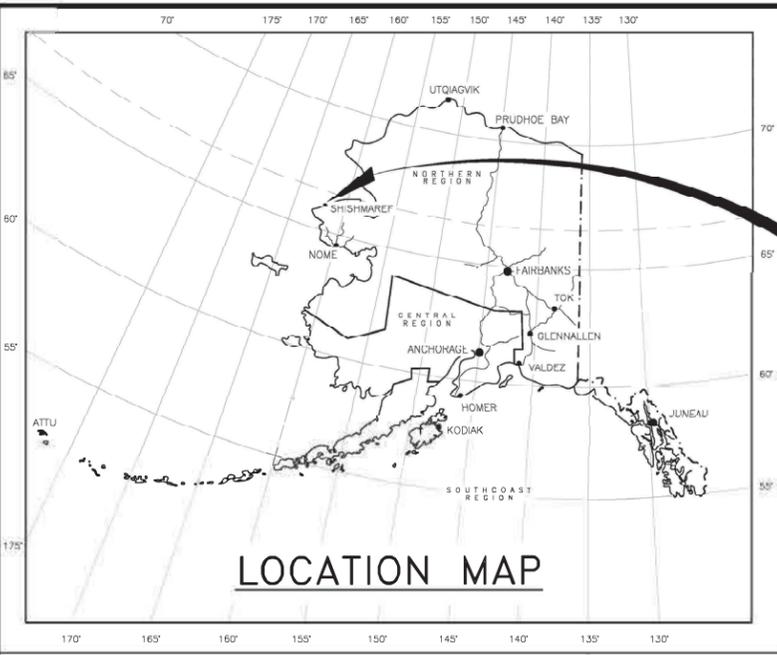


NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHWHY00687	2024	A1	14
			CDS ROUTE: NA	MILEPOINT: NA TO NA			

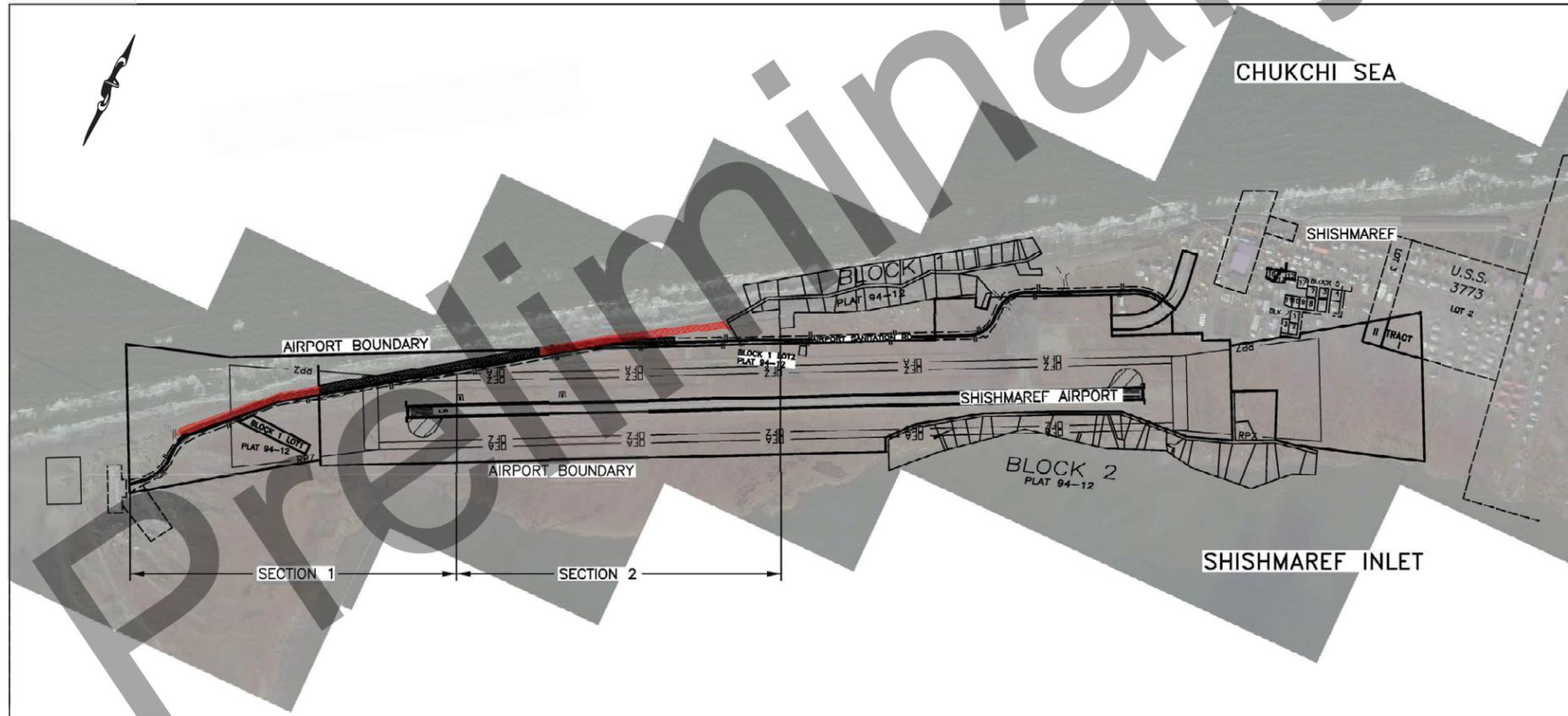


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT
0002514/NFHWHY00687

SHISHMAREF SANITATION ROAD EROSION CONTROL

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND & SHEET LAYOUT INDEX
A3-A5	PROJECT LAYOUT
A6-A8	SURVEY CONTROL PLANS
B1-B3	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES & GENERAL NOTES
Q1-Q2	EROSION SEDIMENT CONTROL PLANS



DESIGN DESIGNATIONS	
ADT (2012)	NA
ADT (2035)	NA
DHV (??%)	NA
PERCENT TRUCKS (T)	NA
DIRECTIONAL SPLIT (D)	NA
DESIGN SPEED (V)	NA
DESIGN ESALS (?? YEARS)	NA

PROJECT SUMMARY	
WIDTH OF PAVEMENT	NA
LENGTH OF GRADING	2,500'
LENGTH OF PAVING	NA
LENGTH OF PROJECT	2,500'

JONATHAN J. HUTCHINSON, P.E., PROJECT MANAGER
THOMAS C. HUGHES, DESIGNER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHwy00687	2024	A2	A8

RECOVERED SET

EXISTING PROPOSED

PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE		
STATION EQUATION	$\begin{matrix} "L"48+97.23 \text{ POT BK=} \\ "O"48+97.23 \text{ PC AHD} \end{matrix}$	
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
TEMPORARY EASEMENT LINE (TCP OR TCE)		
ACCESS OR SECTION LINE EASEMENT		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE		

ROADWAY/PAVEMENT EDGE		
FENCE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS		
GRAVE		

- H = HOUSE
- G = GARAGE
- M = MERCHANT/STORE
- B = BARN
- S = SHED
- P = PRIVY
- SS = SERVICE STATION
- W = WAREHOUSE

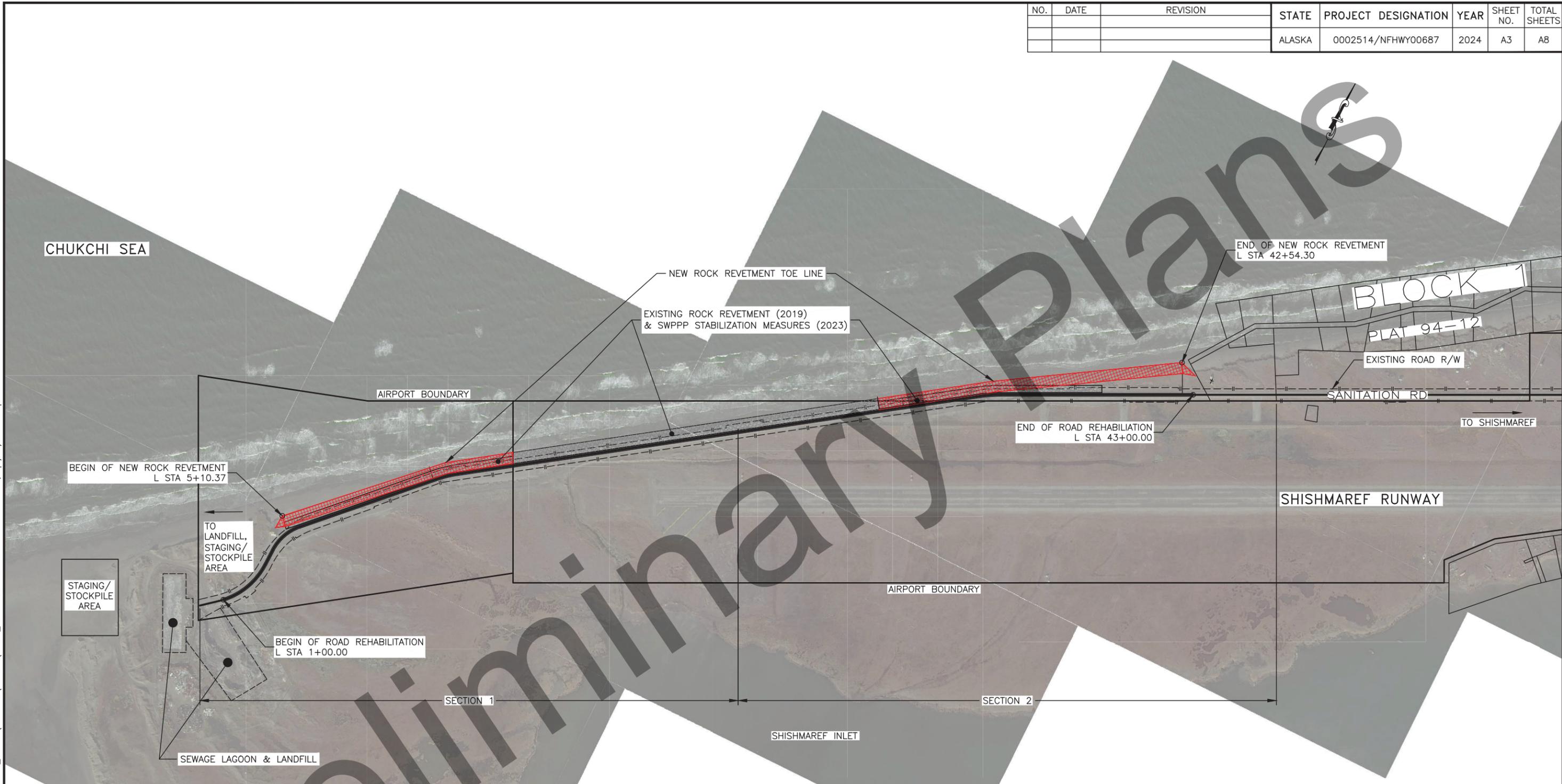
ABBREVIATIONS:

