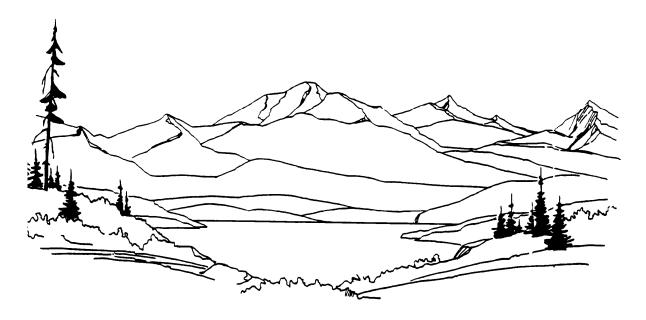
DIVISION OF PARKS AND OUTDOOR RECREATION



PROPOSAL, CONTRACT, BOND AND SPECIAL PROVISIONS

CHENA PUMP SRS FACILITY IMPROVEMENTS PROJECT NO. 71882-1

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5. Federal Wage Rates

Federal wage rates can be obtained at https://sam.gov/content/wage-determinations for the State of Alaska. Use the federal wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the federal wage rates in the signed Contract.

6. State Wage Rates

State wage rates can be obtained at http://www.labor.state.ak.us/lss/pamp600.htm. Use the State wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the State wage rates in the signed Contract.



INVITATION TO BID

for Construction Contract

MENT OF	NATUE	Date:		
	Chana Pump SRS Facility	y Improvements, Project No. 71882-1		
		t Name and Number		
project described bel source) on the <u>16t</u>	ites bidders to submit bids for furnish ow. The Department will only conside h day of July 2025	ning all labor, equipment, and materials and performing all work for the er bids received before 2:00 PM local time (per the Department's time 5 . On that date, the Department will assemble, open, and then publicly the solution of the		
Location of Project:	Fairbanks, Alaska			
Contracting Officer:	Rys Miranda, P.E.			
Issuing Office:	DNR, Division of Parks and Outdoor	or Recreation		
	State Funded [□ Federal Aid ⊠		
an orientation kid of an interpretive	Contract will consist paving gravesk, installation of a bear proof traign.	vel roads and parking areas, replacing signage, installation of rashcan, replacement of two picnic shelters, and installation		
Project DBE Utilizat	ion Goal: ☐ Race-Neutral, Goal is 0%	% ☐ Race-Conscious, Goal is 0%		
The Engineer's Estin	mate is: ☐ less than \$100,000	☐ between \$1,000,000 and \$2,500,000		
	☐ between \$100,000 and \$250			
	☐ between \$250,000 and \$500	9		
	☑ between \$500,000 and \$1,0	000,000		
All work shall be co identify interim com	mpleted in <u>N/A</u> Calendar Day pletion dates, if any, in the Special Pro			
amount of 100% of t successful bidder mu	he contract as security conditioned for	and in the amount of 100% of the contract and a performance bond in the rather the full, complete and faithful performance of the contract. The apparent s within fifteen calendar days, or such further time as may be allowed in the acceptance of their bid.		
Submission of Bidding Documents				
hand delivered. For 1	bidding documents electronically via	the Department's approved online bidding service, through the mail or electronically submitted bids with a paper bid guaranty, documents shall		
Bidding Documents for Project: DNR, Division of Parks and Outdoor Recreation Chena Pump SRS Facility Improvements Project No. 71882-1 ATTN: DNR, Division of Parks and Outdoor Recreation 550 W. 7th Avenue, Suite 1340 Anchorage, AK 99501				
the deadline stated all Department at this en	bove. A bidder sending a bid amendme mail address: <u>rys.miranda@alaska.go</u>	dments, and/or withdrawal arrive, in its entirety, at the location and before ent or withdrawal via email or fax must transmit its documentation to the ov or fax number: (907) 269-8917. to 5% of the amount bid. (When calculating the bid amount for purposes		
of determining the 59 supplemental bid ite	% value of the bid guaranty, a bidder ms, if any.)	shall include its base bid amount, plus the amount bid for alternate and		
Invitation, Disadvan		rmatively ensure that in any contract entered into pursuant to this orded full opportunity to submit bids and will not be discriminated ex in consideration for an award.		

NOTICE TO BIDDERS The following data may assist a bidder in preparing its bid:

SEE SPECIAL NOTICE TO BIDDERS

A bidder may download project plans and specifications from: http://dnr.alaska.gov/parks/designconstruct/bidcalresults.htm. For additional information contact:

Division of Parks and Outdoor Recreation Design & Construction Section Phone: (907) 269-8731

If a bidder has a question relating to design features, constructability, quantities, or other technical aspects of the project, it may direct its inquiry to the contact listed below.

A bidder requesting assistance in viewing the project site must make arrangements at least 48 hours in advance.

The point of contact for inquiries for this project is:

Rangell Soriano, P.E.

Email: Rangell.soriano@alaska.gov

Phone: (907) 269-8937

A bidder may direct questions concerning bidding procedures and requirements to:

Rys Miranda, P.E. Chief, Design & Construction 550 W. 7th Ave., Suite 1340 Anchorage AK 99501 E-Mail: rys.miranda@alaska.gov

Phone: (907) 269-8736

Other Information:

Bid results are available approximately 30 minutes after bid opening at http://dnr.alaska.gov/parks/designconstruct/bidcalresults.htm

SPECIAL NOTICE TO BIDDERS

The Department hereby notifies bidders that information to assist in preparing bids is available.

1. Publications.

- a. Standard Specifications for Highway Construction, 2020 Edition. Available online at: https://dot.alaska.gov/stwddes/dcsspecs/assets/pdf/hwyspecs/sshc2020.pdf
- b. Alaska Test Methods Manual (Lab & Field), 2024 Edition. Available online at: http://www.dot.state.ak.us/stwddes/desmaterials/mat_waqtc/pop_testman.shtml
- 2. Other Publications. These items are available upon request from the Department of Natural Resources, Division of Parks & Outdoor Recreation, Design & Construction Section (DNR-DPOR-D&C) at 550 West 7th Avenue, Suite 1340, Anchorage, AK:
 - a. Estimate of Quantity Computations.
- 3. <u>Materials Certification List (MCL)</u>. The MCL provides the Engineer with the appropriate approving authority. Contractor, submit certification for each material to the Engineer. The MCL is included in Appendix D.
- 4. <u>High Visibility Clothing</u>. The Department requires all workers within the project limits to wear an outer visible surface or layer of high visibility color and retroreflectivity.
- 5. <u>Section 641</u>. ESCP has been provided by the Department in Appendix C.
- 6. <u>Electronic Bidding</u>. The Department is not able to receive bids electronically. All bidding documents must be submitted by mail or hand delivered. Documents shall be submitted in a sealed envelope.
- 7. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially procured material from a source existing prior to the event. For any federal-funded project requiring the use of a non-commercial source or a commercial source that was not permitted to operate prior to the event (e.g. a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify the Department prior to extracting material. The Department must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow sources utilized is required at closeout.

<u>Cultural and Archaeological Survey for Material Sources.</u> All material sources associated with this project must conform to AS 41.35.070 and have documented survey showing no adverse effects to historic, prehistoric, or archaeological resources. A list of qualified consultant approved to perform cultural/archaeological surveys can be found at: http://dnr.alaska.gov/parks/oha/grant/contractorlistcurrent.pdf.



REQUIRED DOCUMENTS

Federal-Aid Contracts (Non-FHWA)

REQUIRED FOR BID. Bids will not be considered if the following documents are not completely filled out and submitted at the time of bidding:

- 1. Bid Forms
 - a. Bid Form (Form 25D-09DNR)
 - b. Bid Schedule
 - c. Bid Attachments (as applicable)
 - d. Addenda Acknowledgement (as applicable)
- 2. Bid Bond (Form 25D-14DNR)

REQUIRED FOR BID MODIFICATIONS. Any bid revisions must be submitted by the bidder prior to bid opening. Use the following form to modify Manual (paper) bids:

3. Bid Modification (Form 25D-16DNR)

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER. The apparent low bidder is required to complete and submit the following documents within 5 working days after receipt of written notification:

1. Subcontractor List (Form 25D-5DNR)

REQUIRED FOR AWARD. In order to be awarded the contract, the successful bidder must completely fill out and submit the following documents within the time specified in the intent to award letter:

- 1. Construction Contract (Form 25D-10HDNR)
- 2. Payment Bond (Form 25D-12DNR)
- 3. Performance Bond (Form 25D-13DNR)
- 4. Contractor's Questionnaire (25D-08DNR)
- 5. Certificate of Insurance (from carrier)
- 6. EEO-1 Certification (Form 25A-304DNR)
- 7. Material Origin Certificate (Form 25D-60)

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STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

FEDERAL EEO BID CONDITIONS

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246). FOR ALL NON-EXEMPT FEDERAL AND FEDERALLY-ASSISTED CONSTRUCTION CONTRACTS TO BE AWARDED IN THE STATE OF ALASKA

- 1. Definitions. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "**Director**" means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor (DOL), or any persons to whom the Director delegates authority;
 - c. "Employer" identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaska Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the DOL in the covered area, either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades that have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7(a) through 7(p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

Covered construction contractors performing construction work in geographical areas where they do not have a federal or federally-assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any OFCCP office or from federal procurement contracting officers.

- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period of an approved training program and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligations to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-thestreet applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the DOL. The Contractor shall provide notice of these programs to the sources compiled under 7(b) above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendent, general foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and dispositions of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 1. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-used toilet, necessary changing facilities and necessary sleeping facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulations of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations 7(a) through 7(p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any or more of its obligations under 7(a) through 7(p) of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

- 9. A single goal for minorities and a separate goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.)
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunities. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic apprentice, trainees, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that the existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Programs).
- 16. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 17. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as set forth in item 20.

These goals as listed in item 20 are applicable to all the Contractor's construction work (whether or not it is federal or federally-assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally and non-federally involved construction.

The hours on minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women

evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

18. The Contractor shall provide written notification to the Department, for all subcontracts documents as follows: the name, address and telephone number of subcontractors and their employer identification number; the estimated dollar amount of the subcontracts; estimated starting and completion dates of the subcontracts; and the geographical area in which the contract is to be performed.

This written notification shall be required for all construction subcontracts in excess of \$10,000 at any tier for construction work under the contract resulting from this project's solicitation.

19. As used in the Bid Notice, and in the contract resulting from this project's solicitation, the "covered area" is the State of Alaska.

20. Goal and Timetable

a. The following goal and timetable for female utilization shall be included in all federal and federally-assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing work on a federal or federally assisted construction contract or subcontract.

ALASKA GOAL AND TIMETABLE FOR WOMEN*

Timetable Goal **
Until Further Notice 6.9%

b. The following goals and timetable for minority utilization shall be included in all federal or federally-assisted construction contracts and subcontracts in excess of \$10,000 to be performed in Alaska. The goals are applicable to the Contractor's aggregate on-site construction work force whether or not part of that work force is performing work on a federal or federally-assisted construction contract or subcontract.

ALASKA GOALS AND TIMETABLE FOR MINORITY UTILIZATION

<u>Timetable</u>	Economic Area (EA)***	<u>Goals</u> **
Until Further Notice	Anchorage SMSA Area	08.7%
	Remainder of State	15.1%

- * The goal and timetable for women listed above applies to Alaska as well as nationwide.
- ** The Director, from time to time, shall issue goals and timetables for minority and female utilization that shall be based on appropriate work force, demographic or other relevant data and which shall cover construction projects, or construction contracts performed in specific geographical areas. The goals shall be applicable to each construction trade in a covered Contractor's or subcontractor's entire work force which is working in the area covered by the goals and timetables, shall be published as notices in the FEDERAL REGISTER, and shall be inserted by the contracting officers and applicants, as applicable, in the Notice required by 41 CFR 60-4.2. Covered construction contractors performing construction work in geographical areas where they do not have a federal or federally-assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed.

^{***}Refer to the Standard Metropolitan Statistical Areas (SMSA) and Economic Areas (EA), Office of Management and Budget, 1975.

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STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

SUBCONTRACTOR LIST

Chena Pump SRS Facility Improvements, Project No. 71882-1

Project Name and Number

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

An apparent low bidder who fails to submiresponsible and may be required to forfeit the		or List form	within the time allowed will be declared non-	
Scope of work must be clearly defined. If an of work to be done by each.	n item of work is to be perfo	ormed by mor	re than one firm, indicate the portion or percent	
Check as applicable: All Work on the above-referenced project will be accomplished without subcontracts				
☐ List all t	Or first tier Subcontractors	s as follows	s:	
FIRM NAME, ADDRESS, PHONE NO.	AK BUSINESS LICEN CONTRACTOR REGISTRATION	a'S	SCOPE OF WORK TO BE PERFORMED	
CONTINUE SUBCONTRACTOR INFORMATION ON REVERSE For projects with federal-aid funding, I hereby certify Alaska Business Licenses and Contractor Registrations will be valid for all subcontractors prior to award of the subcontract. For projects without federal-aid funding (State funding only), I hereby certify the listed Alaska Business Licenses and Contractor Registrations were valid at the time bids were opened for this project.				
Signature of Authorized Company Represe	entative Title			
Company Name		pany Addre	ss (Street or PO Box, City, State, Zip)	
Date	Phon	e Number		

FIRM NAME, ADDRESS, PHONE NO.	AK BUSINESS LICENSE NO., CONTRACTOR'S REGISTRATION NO.	SCOPE OF WORK TO BE PERFORMED



CONTRACTOR'S QUESTIONNAIRE

Chena Pump SRS Facility Improvements, Project No. 71882-1 Project Name and Number

١.	FINANCIAL									
	 Have you ever failed to complete a contract due to insufficient resources? No [] Yes If YES, explain: 									
	2. Describe any arrangem	2. Describe any arrangements you have made to finance this work:								
3.	EQUIPMENT 1. Describe below the equ	uipment you have ava	nilable and intend t	to use for this projec	t.					
	ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE				
				I		-1				

	2.	What percent of the total value of this contract do you in	tend to subcontract? %						
	3.	Do you propose to purchase any equipment for use on th [] No [] Yes If YES, describe type, quanti	nis project? ty, and approximate cost:						
_	4.	Do you propose to rent any equipment for this work? [] No	antity:						
-	5.	Is your bid based on firm offers for all materials necessa [] Yes [] No If NO, please explain:	ry for this project?						
C.	EX	PERIENCE							
	1.	Have you had previous construction contracts or subcontracts with the State of Alaska? [] Yes [] No							
		Describe the most recent or current contract, its completion date, and scope of work:							
-									
-	2.	List, as an attachment to this questionnaire, other construor of work, and total contract amount for each project comp	action projects you have completed, the dates of completion, scope pleted in the past 12 months.						
]	l hei	reby certify that the above statements are true	e and complete.						
	Nai	me of Contractor	Name and Title of Person Signing						
	Sig	nature	Date						



BID FORM

for

Chena Pump SRS Facility Improvements, Project No. 71882-1

Project Name and Number

by

Company Name

Company Address (Street or PO Box, City, State, Zip)

TO THE CONTRACTING OFFICER, DEPARTMENT OF NATURAL RESOURCES:

In compliance with your Invitation to Bid dated <u>June 25, 2025</u>, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the above-referenced Project, located at or near <u>Fairbanks</u>, Alaska, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of 2 sheets, which is made a part of this Bid.

