### TRANSMITTAL FORM

ADDENDUM TO THE CONTRACT DOCUMENTS	Page Number 1	No. of Pages 22				
Addendum No. One (1)	Date Addendum Issued: June 27, 2025					
Issuing Office Alaska State Parks, Design & Construction Section 550 West 7 <sup>th</sup> Ave., Suite 1340, Anchorage, Alaska 99501 Phone: 269-8731 Fax: 269-8917	Previous Addenda Issued None					
Project: Chena Pump SRS Facility Improvements Project No.: 71882-1	Date and Hour of Quotes Due July 16, 2025 2:00pm prevailing time					

### **NOTICE TO BIDDERS**

Bidder must acknowledge receipt of this addendum prior to the hour and date set for the quotes being due by one of the following methods:

- (a) By acknowledging receipt of this addendum on the quote submitted.
- (b) By telegram or telefacsimile which includes a reference to the project and addendum number.

The bid documents require acknowledgment individually of all addenda to the drawings and/or specifications. This is a mandatory requirement and any quote received without acknowledgment of receipt of addenda may be classified as not being a responsive bid. If, by virtue of this addendum it is desired to modify a quote already submitted, such modification may be made by telegram or telefacsimile provided such a telegram or telefacsimile makes reference to this addendum and is received prior to the opening hour and date specified above.

### The Specifications Are Modified As Follows:

- Add Attachment A to Appendix A
- Add Attachment B to Appendix B
- Add Attachment C to Appendix C
- Add Attachment D to Appendix D

Bidders are required to acknowledge this addendum on the proposal for	m
or by FAX prior to the quotes being due.	

Addendum	n Number <b>One</b> received.	
Name/Title	Date	_
	Firm	

**END OF ADDENDUM** 



### FNSB FLOODPLAIN DEVELOPMENT PERMIT

Requirements for this permit:

Permit Number: FP 2025-0024

### **Application Type:**

Construction of any new or substantially improved structure or placement of moveable structure (15.04.080 B)

### Standards:

15.04.080 B

Structure shall be designed to prevent floatation, collapse or lateral movement. Fuel storage tanks shall be adequately secured to prevent floatation or disturbance. On-site waste disposal systems shall be designed to minimize infiltration of flood waters. All mechanical and electrical devices subject to water damage elevated at or above BFE. Improvements located below BFE shall be constructed with materials resistant to flood damage.

15.04.080 C

Residential Structures. All new construction of and substantial improvements to residential structures shall have:

- 1. The lowest floor (including basement) elevated to or above the base flood elevation; and
- 2. Other fully enclosed areas below the lowest floor, such as crawl spaces, that are subject to flooding, and that are usable solely for the parking of vehicles, building access, or limited storage, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following criteria:
- a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- b. The bottom of all openings shall be no higher than one foot above grade.
- c. Openings shall be equipped with screens, louvers, valves or other coverings or devises; provided they permit the automatic entry and exit of floodwaters.

Issued To: Name: FEHRMANN CHET

Mailing Address: 550 W 7TH AVE SUITE 1340 City/State/Zip ANCHORAGE AK 99501

Issued By:	Date: 06/10/2025	<b>BFE</b> : 429'

### (Floodplain Administrator)

### **Description of proposed work:**

Recreational facility maintenance. Picnic shelter replacement and parking lots repaying.

### **Specific Standards:**

Submission of certificate of compliance application upon project completion is required. To include summary of project execution relative to permitted construction.

Parcel(s) 0176877 TL-2807 SECTION 28 T1S-R2W **Project Address:** 1600 CHENA PUMP RD

### NOTE:

This permit authorizes development in the Special Flood Hazard Area described above.

A Certificate of Compliance shall be applied for within 60 days after obtaining the elevation certificate.

The holder of this permit is required to comply with all other applicable laws, including city, borough, state and federal laws.