- APPROX APPROXIMATELY
- C CENTERLINE
- CY CUBIC YARD
- E EAST, EASTING
- ELE, ELEV ELEVATION
- FT. FOOT, FEET
- H HORIZONTAL
- HW/D HEADWATER TO DIAMETER RATIO
- IE INVERT ELEVATION
- IN, " INCH, INCHES
- L LENGTH OF CURVE
- L.C.L LEFT OF CENTERLINE
- LT LEFT
- LVC LENGTH OF VERTICAL CURVE
- MAX MAXIMUM
- MIN MINIMUM
- N NORTH, NORTHING
- NO. NUMBER
- NTS NOT TO SCALE
- O.C. ON CENTER
- PC POINT OF CURVATURE
- POT POINT ON TANGENT
- PST PERFORATED STEEL TUBE
- PT POINT OF TANGENCY
- PVI POINT OF VERTICAL INTERSECTION
- R RADIUS
- R.C.L RIGHT OF CENTERLINE
- RT RIGHT
- S SOUTH
- SQ. FT. SQUARE FOOT
- STA STATION
- T TANGENT
- TCE TEMPORARY CONSTRUCTION EASEMENT
- TS TUBE STEEL
- TYP TYPICAL
- V VERTICAL
- VPC VERTICAL POINT OF CURVATURE
- VPI VERTICAL POINT OF INTERSECTION
- VPT VERTICAL POINT OF TANGENCY
- W WEST
- WWR WELDED WIRE REINFORCEMENT
- Ø DIAMETER

LEGEND & ABBREVIATIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHWHY00687	2024	A3	A8

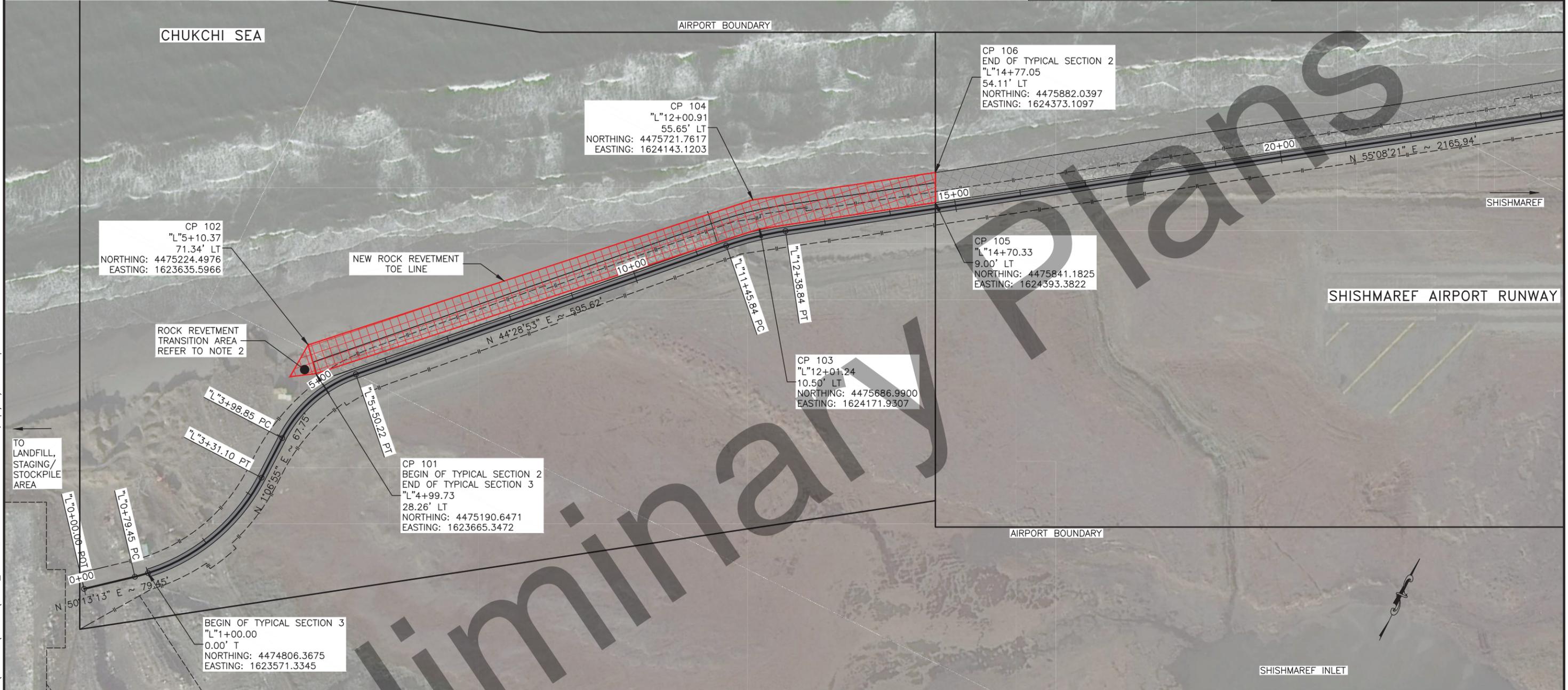
PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907)451-2200
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NOTES:

1. THERE IS AN EXISTING REVETMENT STRUCTURE CONSTRUCTED IN 2019 & 2023 AT THE LOCATIONS AS SHOWN. THIS STRUCTURE IS TO REMAIN.
2. THE MEAN HIGH WATER (MHW) ELEVATION IS 3.26'. THE LOCATION OF THE MHW CONTOUR IS VARIABLE, DUE TO ACTIVE COASTAL EROSION AND ACCRETION. CONTRACTOR SHALL PERFORM ALL WORK OUTSIDE OF THE MHW LIMITS.
3. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PERFORMING ALL CONSTRUCTION ACTIVITY TO MINIMIZE RISK OF STORM DAMAGE, AND PERFORM WORK IN A SEQUENTIAL MANNER TO LIMIT THE ACTIVE CONSTRUCTION AREA.
4. IT IS EXPECTED THAT WATER LEVELS WILL VARY DURING CONSTRUCTION ACTIVITIES AND IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR AND ADJUST CONSTRUCTION SCHEDULE ACCORDINGLY.
5. SITE CONDITIONS MAY PRESENT THE NEED TO HAUL AND PLACE ON THE OUTER LIMITS OF THE ROCK REVETMENT FROM THE ROADWAY RATHER THAN HAULING ON THE BEACH AND IF THIS IS NECESSARY THE WORK IS SUBSIDIARY TO RELATED WORK ITEMS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHWY00687	2024	A4	A8