The Undersigned declares that he has carefully examined the contract requirements and that he has made a personal examination of the site of the work; that he understands that the quantities, where such are specified in the Bid Schedule or on the plans for this project, are approximate only and subject to increase or decrease, and that he is willing to perform increased or decreased quantities of work at unit prices bid under the conditions set forth in the Contract Documents.

The Undersigned hereby agrees to execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Contracting Officer, after receiving notification of the acceptance of this bid, and it is hereby mutually understood and agreed that in case the Undersigned does not, the accompanying bid guarantee shall be forfeited to the State of Alaska, Department of Transportation and Public Facilities as liquidated damages, and the said Contracting officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within 10 calendar days, and to complete the work within <u>NA</u> calendar days, after the effective date of the Notice to Proceed, or by <u>May 31, 2026</u>, unless extended in writing by the Contracting Officer.

The Undersigned proposes to furnish Payment Bond in the amount of 100% (of the contract) and Performance Bond in the amount of 100% (of the contract), as surety conditioned for the full, complete and faithful performance of this contract.

Addenda Number	Date Issued	Addenda Number	Date Issued	Addenda Number	Date Issued
	ı	NON-COLLUSIC	N DECLARATI	ION	
				Jnited States, that no	
				or indirectly, entered ee competitive biddi	
1.	,	j		1	8
J <mark>ndersigned ha</mark> s	s read the forego	ing and hereby	agrees to the co		
ture below:			agrees to the et	onaitions stated the	erein by affixi
		·	agrees to the ec	onditions stated the	erein by affixi
		,	agrees to the ec	onditions stated the	erein by affixi
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			uthorized Company		erein by affixi
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		Signature of A	uthorized Company		erein by affixi
			uthorized Company		erein by affixi
		Signature of Adams and Typed Name and	uthorized Company nd Title		erein by affixi
		Signature of A	uthorized Company nd Title		erein by affixi
		Signature of Adams and Typed Name and	uthorized Company nd Title	Representative ()	erein by affixi
		Signature of An Typed Name an () Phone Number	uthorized Company nd Title	Representative ()	erein by affixi
		Signature of An Typed Name an () Phone Number	uthorized Company nd Title	Representative ()	erein by affixi
		Signature of An Typed Name an () Phone Number	uthorized Company nd Title	Representative ()	erein by affixi
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		Signature of An Typed Name an () Phone Number	uthorized Company nd Title	Representative ()	erein by affixi



BID SCHEDULE

Project Name: Chena Pump SRS Facility Improvements

Project Number: 71882-1

Before preparing this bid schedule, read carefully, Section 102 of the 2020 edition of the Standard Specifications for Highway Construction, and the following:

The Bidder shall insert, as called for, a unit price or lump sum price in figures opposite each pay item for which an estimated quantity appears in the bid schedule. A unit price or lump sum price is not to be entered or tendered for any pay item not appearing in the bid schedule. The estimated quantity of work for payment on a lump sum basis will be "All Required" (All Req'd) and as further specified in the contract.

Whenever a Contingent Sum is shown for any item in this schedule, such amount shall govern and be included in the bid total.

Conditioned or qualified bids will be considered non-responsive.

Notice: Contract award will be made on the basis of the total adjusted basic bid.

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Pay Item Number	Pay Item Description	Pay Unit	Quantity	Unit Bid Price	Amount Bid	
	******* BASIC BID *******					
202.0001.0000	Removal of Structures and Obstructions	L.S.	All Req'd	\$ (LUMP SUM)	\$	
203.0022.0000	Unclassified Excavation	CYVM	810	\$	&	
301.0001.00D1	Aggregate Base Course, Grading D-1	Ton	880	\$	\$	
401.0001.002B	Hot Mix Asphalt, Type II, Class B	Ton	800	\$	\$	
615.0001.0000	Standard Sign	S.F.	42	\$	\$	
622.2004.0000	Bearproof Garbage Can	Each	1	\$	\$	
622.2015.000D	Interpretive Sign, Type D	Each	1	\$	\$	
622.2020.0000	Orientation Kiosk	Each	1	\$	\$	
622.2021.0000	Picnic Shelter	Each	2	\$	\$	

BID SCHEDULE Chena Pump SRS Facility Improvements Project No. 71882-1

Name of Bidding Firm

Pay Item Number	Pay Item Description	Pay Unit	Quantity	Unit Bid Price	Amount Bid	
	******* CONTINUE BASIC BID *******					
622.2034.0000	Remove and Relocate Barrier Rocks	Each	8	\$	\$	
640.0001.0000	Mobilization and Demobilization	L.S.	All Req'd	\$ (LUMP SUM)	\$	
641.0001.0000	Erosion, Sediment and Pollution Control Administration	L.S.	All Req'd	\$ (LUMP SUM)	\$	
641.0002.0000	Temporary Erosion, Sediment, and Pollution Control	C.S.	All Req'd	\$ 5,000.00	\$ 5,000.00	
641.0006.0000	Withholding	C.S.	All Req'd	\$0.00	\$0.00	
642.0001.0000	Construction Surveying	L.S.	All Req'd	\$ (LUMP SUM)	\$	
642.0003.0000	Three Person Survey Party	Hour	10	\$	\$	
643.0002.0000	Traffic Maintenance	L.S.	All Req'd	\$ (LUMP SUM)	\$	
647.0001.0000	Hydraulic Excavator, 1 CY, 100HP, Minimum	Hour	5	\$	\$	
670.0001.0000	Painted Traffic Markings	L.S.	All Req'd	\$ (LUMP SUM)	\$	
		\$				

No:	Expires	No:	Expires
Alaska Business License		Alaska Contractor's License	

BID SCHEDULE Chena Pump SRS Facility Improvements Project No. 71882-1



CONSTRUCTION CONTRACT

Chena Pump SRS Facility Improvements, Project No. 71882-1

Project Name and Number

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES, herein called the Department, acting by and through its Contracting Officer, and

Company Name
Company Address (Street or PO Box, City, State, Zip)
a/an [] Individual [] Partnership [] Joint Venture [] Sole Proprietorship [] Corporation incorporated under the laws of the State of
WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Department, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required in the construction of the above-referenced project at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of
Dollars (), and such other items as are mentioned in the original Bid, which Bid and prices named, together
with the Contract Documents are made a part of this Contract and accepted as such. <i>The Alaska Standard Specifications for Highwad Construction</i> , 2020 Edition is incorporated by reference and made a part hereof as if set forth in full. <i>The Alaska Standar Specifications for Highway Construction</i> can be downloaded at http://www.dot.state.ak.us/stwddes/dcsspecs/index.shtml .
It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and no

It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not specifically herein provided for, will be allowed by the Department, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by the Department. In no event shall the Department be liable for any materials furnished or used, or for any work or labor done, unless the materials, work, or labor are required by the Contract or on written order furnished by the Department. Any such work or materials which may be done or furnished by the Contractor without written order first being given shall be at the Contractor's own risk, cost, and expense and the Contractor hereby covenants and agrees to make no claim for compensation for work or materials done or furnished without such written order.

The Contractor further covenants and agrees that all materials shall be furnished and delivered and all labor shall be done and performed, in every respect, to the satisfaction of the Department, on or before: May 31, 2026 or within NA calendar days. It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of the Department, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, the Department shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, the Department shall have the right to recover As Per Section 108-1.07 dollars (As Per Section 108-1.07) per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages.

The bonds given by the Contractor in the sum of \$100% of Contract Amount Payment Performance Bond, to secure the proper compliance with the terms and provisions of this a part hereof.	Bond, and \$100% of Contract Amou Contract, are submitted herewith and made
N WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree	to its terms and conditions.
CONTRACTOR	
	_
Company Name	
ignature of Authorized Company Representative	-
Syped Name and Title	-
Pate	-
	(Corporate Seal)
STATE OF ALASKA DEPARTMENT OF NATURAL RESOUR	CES
	_
ignature of Contracting Officer	
yped Name	-
ate	-



PAYMENT BOND

Bond No.	

For

Chena Pump SRS Facility Improvements, Project No. 71882-1 **Project Name and Number** KNOW ALL WHO SHALL SEE THESE PRESENTS: as Principal, of and of as Surety, firmly bound and held unto the State of Alaska in the penal sum of **Dollars** good and lawful money of the United States of America for the payment whereof, (\$ well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents. WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the_____ A.D., 20 , for construction of the above-referenced project, said work to be done according to the terms of said contract. Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they shall remain in full force and effect. Principal: Address: By: **Contact Name:** Phone: (**Surety:** Address: **Contact Name:** Phone: (

See Instructions on Reverse

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Natural Resources Authorized Representative

Date

INSTRUCTIONS

- 1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
- 5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



PERFORMANCE BOND

For

	Chena Pump SRS Facility Improvements, Project No. 7188 Project Name and Number	32-1
KNOW ALL WHO SHALL	·	
That		
of		as Principal,
·		
		as Surety,
firmly bound and held unto the	the State of Alaska in the penal sum of	Dollars
(\$) good and lawful money of the United States of America for the	
	the State of Alaska, we bind ourselves, our heirs, successors, execut	
	hal has entered into a written contract with said State of Alaska, on the ion of the above-named project, said work to be done according to the	
complete all obligations and Transportation and Public Fa	nditions of the foregoing obligation are such that if the said Principal d work under said contract and if the Principal shall reimburse updacilities any sums paid him which exceed the final payment determined hall become null and void; otherwise they shall remain in full force an	on demand of the Department of d to be due upon completion of the
IN WITNESS WHEREOF, v	we have hereunto set our hands and seals at A.D., 20	
	Principal:	
	Address:	
	By:	
	Contact Name:	
	Phone: ()	
Surety:		
Address:		
By:		
Contact Name:		
Phone: ()		
The c	offered bond has been checked for adequacy under the applicable statutes and	regulations:
Alaska Department of Natur	ral Resources Authorized Representative	Date
	See Instructions on Reverse	

INSTRUCTIONS

- 1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
- 5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



BID BOND

For

		ity Improvements, Project No. 71882-1		
		ect Name and Number ATE BOND EXECUTED:		
PRINCIPAL (I	Legal name and business address):	TYPE OF ORGANIZATION:		
		[] Individual [] Partnership [] Joint Venture [] Corporation		
		STATE OF INCORPORATION:		
	(Name and business address):			
A.	Б.	C.		
PENAL SUM	OF BOND:	DATE OF BID:		
We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument. THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on the above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefor, and is required to furnish a bond in the amount stated above. If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the				
	he obligation to the State created by this enters into the contract, then the foregoi			
PRINCIPAL				
Signature(s)	1.	2. 3.		
Name(s) & Title(s) (Typed)	1.	2. 3.		
	See Instructions on Re	Corporate Seal verse		

CORPORATE SURETY(IES)

Surety A	Name of Corporation		State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	-	Corporate
Name(s) & Titles (Typed)	1.	2.		Seal
Surety B	Name of Corporation		State of Incorporation	Liability Limit
Signature(s)	1.	2.		Corporate
Name(s) & Titles (Typed)	1.	2.		Seal
Surety C	Name of Corporation		State of Incorporation	Liability Limit
Signature(s)	1.	2.	1	Corporate
Name(s) & Titles (Typed)	1.	2.		Seal

INSTRUCTIONS

- 1. This form shall be used whenever a bid bond is submitted.
- 2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
- 3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
- 4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
- 5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
- 6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
- 7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
- 8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
- 9. The date that bond is executed must not be later than the bid opening date.



BID MODIFICATION

Chena Pump SRS Facility Improvements, Project No. 71882-1 **Project Name and Number** Modification Number: Note: Use this form to modify Manual (paper) bids only. • Group items and provide subtotals by bid schedule section. • All revisions shall be made to the unadjusted bid amount(s). • Changes to the adjusted bid amounts will be computed by the Department. **REVISION TO REVISION TO** LINE **UNIT BID** ITEM NO. **PAY ITEM DESCRIPTION** NO. **BID AMOUNT +/-**PRICE +/-TOTAL REVISION: \$ Name of Bidding Firm **Responsible Party Signature** Date

This form may be duplicated if additional pages are needed.



EEO-1 CERTIFICATION

Federal-Aid Contracts

Chena Pump SRS Facility Improvements, Project No. 71882-1 Project Name and Number

,									
This certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7 (b) (1)] and must be completed by the successful Bidder and each proposed Subcontractor participating in this contract.									
PLEASE CHECK APPROPRIATE BOXES									
The [] Bidder [] Proposed Sub	contractor hereby CERTIFIES:								
PART A Bidders and proposed Subcontractors with 50 or more year-round employees and a federal contract amounting to \$50,000 or more are required to submit one federal Standard Report Form 100 during each year that the two conditions exist (50 employees and a \$50,000 federal contract).									
The company named below (Part C) is exempt from the requirements of submitting the Standard Report Form 100 this year.									
[] NO (go to PART B)	[] YES (go to PART C)								
Instructions and blank Standard Report Form 100's may be obtained from a local U.S. Department of Labor office, or by writing to:									
The Joint Reporting Committee P.O. Box 779 Norfolk, Virginia 23501									
Telephone number: (757) 461-1213									
PART B The company named below has submitted the Standard Report Form 100 this year.									
[]NO []YES									
Note : Bidders and proposed Subcontractors who have not filed the required Standard Report Form 100 and are not exempt from filing requirements will not be awarded this contract or subcontract until Form 100 has been filed for the current year ending June 30.									
PART C									
Signature of Authorized Company Representative	Title								
Signature of Factor and Company Respondential									
Company Name	Company Address (Street or PO Box, City, State, Zip)								
	()								
Date	Phone Number								



MATERIAL ORIGIN CERTIFICATE

Federal-Aid Contracts

Project Name and Number: Chena Pump SRS Facility Improvements, Project No. 71882-1
--

FOREIGN CONSTRUCTION MATERIALS AND PRODUCTS ¹	COL	JNTRY OF ORIGIN	COST ²
I certify under penalty of law that all construction this project are manufactured in the United State Sections 70901-52, 23 CFR 635.410, and Contra foreign construction materials and products that attachment. ³ The term "manufactured in the United America Provision.	s, and complact subsection are listed on	y with the requirements of I a 106-1.01, Buy America Pr this page or on a separate an	Public Law No. 117-58, ovisions; except for those and clearly identified
I certify that I have knowledge that submitting fapenalties.	alse statemen	ts and/or information may r	esult in civil and criminal
Authorized Corporate Signature		Date	
Printed Name		Contractor's Company N	ame
Position Title			

Form 25D-60DNR (11/08/22)

11.	5D-60 Instructions: Enter "NONE" on the first line if there are no exceptions.
2.	Invoice cost for foreign construction materials, steel products, and iron products as delivered to the project including
	freight.
3.	When the Contractor becomes aware of a change from or error in a previously submitted Material Origin Certificate, the Contractor shall submit an updated Material Origin Certificate. The Department of Transportation and Public Facilities shall not accept or approve any Material Origin Certificate over the limit specified in the contract.
4.	Attach additional complete form sheets if necessary to include more than one page of materials and products.