## Alaska Department of Transportation and Public Facilities

# Alaska Construction Surveying Requirements (US Customary Units)

## Alaska Construction Surveying Requirements (US Customary Units)

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### 1. Survey accuracy requirements

### Third order survey

- ✓ Use a 1/5000 horizontal closure.
- ✓ Use an angle closure of  $30\sqrt{N}$  seconds, where N equals the number of angles in the traverse.
- ✓ An Alaska-registered professional land surveyor must perform or supervise replacement of survey monuments (property, USGS, USC&GS, BLM, etc.) or establishment of monuments (including centerline).
- ✓ All monument work must comply with AS 34.65.040 and meet standards in the latest version of the Alaska Society of Professional Land Surveyors' *Standards of Practice Manual*.
- ✓ The allowable vertical error for misclosure is  $e = 0.05 \sqrt{M}$  e = maximum misclosure in feet, M = length of the level circuit in miles.

Table 1—Survey accuracy requirements (in feet)

	Stationing	HI	Closure	Horizontal Angle	Distance To center line	Grade
Additional cross sections	1.0	0.01	0.04	**	0.1	0.1
Benches		0.01	0.02			
Blue tops***	1.0	0.01	0.04		0.1	0.02
Bridges	*	0.01	0.02			0.01
Centerline	*			*		
Clearing & Grubbing	1.0				1.0	
Culverts	1.0	0.01	0.04	**	0.1	0.1
Curb & gutter	1.0	0.01	0.02		0.1	0.02
Grade stakes	1.0				0.1	0.1
Guardrail	1.0				0.1	
Manholes, catch basins & inlets	1.0	0.01	0.02		0.1	0.02
Monuments	*			*		
Red tops***	1.0	0.01	0.02		0.1	0.05
Riprap	1.0	0.1	0.04		1.0	0.1
Signs	1.0				0.1	
Slope stakes & RP's	1.0	0.01	0.04	**	0.1	0.1
Under drains & sewer	1.0	0.01	0.02		0.1	0.02

<sup>\*</sup> Third order survey

<sup>\*\*</sup>Right angle prism or transit angles from center line

<sup>\*\*\*</sup> Use blue tops for top of base course and red tops for the bottom of base course.

### 1. Survey frequency requirements

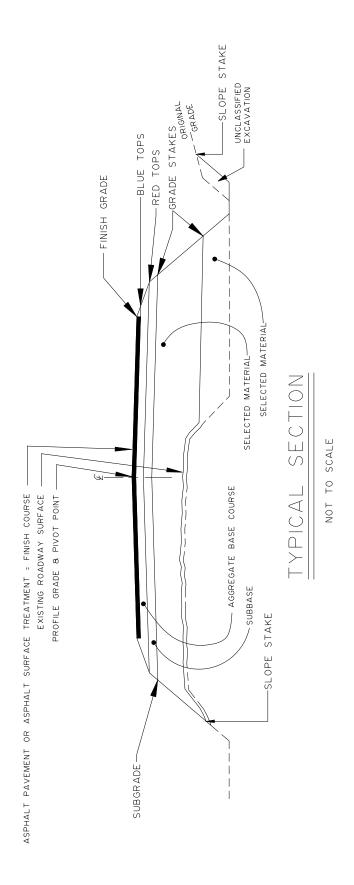
**Table 2—Survey frequency requirements (in feet)** 

	Tangents	Curves	Interchange ramps	Stake each per plan	See special instructions on sample notes
Additional cross sections	*	*	*		
Bench marks					X
Blue tops	100	100**	25		X
Blue tops within 100 feet both sides of railroad track crossings and bridge approaches	25	25	25		X
Bridges				X	X
Center line	100	100**	25		
Clearing	100	100**	25		X
Culverts				X	X
Curb and gutter	25	25	25		
Grade stakes	100	100**	50		
Guardrail	25	25	25		
Manholes, catch basins & inlets				X	
Monuments				X	
Red tops	100	100**	25		X
Riprap	50	50	50		
Signs				X	
Slope stake / cross sections	100	100**	25		X
Under drains and sewers	50	25	25		

<sup>\*</sup> Establish additional cross sections and slope stakes at all breaks in topography and where structures begin and end.

<sup>\*\*</sup>Curves shall be staked on 50-foot stations if the curve is greater than six degrees.

### 2. Typical Section Drawing



### 3. Survey point materials requirements

- ✓ These are minimum requirements; larger sizes may be necessary.
- ✓ Use only stakes with planed sides.