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 NEW ROCK REVETMENT

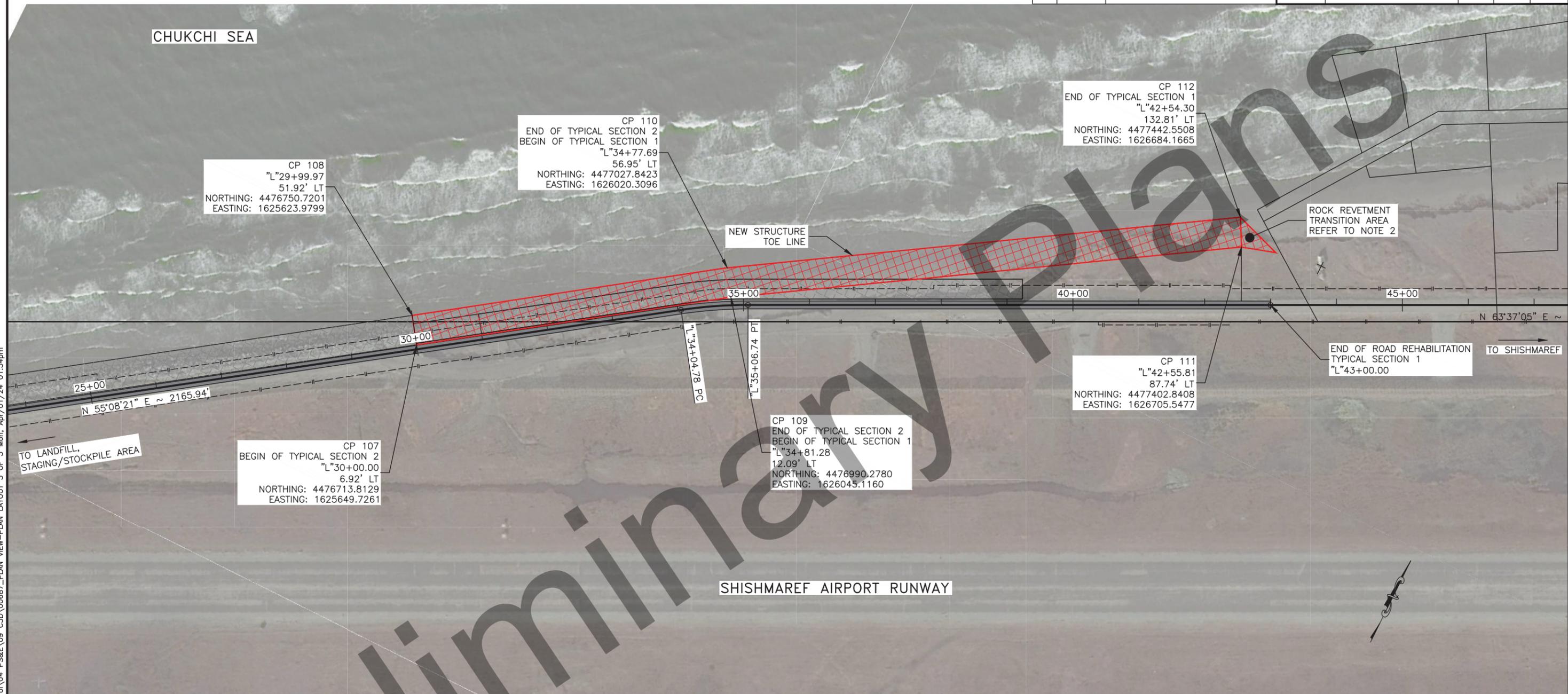
NOTES:

- CONTROL POINTS ARE APPROXIMATE AND SUBJECT CHANGE TO ENSURE A UNIFORM ELEVATION LAYOUT OF THE ROCK REVETMENT STRUCTURE, AS APPROVED BY THE ENGINEER.
- TRANSITION ROCK REVETMENT INTO EXISTING SHORELINE AND GROUND TO FIT FIELD CONDITIONS, AS APPROVED BY THE ENGINEER. WORK AND MATERIALS REQUIRED TO CONSTRUCT WILL BE PAID FOR SEPARATELY UNDER THE RESPECTIVE ITEMS LISTED IN THE BID SCHEDULE.

CONTROL POINTS (CP) – ROCK REVETMENT

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	4475190.6471	1623665.3472	≈14.00'	BEGIN OF TYPICAL SECTION 2
102	4475224.4976	1623635.5966	≈8.00'	
103	4475686.9900	1624171.9307	≈12.50'	
104	4475721.7617	1624143.1203	≈6.50'	
105	4475841.1825	1624393.3822	≈12.50'	
106	4475882.0397	1624373.1097	≈6.50'	END OF TYPICAL SECTION 2

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHWY00687	2024	A5	A8



 NEW ROCK REVETMENT

NOTES:

- CONTROL POINTS ARE APPROXIMATE AND SUBJECT CHANGE TO ENSURE A UNIFORM ELEVATION LAYOUT OF THE ROCK REVETMENT STRUCTURE, AS APPROVED BY THE ENGINEER.
- TRANSITION ROCK REVETMENT INTO EXISTING SHORELINE AND GROUND TO FIT FIELD CONDITIONS, AS APPROVED BY THE ENGINEER. WORK AND MATERIALS REQUIRED TO CONSTRUCT WILL BE PAID FOR SEPARATELY UNDER THE RESPECTIVE ITEMS LISTED IN THE BID SCHEDULE.
- BETWEEN STATION "L" 34+43 AND "L" 37+50 THERE WILL BE ROCK REVETMENT FROM PREVIOUS PROJECTS (2023) AND THE ROCK SHALL REMAIN IN PLACE. THIS AREA TRANSITIONS FROM TYPICAL SECTION 1 TO TYPICAL SECTION 2.

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
107	4476713.8129	1625649.7261	≈12.00'	BEGIN OF TYPICAL SECTION 2
108	4476750.7201	1625623.9799	≈6.00'	
109	4476990.2780	1626045.1160	≈12.00'	END OF TYPICAL SECTION 2 & BEGIN OF TYPICAL SECTION 1
110	4477027.8423	1626020.3096	≈6.00'	END OF TYPICAL SECTION 2 & BEGIN OF TYPICAL SECTION 1
111	4477402.8408	1626705.5477	≈14.00'	
112	4477442.5508	1626684.1665	≈8.00'	END OF TYPICAL SECTION 1

PLAN LAYOUT 3 OF 3
SECTION 2

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFWY00687	2024	A6	A8

GENERAL NOTES

1. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE. ON MULTI YEAR PROJECTS, VERIFY ALL CONTROL ON A SEASONAL BASIS.
2. BACKGROUND MAPPING IS SHOWN FOR ORIENTATION PURPOSES ONLY. THIS SHEET DOES NOT PURPORT TO DEPICT RIGHT OF WAY.
3. ALL DISTANCES SHOWN ARE GROUND DISTANCES, IN U.S. SURVEY FEET.
4. COORDINATE SYSTEM DEFINITION.

THIS PROJECT IS LOCATED ENTIRELY WITHIN A MODIFIED STATE PLANE PROJECTION. ORIGINALLY DESIGNED BY USING:
 STATE PLANE ZONE 8
 SCALED FROM POINT 1002, "SAC", N 4477977.717 SFT, E 1628468.862 SFT
 USING THE INVERSE COMBINED SCALE FACTOR, 1/CSF
 COMBINED SCALE FACTOR (CSF) = 0.99989926

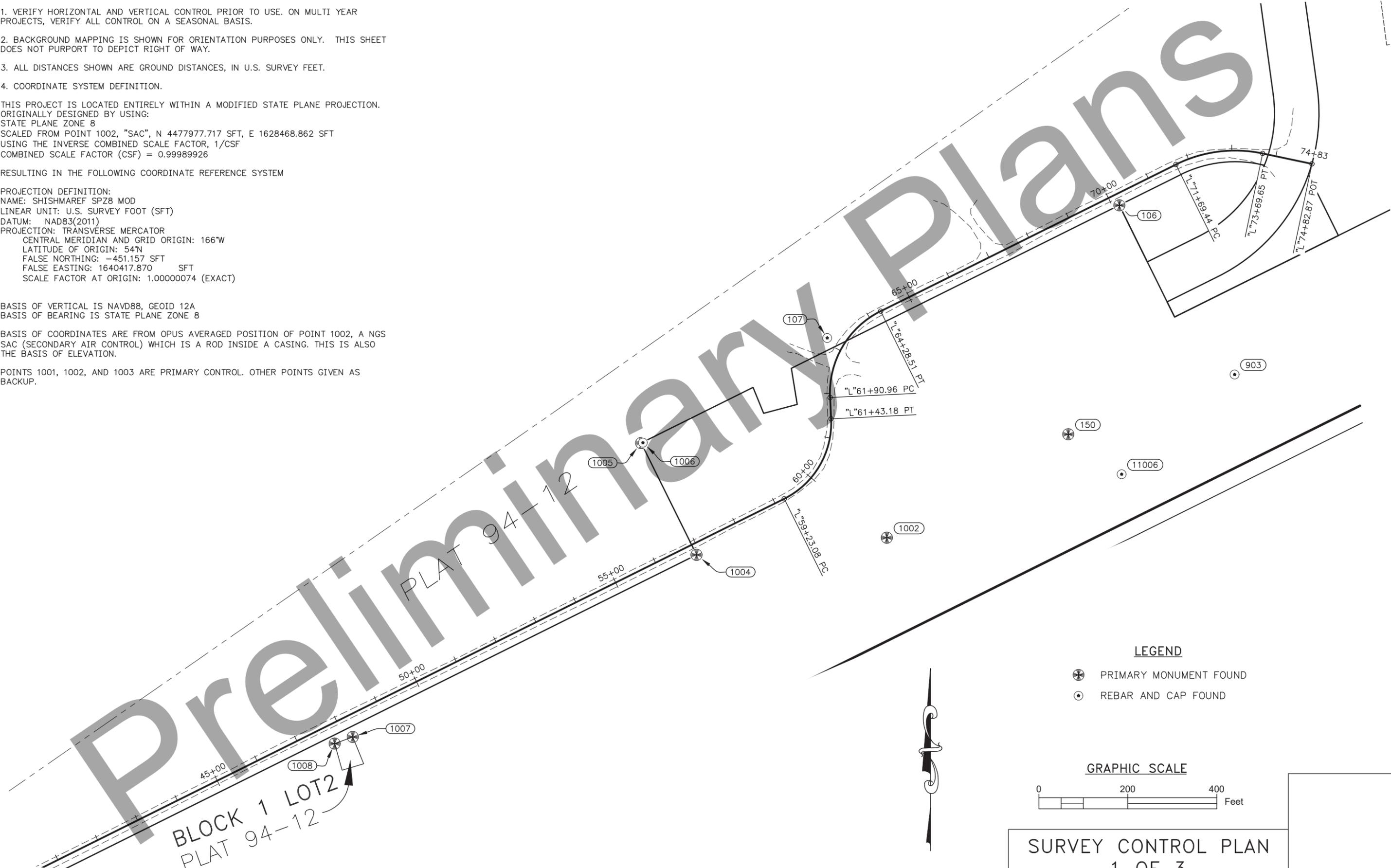
RESULTING IN THE FOLLOWING COORDINATE REFERENCE SYSTEM