Form 25D-60DNR (11/08/22)

SPECIAL PROVISIONS

to the

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
2020 STANDARD SPECIFICATIONS for HIGHWAY CONSTRUCTION

CHENA PUMP SRS

FACILITY IMPROVEMENTS

PROJECT NUMBER 71882-1

SECTION 101 DEFINITIONS AND TERMS

101-1.03 DEFINITIONS.

DEPARTMENT. Replace with the following: The Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation.

(01/01/01) PARKS-Special Provision

ROADWAY. Replace with the following: The portion of a highway or park facility including shoulders within the limits of construction.

(01/01/01) PARKS-Special Provision

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102-1.04 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND WORK SITE. Replace the second paragraph with the following: Material Reports and/or Soils Investigation Reports are not available for this project.

(01/01/01) PARKS-Special Provision

SECTION 105 CONTROL OF WORK

105-1.02 PLANS AND WORKING DRAWINGS. Add the following to the first paragraph: Full size plan sheets are 11" by 17". Plans are not available in CAD digital format.

(01/01/01) PARKS-Special Provision

105-1.13 MAINTENANCE DURING CONSTRUCTION.

Replace the first sentence of the first paragraph with the following: The Contractor shall maintain the entire area located within the project limits from the date construction begins until the Contractor receives a letter of substantial completion.

(03/09/17) PARKS-Special Provision

105-1.15 PROJECT COMPLETION.

Replace the 1st sentence in the 3rd paragraph with the following:

When all physical work and cleanup provided for under the Contract is found to be complete, except for work specified for Period of Establishment, the Engineer will issue a letter of project completion.

CR105.6-23.0601

SECTION 106 CONTROL OF MATERIALS

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS.

Add the following:

PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT. On projects using federal funds, the Contractor shall comply with the requirements of 2 CFR 200.216, Prohibition on certain telecommunication and video surveillance services or equipment, including any future amends thereto that are applicable to the project.

By submitting a bid or by execution of the contract, the Contractor certifies that it has not entered into a contract nor extended or renewed a contract to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Any entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The Contractor further certifies that it has complied with the requirements of 2 CFR 200.216 and that it will continue to do so throughout the term of the Contract.

HSM20.20-21.1231

Replace the BUY AMERICA PROVISION with the following:

BUY AMERICA PROVISION. On projects using federal funds the Contractor shall ensure all iron, steel, manufactured products, and construction materials incorporated into the project are produced in the United States as required by 2 CFR Part 184 Buy America Preferences for Infrastructure Projects and 23 CFR §635.410, Buy America requirements. The Contractor shall submit a completed Non-Domestic Minimal Use and De Minimis Register, Form 25D-60, prior to award of the contract. When the Contractor becomes aware of a change from or error in a previously submitted Form 25D-60, the Contractor shall submit an updated Form 25D-60.

The Contractor shall submit a certificate of compliance according to Subsection 106-1.05 for each item listed on the Material Certification List. The Engineer may authorize the use of materials based on a certificate of compliance and Form 25D-62 Certificate of Buy America Act Compliance. Materials incorporated into the project on the basis of a certificate of compliance may be tested at any time, whether in place or not, and if they do not conform to Contract specifications, they may be rejected and ordered removed under the Subsection 105-1.11.

Manufactured products that are not predominantly steel or iron, or a combination of both, or construction materials are not subject to Buy America provisions. Declare manufactured products on Form 25D-62 regardless of their exemption.

Non-domestic products in excess of the minimal use and/or the de minimis amounts shall be replaced at no expense to the State. Failure to comply may also subject the Contractor to default and debarment.

The supplier certifying Form 25D-62 may be the manufacturer, fabricator, vendor, or supplier; provided they have sufficient control and knowledge of the manufacturing process to accept responsibility and certify full and complete conformance with 23 CFR §635.410 and 2 CFR Part 184. The Prime Contractor shall also certify Form 25D-62. Provide additional certifications and backup documentation to signed Form 25D-62 when required by the Engineer. False statements may result in criminal penalties prescribed under AS 36.30.687 and Title 18 US Code Section 1001 and 1020.

The United States, Mexico, Canada Agreement (USMCA) does not apply to the Buy America requirement.

Buy America does not apply to construction materials, steel products, and iron products, brought temporarily to the construction site and removed at or before the completion of the project. Further, it does not apply to construction materials, steel products, and iron products which remain in place at the Contractor's convenience. Buy America does not apply to iron ore, pig iron, and processed, pelletized and reduced iron ore.

The following materials are exempt from Build America, Buy America requirements per Section 70917(c) of P. L. 117-58:

- 1. cement and cementitious materials
- 2. aggregates such as stone, sand, or gravel
- aggregate binding agents or additives

De Minimis amount:

Small amounts of non-domestic construction materials are allowed provided the total value of the non-domestic products is no more than the lesser of \$1,000,000 or 5% of total material costs for the project including freight to the project location.

The total material costs of the project include (Form 25D-60):

- 1. Predominantly Iron and Steel products
- 2. Construction Materials
- 3. Manufactured Products

Do not include the cost of materials exempted per Section 70917(c) of P. L. 117-58, earth materials, processed aggregates, asphalt, concrete, fuel, lubricant, equipment repair parts, etc. in the total material costs of the project.

PREDOMINANTLY STEEL OR IRON PRODUCTS. Products and materials where the cost of the iron and steel, or a combination of both, exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product, or a good faith estimate of the cost of iron or steel components.

To be classified as domestic, all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

Iron and Steel minimal use:

All predominately steel and iron, or a combination of both, products incorporated into the work, shall be manufactured in the United States except that minor amounts of steel and iron products of foreign manufacture may be used, provided the aggregate cost of such does not exceed one tenth of one percent (0.001) of the total contract amount, or \$2,500, whichever is greater. For the purposes of this paragraph, the cost is the value of the products as they are delivered to the project, including shipping.

CONSTRUCTION MATERIALS. The following list contains the categories of construction materials, and the requirements for domestic origin. Construction materials are an article, material, or supply that is:

- 1. **Non-ferrous metals**. All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
- Plastic and Polymer-based products. All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- 3. **Glass**. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- 4. **Fiber Optic Cable**. All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United

States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.

- 5. **Optical Fiber**. All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- 6. **Lumber**. All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
- 7. **Drywall**. All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- 8. **Engineered Wood**. All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

If one construction material contains as inputs other construction materials, it remains classified as a construction material for the purposes of this section. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material.

MANUFACTURED PRODUCTS. Articles, materials, or supplies that have been processed into a specific form and shape or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

If an item is classified as an iron or steel product, a construction material, or an exempted material per Section 70917(c) of P. L. 117-58 then it is not a manufactured product. An article, material, or supply classified as a manufactured product may include components that are construction materials, iron or steel products, or an exempted material per Section 70917(c) of P. L. 117-58

HSP20.7A-23.1114

106-1.02 MATERIAL SOURCES.

Add the following under 5. Rights, Permits and Plan Approvals for Material Sources.

c. Provide proof to the Engineer that all material sources associated with this project have been surveyed for historical and cultural resources by a qualified surveyor and approved by the Alaska Office of History and Archaeology (OHA) or State Historic Preservation Officer (SHPO).

(01/29/21) PARKS-Special Provision

Replace Subsection 106-1.05 with the following:

106-1.05 CERTIFICATES OF COMPLIANCE. A certificate of compliance must meet one of the following:

- 1. If by manufacturer's certification, the certificate must include the project name and number, the signature of the manufacturer, and must include information that clearly demonstrates the material or assembly complies with all Contract requirements except for domestic preference.
- 2. If by Contractor's summary sheet, the summary sheet must include the project name and number, the signature of the contractor, and must include attached documentation that clearly demonstrates the material or assembly fully complies with all Contract requirements except for domestic preference.

Electronic submittals that are submitted by email from the Contractor's email account are considered signed by the Contractor.

The Contractor shall submit additional certificates of compliance or test data if required by the Contract or by the Engineer. The Engineer may refuse permission to incorporate materials or products into the project based on a certificate of compliance that does not meet the Contract requirements.

HSP20.7A-23.1114

SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107-1.02 PERMITS, LICENSES, AND TAXES.

The Department will: Add No. 3:

3. See Appendix A for all Department-secured permits.

(03/01/24) PARKS-Special Provision

The Contractor shall:

Replace No. 1. with the following:

- 1. Acquire all permits and licenses required to complete the project that are not acquired by the Department.
 - a. Complete all draft permits. Draft permits are included in Appendix F, when there are draft permits.

CR107.2-070121

Add No. 10:

10. Provide a wetland specialist able to conduct wetlands determinations and delineations according to the Corps of Engineers 1987 Wetland Delineation Manual, and the Regional Supplement to the Corps of Engineers Wetland Delineations Manual (Alaska Region, Version 2.0, September 2007). The wetland specialist shall conduct the determination and delineations of sites outside the project limits or not previously permitted, impacted by the Contractor's operations. These delineations will be subject to Corps of Engineers approval.

CR107.5-120117R

107-1.07 ARCHAEOLOGICAL OR HISTORICAL DISCOVERIES.

Replace the 1st sentence including numbers 1, 2, and 3, with:

When operation encounters historic or prehistoric artifacts, burials, remains of dwelling sites, paleontological remains, (shell heaps, land or sea mammal bones or tusks, or other items of historical significance), cease operations immediately and notify the Engineer.

CR107.3-051517

107-1.11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE.

Add the following:

Non-municipal Water Source. If water is required for a construction purpose from a nonmunicipal water source, obtain a Temporary Water Use Permit from the Water Resource Manager, and provide a copy to the Engineer. The Water Resource Manager is with the Department of Natural Resources in Anchorage and may be contacted at (907) 269-8645.

CR107.3-051517

Add the following:

<u>Eagles</u>. Eagles are protected under 16 U.S.C. 668-668c Protection of Bald and Golden Eagles, that prohibits "takes" of eagles, their eggs, nests, or any part of the bird. The Act defines "taking" as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

Maintain a Primary Zone of minimum 330-feet as an undisturbed habitat buffer around nesting eagles. If topography or vegetation does not provide an adequate screen or separation, extend the buffer to 1320-feet, or a sufficient distance to screen the nest from human activities. The actual distance will depend on site conditions and the individual eagle's tolerance for human activity. Within the Secondary Zone, between 330-feet and 660-feet from a nest tree, no obtrusive facilities, or major habitat modifications shall occur. If nesting occurs in sparse stands of trees, treeless areas, or where activities would occur within line-of-site of the nest, extend the buffer up to 2640-feet. No blasting, logging and other noisy, disturbing activities should occur during the nesting period (February 1 – August 31) within the primary or secondary zones.

Do not disturb a nesting eagle. Notify the Engineer when an active eagle nest is within the primary or secondary zones.

CR107.1-100118

SECTION 108 PROSECUTION AND PROGRESS

108-1.01 SUBCONTRACTING OF CONTRACT.

In item 1g. replace AS 45.45.101(a) with AS 45.45.010(a).

<u>In item 2f. replace</u> AS 45.45.101(a) <u>with</u> AS 45.45.010(a).

HSM20.41-010122

Replace Subsection 108-1.01 1h. with the following:

1h. Other required items listed in Form 25D-042 are included in the subcontracts;

Replace Subsection 108-1.01 2g. with the following:

2g. Other required items listed in Form 25D-042, are included in the lower tier subcontracts:

CR108.4-010120

Add the following Subsection 108-1.011 Related Sections:

108-1.011 RELATED SECTIONS.

Section 652, Prosecution and Progress – Supplemental Requirements

CR108.3-012816R

108-1.03 PROSECUTION AND PROGRESS. Replace the last sentence of the first paragraph with the following: Submit the following at the Preconstruction Conference:

Replace item 1. with the following:

1. A Critical Path Method (CPM) Schedule is required, in a format acceptable to the Engineer, showing the order the work will be carried out and the contemplated dates the Contractor and subcontractors will start and finish each of the salient features of the work, including scheduled periods of shutdown. Indicate anticipated periods of multiple shift work in the CPM Schedule. Revise the proposed CPM Schedule promptly. Promptly submit a revised CPM Schedule if there are substantial changes to the schedule, or upon request of the Engineer.

(03/01/24) PARKS-Special Provision

108-1.07 FAILURE TO COMPLETE ON TIME.

Replace Table 108-1 with the following:

Table 108-1 DAILY CHARGE FOR LIQUIDATED DAMAGES FOR EACH CALENDAR DAY OF DELAY

Original Cont	Daily Charge	
From More Than	To and Including	Daily Charge
\$ 0	500,000	\$1,400
500,000	1,000,000	1,700
1,000,000	5,000,000	2,600
5,000,000	10,000,000	3,800
10,000,000	25,000,000	4,500
25,000,000		6,600

HSM20.43-070122

SECTION 109 MEASUREMENT AND PAYMENT

109-1.01 GENERAL.

Replace the 2nd paragraph with the following:

When more than one type of material or work is specified for a pay item, the proposal line number, and the description are used to differentiate the material or work.

CR109.4-010120

109-1.02 MEASUREMENT OF QUANTITIES. Add the following:

14. Hour. Measured items by the hour shall be full payment for the work described in the contract including labor, equipment, and operating costs of the equipment. Items to be measured by the hour will be recorded to the nearest quarter-hour by the Engineer. The measurement shall start when the required equipment & operator, surveyor, or survey party begins work at the specified location as directed by the Engineer. The measurement will stop when the required work is accomplished, when the equipment fails, when directed to stop work by the Engineer, or when the operator stops work. Times will be reconciled with the Contractor on a daily basis.

