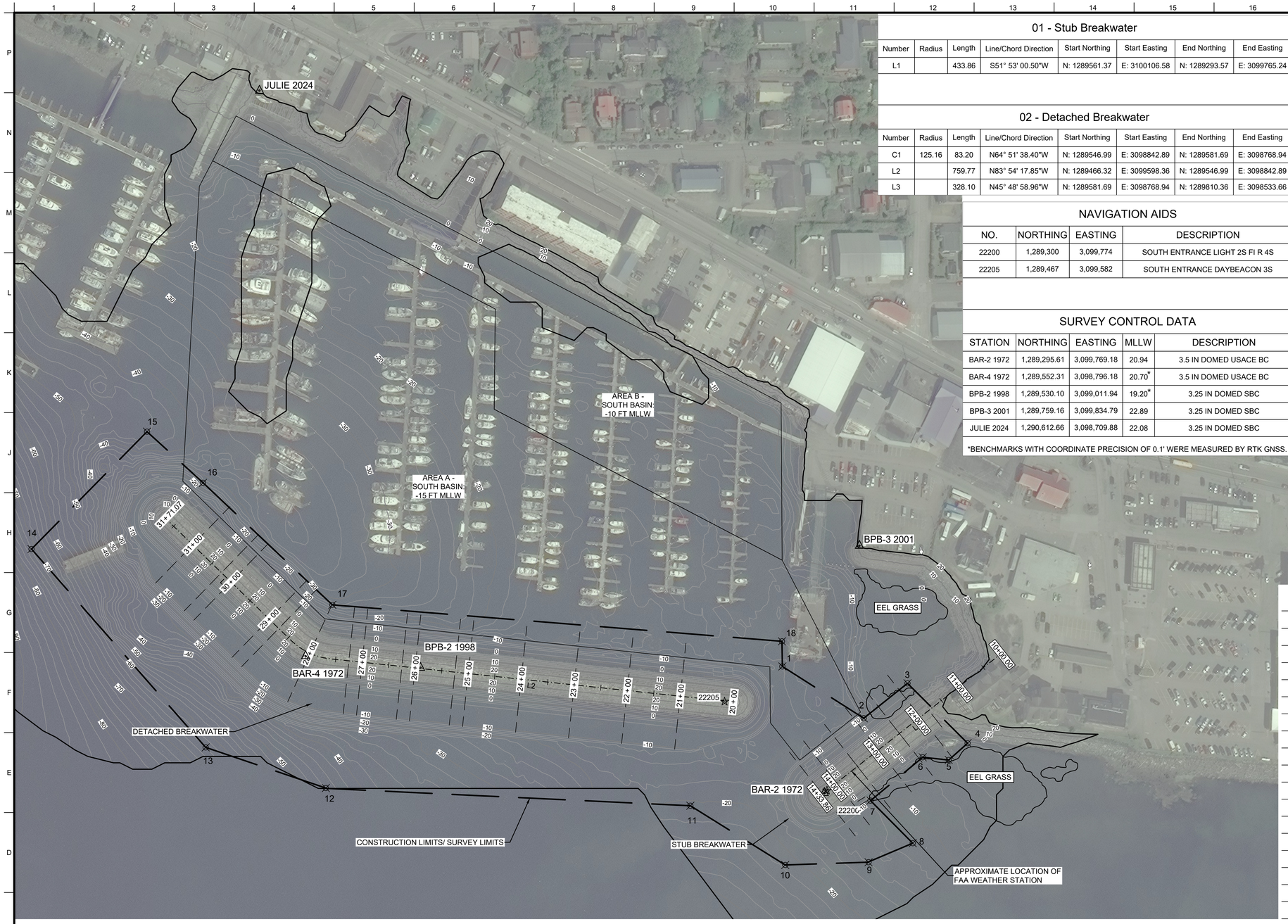


01 - Stub Breakwater

Number	Radius	Length	Line/Chord Direction	Start Northing	Start Easting	End Northing	End Easting
L1		433.86	S51° 53' 00.50"W	N: 1289561.37	E: 3100106.58	N: 1289293.57	E: 3099765.24

02 - Detached Breakwater

Number	Radius	Length	Line/Chord Direction	Start Northing	Start Easting	End Northing	End Easting
C1	125.16	83.20	N64° 51' 38.40"W	N: 1289546.99	E: 3098842.89	N: 1289581.69	E: 3098768.94
L2		759.77	N83° 54' 17.85"W	N: 1289466.32	E: 3099598.36	N: 1289546.99	E: 3098842.89
L3		328.10	N45° 48' 58.96"W	N: 1289581.69	E: 3098768.94	N: 1289810.36	E: 3098533.66

NAVIGATION AIDS

NO.	NORTHING	EASTING	DESCRIPTION
22200	1,289,300	3,099,774	SOUTH ENTRANCE LIGHT 2S FI R 4S
22205	1,289,467	3,099,582	SOUTH ENTRANCE DAYBEACON 3S

SURVEY CONTROL DATA

STATION	NORTHING	EASTING	MLLW	DESCRIPTION
BAR-2 1972	1,289,295.61	3,099,769.18	20.94	3.5 IN DOMED USACE BC
BAR-4 1972	1,289,552.31	3,098,796.18	20.70*	3.5 IN DOMED USACE BC
BPB-2 1998	1,289,530.10	3,099,011.94	19.20*	3.25 IN DOMED SBC
BPB-3 2001	1,289,759.16	3,099,834.79	22.89	3.25 IN DOMED SBC
JULIE 2024	1,290,612.66	3,098,709.88	22.08	3.25 IN DOMED SBC

*BENCHMARKS WITH COORDINATE PRECISION OF 0.1' WERE MEASURED BY RTK GNSS.