PROJECTION DEFINITION:
 NAME: SHISHMAREF SP28 MOD
 LINEAR UNIT: U.S. SURVEY FOOT (SFT)
 DATUM: NAD83(2011)
 PROJECTION: TRANSVERSE MERCATOR
 CENTRAL MERIDIAN AND GRID ORIGIN: 166°W
 LATITUDE OF ORIGIN: 54°N
 FALSE NORTHING: -451.157 SFT
 FALSE EASTING: 1640417.870 SFT
 SCALE FACTOR AT ORIGIN: 1.00000074 (EXACT)

BASIS OF VERTICAL IS NAVD88, GEOID 12A
 BASIS OF BEARING IS STATE PLANE ZONE 8

BASIS OF COORDINATES ARE FROM OPUS AVERAGED POSITION OF POINT 1002, A NGS SAC (SECONDARY AIR CONTROL) WHICH IS A ROD INSIDE A CASING. THIS IS ALSO THE BASIS OF ELEVATION.

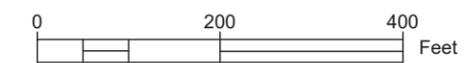
POINTS 1001, 1002, AND 1003 ARE PRIMARY CONTROL. OTHER POINTS GIVEN AS BACKUP.



LEGEND

- ⊗ PRIMARY MONUMENT FOUND
- ⊙ REBAR AND CAP FOUND

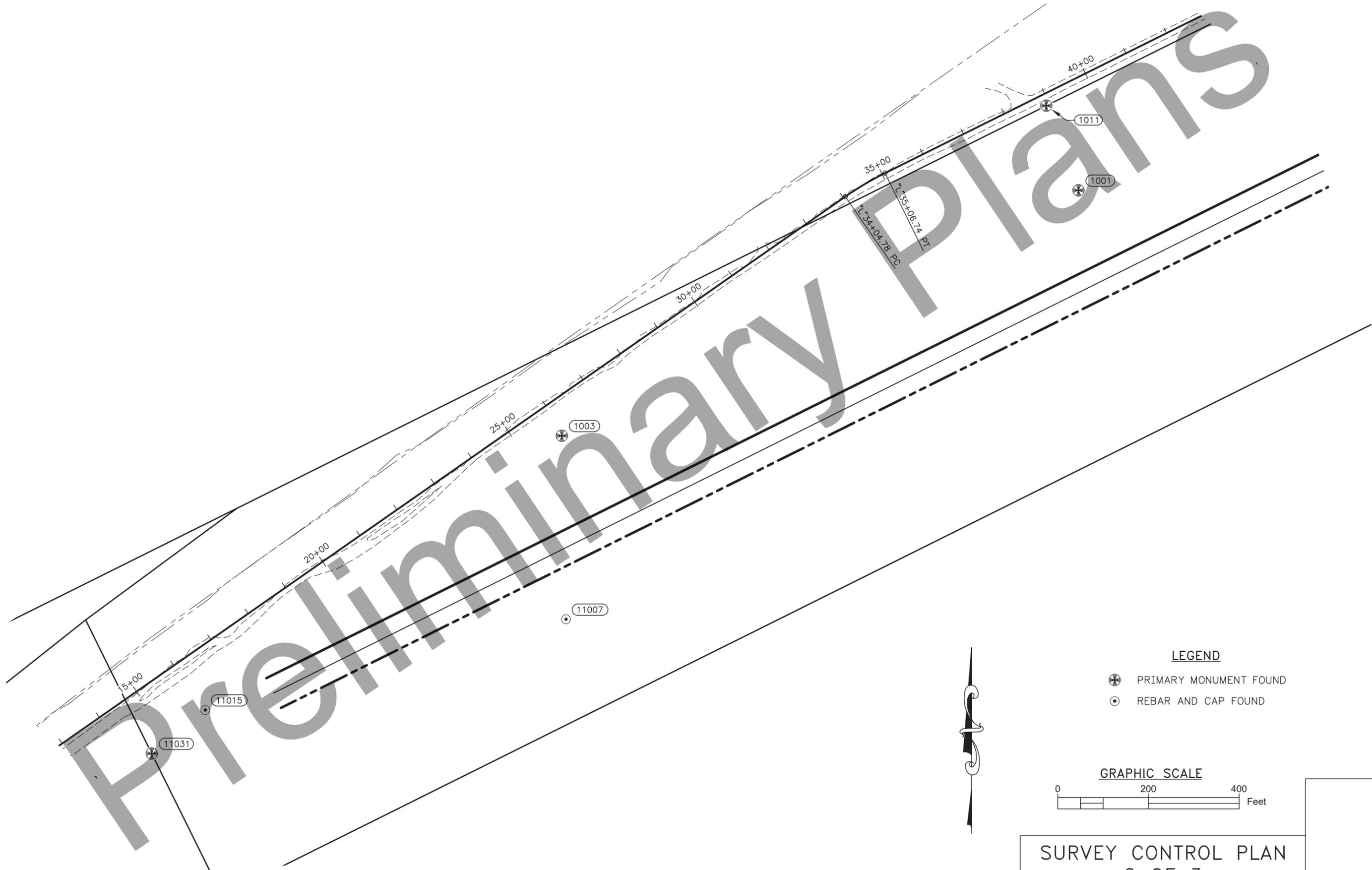
GRAPHIC SCALE



SURVEY CONTROL PLAN
 1 OF 3

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFWY00687	2024	A7	A8



PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907)451-2200
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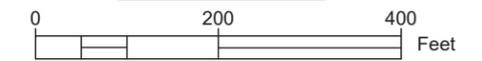
Preliminary Plans



LEGEND

- ⊗ PRIMARY MONUMENT FOUND
- ⊙ REBAR AND CAP FOUND

GRAPHIC SCALE



SURVEY CONTROL PLAN
2 OF 3

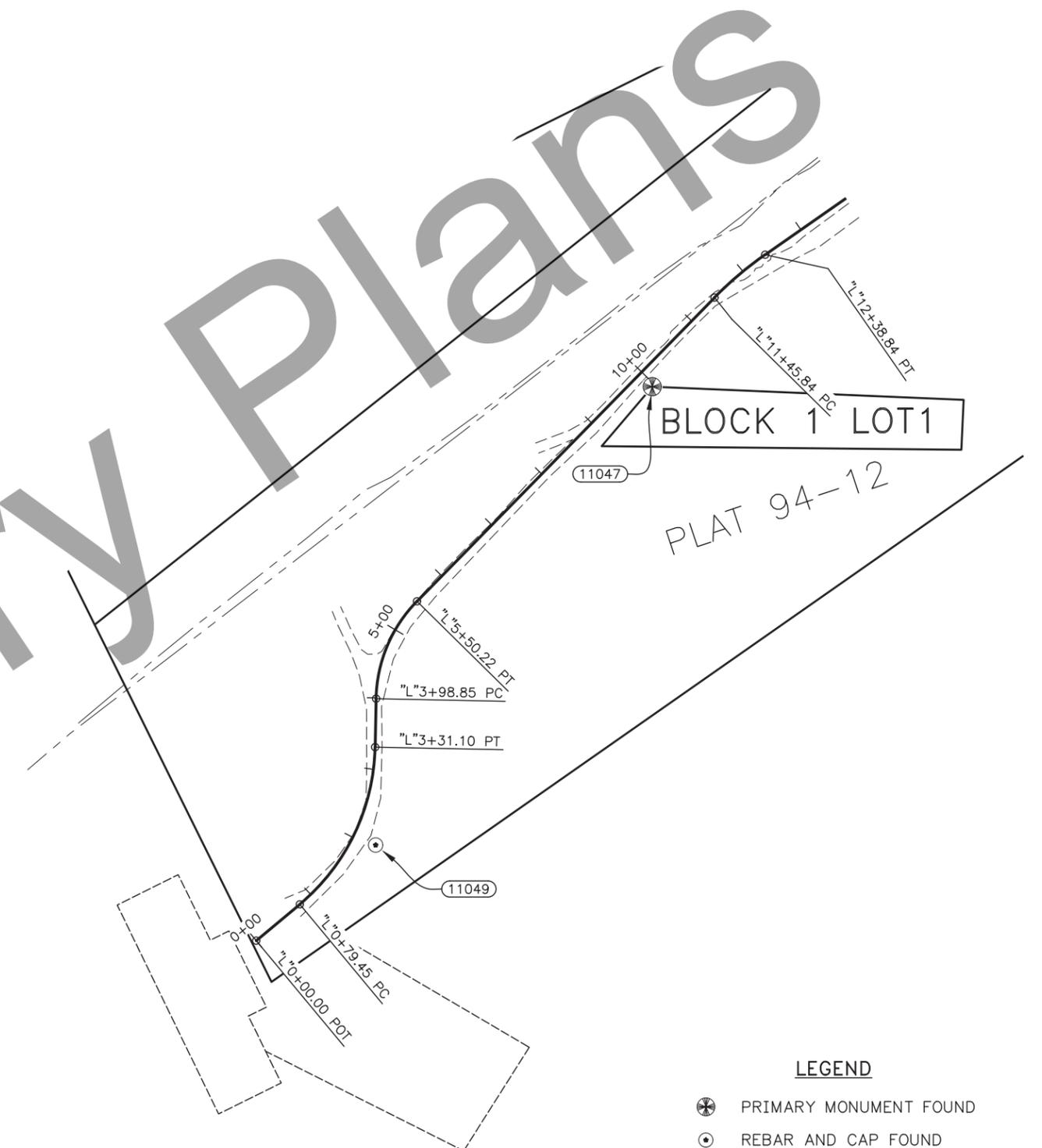
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFWY00687	2024	A8	A8