(02/23/15) PARKS-Special Provision

109-1.05 COMPENSATION FOR EXTRA WORK ON TIME AND MATERIALS BASIS.

<u>Under Item 3</u>. <u>Equipment, Item a. add the following to the second paragraph:</u>

The rental rate area adjustment factors for this project shall be as specified on the adjustment maps for the Alaska Central Region.

Provide a printed copy of the current EquipmentWatch rate sheet for each piece of equipment utilized on time and materials work.

CR109.2-110118

109-1.08 FINAL PAYMENT. Add the following after the fifth paragraph:

On federally funded projects, if DOLWD Wage and Hour Administration notifies the Department of a pending prevailing wage investigation, and that the investigation is preventing the closing out of the project, the Contractor may place the notified amount in escrow under Wage and Hour for the exclusive purpose of satisfying unpaid prevailing wages. Upon receipt of notice from Wage and Hour that the Contractor has satisfactorily

transferred the necessary funds into escrow, the Department will proceed to issue final payment.

HSM20.3-113020R

SECTION 120 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

120-1.01 DESCRIPTION.

<u>In the first sentence of the second paragraph, replace</u> "8.83 percent" <u>with</u> "8.28 percent".

120-3.01 DETERMINATION OF COMPLIANCE. Replace 2a. with the following:

2a. <u>Written DBE Commitment</u>. Complete Form 25A-326 for each DBE to be used on the project.

HSM20.21-123121

SECTION 201 CLEARING AND GRUBBING

201-3.01 GENERAL.

Add the following:

<u>Timber for Public Removal</u>. Cut timber, with a 5-inch diameter or larger at breast height, into 8-foot lengths, de-limbed, and stacked to a height no greater than 6 feet. Place the stacks at locations shown in the Plans, included in Specifications or at other locations approved by the Engineer. Make locations adjacent to the nearest turnout, side street, or other approved site that does not create a traffic hazard due to lack of adequate parking for the public. Access to the site(s) shall be maintained and controlled by flaggers, in accordance with Subsection 643-3.04. The Contractor shall provide and maintain a separate firewood telephone hotline that details when and where the wood is available to the public. Special Construction signs, in accordance with Subsection 643-2.01, shall be used to advertise the firewood telephone hotline. Provide two weeks for the public to access each area of the project where timber is made available. Dispose of the timber left by the public after the two-week time period.

Mechanical loading by the public is not permitted.

CR201.2-010114

Add the following:

Perform the work necessary to preserve and/or restore land monuments and property corners from damage. Restore land monuments and/or property corners that are disturbed according to Section 642. An undisturbed area five feet in diameter may be left around existing monuments and property corners. A list of land monuments and property corners is shown on the Right of Way maps.

CR201.3-042313

Add the following:

Clearing and grubbing is not permitted within the migratory bird window of <u>May 1</u> to <u>July 15</u>; except as permitted by Federal, State and local laws when approved by the Engineer.

CR201.1-010114

201-3.03 GRUBBING. Add the following: The Contractor has the option to screen organic soil obtained from grubbing to meet the gradation for topsoil as specified under Section 726, or as approved by the Engineer. The screened material may be used for topsoil onsite.

(05/02/11) PARKS-Special Provision

201-5.01 BASIS OF PAYMENT.

Add the following:

The work required to cut, de-limb, and stack timber for public removal is subsidiary to 201 Pay Items.

CR201.2-010114

Add the following:

The work required to preserve and restore land monuments and property corners is subsidiary to 201 Pay Items.

CR201.3-042313

Add the following:

Material from screening and tub grinding incorporated into the project as topsoil will be paid for as topsoil under Section 620. Screening and tub grinding operations shall be subsidiary to Section 620 items.

Material not incorporated into the project and is disposed of offsite shall be subsidiary to clearing and grubbing items.

(05/06/11) PARKS-Special Provision

Item 201.0012.0000 Clearing and Grubbing will be paid for by the square yard completed and accepted. Backfill and compaction of holes left from removal of stumps or other objects are subsidiary.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
201.0012.0000	Clearing and Grubbing	SY

(04/09/25) PARKS-Special Provision

SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

202-1.01 DESCRIPTION. Replace the first sentence with the following: This work shall consist of, but not be limited to, the removal of picnic shelters, signposts, bulletin board, and parking bumpers, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the contract.

(01/24/25) PARKS-Special Provision

Add the following:

Materials which are designated to be salvaged and remain the property of the Division of Parks and Outdoor Recreation are the signs and signposts. By arrangement with the Engineer, stage salvaged materials on site.

(02/25/25) PARKS-Special Provision

202-3.01 GENERAL. Replace paragraphs three, four, and five with the following: Remove and satisfactorily dispose of materials not designated to be salvaged and materials determined by the Engineer to be unusable to the Department.

(01/01/01) PARKS-Special Provision

Add the following Subsection:

202-3.06 SALVAGE AND DISPOSAL OF CONSTRUCTION AND DEMOLITION MATERIALS.

Unless otherwise noted, remove, handle, salvage, transport, store, and dispose waste materials according to the Occupational, Safety, and Health Administration (OSHA), Environmental Protection Agency (EPA), Alaska Department of Environmental Conservation (ADEC), and other Federal, State and local government agency's statutes, rules and regulations.

Use disposal sites outside the project right-of-way limits unless directed otherwise, in writing, by the Engineer. Obtain written consent from the private or public property owner for such disposal and a waiver of all claims against the State for any damage to such land which may result, together with all permits required by law for such disposal. Furnish a copy of such permission, waiver of claims, and permits to the Engineer before commencing work. Grade disposal areas to drain.

(04/01/20) CR202.1-Special Provision

SECTION 203 EXCAVATION AND EMBANKMENT

203-3.04 COMPACTION WITH MOISTURE AND DENSITY CONTROL.

In the second paragraph delete "and ATM 214".

HSM20.5-113020R

201-5.01 BASIS OF PAYMENT.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
203.0022.0000	Unclassified Excavation	CYVM

(06/04/25) PARKS-Special Provision

Replace Section 204 with the following:

SECTION 204 STRUCTURE EXCAVATION FOR CONDUITS AND MINOR STRUCTURES

204-1.01 DESCRIPTIONS. Excavate and backfill for conduits (pipe culverts, structural plate pipe, pipe arches, storm drains, underdrains, and electrical conduits), headwalls, manholes, inlet boxes, and other minor structures.

Dewater ground water from work areas. Construct and maintain temporary water diversion when working in waterways, and for facilities or structures with active drainage.

Perform all pumping, bailing, draining, sheeting, bracing, and incidentals required for proper execution of the work.

204-2.01 MATERIALS. Use materials that conform to the following:

Selected Material Subsection 703-2.07 Porous Backfill Material Subsection 703-2.10

1. Structure Backfill and Bedding Material: Selected Material Type A.

Maximum Particle Size:

- a. Corrugated Steel and Aluminum Conduit: material passing the 3-inch sieve
- b. Precast Concrete Structures
 - (1) Conduit: materials passing the 1-inch sieve, except 2-inch when bedding thickness is greater than 6 inches
 - (2) Minor structures: material passing the 1-inch sieve
- c. Plastic Conduit: material passing the 2-inch sieve, except 3/4-inch for conduit between 8 inches and 15 inches and for conduit less than 8 inches 10% of the conduit diameter
- d. Electrical Conduit: material passing the 1-inch sieve
- e. Underdrain Conduit: uniform porous backfill material passing the 2-inch sieve and a minimum greater than the conduit perforations
- 2. Backfill Material: Selected Material Type C

In the roadbed structure use backfill material meeting the requirements of the roadbed structure, except use the structure backfill material and bedding as specified herein.

Use all suitable material from the project excavation for bedding, structure backfill and backfill material before using material from another source.

204-3.01 CONSTRUCTION REQUIREMENTS. Clear and grub prior to starting excavation according to the requirements of Section 201.

Keep the work areas dewatered and divert water when working in a waterway or active drainage, Subsection 204-3.02.

Remove and dispose, Subsection 203-3.01, of unsuitable foundation material, including rock or other unyielding material, below the designed elevation as directed, except no less than 6 inches, and replace with approved material.

Place bedding material to a minimum thickness of 4 inches, except 6-inch minimum thickness for conduit over rock or unyielding material, and below electrical conduit, unless shown otherwise in the plans.

Place the bedding material to provide uniform support for conduit with the material in the middle one-third loosely placed and not compacted. Do not shape the bedding to the curvature of the round conduits. Shape the bedding for pipe arches, horizontal ellipse, and underpass shapes with spans exceeding 12 feet. Provide a minimum shaped width one-half the span of the pipe arch and underpass shapes and one-third the span of horizontal ellipse shape. Shape the bedding to the relatively flat bottom arc or fine grade the foundation to a slight "V" shape.

Place minor precast concrete structures, other than conduits, on the 4-inch bedding/leveling course of uniform stiffness and thickness with even compaction throughout.

Place the structure backfill over the bedding each side of the structure to 12 inches above the structure or the ground surface if less than 12 inches, except 6 inches above electrical conduit.

Place the structure backfill and backfill material in uniform layers not more than 6 inches deep. Do not create unbalanced loading with the placement of the structure backfill materials. When placing material against concrete, place the material according to the requirements of Section 550.

Compact the materials, each layer, without ponding or jetting to meet Subsection 203-3.04. In the haunch area, each side of the conduit, compact the material by firmly tamping into place.

Outside the roadbed structure, the Engineer may visually inspect and approve the excavation, bedding, structure backfill, backfill material, and compaction.

Support and protect existing conduits or utilities, not scheduled for removal or abandonment, when encountered in the excavation.

Remove all sheeting and bracing used in structure excavation upon completion of the work.

204-3.02 DEWATERING AND WATER DIVERSION. Submit a plan for work area dewatering and each waterway diversion, 14 days before related construction activities. Do not implement the plan without written approval. Include the permit requirements in the plan.

- 1. Do not exceed State of Alaska water quality standards.
- 2. Do not divert water from dewatering into a waterway.
- 3. Provide an approved disposal site for work area excess water. Maintain disposal site a minimum of 100 ft from waterway.
- 4. Prevent turbid water from directly entering waterways.
- 5. Do not divert water onto the roadway.
- 6. In addition to other equipment required to complete the temporary water diversion and dewatering work, maintain a minimum of two trash pumps with hoses at the site during diversion construction activities. Maintain the intake to prevent fish entrapment, entrainment, or injury with the use of perforated or slotted plate and woven wire with a mesh size not greater than 3/32 inch or a profile bar and wedge wire with openings not greater than 1/16 inch. Do not exceed passive approach velocity of 0.2 fps and active approach velocity of 0.4 fps.

Rewater to minimize sediment movement downstream of the site. Prior to rewatering, slowly wet the reconstructed waterway channel; wash the fines into the bed by using pumps, or by diverting a small portion of the waterway channel flow. Capture and pump the sediment and turbid water, from the downstream end of the channel to the upstream end of the channel, until fines are washed into the streambed and water runs clear. Attain the Engineers written approval before breaching the coffer/diversion dams. Slowly breach the coffer/diversion dams and rewater the waterway channel.

204-4.01 METHOD OF MEASUREMENT. Section 109. Use neat line method as follows:

Structure Excavation:

1. Masonry Structures (except conduit). Between vertical planes, 18 inches outside the base of the masonry sections for the depth required.

2. Conduit. Between parallel vertical planes located 18 inches outside the horizontal projection of the outside diameter of the conduit and to the depth shown on the Plans.

Structure excavation only measured below the limits of other classes of excavation. Structure's in embankment section, the natural ground line as cross-sectioned is the uppermost level of computation.

204-5.01 BASIS OF PAYMENT. The Contract price includes the placing and compacting of all backfill and bedding when the materials used are obtained from excavation, any clearing and grubbing required and not paid for under some other item, formation of any embankments made with surplus material from structure excavation, and disposal of all surplus or unsuitable excavation.

Culvert baffles, headwalls, temporary water diversion, dewatering and rewatering, and the removal of pavement are subsidiary to the conduit and minor structure Pay Items.

Additional excavation to provide for shoring, sheet piles, excavation shields or flattening the excavation slopes, is subsidiary.

When item 204.0001.0000, 0002.0000, or 0003.0000 Structure Excavation, does not appear in the bid schedule, structure excavation required to complete other items of work is subsidiary, except that excavation and disposal of unsuitable material required from below a plane 12 inches below the invert elevation of conduits and 12 inches below the bottom of structures is paid as extra work.

Any backfill or bedding material required whose source is other than project excavation is paid at the contract unit price for the materials being used, or as extra work if no unit price has been established.

Traffic control paid under Section 643 and Erosion, Sediment, and Pollution Control paid under Section 641.

CR204-070121

SECTION 205 EXCAVATION AND FILL FOR MAJOR STRUCTURES

205-3.05 COMPACTION.

1. <u>Compaction with Moisture and Density Control</u>. <u>2nd paragraph delete</u>: "and ATM 214".

HSM20.5-113020R

SECTION 301 AGGREGATE BASE AND SURFACE COURSE

301-2.01 MATERIALS.

Add the following after the first sentence:

Recycled Asphalt Material (RAM) may be substituted for aggregate base course, inch for inch, if the following conditions are met:

- 1. RAM shall be crushed or processed to 100 percent by weight passing the 1.5-inch sieve and 95-100 percent by weight passing the 1-inch sieve.
- 2. The gradation of the extracted aggregate shall meet the following:

Sieve	Percent Passing by Weight
1 inch	100
3/4 inch	70 – 100
3/8 inch	42 – 90
No. 4	28 – 78
No. 16	11 – 54
No. 50	5 – 34
No. 100	3 - 22
No. 200	2 – 12

3. The asphalt content shall be 2.5 - 5.0 percent by weight of the RAM.

CR301.1-012407R

Add No. 5 after the 5th paragraph:

5. within 50 feet of detector loops.

CR301.3-022015

301-3.03 SHAPING AND COMPACTION.

In the second paragraph delete "and ATM 214".

HSM20.5-113020R

Add the following:

If recycled asphalt material is substituted for aggregate base course, the following conditions shall be met:

- 1. Density acceptance will be determined by control strip method ATM 412. Use a test strip with a vibratory compactor with a minimum dynamic force of 40,000 pounds. The optimum density will be determined by the Engineer using a nuclear densometer gauge to monitor the test strip. Adequate water shall be added to aid compaction.
- 2. After the appropriate coverage with the vibratory compactor, a minimum of 6 passes with a pneumatic tire roller shall be completed. Tires shall be inflated to 80 psi (\pm 5 psi) and the roller shall have a minimum operating weight per tire of 3,000 pounds.

301-5.01 BASIS OF PAYMENT.