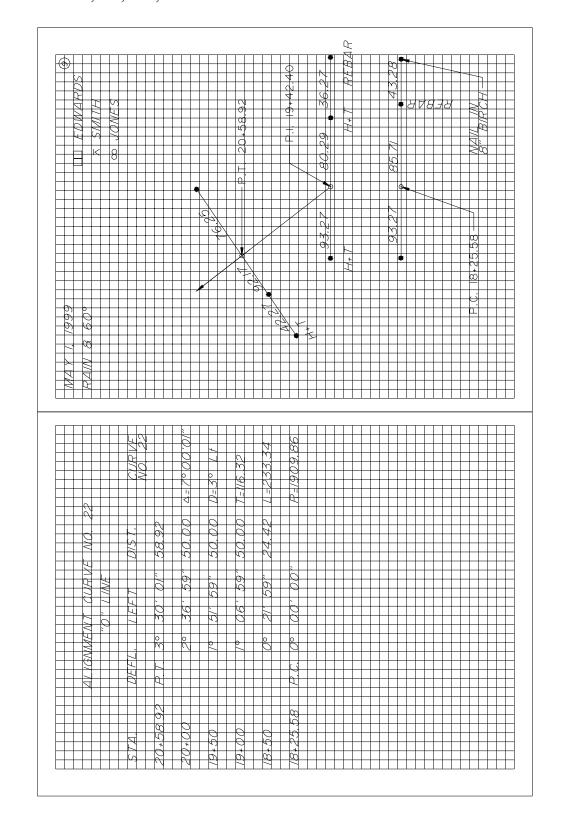
Table 3—Survey point materials requirements

	24" lath or whiskers	2" x 2" x 8" hub	2" x 2" x 12" hub	1" x 2" x 18" stake	1" x 2" x 24" stake	48" lath	Hub and tack	40d nail	60d nail	½" x 24" rebar
Benchmarks									X	
Blue tops	X	X								
Centerline P.C., P.T., P.O.T.			X	X			X *			X*
Centerline reference points			X	X			X *			X *
Centerline station				X				X		
Clearing						X				
Culvert stake			X		X	X				
Culvert stake references					X	X				
Curb and gutter			X		X		X			
Guardrail								X		
Major structures			X	X *	X *	X	X *			X *
Red tops	X	X								
Signs						X				
Slope stake					X	X				
Slope stake references			X		X	X				

<sup>\*</sup> Optional depending on conditions, and to be determined by the Project Engineer.

### 4. Typical alignment notes

- ✓ The Chief of Parties must prepare the alignment book before actual staking.
- ✓ Don't use swing ties for reference points.
- ✓ Use three point right angle ties, two to the right and one left, or vice versa.
- ✓ Reference P.C., P.I., P.T., and P.O.T.



### 5. Typical clearing notes

- ✓ Exclude areas not needing clearing.✓ Draw a diagram as required to show unusual or confusing areas.

© (8) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B	⊼ SMITH	∞ JOMES											
		<u> </u>											
				CL.RT.	215'	200,	216'	192,	200,				
1999		EAR			+12'								
AUG. 6, 1999		80°± CLEAR	CALM	CA TCH	203'	188,	204'	180,	188,				
. GRUBBING -				CA TCH	137'	152'	147'	155'	167,				
CLEARING &					+12,								
+ CLEA				CL.L T.	149,	164,	159'	167,	179,				
				S74.	5+50	00+9	05+9	7+00	7+50				

### 6. Typical level notes

- ✓ Balance back sights and foresights.
- ✓ Establish all benchmarks and take the centerline profile before doing any staking involving elevations.
- ✓ Don't set benchmarks in utility poles.
- ✓ Don't use side shots on benchmarks.
- ✓ Use the turn through method when establishing benchmarks.
- ✓ Re-check benchmarks after each major freeze/thaw cycle and/or any environmental event that may change the benchmark elevation.
- ✓ Do not use double rodding.
- ✓ Run separate level loops between all benchmarks
- ✓ Set benchmarks in trees of at least six-inch diameter, unless approved by the Project Engineer.

