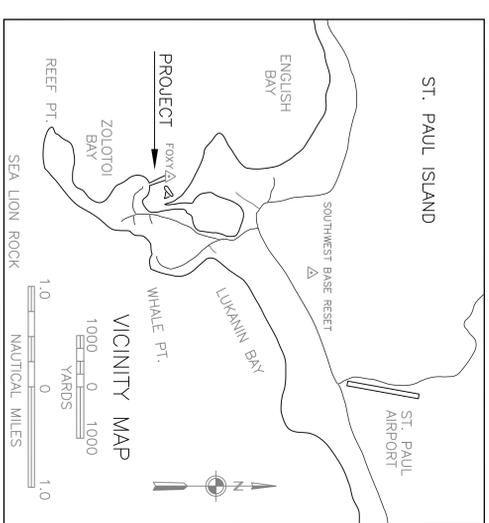


USCG No.	DESCRIPTION	NORTHING	EASTING
27830	ST. PAUL HARBOR JETTY LIGHT 4 (T R 4)	1,142,582.3	1,583,175.0
27831	ST. PAUL HARBOR JETTY LIGHT 3 (T R 4)	1,142,579.0	1,583,791.8



NOTES

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 9, NAD83 (1992). US SURVEY FEET, HOLDING USCGS TRIM-STATION SOUTHWEST BASE RESET 1997 1951' AS N 1,151,424.69, E BASED ON USACE PROJECT CONDITION SURVEY NO. 1980-02, ST. PAUL HARBOR, MAIN MADE REEF, DATED MAY 26, 2002.
- VERTICAL CONTROL IS IN US SURVEY FEET AND IS BASED ON MEAN LOWER LOW WATER (MALLW-000) DATUM, HOLDING NOAA/US TIDAL BENCH MARK NO. 4 1948' AS 32.37' BEACH MARK ELEVATION WAS TAKEN FROM NOAA/US TIDAL BENCH MARK SHEET FOR 894942, VILLAGE COVE, ST. PAUL HARBOR, ALASKA, PUBLISHED DATE 1986 26, 289M.
- VERTICAL CONTROL WAS SURVEYED MARCH 5-6, 2005 USING OPTICAL INSTRUMENTS AND 2005 USACE PROJECT CONDITION SURVEY NO. 1980-02, ST. PAUL HARBOR, MAIN MADE REEF, DATED MAY 26, 2002.
- PROSPECTIVE DATA WAS COLLECTED MARCH 6-13, 2005 WITH RTK METHODS USING TRIMBLE 4700* RECEIVERS AS ROVERS AND A TRIMBLE 4000* OPERATING AS A BASE AT STATION 7001. DATA WAS PROCESSED USING TRIMBLE GEOMATICS OFFICE V1.6*.
- HIDROGRAPHIC DATA WAS COLLECTED ON MARCH 9-12, 2005. SOUNDINGS WERE OBTAINED USING AN 'ODOM HYDROTRAC' PRECISION PERM SOUNDING WITH A 3 DEGREE SINEWAVE TRANSDUCER. VESSEL POSITIONING, HEAVE AND WATER SURFACE ELEVATION (TIDES) WERE OBTAINED USING A 'TRACER' GPS TRACKER. DATA WAS ACQUIRED AND PROCESSED WITH 'HPACK MAX V2.12A' USING REAL-TIME-KINEMATIC (RTK) GPS EQUIPMENT AND TECHNIQUES.
- NO NEW MONUMENTS WERE ESTABLISHED THIS SURVEY.
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- THIS SURVEY REPRESENTS GENERAL CONDITIONS AT THE TIME OF SURVEY.
- THE ST. PAUL SALT LAGOON CHANNEL WAS SURVEYED IN CONJUNCTION WITH THIS SURVEY.

PT.	DISTANCE	BEARING	NORTHING	EASTING
OA	85.00	N 88-35-29 E	1,141,563.68	1,583,784.40
1A	379.36	N 10-30-16 E	1,141,594.70	1,583,663.54
2A	536.95	N 21-24-22 W	1,141,966.72	1,583,323.52
7A	204.75	S 80-55-59 W	1,142,466.63	1,583,736.54
8A	72.31	S 88-35-29 W	1,142,434.38	1,583,534.36
9A			1,142,407.97	1,583,487.05

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
SOUTHWEST BASE RESET	1,151,424.69	1,591,083.94		USCGS TRM-STIA SMC
VILLAGE HILL RESET	1,140,227.17	1,584,339.10		USCGS TRM-STIA SMC
TELEGRAPH HILL Z	1,148,997.51	1,586,627.93	17.2	USCGS TRM-STIA SMC
ST-1 1982	1,141,207.46	1,583,660.79	33.25	USACE SMC
ST-3 1992	1,142,616.05	1,583,160.03	28.11	USACE SMC
ST-4 1992	1,142,668.89	1,584,684.33	16.85	USACE SMC
RB01 1994	1,141,043.54	1,583,646.45	28.41	USACE SMC (NOAA/US TIDAL BM)
RB02 1994	1,141,698.14	1,583,927.18	36.90	USACE SMC
RB03 1994	1,141,565.14	1,583,907.33	11.60	USACE SMC (SQUATTED)
FOXY 1995	1,141,611.18	1,583,160.74	28.01	USACE SMC (UNSTAMPED)
DUMP 1995	1,141,172.75	1,584,928.37	15.30	ORC (NOAA/US TIDAL BM)
SP-3 2001	1,142,950.54	1,583,818.82	21.00	5.25* TORPEDO BC (ORB)
BA NO 4 1948			32.37	USCGS SMC (NOAA/US TIDAL BM)
212 E 1916			25.38	IND. BENCH MARK SMC

VOLUME COMPUTATIONS	
PROJECT DEPTH -18' MILW	CUBIC YARDS
VOLUME AVAILABLE TO PROJECT DEPTH	0.0
VOLUME AVAILABLE BETWEEN PROJECT AND ALLOWABLE OVERDEPTH (-18' MILW)	0.0
VOLUME AVAILABLE ALONG SOPS/OPS (3:1, H.V)	0.0
TOTAL	0.0

CONTRACT NO. **W118-04-D-0006-0007**
 CONTRACTOR **TERRA SURVEYS, LLC**
 STATE **ALASKA**
 CITY **PALMER**

ALASKA DISTRICT
 CORPS OF ENGINEERS
 ANCHORAGE, ALASKA

SURVEYED: **DK/LMK**
 TRANN: **LES/KLW**
 CHECKED: **KDW**
 SUBMITTED: **DATE:**

PROJECT CONDITION SURVEY
MARCH 5-13, 2005

RECOMMENDED: **DATE:**

PROJECT NUMBER: **2202-05**
 SCALE: **T=100'**
 SURVEY NO. **2202-05**
 SHEET **1** OF **1**