Add the following:

Recycled asphalt material substituted for aggregate base course will be paid for as Item 301.0001.00D1 Aggregate Base Course, Grading D-1 at the unit price shown in the bid schedule for that Item.

CR301.1-012407R

SECTION 401 HOT MIX ASPHALT

401-1.01 DESCRIPTION. Construct one or more courses of plant-mixed, hot mix asphalt (HMA) pavement on the areas as shown on the plans.

MATERIALS

- **401-2.01 COMPOSITION OF MIXTURE JOB MIX DESIGN.** Use an Alaska DOT&PF Type II, Class B approved Job Mix Design. The Job Mix Design must have been accepted within the calendar year of construction.
- **401-2.02 ASPHALT BINDER.** Conform to Subsection 702-2.01. If binder performance grade is not specified, use PG 52-28.
- **401-2.03 TACK COAT.** Special Tack Emulsion, STE-1 conforming to Subsection 702-2.03.
- **401-2.04 PROCESS QUALITY CONTROL.** Sample and test materials for quality control of the asphalt concrete mixture according to Subsection 106-1.03.

Submit a paving and plant control plan at the pre-paving meeting to be held a minimum of 5 working days before initial paving operations. Address the sequence of operations and joint construction. Outline steps to assure product consistency, to minimize segregation, and to prevent premature cooling of the asphalt concrete mixture. Include a proposed quality control testing frequency for gradation, asphalt cement content, and compaction.

CONSTRUCTION REQUIREMENTS

- **401-3.01 WEATHER LIMITATIONS.** Do not place the hot mix asphalt on a wet surface, on an unstable/yielding roadbed, when the base material is frozen, or when weather conditions prevent proper handling or finishing of the mix. Do not place hot mix asphalt unless the roadway surface temperature is 40 °F or warmer.
- **401-3.02 EQUIPMENT, GENERAL.** Use equipment in good working order and free of hot mix asphalt buildup. Make equipment available for inspection and demonstration of operation a minimum of 24 hours before placement of hot mix asphalt.
- **401-3.03 ASPHALT MIXING PLANT.** Meet AASHTO M 156. Use an asphalt plant designed to dry aggregates, maintain accurate temperature control, and accurately proportion asphalt cement and aggregates. Calibrate the asphalt plant and furnish copies of the calibration data to the Engineer at least 4 hours before hot mix asphalt production.

Provide a scalping screen at the asphalt plant to prevent oversize material or debris from being incorporated into the hot mix asphalt.

401-3.04 HAULING EQUIPMENT. Haul hot mix asphalt in trucks with tight, clean, smooth metal beds, thinly coated with a minimum amount of paraffin oil, lime water solution, or an approved manufactured asphalt release agent. Do not use petroleum fuel as an asphalt release agent.

During hot mix asphalt hauling activities, the hauling vehicle will have covers attached and available for use. Be prepared to demonstrate deployment of the covers when hauling material or empty. Illustrate the efficiency of deployment and how the materials are protected from the environment and the environment is protected from the materials. Cover the hot mix asphalt in the hauling vehicle(s) when directed by the Engineer.

401-3.05 ASPHALT PAVERS. Use self-propelled pavers equipped with a heated vibratory screed. Control grade and cross slope with automatic grade and slope control devices. Use an erected string line, a 30-foot minimum mobile stringline (ski) or other approved grade follower, to automatically actuate the paver screed control system. Use grade control either (a) both the high and low sides or (b) grade control on the high side and slope control on the low side.

Equip the paver with a receiving hopper having sufficient capacity for a uniform spreading operation and a distribution system to place the hot mix asphalt uniformly in front of the screed.

Use a screed assembly that produces a finished surface of the required smoothness, thickness, and texture without tearing, shoving, or displacing the hot mix asphalt.

Equip the paver with a means of preventing segregation of the coarse aggregate particles from the remainder of the hot mix asphalt when carried from the paver hopper back to the augers. Use means and methods approved by the paver manufacturer. Means and methods may consist of chains, deflector plates, or other similar devices or combination of devices. Provide a Certificate of Compliance that verifies the means and methods required to prevent segregation are being used.

401-3.06 ROLLERS. Use both steel-wheel (static or vibratory) and pneumatic-tire rollers. Avoid crushing or fracturing aggregate. Use rollers designed to compact hot mix asphalt mixtures and reverse without backlash.

Use fully skirted pneumatic-tire rollers having a minimum operating weight of 3,000 pounds per tire.

401-3.07 PREPARATION OF EXISTING SURFACE. Prepare existing surface in conformance with the Plans and Specifications. Clean existing paved surfaces of loose material

Uniformly coat contact surfaces of curbing, gutters, sawcut pavement, cold joints, manholes, and other structures with tack coat material prior to placing the hot mix asphalt. Allow tack coat to break before placement of hot mix asphalt.

401-3.08 PREPARATION OF ASPHALT. Provide a continuous supply of asphalt cement to the asphalt mixing plant at a uniform temperature, within the allowable mixing temperature range.

401-3.09 PREPARATION OF AGGREGATES. Dry the aggregate so the moisture content of the hot mix asphalt does not exceed 0.5% (by total weight of mix), as determined by WAQTC FOP for AASHTO T 329.

Heat the aggregate for hot mix asphalt to a temperature compatible with the mix requirements specified.

Adjust the burner on the dryer to avoid damage to the aggregate and to prevent the presence of unburned fuel on the aggregate. Hot mix asphalt containing soot or fuel is considered unacceptable and is subject to the requirements of Subsection 105.-1.11.

401-3.10 MIXING. Combine the aggregate, asphalt cement, and additives in the mixer in the amounts required by the Job Mix Design. Mix to obtain 98% coated particles when tested according to AASHTO T 195.

For batch plants, put the dry aggregate in motion before addition of asphalt cement.

401-3.11 PLACING AND SPREADING. Place the hot mix asphalt upon the approved surface, spread, strike off, and adjust surface irregularities. Use asphalt pavers to distribute hot mix asphalt, including leveling courses. The maximum compacted lift thickness allowed is 3 inches.

Use hand tools to spread, rake, and lute the hot mix asphalt in areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical.

Do not pave against new Portland cement concrete pads or curbing until it has cured for at least 72 hours.

401-3.12 COMPACTION. Thoroughly and uniformly compact the hot mix asphalt by rolling. In areas not accessible to large rollers, compact with mechanical tampers or trench rollers.

The target value for density is 96% of the maximum specific gravity (MSG), as determined by WAQTC FOP for AASHTO T 209.

Do not leave rollers or other equipment standing on hot mix asphalt that has not cooled sufficiently to prevent indentation.

401-3.13 JOINTS. Minimize the number of joints. Ensure that all joints have the same texture and smoothness as other sections of the course.

Remove to full depth improperly formed joints resulting in surface irregularities. Replace with new material, and thoroughly compacted.

Precut all pavement removal to a neat line with a power saw or by other approved method.

Form transverse joints by cutting back on the previous run to expose the full depth of the layer. Saw cut the joint, use a removable bulkhead, or other method approved by the Engineer.

401-3.14 PATCHING DEFECTIVE AREAS. Remove any hot mix asphalt that becomes contaminated with foreign material, is segregated, flushing, bleeding, or is in any way determined to be defective. Do not skin patch. Remove defective materials for the full thickness of the course. Cut the pavement so that all edges are vertical, the sides are parallel to the direction of traffic. Coat edges with a tack coat and allow to cure. Place and compact fresh hot mix asphalt to grade and smoothness requirements.

401-4.01 METHOD OF MEASUREMENT. Section 109 and the following:

Hot Mix Asphalt.

By weighing. No deduction will be made for the weight of asphalt cement or anti- stripping additive.

Job Mix Design, asphalt cement, anti-strip additive, tack coat, and other incidentals to complete the work under this Section will not be measured separately for payment but shall be considered subsidiary to the respective hot mix asphalt pay item.

401-5.01 BASIS OF PAYMENT.

Item 401.0001.002B Hot Mix Asphalt, Type II; Class B will be paid for by the ton in place completed and accepted. Job Mix Design, asphalt cement, anti-strip additive, tack coat, and other incidentals are subsidiary to this pay item.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
401.0001.002B	HMA, Type II; Class B	Ton

(03/01/24) PARKS-Special Provision

SECTION 615 STANDARD SIGNS

615-1.01 DESCRIPTION. Furnish and install standard signs and delineators. Remove and relocate or remove and dispose of existing signs and markers, as specified.

615-2.01 MATERIALS. Use materials that conform to the following Subsections:

Sheet Aluminum	730-2.01
High Density Overlaid Plywood	730-2.02
Retroreflective Sheeting, ASTM D4956	730-2.03
Sign Posts	730-2.04
Delineator Posts	730-2.05
Acrylic Prismatic Reflectors	730-2.06
Sign Support Fasteners	730-2.07

- Shop Drawings. Submit shop drawings, for all signs that must meet the ASDS letter width and spacing charts for variable width legends (such as D-series and I-3 signs), and which require custom shop drawings specific to the project. Submit 2 sets of collated shop drawings prepared according to Subsection 105-1.02. Show the following on each sign drawing:
 - a. Dimensions of all horizontal and vertical characters and spaces
 - b. Overall dimensions
 - c. Sign material and sheeting material type
 - d. Panel thickness
 - e. Legend and letter series
 - f. Whether the sign will be framed
- 2. <u>Sign Fabrication</u>. Use ASTM D4956 Type IV retroreflective sheeting (for lettering, symbols, borders, and background) on sheet aluminum panels for all signs except the following:
 - a. <u>Orange Background Signs</u>. Use Type IX or XI fluorescent orange reflective sheeting placed on sheet aluminum panels, except:
 - (1) For temporary installations, the reflective sheeting place on aluminum, plastic, or plywood sheet panels.
 - (2) For flexible signs, (Roll-Up Signs) use fluorescent reflective sheeting Type VI or better (based on durability and reflectivity, as determined by the Engineer). Roll-Up Sign 3M Series RS 24, Reflexite Marathon Orange, or approved equal.

- <u>Railroad Crossbucks and Vertical Crossbuck Supports</u>: Use white ASTM D4956
 Type VIII or Type IX or XI retroreflective sheeting for background of sign and all
 strips.
- c. <u>Non-Illuminated Overhead Signs with White Legends on Green Backgrounds</u>: Use ASTM D4956 Type IX or XI retroreflective sheeting for legends and background. Create the legend in one of the following ways:
 - (1) Cut border and legend from white ASTM D4956 Type IX or XI retroreflective sheeting and adhere them to a green ASTM D4956 Type IX background, or
 - (2) Cut stencil of border and legend out of green transparent acrylic film and use transparent adhesive to overlay the film on a white ASTM D4956 Type IX or XI retroreflective background.
- d. <u>Fluorescent Yellow-Green School Area Signs</u>: Use ASTM D4956 Type VIII, Type IX or XI retroreflective sheeting for background.

Use a manufacturer-recommended clear coat on all screened signs.

Use sign layouts (including characters, symbols, corner radii, and borders) that conform to the ASDS.

3. <u>Sign Posts and Bases.</u> Use sign posts and bases of the types specified. The structural aspects of design and materials for sign supports must comply with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. Do not splice sign posts.

Foundation Concrete:

- a. Non-structural and Non-steel-reinforced Sign Foundations. Use Class W concrete, or commercially available pre-mixed sacked concrete with a minimum compressive strength of 3,000 psi. When sacked concrete is used, acceptance will be based on manufacturer Certificates of Compliance and the compressive strength test results of the specimens prepared according to ATM 506.
- b. <u>Steel-reinforced Roadside Sign Foundations</u>. Use Class B concrete meeting the requirements of Section 550, except:
 - <u>Overhead Sign Support Foundations</u>. Use Class A concrete meeting the requirements of Section 501.
- Delineators. Use delineator assemblies that conform to the requirements shown on the Plans. Fabricate flexible delineators using ASTM 4956 Type III, IV, V, IX or XI retroreflective sheeting.

- 5. <u>Reflective Sheeting Warranty</u>. Supply manufacturer's warranty for reflective sheeting, including retention of fluorescent yellow-green (measured in accordance with ASTM E2301) for ten years according to the following criteria:
 - a. Minimum Fluorescent Luminance Factor Y_F: 20%
 - b. Minimum Total Luminance Factor Y_T: 35%

The warranty shall stipulate that: If the sheeting fails to meet the minimum fluorescence values within the first 7 years from the date of fabrication of the sign, the manufacturer shall, at the manufacturer's expense, restore the sign surface to its original effectiveness. If the reflective sheeting fails to meet the minimum fluorescence values within the 8th through 10th year from the date of fabrication, the manufacturer shall, at the manufacturer's expense, provide enough new replacement sign sheeting to the Department to restore the sign surface to its original effectiveness.

CONSTRUCTION REQUIREMENTS.

615-3.01 GENERAL.

- 1. Place posts in excavated holes to the depth shown on the Alaska Standard Plans.
- 2. Backfill the space around the posts and foundations placed in holes to finish ground with selected earth or sand, free of rocks or deleterious material. Place backfill in layers approximately 6 to 12 inches thick and thoroughly compact it.
- 3. Dispose of surplus excavated material neatly along the adjacent roadway as directed.4. Install flexible delineator posts according to the manufacturer's recommendations.
- 5. Attach sign panels to posts, electroliers, traffic signal standards, bridge rails, piers, and abutments using the types and sizes of fastening hardware shown on the Plans.
- 6. If using existing signs and mileposts that are removed and relocated, ensure they conform to the details shown on the Plans or as directed.

7. Sign Salvage:

Notify the Engineer 5 working days prior to beginning sign salvage activities. The Engineer will physically identify those signs to salvage.

a. <u>Property of the State</u>. When 615-3.01 7a identifies a maintenance station to receive sign salvage, the signs (sign panels, posts, and hardware) are the property of the State.

Protect all items from damage during salvaging and delivery. For each sign so designated, disconnect sign post from panel and group the panels together. Group

posts together with their hardware. Deliver sign panels, posts, and hardware to the State Maintenance Station noted in these Special Provisions. Do not deliver salvaged materials until inspected and approved by the Engineer. Replace any items damaged by you at no additional cost to the Department.

Store salvaged sign panels, posts, and hardware at an onsite location identified by the Engineer.

b. <u>Property of the Contractor</u>. When 615-3.01 7a does not identify a State Maintenance and Operations Station; the signs salvaged (sign panels, posts, and hardware) are the property of the Contractor.

Remove project signs and/or parts designated for salvage, off the project site.

Dispose of foundations from salvaged existing signs in a manner approved of by the Engineer (remove and dispose, abandoned in place, or otherwise). If abandoned in place, remove the tops of the foundations, reinforcing steel, anchor bolts, and conduits to a depth of not less than 12 inches below roadway subgrade or unimproved ground, whichever applies.