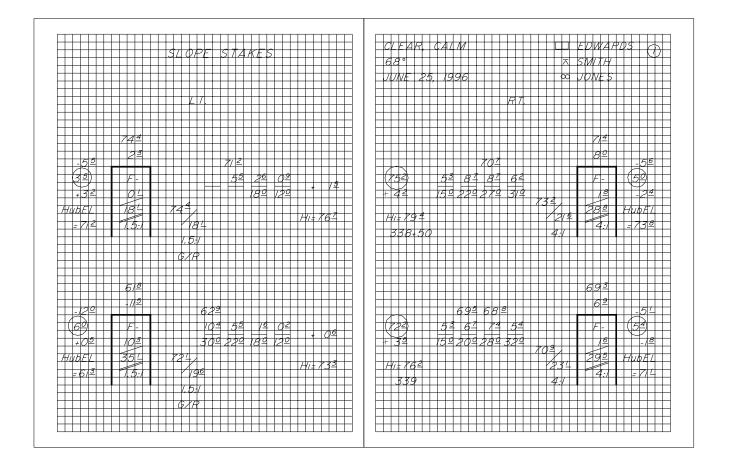
- ✓ Correct errors in benchmark elevations so they will not affect the elevations of succeeding benchmarks.
- ✓ Consult with the Project Engineer before placing benchmarks in areas of permafrost or other unstable ground.
- ✓ Establish benchmarks at intervals and locations consistent with good engineering practice, and generally not more than 1000 feet.
- ✓ Completely describe benchmarks when establishing or re-establishing their elevation. Give centerline stationing, offset, benchmark projection, and observable benchmark characteristics. When checking into or out of benchmarks, note the book and page number that contains the most recent elevation establishment for that benchmark.
- ✓ Write the station on the top twelve inches facing centerline, with numerals a minimum of one inch in height.

						C				
STA.	BS+	HI	FS-	ELEV.	45°± CLE WARM CA	AR ALM			⊼ Ш	EDWARDS
					WILD 413		3-2	3-90	\$	SMITH
TBM #1	01			161 700		A/ai/ ia	6 0 0 0 0	f 12" S	2000	
6+72				161.309		IVAII III	85' 10		6+72	
	3.877	165.186					00 70	<i>L</i> 7.	0172	
6+00			1.95	163.24						
6+25			2.32	162.87						
6+50			2.96	162.23						
<i>T.P.</i>			3.246	161.940						
	1.103	163.043	3							
6+75			2.31	160.73						
7+00			2.56	160.48						
T.P.			2.823	160.220						
	2.332	162.552				Nail in	base (	of 18".	stump	
TBM #1	02		1.143	161.409		60' 4		7+21	Elev.	161.413

### 7. Typical slope stake notes

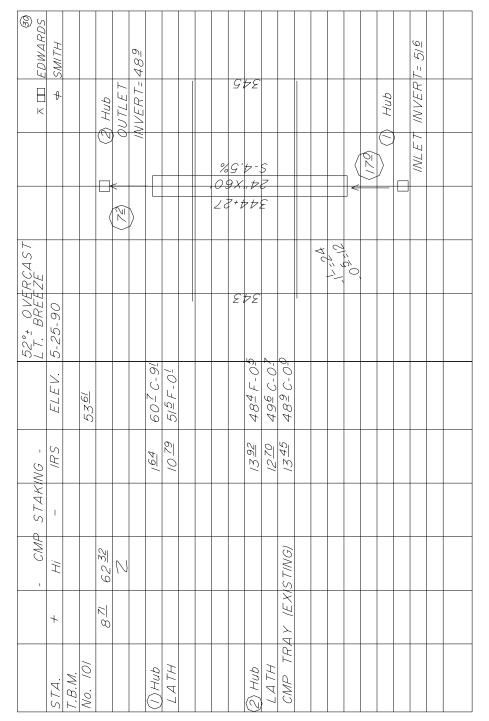
- ✓ Enter the station, elevations, shoulder distance or ditch distances, and slope in the slope stake book before staking begins.
- ✓ In areas where slides or overbreak are anticipated, extend the sections beyond the construction limits.
- ✓ Slope-stake each section that is cross-sectioned.
- ✓ Final re-cross sections are required where there are overbreaks, undercuts, etc. Re-cross section book and page numbers shall be noted on the original cross-section and slope staking page for the relevant stations.