CONTROL POINTS

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	LATITUDE	LONGITUDE
106	4478723.16	1628991.67	9.09	PRIM MON FND C9 TRVI 4922-S 1992	N66° 15' 14.5739"	W166° 04' 38.9107"
107	4478425.62	1628334.79	9.29	REBAR CAP FND PI 12+37.95 9232-S 1999	N66° 15' 11.6378"	W166° 04' 54.9353"
150	4478209.64	1628876.73	11.32	PRIM MON FND SACE-1 6714-S 2006	N66° 15' 09.5194"	W166° 04' 41.7007"
903	4478343.75	1629250.76	9.67	REBAR CAP FND SHH CP5 9235-S 2010	N66° 15' 10.8436"	W166° 04' 32.5750"
1001	4476953.46	1626500.28	9.65	PRIM MON FND PAC	N66° 14' 57.1262"	W166° 05' 39.6596"
1002	4477977.72	1628468.86	10.61	PRIM MON FND SAC	N66° 15' 07.2321"	W166° 04' 51.6487"
1003	4476413.51	1625360.84	10.78	PRIM MON FND SAC	N66° 14' 51.7954"	W166° 06' 07.4462"
1004	4477939.25	1628040.92	12.28	PRIM MON FND TR6 C7 4922-S 1992	N66° 15' 06.8481"	W166° 05' 02.0926"
1005	4478190.12	1627916.54	10.32	PRIM MON FND C8TR6 L14B1 4922-S 1992	N66° 15' 09.3150"	W166° 05' 05.1366"
1006	4478190.82	1627920.31	9.37	REBAR CAP FND B1 L14 L15 4922-S	N66° 15' 09.3219"	W166° 05' 05.0446"
1007	4477530.99	1627267.92	11.65	PRIM MON FND 1992 4922-S B1 L2	N66° 15' 02.8202"	W166° 05' 20.9454"
1008	4477516.00	1627227.28	11.94	PRIM MON FND 1992 4922-S B1 L2	N66° 15' 02.6721"	W166° 05' 21.9368"
1011	4477139.63	1626429.22	9.44	PRIM MON FND WP TR6 4922-S 1992	N66° 14' 58.9570"	W166° 05' 41.4009"
11005	4478431.39	1630050.91	8.03	NGS MON RAYMARE 1961	N66° 15' 11.7151"	W166° 04' 13.0470"
11006	4478120.04	1628996.77	10.98	REBAR CAP FND TSM-1 9235-S 2010	N66° 15' 08.6391"	W166° 04' 38.7680"
11007	4476009.63	1625369.97	10.72	REBAR CAP FND SHH TSM2 9235-S 2010	N66° 14' 47.8214"	W166° 06' 07.2074"
11015	4475810.06	1624574.28	9.30	REBAR CAP FND SHH CP3 9235-S 2010	N66° 14' 45.8445"	W166° 06' 26.6159"
11016	4478081.44	1629644.53	9.69	REBAR CAP FND PANP SHH CP4 9235-S 2010	N66° 15' 08.2670"	W166° 04' 22.9562"
11031	4475714.42	1624456.33	9.31	PRIM MON FND G 163+00 S4922 1992	N66° 14' 44.9013"	W166° 06' 29.4901"
11047	4475516.87	1624050.34	10.90	PRIM MON FND SNC L1 B1 4922-S 1992	N66° 14' 42.9505"	W166° 06' 39.3884"
11049	4474875.59	1623662.43	11.40	REBAR CAP FND PI 73+39.26 9232-S 1999	N66° 14' 36.6333"	W166° 06' 48.8254"

ALIGNMENT POINTS

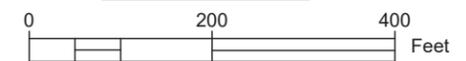
POINT NO.	NORTHING	EASTING	DESCRIPTION
1	4478816.17	1629424.59	BP 0+49.29
2	4478839.45	1629313.87	PC 1+62.43
3	4478814.61	1629118.79	PT 3+62.79
4	4478476.49	1628437.34	PC 11+23.52
5	4478311.33	1628340.32	PT 13+26.20
6	4478234.63	1628344.00	PC 14+02.99
7	4478069.48	1628246.99	PT 16+05.67
8	4476975.34	1626041.87	PC 40+67.31
9	4476962.23	1626019.71	PT 40+93.09
10	4475659.58	1624147.43	PI 63+73.94
11	4475245.66	1623748.84	PC 69+48.58
12	4475044.21	1623662.33	PT 71+72.65
13	4475012.62	1623661.71	PC 72+04.25
14	4474792.68	1623556.01	PT 74+55.90
15	4474741.84	1623494.96	END 75+35.35