Dispose of sign salvage not wanted by the Contractor, not used in the project, and not accepted by the Local Maintenance and Operations Station as required by Federal, State, and Municipal environmental regulations.

All signs, the sign panels, posts, hardware, and foundations at a single installation are considered as one unit.

- 8. All materials and finished signs are subject to inspection and acceptance in place.
 - a. Surfaces exposed to weathering must be free of defects in the coating that impair serviceability or detract from general appearance or color match.
 - b. Finished signs must be clean and have no chatter marks, burrs, sharp edges, loose rivets, delaminated reflective sheeting, or aluminum marks. Do not make repairs to the face sheet.
- 9. Install the various breakaway assemblies according to the manufacturer's written instructions. Meet MASH crashworthiness requirement for breakaway hardware, unless approved otherwise by the Engineer.
- 10. Secure the anchors in templates and install them according to the manufacturer's written instructions.
- 11. Finish the foundation according to these tolerances:
 - a. Do not use more than two shims per coupling.

b. Do not use more than three shims to plumb each post.

Remove and replace all foundations requiring more than three shims to plumb a post without extra compensation.

- 12. Construct the top of any foundation located on a slope so that the finished slope passes through the top center of the foundation. Grade the area 24 inches up and down slope of the foundation edge so that no portion of the foundation projects above the surrounding slope and water will drain away from the foundation.
- 13. Attach a label to the back of all standard signs in the lower right corner. Make the label at least 15 square inches and show the year the sign was purchased from the manufacturer. Show the last two digits of the year in clear and bold numbers. Make the label from ASTM D4956 Type I or brighter retroreflective sheeting. Use background and legend colors meeting Table 615-1.

TABLE 615-1 DECAL COLORS

YEAR	BACKGROUND COLOR	LEGEND COLOR		
XXX1	Yellow	Black		
XXX2	Red	White		
XXX3	Blue	White		
XXX4	Green	White		
XXX5	Brown	White		
XXX6	Orange	Black		
XXX7	Black	White		
XXX8	White	Black		
XXX9	Purple	White		
XXX0	Strong Yellow-Green	Black		

Central values and tolerance limits for each color, as referenced in the MUTCD, are available from the Federal Highway Administration, (HHS-30), 400 7th St. SW, Washington, D.C. 20590

615-3.02 SIGN PLACEMENT AND INSTALLATION. The location and type of installation will be as shown on the Plans. Sign locations are approximate and subject to field adjustment by the Engineer.

Do not allow the top of the embedded steel tube to extend more than 2 inches above the surrounding ground and concrete foundation.

On all signs, install 2-inch diameter wind washers, colored to match the sign face, between the fastener head and the sign. Use rust-resistant washers fabricated from a material equal in strength to the sign blank.

Mount signs on mast arms level.

Bring existing signs that are to remain, into conformance with Standard Drawing S-05. Keep existing signs in service until they are no longer needed.

615-4.01 METHOD OF MEASUREMENT.

<u>Standard Signs and Object Markers</u>. By the total area of legend-bearing sign panel erected in place. No deductions in quantity for corner rounding will be made. Nominal dimensions for sign sizes indicated on the Plans will be used to calculate sign pay quantities. Octagons and round signs will be measured as rectangles. Only one side of each double-faced sign will be measured for payment.

Removal and Relocation. By each, complete in place.

<u>Delineators</u>. By each, complete in place. A single delineator consists of one post equipped with three reflectors.

Salvage Sign. By each complete sign delivered in acceptable condition.

615-5.01 BASIS OF PAYMENT. Sign posts, bases, and mounting hardware are subsidiary.

<u>Salvage Sign</u>. Each complete sign includes the sign panels, posts, hardware, and foundations at a single installation.

When Items 615.0002.0000, 615.0003.0000, or 615.0006.0000 do not appear on the bid schedule, this work is subsidiary.

PAY ITEM

Item Number	Item Description	Unit
615.0001.0000	Standard Sign	SF

CR615-23.0501

SECTION 622

PARK FACILITIES

- **622-1.01 DESCRIPTION.** This work shall consist of furnishing, constructing and placing park facilities in conformance with the plans and Special Provisions.
- **622-1.02 APPLICABLE ACCESSIBILITY STANDARD.** Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.
- 622-1.03 SUBMITTALS AND SUBSTITUTIONS. Conform to Subsection 106-1.01.

MATERIALS

- **622-2.01 GENERAL.** All materials shall be new and conform to the details shown on the plans or as specified.
- **622-2.02 BACKFILL.** Selected Material, Type A conforming to Subsection 703-2.07.
- **622-2.03 CONCRETE.** Class A Concrete conforming to Section 501.
- **622-2.04 STRUCTURAL STEEL.** Structural steel shall conform to the requirements of ASTM Specification A36 (Standard Specification for Carbon Structural Steel).
- **622-2.05 GALVANIZING.** Conform to AASHTO M111/ASTM A123 (Standard Specification for Zinc [Hot-Dip Galvanized] Coatings on Iron and Steel Products), or AASHTO M232/ASTM A153 (Standard Specification for Zinc Coating [Hot-Dip] on Iron and Steel Hardware). Repair damaged galvanizing by using low melting point zinc repair rods in conformance with ASTM A780 (Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings).
- **622-2.06 LUMBER.** Conform to Section 713. Wood species shall be Douglas Fir or Hem-fir unless otherwise specified.
- <u>Dimensional</u>. Dimensional lumber and timbers are shown on the plans in nominal dimensions, i.e., 2x4, indicating surfaced four sides (S4S) or planed material. Use classification for light framing shall be Construction Grade. Use classification for structural joists and planks shall be No. 2 Grade or Better. Manufacturing classification shall be Dressed (Surfaced) Lumber. Size classification shall be Nominal Size Designations of Boards, Dimension, and Timbers.
- 2. Rough Cut. Unless otherwise indicated, rough cut lumber and timbers are shown on the plans in actual dimensions, i.e., 2"x4", indicating rough cut material. Use

classification shall be Structural Lumber, No. 2 Grade or Better. Manufacturing classification shall be Rough Lumber. Size classification shall be Rough Dry Sizes.

622-2.07 TREATED LUMBER. Wood species conforms to Subsection 622-2.06.

Treatment shall be as follows:

- 1. <u>Above Ground Applications</u>. Preservative pressure treatment shall conform to Section 714. Pressure treat with preservative Ammonical Copper Quat Type A, B, C, or D (ACQ-A, B, C, or D) or Copper Azole Type A (CBA-A). Minimum retention shall be 0.40 pounds per cubic foot or to refusal. Treated materials shall be uniformly brown in color and nonincised. This type of treated lumber is commonly used for residential decks for above ground applications. Incising may be used on 4x and thicker material to obtain minimum retention.
- Ground Contact Applications. Preservative pressure treatment shall conform to Section 714. Pressure treat with preservative Ammonical Copper Quat - Type A, B, C, or D (ACQ-A, B, C, or D) or Copper Azole – Type A (CBA-A). Minimum retention shall be 0.60 pounds per cubic foot. Exposed treated materials shall be pigmented uniformly brown in color by manufacturer.
- **622-2.08 RECYCLED PLASTIC LUMBER.** Recycled plastic lumber shall contain a minimum of 90% recycled HDPE. Recycled plastic lumber shall have a minimum flexural strength of 1355 psi and compressive strength of 1420 psi as determined by ASTM D6109, minimum specific gravity of 0.861 g/cc as determined by ASTM D6111, and a maximum thermal expansion of 0.000033 inch/inch/degree F as determined by ASTM D6341. The lumber shall also incorporate an ultraviolet stabilizer at the time of manufacturing. Color shall be as determined by the Engineer.
- **622-2.09 METAL ROOFING.** Exposed fastener metal roof system with panel base metal steel conforming to ASTM A446, Grade 80, (80,000 psi minimum tensile strength) with a protective coating of zinc-aluminum alloy conforming to ASTM A924/ASTM A792, 45 percent zinc and 55 percent aluminum by weight applied to a thickness of 1.9 mils. Alternate coatings proposed for substitution will not be accepted. Exterior paint finish to be a 0.8 mil Acrylic Emulsion finish coat over a 0.2 mil baked-on acrylic primer. Exterior color to match Denali Green by IMSA Building Products Inc. or approved equal. Interior paint finish to be a 0.25 mil off-white backer over a 0.15 mil baked-on acrylic primer.
- 1. <u>Roof Panels</u>. Minimum 29-gauge, 36-inch net width panel with 9 inches on center roll-formed profile pattern consisting of three evenly spaced ribs, one tall rib followed by two shorter ribs.
- 2. Gable Trim and Universal Ridge. Shall be approximately 6 inches wide.
- 3. <u>Closure Strips</u>. Polyethylene foam type to fit panel profile or 1 inch by 1-inch universal closures.

- 4. <u>Sidelap Mastics</u>. Closed cell neoprene butyl.
- 5. <u>Fasteners</u>. Metal to wood fasteners as recommended by the manufacturer. Fastener length should assure penetration of at least one inch into the wood. Fastener heads shall be pre-painted the same color as roof panels.
- **622-2.10 FASTENERS.** Commercial quality and type of nails and screws as required to securely hold all members in place in accordance with National Design Specifications (NDS). Nails shall be hot dipped galvanized. All other fasteners shall be corrosion resistant. Fasteners in pressure treated wood shall be hot dipped galvanized. Nails and wood screws below grade in pressure treated wood shall be stainless steel.

622-2.11 PAINT. Unless otherwise specified, use the following paint types and colors, or approved equals:

- Solid Oil Stain. Exterior oil/alkyd flat finish stain, color "Russet". DF7XX as manufactured by Fuller O'Brien / Devoe Products, Sun-Proof Solid Alkyd/Oil Stain (77-1354) as manufactured by Pittsburgh Paint Company, Behr Plus 10 Solid Stain, Rural Manor II Solid Color Stain (714401x) as manufactured by Rodda Paint Co., or approved equivalent. Submit color samples of proposed substitutions for approval.
- 2. <u>Semi-Transparent Oil Stain</u>. Exterior alkyd-based stain, color Sherwin Williams "SW 3507 Riverwood", Behr Superdeck "#1907 Canyon Brown", or PPG Architectural Finishes Olympic "Russet".
- 3. <u>Clear Oil Stain</u>. Non-pigmented penetrating exterior alkyd base stain formulated for water repellency.
- 4. Metal Primer Paint. As recommended by enamel paint manufacturer.
- 5. <u>Enamel Paint</u>. Exterior alkyd base gloss enamel. Color to match solid oil stain color.
- 6. <u>Concrete Sealer</u>. Clear acrylic copolymer conforming to AASHTO M148/ASTM C309 (Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete, for Type 1 Compounds).
- 7. <u>Above Ground Wood Preservative</u>. Brown preservative with active ingredient of minimum 9.08 percent copper naphthenate (equivalent to minimum 1 percent metallic copper). Color to be approved by Engineer.
- 8. <u>Below Ground Wood Preservative</u>. Preservative with active ingredient of minimum 16 percent copper naphthenate (equivalent to minimum 2 percent metallic copper).
- 9. <u>End Cut Preservative for Treated Wood</u>. Brown preservative with active ingredient of minimum 10 percent copper naphthenate (equivalent to minimum 1 percent metallic copper). Color to match preservative pressure treatment color.

Paint that has been frozen or is out of date shall be replaced at no additional cost to the Department.

622-2.12 SIGNS. Fabricate sign panels to the dimensions shown on Plans. Metal sign panels shall be 0.125-inch-thick alloy 6061-T6, 5052-H36, or 5052-H38 aluminum. Wood sign panels shall be medium density overlay (MDO) plywood. Signs shall have Type II (medium intensity) reflective sheeting background with color as specified. White high intensity sheeting for symbols, letters, and borders shall match 3M Scotchlite Reflective Sheeting #3290. Brown medium intensity sheeting for background shall match 3M Scotchlite Reflective Sheeting #3279.

622-2.13 BEARPROOF GARBAGE CAN. Shall be Series as manufactured by BearSaver (800-851-3887) or approved equal. Model shall have no decorative siding.

Garbage can shall meet all current American Disabilities Act Accessibility Guidelines (ADAAG).

Latch hardware is to be spring loaded. The force required to operate the latch must be less than 5 lbs. Gravity alone is not an acceptable method of assuring that doors re-latch

Garbage shall not be the chute type. Trash shall be loaded from the top and emptied from the back.

Garbage shall be mountable to a concrete base. The mounting supports shall not extend outside of the receptacle housing.

Double capacity garbage shall be 140 gallons, minimum, and brown in color.

- **622-2.14 SEAT ROCK.** Seat rocks shall have dimensions conforming to those found on Sheet 1 of Standard Drawing S-10D, Orientation Kiosk and shall have one relatively flat surface that can be used as a seat when installed. All seat rocks shall be approved by the Engineer before installation.
- **622-2.15 PICNIC SHELTER.** Conform to Standard Drawing R-1, Picnic Shelter. Metal roofing shall conform to subsection 622-2.09. Column bases shall be corrosion resistant and embedded in wet concrete for subsequent connection of wood post to the concrete footing. Size column base to dimension of post. Posts shall have commercially fabricated column bases inset a maximum of 1/2 inch. If commercial bases cannot meet the 1/2-inch requirement, custom fabricate full dimension column bases. Stirrup shall be provided with holes for two galvanized bolts with washers. Similar to Simpson CB1010.

Post Size	Base Plate Gage & Dimension	Stirrup Material	Post Bolts	Allowable Uplift Load
	Gage & Dillielision			Upilit Luau

10 X 10 3 ga & 9 ½" x 9 ½"	3 ga x 3" strap	2 each 3/4"	6,650 pounds
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622-2.16 ORIENTATION KIOSK. Conform to Standard Drawing S-10D, Orientation Kiosk. Interpretive panel frame and bulletin board frame shall be surfaced four sides clear cedar. Metal Roof shall conform to subsection 622-2.09.

Column bases shall be corrosion resistant and embedded in wet concrete for subsequent connection of wood post to concrete footing. Size column base to dimension of post. Posts shall have commercially fabricated column bases inset a maximum of 1/2 inch. If commercial bases cannot meet the 1/2-inch requirement, custom fabricate full dimension column bases. Stirrup shall be provided with holes for two galvanized bolts with washers. Similar to Simpson CB88.