- ✓ Use a hand level only for one turn up or down from the instrument.
- ✓ Clearly note hand level turns.
- ✓ Use a reference point that is 10-20 feet beyond the slope stake.
- ✓ The reference point must show the cut or fill to the slope stake and must include the slope stake information.
- ✓ Slope stake all abrupt changes in typical sections.
- ✓ Position all laths to face centerline.
- ✓ Include at least the following information on the stake: (1) where to begin the cut or fill (2) the slope ratio (3) the depth of cut or height of fill and (4) the station.

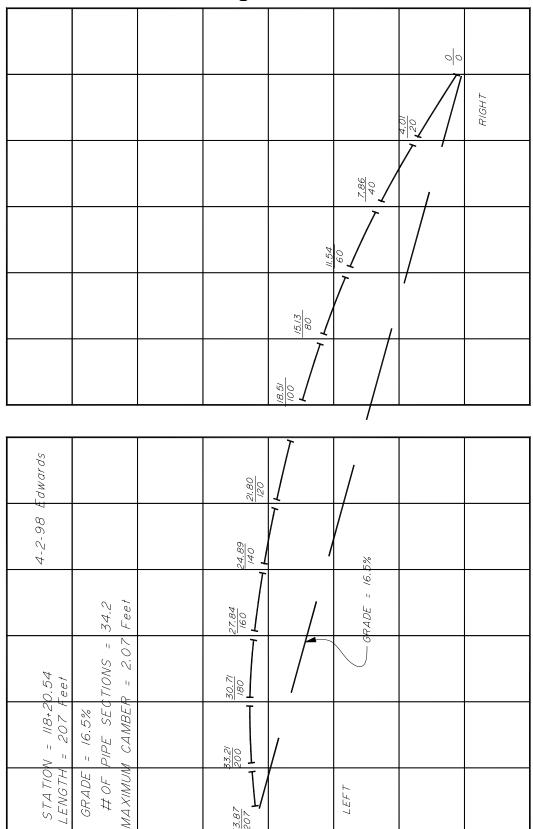


### 8. Typical culvert notes

- ✓ Show at least the following information on culvert stakes
  - station
  - size
  - length
  - type of pipe (e.g., 24" x 80' CMP)
- cut or fill from top of hub to inlet & outlet
- skew angle
- horizontal distance from hub to end of pipe
- gradient of pipe
- drop of pipe
- ✓ Ensure that all culverts have a minimum camber equal to 1% of the length of the pipe, unless the Project Engineer directs otherwise.
- ✓ Develop a culvert camber diagram showing each section of pipe and its elevation and offset.

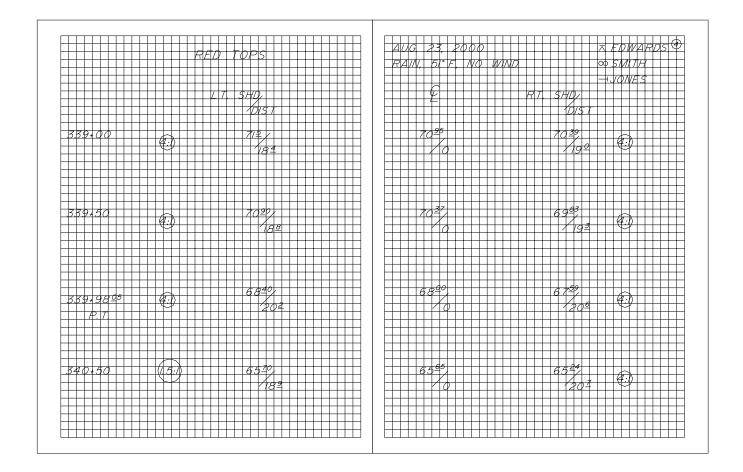


### 9. Typical culvert camber diagram



### 10. Typical blue or red tops and grade stake notes

- ✓ Place blue and red tops at each break in typical section and on centerline.
- ✓ Use blue tops for top of base course.
- ✓ Use red tops for the bottom of the base course.
- ✓ Evenly space red/blue tops at and between crown section break points with a maximum spacing of 25 feet between red/blue tops.
- ✓ Establish horizontal control from centerline references and vertical control from benchmarks.
- ✓ Place blue tops at the same interval as slope stakes.
- ✓ Stake all curve transitions.