LEGEND

- ⊗ PRIMARY MONUMENT FOUND
- ⊙ REBAR AND CAP FOUND

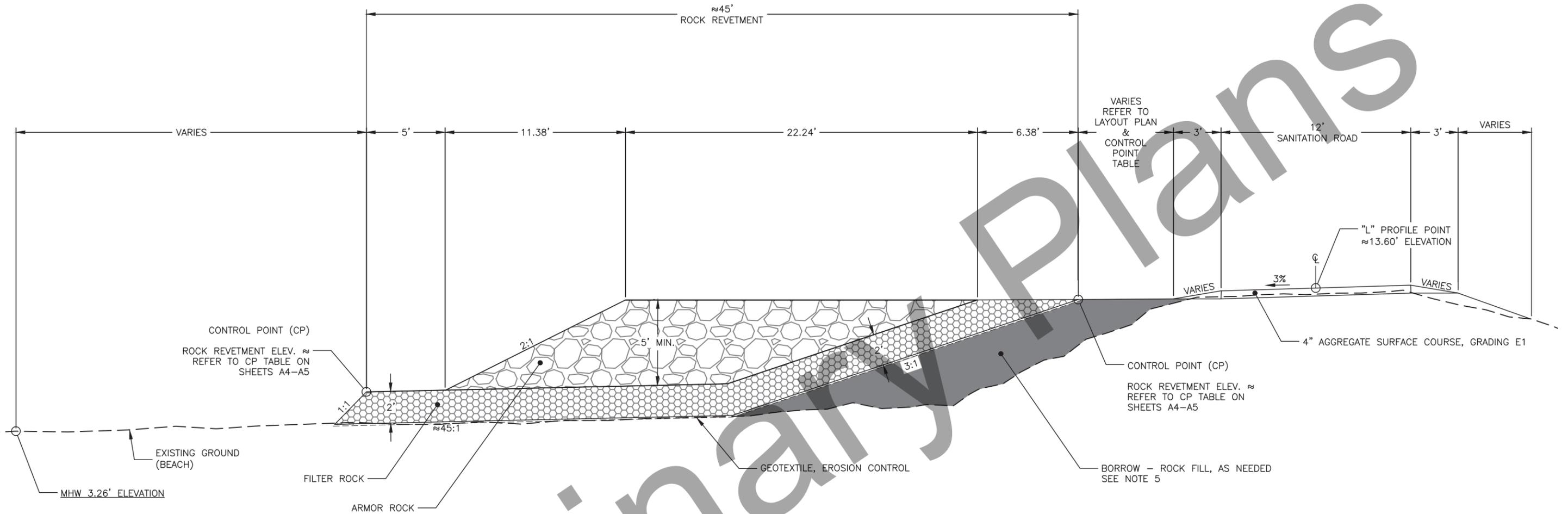
GRAPHIC SCALE



SURVEY CONTROL PLAN
3 OF 3

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHWHY00687	2024	B1	B3

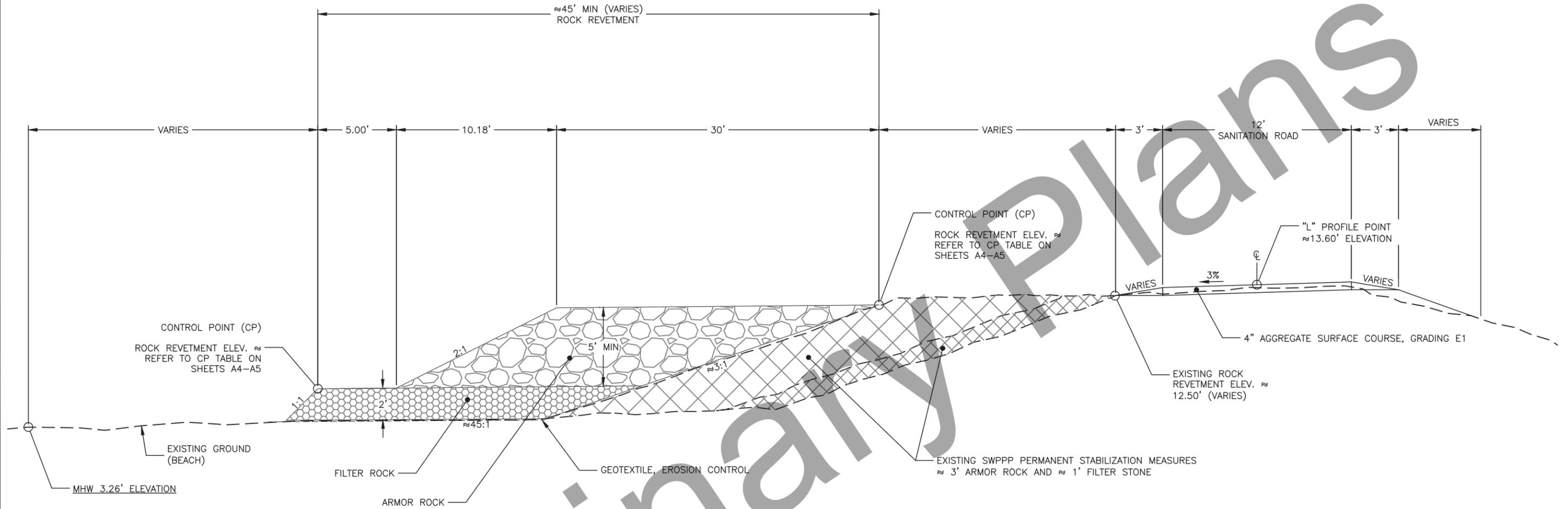


TYPICAL SECTION 1
ROCK REVETMENT (FULL BUILD SECTIONS) & ROAD REHABILITATION
 STA "L" 37+50 TO 43+00

NOTE:

- SEE SURVEY CONTROL FOR BASIS OF VERTICAL AND HORIZONTAL CONTROL.
- ALL ELEVATIONS AND A DIMENSIONS SHOWN FOR THE ROCK REVETMENT ARE APPROXIMATE AND ARE SUBJECT TO MINOR DEVIATIONS TO FIT FIELD CONDITIONS. THE VARIATION IN ROCK SIZE, EXISTING EROSIONS CONTROL STRUCTURES, AND ROAD LOCATIONS WILL HAVE AN EFFECT ON DIMENSIONS SHOWN, AS APPROVED BY THE ENGINEER.
- SANITATION ROAD AND REVETMENT SECTIONS CONTROL POINTS, LOCATIONS, PROFILE HEIGHTS MAY BE MODIFIED TO FIT FIELD CONDITIONS AT THE DIRECTION OF THE ENGINEER.
- 203.0006.0000 "BORROW - ROCK FILL" WILL FILL IN AREAS BETWEEN SANITATION ROAD AND ROCK REVETMENT STRUCTURE TO ENSURE A SUITABLE EMBANKMENT FOR CONSTRUCTION OF EACH RESPECTIVE STRUCTURE, AS DIRECTED BY THE ENGINEER.
- ANY UNCLASSIFIED EXCAVATION (SAND) ENCOUNTERED (APPROX. 1,000-1,500 CY) WILL BE SPREAD EVENLY BELOW "BORROW - ROCK FILL" AS APPROVED BY THE ENGINEER. ALL UNCLASSIFIED EXCAVATION WORK WILL BE SUBSIDIARY TO 203.0006.0000 PAY ITEM
- THE CONTRACTOR SHALL LIMIT THE AREA UNDER CONSTRUCTION AT ANY GIVEN TIME. AT A MINIMUM, ACCEPTABLY INSTALL GEOTEXTILE FABRIC AND FILTER ROCK FOR THE AREA BEFORE THE END OF EACH WORK SHIFT.
- EXCAVATION SHALL BE PERFORMED IN A MANNER TO SELECTIVELY SEPARATE MATERIAL WITH ORGANICS AND VEGETATION FROM BEACH SAND. MINIMIZE MIXING OF MATERIALS.
- FILL OR EXCAVATE AND GRADE BEHIND REVETMENT, DAYLIGHTING TO EXISTING GROUND. THE FINISHED GRADE SHALL NOT EXCEED 12.5%.
- PLACE ARMOR AND FILTER ROCK IN A MANNER THAT PRODUCES A WELL-KEYED MASS OF STONE, WITH EACH INDIVIDUAL STONE HAVING FOUR POINTS OF CONTACT. PLACE STONE IN A MANNER THAT AVOIDS DISPLACING UNDERLYING MATERIALS.
- ANY DAMAGE TO THE NATURAL VEGETATIVE MAT OUTSIDE OF THE PLAN GRADING LIMITS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- PLAN GRADING LIMITS AND MHW (3.26) SHALL BE MARKED AND MAINTAINED IN THE FIELD BY THE CONTRACTOR TO THE EXTENT PRACTICAL.
- AT THE DIRECTION OF THE ENGINEER, EROSION PROTECTION MAY BE PLACED WITHIN OTHER THREATENED OR ERODING SECTIONS OF THE SHISHMAREF SANITATION ROAD (STA 1+00 TO 43+00) TO BE PAID FOR AT THE UNIT PRICE FOR THE MATERIALS USED.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002514/NFHwy00687	2024	B2	B3

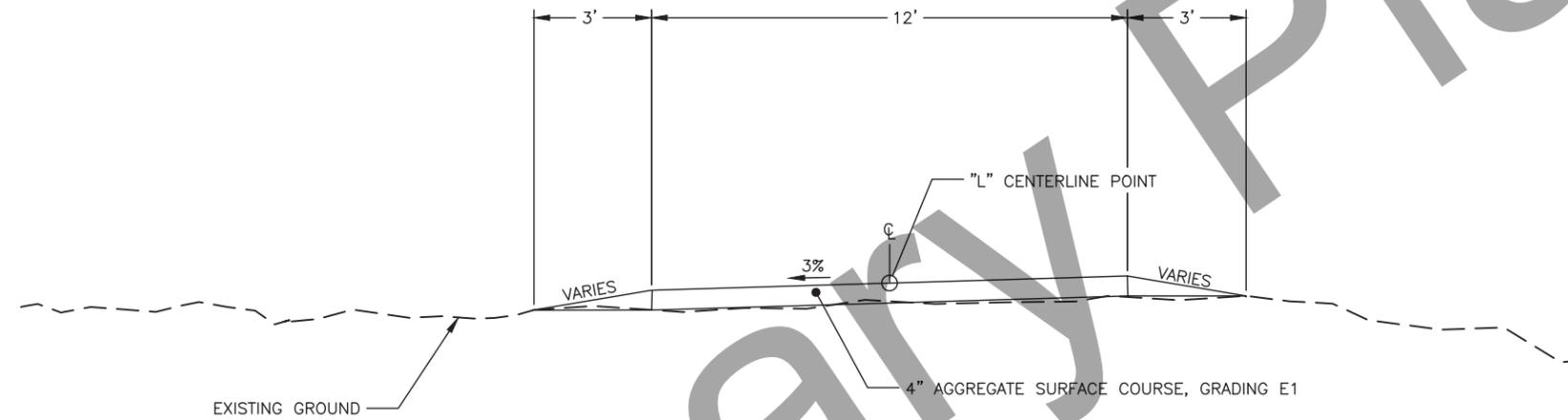


TYPICAL SECTION 2
ROCK REVETMENT EXTENSION (SWPPP STABILIZATION AREA) & ROAD REHABILITATION
 STA "L" 5+00 TO 14+79
 STA "L" 30+00 TO 37+50

NOTE:

1. THE EXISTING ROCK REVETMENT VARIES IN DIMENSIONS. THE OBJECTIVE WILL TO EXPAND THE EXISTING ROCK REVETMENT TO 45' LENGTH AS SHOWN ON TYPICAL SECTIONS.
2. WORK NEEDED TO PLACE FILTER ROCK AND GEOTEXTILE SHOWN WILL REQUIRE DISPLACEMENT AND REPLACEMENT OF EXISTING ARMOR ROCK. THAT WORK WILL BE SUBSIDIARY TO 203.0006.0000.
3. SANITATION ROAD AND REVETMENT SECTIONS MAY BE MODIFIED TO FIT FIELD CONDITIONS AT THE DIRECTION OF THE ENGINEER.
4. AT THE DIRECTION OF THE ENGINEER, EROSION PROTECTION MAY BE PLACED WITHIN OTHER THREATENED OR ERODING SECTIONS OF THE SHISHMAREF SANITATION ROAD (STA. 1+00 TO 43+00) TO BE PAID FOR AT THE UNIT PRICE FOR THE MATERIALS USED.