GENERAL NOTES

1. THE CONTRACTOR SHALL LIMIT ITS OPERATIONS TO THE AREA WITHIN THE DEFINED CONSTRUCTION LIMITS. DAMAGE TO AREAS OUTSIDE THE DEFINED PLACEMENT LIMITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
2. THERE IS NO CONTRACTOR STAGING AREA PROVIDED IN THIS CONTRACT.
3. THE CONTRACTOR SHALL REMOVE THE EXISTING NAVIGATION MARKERS AND BASES. THE EXISTING NAVIGATION MARKERS AND BASES SHALL BE REINSTALLED PER THE REQUIREMENTS ON SHEET C-501. THE MARKERS SHALL BE ORIENTED SUCH THAT THE TOWER WILL FACE THE SAME DIRECTION AS ITS PRECONSTRUCTION ORIENTATION.
4. ALL CONTRACTOR FLOATING PLANT/VESSELS SHALL BE LIMITED TO A SPEED OF 8 KNOTS WITHIN 1000 FEET OF THE PROJECT LOCATION TO REDUCE RISK OF COLLISION WITH PROTECTED SPECIES.
5. REFERENCE C-102 SHEET FOR HORIZONTAL AND VERTICAL SURVEY CONTROL AND DATUMS.
6. ACCESS THE SUB BREAKWATER VIA MARINE VESSEL; NO LAND ACCESS IS PROVIDED.
7. PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83 (CORS96) 2002.00, IN US SURVEY FEET BASED ON A FULLY CONSTRAINED STATIC GPS NETWORK HOLDING THE PUBLISHED NAD83 (CORS96) 2002.00 EPOCH VALUES OF NGS CORS STATIONS: "ANNETTE ISLAND 5 CORS ARP" (AIS5 - PID DK6482); "KLAWOCKAIRAK2006 CORS ARP" (AB49 - PID DM7451) AND "LEVEL ISLAND 6 CORS ARP" (LEV6 - PID DJ3035).

   LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83 (2011) EPOCH 2010.00, IN US SURVEY FEET HOLDING DOMED BC "BM NO 37" (VM# 1170 / PID AI4914) AS 1,284,196.59', E 3,110,894.96'.
8. VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0'), BASED ON THE NOAA/NOS TIDAL BENCHMARK LIST: "945 0460 KETCHIKAN, TONGASS NARROWS, ALASKA " PUBLISHED 09/27/2011. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/NOS TIDAL BENCHMARK "BM NO 37" (VM# 1170 / PID AI4914) AS AS 35.09'.
9. VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 ELEVATIONS HOLDING NOAA/USACE TIDAL BENCHMARK "BM NO 37" (PID AI4914 / VM# 1170) AS 31.43'.

TIDAL INFORMATION

LEVEL	ELEVATION (FEET)
EXT. HIGH WATER LEVEL 12/02/1967	21.31'
MEAN HIGHER HIGH WATER (MHHW)	15.45'
MEAN HIGH WATER (MHW)	14.54'
MEAN SEA LEVEL (MSL)	8.07'
MEAN LOW WATER (MLW)	1.57'
MEAN LOWER LOW WATER (MLLW)	0.00'
EXT. LOW WATER LEVEL 12/14/2008	-5.27'

KETCHIKAN, ALASKA
TIDAL BENCH MARK SHEET: 9450460
TIDAL EPOCH: 1983-2001
PUBLICATION DATE: 09/26/2011
SOURCE: NOAA NATIONAL OCEAN SERVICE

CONSTRUCTION LIMITS/ SURVEY LIMITS

NO.	NORTHING	EASTING	DESCRIPTION
1	1,289,533	3,099,690	BOUNDARY
2	1,289,436	3,099,843	BOUNDARY
3	1,289,501	3,099,925	BOUNDARY
4	1,289,389	3,100,038	BOUNDARY
5	1,289,357	3,100,002	BOUNDARY
6	1,289,362	3,099,954	BOUNDARY
7	1,289,281	3,099,856	BOUNDARY
8	1,289,201	3,099,935	BOUNDARY
9	1,289,166	3,099,852	BOUNDARY
10	1,289,160	3,099,696	BOUNDARY
11	1,289,272	3,099,518	BOUNDARY
12	1,289,305	3,098,834	BOUNDARY
13	1,289,381	3,098,609	BOUNDARY
14	1,289,753	3,098,282	BOUNDARY
15	1,289,973	3,098,499	BOUNDARY
16	1,289,877	3,098,604	BOUNDARY
17	1,289,648	3,098,846	BOUNDARY
18	1,289,580	3,099,690	BOUNDARY

PLAN NORTH

0 100' 200'

A1 SITE PLAN
SCALE: 1" = 100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: E. TURNER
DRAWN BY: D. HIPPLER
CHECKED BY: E. KINSLOW
SUBMITTED BY: S. HAAN
SIZE: ANSI D
ISSUE DATE: 29 MAY 2026
SOLICITATION NO.: W911KB-XX-X-XXXX
CONTRACT NO.: W911KB-XX-X-XXXX
FILE NUMBER: +FILE NUMBER
FILE NAME: KET006-C-101.dwg

U.S. ARMY CORPS OF ENGINEERS
ALASKA DISTRICT
2204 3RD STREET
JBER, ALASKA 99506-0898

KETCHIKAN, ALASKA
BAR POINT HARBOR RUBBLEMOUND BREAKWATER REPAIR
PIN 137716
UFC KET006

GENERAL SITE PLAN

SHEET ID
C-101

O:\ENP\PUBLIC\ENGINEER\UNIFIED\EN-CW\JOBS\KET006\10 DWGS\03_SHEETS\J4ENDDJH
7/30/2026 1:06 PM
1:1

60% - NOT FOR CONSTRUCTION

VERIFY SCALES: BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"