### SITE DESCRIPTION: ASSUMED CONSTRUCTION SEQUENCE: **ENVIRONMENTAL INFORMATION:** EROSION & SEDIMENT CONTROL PLAN (ESCP) NOTES: Ø RESOURCES RECREATION 7.269.8731 SITE FUNCTION: RECREATIONAL USE AREA, BOAT LAUNCH/ RIVER IMPLEMENT ESCP / INSTALL BMPs AS BEO'D RECEIVING WATER BODIES: TANANA RIVER THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL DETAILS AND BEST MANAGEMENT PRACTICES (BMPs) BASED ON THE IMPLEMENT TRAFFIC CONTROL PLAN ACCESS IMPAIRED WATER BODIES: NONE THIS PROJECT INCLUDES RECONDITIONING OF EXISTING ROADWAY REMOVE AND DISPOSE SPECIFIED TOTAL MAXIMUM DAILY LOAD (TMDL) THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF DISTURBED AREA OPEN TO EROSION AT ANY ONE TIME. PLACEMENT OF D-1, PLACEMENT OF HOT MIX ASPHALT, REMOVAL OF STRUCTURES WATERS: N/A EROSION AND SEDIMENT CONTROL BMPs SHALL BE INSTALLED WITHIN 7 DAYS IN AREAS WHERE EARTHWORK DISTURBANCE HAS SIGNPOSTS AND BASES, REPLACEMENT OF PICNIC SHELTERS, CONSTRUCT PICNIC SHELTERS & ORIENTATION KIOSK, INSTALL BEAR PROOF THREATENED AND ENDANGERED SPECIES TEMPORARILY OR PERMANENTLY CEASED. INSTALLATION OF AN ORIENTATION KIOSK, INSTALLATION OF A BEAR ALL DISTURBED GROUND CAPABLE OF SUPPORTING VEGETATION SHALL BE REVEGETATED. FOR FINAL STABILIZATION. FINAL STABILIZED (ESA): NONE GARBAGE CAN, INSTALL INTERPRETIVE SIGN, PROOF GARBAGE CAN, INSTALLATION OF A INTERPRETIVE SIGN, HISTORIC IMPACTS: CHENA TOWNSHIP AREAS NOT REVEGETATED SHALL BE 100% COVERED BY ROCK, ASPHALT, CONCRETE, OR OTHER PERMANENT NON-ERODABLE MATERIAL. INSTALLATION OF SIGNPOSTS AND BASES. ARCHAEOLOGICAL DISTRICT & TANANA INSTALL SIGN POST BASES, AND PLACE D-1 TEMPORARY PERIMETER CONTROL BMPs SHALL BE INSTALLED BEFORE ANY UP-GRADIENT SOIL DISTURBANCE OCCURS. PROVIDE PERIMETER CONTROLS IN AREAS NOT SHOWN ON THE PLANS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING PROJECT AREA. PROJECT AREA: 3.2 ACRES VALLEY RAILROAD PAVE, PLACE D-1 SHOULDER, APPLY PAINTED TRAFFIC MARKINGS, INSTALL CONCRETE PROJECT DISTURBED AREA: 1.51 ACRES RETAIN A VEGETATIVE BUFFER STRIP IN UPLAND AREAS WHENEVER POSSIBLE. VEGETATIVE BUFFER STRIPS MAY BE USED IN LIEU OF SILT CONTACT THE PROJECT ENGINEER WITH PERCENT IMPERVIOUS AREA BEFORE CONSTRUCTION: 92.4% RUNOFF COEFFICIENT BEFORE CONSTRUCTION: 0.48 PERCENT IMPERVIOUS AREA AFTER CONSTRUCTION: 100% FENCE OR OTHER TEMPORARY DEVICES PROVIDED THEY ARE OF SUFFICIENT WIDTH FOR THE CATCHMENT AREA. ADDITIONAL QUESTIONS PARKING BUMPERS. AVOID CONDITIONS WHICH PROMOTE CONCENTRATED FLOWS. INSTALL VELOCITY CONTROL BMPs WHEN CONCENTRATED FLOWS OCCUR. REMOVE TRAFFIC CONTROL DEVICES AND SLOPE PROTECTION MAY INCLUDE SLOPE ROUGHENING, TACKIFYING, EROSION CONTROL BLANKETS, SEEDING, ROCK LINING, OR OTHER RUNOFF COEFFICIENT AFTER CONSTRUCTION: 0.78 METHODS APPROVED BY THE PROJECT ENGINEER. EXISTING SOILS CONSIST FINE SANDY LOAM (USGS GEOLOGICAL 7. DEMOBILIZE EQUIPMENT AND SITE CLEANUP 10. ALL STOCKPILES OF ERODIBLE MATERIALS SHALL HAVE PERIMETER CONTROL IN PLACE. CHENA PUMP RD EDGE OF PAVEMENT **GUARDRAIL** A, DEPARTMENT OF NABY: DIVISION OF PARKS AND SUITE 1340, ANCHORAGE, AK ORIENTATION\_ -BEARPROOF GARBAGE CAN CONCRETE PARKING BUMPER KIOSK EXISTING VAULTED TOILET (PIP) 0 CONTROL POINT NO. 3 $\circ$ CHENA PUMP SRS FACILITY IMPROVEMENTS PROJECT No. 71882-1 PICNIC SHELTER 2 0 FINISHED FLOOR PICNIC SHELTER ELEVATION 462.93' E OF ALASKA ANS DEVELOPED E FINISHED FLOOR INTERPRETIVE OLD TIMÉR'S CABIN (PIP) www.... BEARPROOF GARBAGE CAN BARRIER ROCK (TYP.) CONTROL POINT NO. 1 $\bar{\mathbf{x}}$ ORDINARY HIGH WATER ~458.5 +/-EDGE OF WATER AS SURVEYED PREPARED: EEH DRAWN: EEH PROPOSED BMP REVIEWED: RCS DATE: 2/24/2025 TABILIZED CONSTRUCTION ENTRANCE GRAPHIC SCALE TANANA RIVER SHEET EXISTING VEGETATION/VEGETATED BUFFER CULTURALLY SENSITIVE AREA ( IN FEET ) OF 1 SHEETS