Post Size	Base Plate Gage & Dimension	Stirrup Material	Post Bolts	Allowable Uplift Load
8 X 8	7 ga & 7-1/2" X 7-1/2"	3 ga x 3" strap	2 each 3/4"	6,650 pounds

Column caps to connect front posts to front horizontal beam shall be corrosion resistant. Size column cap to dimension of the timbers. If commercial column caps cannot meet the timber dimensions, custom fabricate full dimension column caps. Install with manufacturer recommended fasteners. Similar to Simpson BC8.

Beam Size /	Beam Flange	Post Flange	Allowable	Allowable
Post Size	Gage & Dimension	Gage & Dimension	Uplift Load	Lateral Load
8 X 8 /	18 ga &	18 ga &	1 000 paunda	O OOO naunda
8 X 8	7-1/2" X 7-1/2"	7-1/2" X 7-1/2"	1,800 pounds	2,000 pounds

Face mount hangers to connect the side horizontal beam to the front posts shall be corrosion resistant. Size hangers to dimension of the timbers. If commercial hangers cannot meet the timber dimensions, custom fabricate full dimension hangers. Hangers shall have concealed flanges. Install with manufacturer recommended fasteners to achieve the allowable uplift load specified below. Similar to Simpson HUC88.

Beam Size /	Beam Flange	Post Flange	Allowable
Post Size	Gage & Dimension	Gage & Height	Uplift Load
8 X 8 /	14 ga &	14 ga &	1,285 pounds
8 X 8	7-1/2" X 2-1/2"	6-5/8"	1,200 pourius

Corner bracket to connect the side horizontal beams to the rear posts and rear horizontal beam shall be custom fabricated as shown on the Standard drawing.

Hurricane tie to secure roof trusses to horizontal front and rear beams shall be 18-gauge steel and corrosion resistant. Install with manufacturer recommended fasteners to

achieve 320 pounds minimum uplift load and 105 pounds minimum lateral load. Similar to Simpson H3.

622-2.17 INTERPRETIVE SIGN, TYPE. Conform to Standard Drawing S-11D, Interpretive Sign, Type D. Aluminum for back plate to conform to alloy 6061-T6, 5052-H36, or 5052-H38. Provide one pin-in-head torx machine bolt driver per sign. Column bases shall be corrosion resistant and embedded in wet concrete for subsequent connection of wood post to concrete footing. Size column base to dimension of post. Rough cut posts shall have commercially fabricated column bases inset a maximum of 1/2 inch. If commercial bases can't meet the 1/2 inch requirement, custom fabricate full dimension column bases. Stirrup shall be provided with holes for two galvanized bolts with washers. Similar to Simpson CB66.

Post Size	Base Plate Gage & Dimension	Stirrup Material	Post Rolts	Allowable Uplift Load
6" X 6"	7 ga & 6" X 6"	7 ga x 3" strap	2 each 5/8"	4,200 pounds

CONSTRUCTION REQUIREMENTS

- **622-3.01 GENERAL.** The location shown on the drawings for park facilities placement are approximate. The Engineer will field locate park facilities at the time of construction.
- **622-3.02 EXCAVATION AND BACKFILL.** Conform to the requirements of Section 204 and the details on the plans.
- **622-3.03 CONCRETE**. Conform to the requirements of Section 501 and the details on the plans.
- **622-3.04 STRUCTURAL STEEL.** Welding to conform to American Welding Society D1.1.
- **622-3.05 WOOD.** Competent carpenters shall be employed, and all framing shall be true and exact. Unless otherwise specified, nails and spikes shall be hand driven with just sufficient force to set the heads flush with the surface of wood. Power nail guns may be used if the pressure may be adjusted to drive the nail flush with the face of the lumber. All non-removable shipping, storage, weathering and erection marks on fabricated lumber shall be hidden from view in the completed work. Use of damaged lumber shall not be allowed. Store on-site lumber above the ground and protected from damage and weathering.

Holes for round drift-bolts and dowels shall be bored with a bit 1/16 inch smaller in diameter than that of the bolt or dowel used. Holes for machine and carriage bolts shall be bored with a bit of the same diameter as that of the bolt. Holes for lag screws shall be bored with a bit not larger than the body of the screw at the root of the thread.

Unless otherwise specified, USS flat washers shall be used in contact with all bolt heads and nuts that would otherwise be in contact with wood.

622-3.06 METAL ROOFING. Store sheets and other roofing components above the ground and keep dry. Metal roofing shall not come into contact with lead, aluminum, copper, alkalines, fertilizers, or acids. Panels shall be clean and unmarked during and after erection.

Place roofing felt over 2x6 T&G. Lap felt 4 inches minimum at sides and top and 10 inches at ridge.

Position first roof panel at gable end away from prevailing wind and check for alignment with building structure. Panels shall overhang sheathing at eave, as shown on the drawing, as a drip edge. Sidelap mastic shall be installed continuously along edge of panels. Do not place fasteners through the sidelap mastic. Install wood-metal screws at 24 inches on center at major ribs and stitch screws at 12 inches on center at sidelaps.

Align roof panels correctly prior to ridge cap installation. Install closure strips under ridge cap and fasten through cap, closure strips, and roofing at each major rib.

Install closure strip under panel prior to flashing installation. Fasten at 12 inches on center with stitch screws.

Apply gable trim to both roof ends. Fasten at top and sides at 24 inches on center.

622-3.07 PAINT. Deliver in sealed containers with labels legible and intact. Remove dirt, grease, oil and other construction debris prior to painting. Ensure that surfaces to be painted are even, smooth, sound, clean, dry, and free from defects affecting proper application. Metal surfaces to receive paint shall be corrosion free. Apply per manufacturer's recommendations. Apply paint material evenly without runs, sags, or other defects. Work each coat into the material being coated at an average rate of coverage recommended by the manufacturer. Cover surfaces completely to provide uniform color and appearance. Remove all paint, stain, or other finish material where it has spilled or spattered.

- 1. General. Unless otherwise specified, schedule finishes as follows:
 - a. Non-Treated Wood, Surfaced. Finish surfaces not scheduled to receive stain or clear oil stain with wood preservative.
 - b. Non-Treated Wood, Rough Cut. Saturate below and above ground surfaces not scheduled to receive stain with wood preservative.
 - c. Treated Wood, Hidden. Dado cuts, cut ends, drilled holes and field cuts in wood materials shall be brush coated to saturation with end cut preservative.

- d. Treated Wood, Exposed. Saturate cut surfaces with scheduled finish. Finish surfaces not scheduled to receive stain with wood preservative.
- e. Concrete and Masonry. Seal exposed surfaces.
- f. Metal. Prime and paint exposed metal surfaces as required. Finish is not required for fasteners that are galvanized or corrosion resistan

2. Bearproof Garbage Can.

a. Metal. Factory Applied Brown Enamel Paint

3. Picnic Shelter.

- a. Exposed Tongue and Groove Wood. Clear Oil Stain
- b. Other Wood. Semi-Transparent Oil Stain
- c. Metal Roof. Manufacture applied finish.
- d. Other Metal, except Fasteners. Primer and Enamel Paint

4. Orientation Kiosk.

- a. Interp/Bulletin Board Frame and Exposed T&G Wood. Clear Oil Stain
- b. Other Wood. Semi-Transparent Oil Stain
- c. Metal. Primer and Enamel Paint
- d. Bulletin Board Sound Board. Off White Flat Latex Paint

5. Interpretive Sign, Type D

- a. Wood. Solid Oil Stain.
- b. Aluminum Back Plate. No Finish Required.
- c Other Metal Primer and Fnamel Paint
- **622-3.8 BEARPROOF GARBAGE CAN**. Install with concrete foundation 4" thick extending 6" beyond the edge of the garbage can base in accordance with the Plans and manufacturer's recommendations.
- **622-3.9 BARRIER ROCK/SEAT ROCK.** Place barrier rocks 4 feet apart, edge to edge, with approximately 20 percent of the height of each rock set below ground level. When finish surface is pavement or concrete, place barrier rocks prior to paving or pouring operations. Cutting pavement to place barrier rocks and then patching is not acceptable.

Place seat rocks with 18 to 24 inch seat height and a minimum of 20 percent of the height of rock set below ground level.

- **622-3.10 PICNIC SHELTER.** Construct in accordance with the Plans.
- **622-3.11 ORIENTATION KIOSK.** Construct in accordance with Standard Drawing S-10D, Orientation Kiosk.

622-3.12 INTERPRETIVE SIGN, TYPE D. Construct in accordance with Standard Drawing S-11C, Interpretive Sign, Type D.

622-4.01 METHOD OF MEASUREMENT. Park facilities with the unit measure each will be measured by the actual number of facilities completed and accepted.

Excavation and embankment for park facilities outside the limits shown on the plans will be measured for payment only if directed by the Engineer. Excavation and backfill required for items paid for under this Section will not be measured for payment.

Seat rocks at Interpretive Kiosk, Type B, and Orientation Kiosk will be subsidiary to that item and will not be measured separately for payment.

622-5.01 BASIS OF PAYMENT. The accepted quantity of park facilities will be paid for at the contract unit price per unit of measurement for the type specified completed in place, and listed below excluding all clearing, grubbing, topsoil and crushed aggregate base course, which shall be paid for separately at contract unit prices.

ADA Accessible models of a park facility item will be compensated at the same unit price as the standard model.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
622.2004.0000	Bearproof Garbage Can	EACH
622.2015.000D	Interpretive Sign, Type D	EACH
622.2020.0000	Orientation Kiosk	EACH
622.2021.0000	Picnic Shelter	EACH

(02/3/20) PARKS-Special Provision

Replace Section 641 with the following:

SECTION 641 EROSION, SEDIMENT, AND POLLUTION CONTROL

641-1.01 DESCRIPTION. Provide project administration and Work relating to control of erosion, sedimentation, and discharge of pollutants, according to this Section and applicable local, state, and federal requirements, including the Alaska Pollution Discharge Elimination System (APDES) Construction General Permit (CGP). The state APDES program is administered by the Department of Environmental Conservation (DEC). Section 301(a) of the Clean Water Act (CWA) and 18 AAC 83.015 provide that the discharge of pollutants to water of the U.S. is unlawful except as allowed by the CGP.

641-1.02 DEFINITIONS.

These definitions apply only to Section 641.

ACTIVE TREATMENT SYSTEM (ATS) OPERATOR. CGP Appendix C.

ALASKA CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (AK-CESCL). A person who has completed training, testing, and other requirements of, and is currently certified as, an AK-CESCL from an AK-CESCL Training Program (a program developed under a Memorandum of Understanding between the Department and others). The Department recognizes AK-CESCLs as "qualified personnel" required by the CGP. An AK-CESCL must be recertified every three years. (See Qualified Person)

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC). The state agency authorized by EPA to administer the Clean Water Act's National Pollutant Discharge Elimination System.

ALASKA GENERAL PERMIT FOR EXCAVATION, DEWATERING (Excavation Dewatering Permit). Permit authorizing excavation dewatering discharges from Construction Activities.

ALASKA MULTI-SECTOR GENERAL PERMIT (MSGP). Permit authorizing storm water discharges associated with Industrial Activity.

ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES). A system administered by DEC that issues and tracks permits for storm water discharges.

BEST MANAGEMENT PRACTICES (BMPS). CGP Appendix C.

CLEAN WATER ACT (CWA). Federal Water Pollution Control Amendments of 1972, as amended (33 U.S.C. 1251 et seq.).

CONSTRUCTION ACTIVITY. Ground disturbing activity by the Contractor, Subcontractor or utility company; that may result in erosion, sedimentation, or a discharge of pollutants into storm water. CGP Appendix C.

CONSTRUCTION GENERAL PERMIT (CGP). The permit authorizing storm water discharges from Construction Activities, issued and enforced by Alaska DEC. It authorizes storm water discharges providing permit conditions and water quality standards are met.

U.S. ARMY CORPS OF ENGINEERS PERMIT (COE Permit). U.S. Army Corps of Engineers Permit for construction in waters of the U.S. may be issued under Section 10 of the Rivers and Harbors Act of 1899, or Section 404 of the Clean Water Act.

ELECTRONIC NOTICE OF INTENT (ENOI). CGP Appendix C.

ELECTRONIC NOTICE OF TERMINATION (ENOT). CGP Appendix C.

ENVIRONMENTAL PROTECTION AGENCY (EPA). The federal agency charged to protect human health and the environment.

ERODIBLE STOCKPILE. Any material storage area or stockpile consisting of mineral aggregate, organic material, or a combination thereof, with greater than 5 percent passing the #200 sieve, and any material storage where wind or water transports sediments or other pollutants from the stockpile. Erodible Stockpile also includes any material storage area or stockpile where the Engineer determines there is potential for wind or water transport of sediments or other pollutants away from the stockpile.

EROSION AND SEDIMENT CONTROL PLAN (ESCP). The Department's project specific document that illustrates measures to control erosion and sediment on the project. The ESCP provides bidders with the basis for cost estimating and guidance for developing an acceptable Storm Water Pollutant Prevention Plan (SWPPP).

FINAL STABILIZATION. CGP Appendix C, "Stabilization".

HAZARDOUS MATERIAL CONTROL PLAN (HMCP). The Contractor's detailed project specific plan for prevention of pollution from storage, use, transfer, containment, cleanup, and disposal of hazardous material (including, but are not limited to, petroleum products related to construction activities and equipment). The HMCP is included as an appendix to the SWPPP.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT. A DEC storm water discharge permit issued to certain local governments and other public bodies, for operation of storm water conveyances and drainage systems. CGP Appendix C.

OPERATOR(S). The party(s) responsible to obtain CGP permit coverage. CGP Appendix C.

- 1. Contractor the Contractor is an Operator inside and outside the Project Zone.
- 2. Department the Department is an Operator inside the Project Zone.

POLLUTANT. Any substance or item meeting the definition of pollutant contained in 40 CFR § 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sediment, sewage, garbage, sewage sludge, chemical wastes, biological materials, wrecked or discarded equipment, rock, sand, cellar dirt and industrial or municipal waste.

PROJECT ZONE. The physical area provided by the Department for Construction. The Project Zone includes the area of highway or facility under construction, project staging and equipment areas, and material and disposal sites; when those areas, routes and sites, are provided by the Contract.

Material sites, material processing sites, disposal sites, haul routes, staging and equipment storage areas; that are furnished by the Contractor or a commercial operator, are not included in the Project Zone.

QUALIFIED PERSON. CGP Appendix C and Section 641-1.04.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCC PLAN). The Contractor's detailed plan for petroleum spill prevention and control measures that meet the requirements of 40 CFR 112.

SPILL RESPONSE FIELD REPRESENTATIVE. The Contractor's representative with authority and responsibility for managing, implementing, and executing the HMCP and SPCC Plan.

STORM EVENT. CGP Appendix C.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP). The Contractor's plan for compliance with the CGP for construction activities inside the Project zone, CGP Appendix C and Section 641.