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TYPICAL SECTION 3
ROAD REHABILITATION
STA "L" 1+00 TO 5+00

NOTE:

- SANITATION ROAD STA. 1+00 TO 5+00 SHALL BE GRADED TO A SMOOTH SURFACE IN PREPARATION OF 4" OF CRUSHED AGGREGATE SURFACE COURSE, AS APPROVED BY THE ENGINEER.
- SANITATION ROAD PROFILE AND ALIGNMENT MAY BE SLIGHTLY MODIFIED TO FIT FIELD CONDITIONS AT THE DIRECTION OF THE ENGINEER.
- AT THE DIRECTION OF THE ENGINEER, EROSION PROTECTION MAY BE PLACED WITHIN OTHER THREATENED OR ERODING SECTIONS OF THE SHISHMAREF SANITATION ROAD TO BE PAID FOR AT THE UNIT PRICE FOR THE MATERIALS USED.
- RELATIVELY SMALL SLIVER FILLS OF BORROW MAY BE NECESSARY TO LEVEL UP ROAD PRIOR TO PLACEMENT OF SURFACE COURSE, AS DIRECTED BY THE ENGINEER.

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ESCP GENERAL NOTES

GENERAL

- SHISHMAREF IS LOCATED ON SARICHEF ISLAND, A BARRIER ISLAND OFF THE NORTHWEST COAST OF THE SEWARD PENINSULA. IT IS A CLASSIC BARRIER BEACH, COMPOSED PRIMARILY OF SAND DEPOSITED BY THE WAVES AND CONTINUALLY BEING ERODED AND BUILT UP AT DIFFERENT POINTS.
- DISCONTINUOUS PERMAFROST UNDERLIES PARTS OF SARICHEF ISLANDS AT DEPTHS OF 2 TO 4 FT AND IS CRITICAL TO ISLAND'S STABILITY. THE EROSION PROBLEM IS CAUSED BY STORM-DRIVEN WAVES BEATING AGAINST THE SANDY ISLAND SHORE. THE STABILITY OF A BAR IS BELIEVED TO BE PARTIALLY A FUNCTION OF SEASONALLY AND PERMANENTLY FROZEN GROUND (1980 USCOE COMMUNITY MAP)
- PROJECT CORRIDOR IS ABOUT 2,900' LONG ON THE COASTAL LANDFILL ROAD ON SARICHEF ISLAND IN SHISHMAREF, ALASKA. MORE SPECIALLY IT RUNS PARALLEL TO THE SHISHMAREF AIRPORT RUNWAY 5 AND EXTENDS TOWARDS THE LANDFILL SITE. GROWING SEASON IS FROM MAY 23 TO OCTOBER 3 FOR NORTHERN ALASKA SEWARD PENINSULA/COASTAL PLAIN ECO-REGION (USACE WETLANDS DELINEATION MANUAL: ALASKA REGION, VERSION 2). TYPE OF FOREST : COASTAL TUNDRA.
- A SEARCH OF THE ADEC DRINKING WATER PROTECTION AREAS (DWPA) MAP LOCATED AT [HTTP://DEC.ALASKA.GOV /DAS/GIS/APPS.HTM](http://dec.alaska.gov/das/gis/apps.htm) SHOWED THIS PROJECT AREA DOES NOT INTERSECT WITH A DRINKING WATER PROTECTION AREA THAT IS LOCATED ON THE OPPOSITE SIDE OF THE ISLAND.
- PROJECT INVOLVES REPAIR OF SEVERAL DAMAGED SECTIONS OF EMBANKMENT AND SLOPE REPAIRS AND UPGRADES.
- PROJECT AREA: 8.0 ACRES.
- ESTIMATED AREA DISTURBED: 2.2 ACRE.
- SHISHMAREF HAS A TRANSITIONAL CLIMATE BETWEEN THE COLD FROZEN ARCTIC AND THE CONTINENTAL INTERIOR. WINTER TEMPERATURES AVERAGE BETWEEN 2°F AND -12°F, SUMMERS CAN BE FOGGY WITH WEST WINDS PREVAILING AND TEMPERATURES AVERAGING BETWEEN 47°F AND 54°F. AVERAGE PRECIPITATION WAS ESTIMATED AT 8.02 INCHES (1980 USCOE STUDY). WINDS FROM THE WEST AND NORTH PREDOMINATE AT SHISHMAREF.
- AVERAGE ANNUAL PRECIPITATION IS 11.48 IN (WALES STATION (50-9739), LAT. 65.6167; LONG. -166.0500, PER WESTERN REGIONAL CLIMATE DATA CENTER WEBSITE, SEE APPENDIX B.
- PROBABLE MAXIMUM PRECIPITATION FOR 2 YEAR, 24 HOUR IS 0.97 IN AT THE SHISHMAREF STATION (50-8437), LAT. 66.2506; LONG. -166.0821 PER https://hdsc.nws.noaa.gov/pfds/pfds_map_ak.html
- NAME(S) OF RECEIVING WATERS: SHISHMAREF INLET AND CHUKCHI SEA.
- IMPAIRED WATERS: NONE.
<https://dec.alaska.gov/water/water-quality/map>
- SOILS CONSISTS OF SILTY SAND AND GRAVEL.
- PERMIT CONDITIONS: REFER TO APPENDIX A. COMPLY WITH CONDITIONS OF THE THREATENED AND ENDANGERED SPECIES ACT AND WETLANDS WORK COMMITMENTS.
- MIGRATORY BIRD TREATY: ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE MIGRATORY BIRD TREATY ACT TO PREVENT THE KILLING OR TAKING OF MIGRATORY BIRDS OR ANY PART, NEST OR EGG OF SUCH BIRDS.
- HISTORIC PLACES: NO HISTORIC PROPERTIES HAVE BEEN IDENTIFIED WITHIN THE PROJECT LIMITS.

GENERAL SWPPP NOTES:

- CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE ADEC CONSTRUCTION GENERAL PERMIT AKR100000.
- THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWPPP MANAGER/STORMWATER LEAD WHO IS RESPONSIBLE FOR IMPLEMENTING THE SWPPP.
- TIMING OF BMP INSTALLATION SHALL MATCH REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT (CGP). STABILIZATION MUST BE IN ACCORDANCE WITH CGP SECTION 4.5. (PP. 27-28).
- SEDIMENT CONTROL MEASURES AND TEMPORARY EROSION CONTROL FEATURES SHALL BE BASED ON LATEST BEST MANAGEMENT PRACTICES AS CONTAINED IN THE "CONTRACTOR GUIDANCE FOR PREPARING AND EXECUTING STORM DEPARTMENT MANUAL WATER POLLUTION PREVENTION PLANS".
- INSTALL PERIMETER SEDIMENT PROTECTION AT ALL LOCATIONS WHERE EXCAVATION OCCURS BELOW CURRENT BEACH BOTTOM ELEVATION.
- IDENTIFY, LOCATE AND PROTECT ALL OTHER LOCATIONS THAT MAY NEED TO BE PROTECTED FROM THE PROJECT-GENERATED SEDIMENTS; THIS REQUIREMENT ALSO INCLUDES MATERIAL SITES IF THEY ARE DESIGNATED AS AVAILABLE AND ARE SUBJECT TO MATERIAL SALES AGREEMENTS WHERE STATE OF ALASKA HAS A LEGAL INVOLVEMENT.
- IF EXCAVATION DEWATERING IS ANTICIPATED, COMPLY WITH THE DEC EXCAVATION DEWATERING PERMIT.

TIMING OF BMP INSTALLATION:

- THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S WILL BE INSTALLED PRIOR TO START OF CONSTRUCTION, AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ON SITE.
- TEMPORARY PERIMETER CONTROL BMP'S WILL BE INSTALLED BEFORE ANY SOIL DISTURBANCE OCCURS.
- BEFORE ANY HYDRAULIC CONVEYANCE OR DEWATERING PROCEDURES OCCURS, AN APPROPRIATE PLAN TO ISOLATE WORK FROM FLOWING WATERS OF THE U.S. MUST BE APPROVED BY THE PROJECT ENGINEER.

ARMOR AND FILTER ROCK NOTES:

- AT NO TIME WILL EMBANKMENT IN PROJECT AREA WILL BE LEFT EXPOSED TO THE ERODIBLE FORCES
- THE PLACEMENT OF ALL PRIMARY ARMOR AND FILTER ROCK SHALL BE TIMED IN ACCORDANCE WITH ALASKA SEASONAL LOW WATER WHERE APPLICABLE.