### **MATERIALS CERTIFICATION LIST**

			Construction			Design		Statewide	
		Approved	Project	QA/Materials	Design	Bridge	Traffic	State	Manufacturer/
	Specifications	Products	Engineer	Engineer	Engineer	Engineer	Engineer	Materials	Remarks
		List						Engineer	
Project Name		(	Chena Pump SR	S Facility Improve	ements				
Project Number			-	71882-1					
Project Engineer Signature									
301 AGGREGATE BASE COURSE									
Aggregate for Base and Surface Course	703-2.03								
401 ASPHALT HOT MIX PAVEMENT			ļ						
Mix Design	401-2.01								
Asphlat Binder	702-2.01								
Tack Coat	702-2.03								
615 STANDARD SIGNS									
Sheet Aluminum	730-2.01								
Reflective Sheeting, ASTM D4956	730-2.03								
Sign Posts	730-2.04								
622 PARK FACILITIES									
Backfill	703-2.07								
Concrete, Class A	501-2.02								
Structural Steel	622-2.04								
Galvanizing	622-2.05								
Lumber	713-2.01								
Treated Lumber	713-2.01								
Metal Roofing	622-2.09								
Fasteners	622-2.10								
Paint	622-2.11								
Signs	622-2.12								
Bearproof Grabage Can	622-2.13								
Seat Rock	622-2.14								
Picnic Shelter	622-2.15								
Orientation Kiosk	622-2.16								
Interpretive Sign, Type D	622-2.17								
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### **MATERIALS CERTIFICATION LIST**

		Construction				Design		Statewide	
	Specifications	Approved Products	Project Engineer	QA/Materials Engineer	Design Engineer	Bridge Engineer	Traffic Engineer	State Materials	Manufacturer/ Remarks
		List						Engineer	
670 PAINTED TRAFFIC MARKINGS									
Pavement Markings	670-2.01								