MATERIAL SITE NOTES:

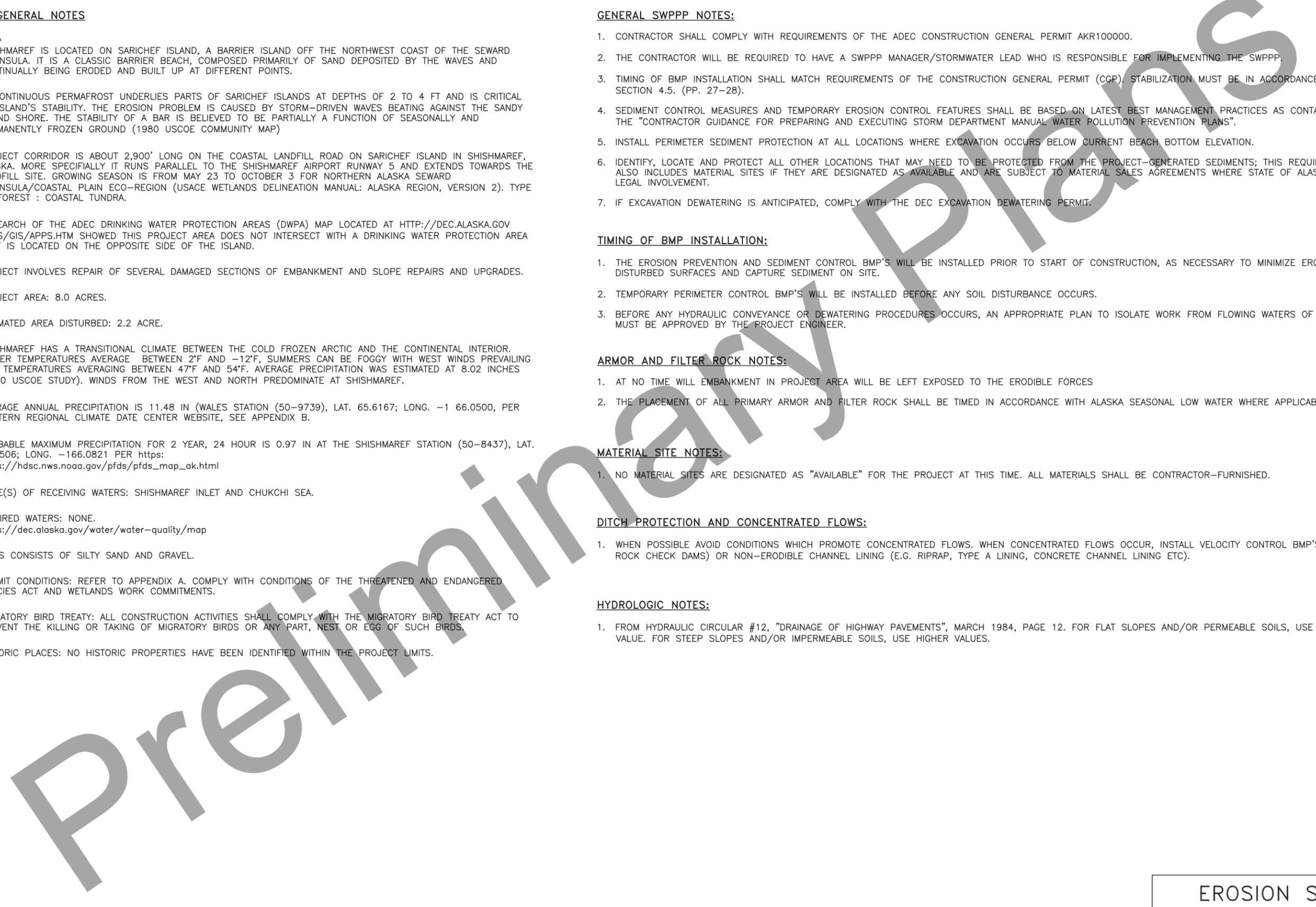
- NO MATERIAL SITES ARE DESIGNATED AS "AVAILABLE" FOR THE PROJECT AT THIS TIME. ALL MATERIALS SHALL BE CONTRACTOR-FURNISHED.

DITCH PROTECTION AND CONCENTRATED FLOWS:

- WHEN POSSIBLE AVOID CONDITIONS WHICH PROMOTE CONCENTRATED FLOWS. WHEN CONCENTRATED FLOWS OCCUR, INSTALL VELOCITY CONTROL BMP'S (E.G. ROCK CHECK DAMS) OR NON-ERODIBLE CHANNEL LINING (E.G. RIPRAP, TYPE A LINING, CONCRETE CHANNEL LINING ETC).

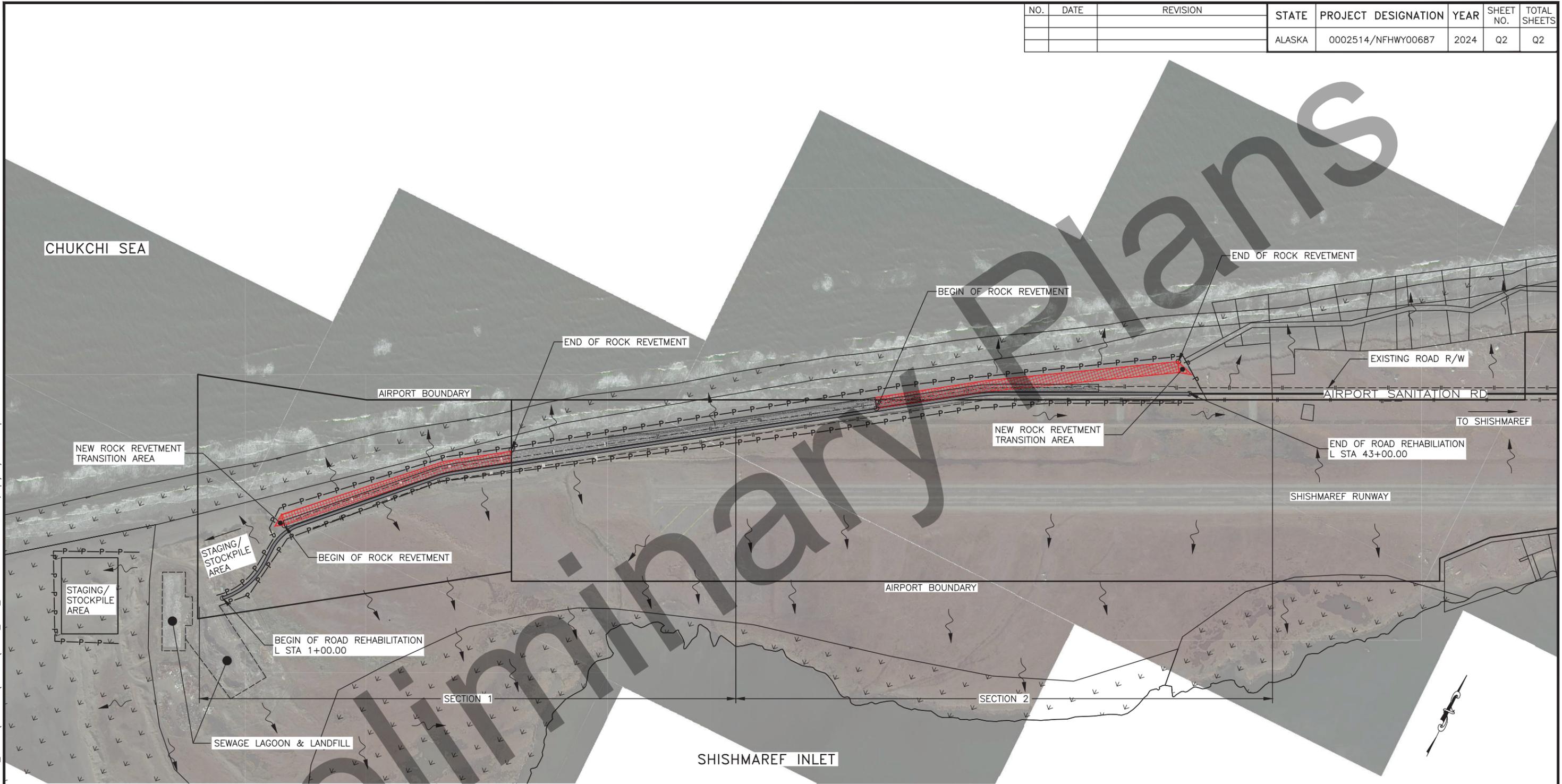
HYDROLOGIC NOTES:

- FROM HYDRAULIC CIRCULAR #12, "DRAINAGE OF HIGHWAY PAVEMENTS", MARCH 1984, PAGE 12. FOR FLAT SLOPES AND/OR PERMEABLE SOILS, USE LOWER VALUE. FOR STEEP SLOPES AND/OR IMPERMEABLE SOILS, USE HIGHER VALUES.



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PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907)451-2200
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LEGEND	
	PERIMETER CONTROL
	MEAN HIGH WATER CONTOUR
	SHEET FLOW DIRECTION
	WETLAND AREA
	REVETMENT FOOTPRINT
	NEW ROAD
	NEW ROCK REVETMENT

**EROSION SEDIMENT
CONTROL PLAN 2 OF 2**