STORM WATER POLLUTION PREVENTION PLAN TWO (SWPPP2). The Contractor's plan for compliance with the CGP and MSGP for construction activities outside the Project Zone.

SUPERINTENDENT. The Contractor's duly authorized representative with authority and responsibility for the overall operation of the Project and Contractor furnished sites and facilities.

SWPPP AMENDMENT. A modification to the SWPPP. CGP Part 5.0.

SWPPP MANAGER. The Contractor's Qualified Person with authority and responsibility. CGP Appendix C.

SWPPP PREPARER. The Contractor's Qualified Person with authority and responsibility. CGP Appendix C.

TEMPORARY STABILIZATION. CGP Appendix C, "Stabilization".

641-1.02.01 REFERENCE.

A list of websites and documents referenced herein, including SWPPP preparation documents and construction forms, are available at the DOT&PF Statewide Design and Engineering Services Storm Water web page and Construction Forms webpage. DEC Permit information is available at the DEC Division of Water webpage.

641-1.03 PLAN AND PERMIT SUBMITTALS.

For plans listed in Subsection 108-1.03.5 (SWPPP, HMCP, and SPCC), use the Contractor submission and Department review deadlines identified in this subsection. Partial and incomplete submittals will not be accepted for review. Any submittal that is re-submitted or revised after submission, but before the review is completed, will restart the submittal review timeline. No additional Contract time or additional compensation will be allowed due to delays caused by partial or incomplete submittals or required resubmittals.

 Storm Water Pollution Prevention Plan. Submit one electronic copy (single PDF file) and one hard copy of the SWPPP to the Engineer for approval. Deliver these documents to the Engineer at least 21 days before beginning Construction Activity. Organize the SWPPP and related documents for submittal according to the requirements of Subsection 641-2.01.2.

The Department will review the SWPPP submittals within 14 days after they are received. Submittals will be returned to the Contractor and marked as either "rejected" with reasons listed or as "approved" by the Department. When the submittal is rejected, the Contractor must revise and resubmit the SWPPP. The 14-day review period will restart when the contractor submits an electronic copy and one hard copy of the revised SWPPP to the Engineer for approval.

After the SWPPP is approved and certified by the Department using Form 25D-109, the Contractor must certify the approved SWPPP using Form 25D-111. See Subsection 641-1.03.4 for further SWPPP submittal requirements.

Submit the final SWPPP. Transmit an electronic copy (single pdf file) of the final SWPPP to the Engineer when the Contractor's eNOT is filed, or within 30 days of the Department's eNOT being filed, whichever is sooner. Include all SWPPP documents.

- 2. <u>Hazardous Material Control Plan</u>. The HMCP Template is available at the DOT&PF Construction Forms webpage. The HMCP submittal, review timeline, and signature requirements are the same as the SWPPP.
- 3. <u>Spill Prevention, Control, and Countermeasure Plan</u>. When a SPCC Plan is required under Subsection 641-2.03, submit an electronic copy and one hard copy of the SPCC Plan to the Engineer. Deliver these documents to the Engineer at least 21 days before

the beginning of Construction Activity. The Department reserves the right to review the SPCC Plan and require modifications.

4. <u>CGP Coverage</u>. The Contractor is responsible for the permitting of Contractor and subcontractor Construction Activities related to the Project. Do not use the SWPPP for Construction Activities outside the Project Zone where the Department is not an operator. For Construction Activities outside the Project Zone, the Contractor must use a SWPPP2. Department approval is not required for a SWPPP2.

After the Department certifies the SWPPP and prior to beginning Construction Activity, submit an eNOI with the required fee to DEC for coverage under the CGP. Submit a copy of the signed eNOI and DEC's written acknowledgement (by letter or other document), to the Engineer as soon as practicable and no later than three days after filing eNOI or receiving a written response.

Do not begin Construction Activity until the conditions listed in Subsection 641-3.01.1 are completed.

The Department will submit an eNOI to DEC for Construction Activities inside the Project Zone. The Engineer will provide the Contractor with a copy of the Department's eNOI and DEC's written acknowledgment (by letter or other document), for inclusion in the SWPPP.

Before Construction Activities occur, transmit to the Engineer an electronic copy and one hard copy of the approved and certified SWPPP, with signed Delegations of Signature Authorities on Forms 25D-107 and 25D-108, SWPPP Certifications on Forms 25D-111 and 25D-109, both permittee's signed eNOIs and DEC's written acknowledgement.

- 5. <u>DEC SWPPP Review</u>. When CGP Part 2.1.3, or 2.1.4 requires DEC SWPPP review:
 - a. Transmit a copy of the Department-approved SWPPP to DEC using delivery receipt confirmation;
 - b. Transmit a copy of the delivery receipt confirmation to the Engineer within seven days of receiving the confirmation; and
 - c. Retain a copy of delivery receipt confirmation in the SWPPP.
- 6. <u>Local Government SWPPP Review</u>. When local government or the CGP Part 2.1.4, requires local government review:
 - a. Transmit a copy of the Department-approved SWPPP and other information as required to local government, with the required fee. Use delivery receipt confirmation:
 - b. Transmit a copy of the delivery receipt confirmation to the Engineer within seven days of receiving the confirmation;

- c. Transmit a copy of any comments by the local government to the Engineer within seven days of receipt;
- d. Amend the SWPPP as necessary to address local government comments and transmit SWPPP Amendments to the Engineer within seven days of receipt of the comments:
- e. Include a copy of local government SWPPP review letter in the SWPPP; and
- f. File a notification with local government that the project is ending.
- 7. Modifying Contractor's eNOI. When required by the CGP Part 2.7, modify your eNOI to update or correct information within 30 calendar days of the change. Reasons for modification are in the CGP Part 2.7.1. The Contractor must submit an eNOT instead of an eNOI modification when the operator has changed. The new operator must file an eNOI to obtain permit coverage.

641-1.04 PERSONNEL QUALIFICATIONS.

Provide documentation in the SWPPP that the individuals serving in these positions meet the personnel qualifications. The Department accepts the following certificates as equivalent to AK-CESCL: Certified Professional in Erosion and Sediment Control (CPESC), or Certified Inspector in Sediment, and Erosion Control Certified (CISEC). These equivalent certificates are included in the CGP Appendix C and repeated below.

TABLE 641-1.04 PERSONNEL QUALIFICATIONS

Personnel Title	Required Qualifications
SWPPP Preparer	 Current certification as a Certified Professional in Erosion and Sediment Control (CPESC); or Current certification as AK-CESCL, and at least two years' experience in erosion and sediment control as a SWPPP Manager or SWPPP writer, or equivalent; or Professional Engineer registered in the State of Alaska with current certification as AK-CESCL.
Superintendent	Current AK-CESCL, or substitute training from CGP Appendix C, Qualified Person Table 4
SWPPP Manager	Current AK-CESCL or substitute training from CGP Appendix C, Qualified Person Table 4.
Active Treatment System Operator	Current AK-CESCL or substitute training from CGP Appendix C, Qualified Person Table 4. ATS operators should possess a recognized certification, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to meet the ATS requirement.

641-1.05 SIGNATURE/CERTIFICATION REQUIREMENTS AND DELEGATIONS.

- 1. <u>eNOI and eNOT</u>. The eNOI, eNOT, and eNOI Modifications must be signed and certified by a responsible corporate officer according to CGP Appendix A, Part 1.12. Signature and certification authority for the eNOI and eNOT cannot be delegated.
- 2. Delegation of Signature Authority for Other SWPPP Documents and Reports. Use Form 25D-108 to delegate signature authority and certification authority to the Superintendent position, according to CGP Appendix A, Part 1.12.3, for the SWPPP, Inspection Reports and other reports required by the CGP. The Superintendent position is responsible for signing and certifying the SWPPP, Inspection Reports, and other reports required by the CGP, except the eNOI, eNOI Modifications, and eNOT. The Engineer will provide the Department's delegation on Form 25D-107, which the Contractor must include in the SWPPP.
- 3. <u>Subcontractor Certification</u>. Subcontractors must certify on Form 25D-105, that they have read and will abide by the CGP and the conditions of the project SWPPP.
- 4. <u>Signatures and Initials</u>. Certify or initial the CGP documents and SWPPP forms, wherever a signature or initial is required.

641-1.06 RESPONSIBILITY FOR STORM WATER PERMIT COVERAGE.

107-1.02 includes the requirements to obtain permits, and to provide permit documents to the Engineer.

- 1. The Department and the Contractor are jointly responsible for permitting and permit compliance within the Project Zone.
- 2. The Contractor is responsible for permitting and permit compliance for all construction support activity in the Project Zone and outside the Project Zone. The Contractor has sole responsibility for compliance with DEC, COE, and other applicable federal, state, and local requirements, and for securing all necessary clearances, rights, and permits. The Contractor is responsible for protection, care, and upkeep of all work, and all associated off-site zones.
- 3. The Contractor is responsible for obtaining an Excavation Dewatering Permit (AKG002000) if construction activities are within 1,500 feet of a DEC-identified contaminated site or groundwater plume.
- 4. An entity that owns or operates a commercial plant (as defined in Subsection 108-1.01.4) or material source or disposal site outside the Project Zone, is responsible for permitting and permit compliance. The Contractor has sole responsibility to verify that the entity has appropriate permit coverage.
- 5. The Department is not responsible for permitting or permit compliance, and is not liable for fines resulting from noncompliance with permit conditions:
 - a. For areas outside the Project Zone:
 - b. For Construction Activity and Support Activities outside the Project Zone; and

c. For commercial plants, commercial material sources, and commercial disposal sites.

641-1.07 UTILITY.

Relocation Coverage. A Utility company is not an Operator when utility relocation is performed concurrently with the Project, as outlined in Section 105-1.06. The Department maintains operational control over the Utility's plans and specifications for coordination with project construction elements, and the Contractor has day-to-day control over the various utility construction activities that occur in support of the Project. A Utility company is considered a subcontractor for concurrent relocation.

After the Contractor has an active NOI for the Project, a Utility Company performing advance relocation work under a separate SWPPP no longer has Operator status and files the NOT for the Utility Company's SWPPP covering only the completed utility work. Remaining utility relocation work is included in and performed under the Project SWPPP.

641-2.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.

1. SWPPP Preparer and Pre-Construction Site Visit.

Use a SWPPP Preparer to develop the SWPPP according to the CGP, DEC and Department SWPPP Template. Subsection 641-1.02.01 provides directions to templates.

The SWPPP Preparer must conduct a pre-construction inspection at the Project site before construction activity begins. If the SWPPP Preparer is not a Contractor employee, the SWPPP Preparer must visit the site accompanied by the Contractor. Give the Department at least seven days advance notice of the site visit, so that the Department may participate.

Document the SWPPP Preparer's pre-construction inspection in the SWPPP on Form 25D-106, SWPPP Pre-Construction Site Visit, include the names of attendees and the date.

2. Developing the SWPPP.

- a. Meet all CGP requirements.
- b. Use the Department's ESCP, Environmental commitments, and other Contract documents as a starting point for developing the SWPPP.
- c. Develop the SWPPP with sections and appendices according to the DEC CGP SWPPP Template and DOT&PF SWPPP Template. Include the information required by the Contract and described in the CGP Part 5.0. Use the forms available at the DOT&PF Construction Forms website.

d. Compile the SWPPP in three ring binders with tabbed and labeled dividers for each appendix. Submit the SWPPP according to Subsection 641-1.03.

3. SWPPP Considerations and Contents.

- a. The SWPPP must provide erosion and sediment control measures for all Construction Activity within the Project Zone.
 - Construction activity outside the Project Zone must have permit coverage. Document permit compliance according to SWPPP2 requirements.
- b. The SWPPP must consider the activities of the Contractor and all subcontractors and utility companies performing work in the Project Zone. Describe the roles and responsibilities of the Contractor, subcontractors, utility companies, and the Department with regard to implementation of the SWPPP. Include the utility companies and other operators performing Construction Activity. Identify areas:
 - (1) Over which each operator has operational control; and
 - (2) Where the Department and Contractor are co-operators.
- c. For work outside the Project Zone the SWPPP must identify the entity that has storm water permit coverage, the operator, and areas that are:
 - (1) Dedicated to the Project and where the Department is not an operator; and
 - (2) Not dedicated to the project but used for the project.
- d. If the project discharges to a Tier III, Outstanding Natural Resource Water, comply with the CGP Part 2.1.6. Submittal deadlines apply prior to filing an eNOI and beginning construction activities. As of the issuance of the CGP 2021, no Tier III, Outstanding Natural Resource Water is designated in the State of Alaska.
- e. There are special requirements in the CGP Part 3.2, for storm water discharges into an impaired water body. Monitoring storm water discharges may be required. The Contractor is responsible for monitoring and reporting inside and outside the project zone.
- f. Describe the sequence and timing of activities that disturb soils and BMP implementation and removal. Phase earth-disturbing activities to minimize unstabilized areas, and to achieve temporary or final stabilization. Whenever practicable incorporate final stabilization work into excavation, embankment, and grading activities. Include drawings showing each phase of the project with the BMPs implemented in the Phase.
- g. Delineate the site according to the CGP Part 4.2.1.

- h. Minimize the amount of soil exposed and preserve natural topsoil on site, unless infeasible according to the CGP Part 4.2.2.
- i. Describe methods and time limits, to initiate temporary or final soil stabilization. Comply with stabilization requirements in the CGP Part 4.5.
- j. If construction ceases during winter months, describe all requirements for winter shutdown according to the CGP Part 4.12.
- k. Plans for ATS must meet with the requirements in the CGP Part 2.1.5 and 4.6.
- I. Design all temporary BMPs to accommodate a two-year 24-hour storm event. Describe and document all installed control measures in the SWPPP according to the CGP Part 5.3.6. Include a citation from a published BMP Manual, publication, or manufacturers specification used as a source, or include a statement "No BMP Manual was used for this design". If using out of state BMPs, follow the instructions in the DOT&PF SWPPP Guide.
- m. Provide a legible site map or set of maps in the SWPPP, showing the entire site and identifying boundaries of the property where construction and earth-disturbing activities will occur. Include all elements described in the CGP Part 5.3.5 and the DEC CGP SWPPP Template Section 5.0.
- n. Identify the inspection frequency in the SWPPP according to the CGP Part 6.1; except, inspect once every seven calendar days regardless of the precipitation amount.
- o. Linear Project Inspections, described in CGP Part 6.5, are not applicable to this Contract.
- p. The SWPPP must cite and incorporate applicable requirements of the Project permits, environmental commitments, COE permit, and commitments related to historic preservation. Make additional consultations or obtain permits as necessary for Contractor specific activities that were not included in the Department's permitting and consultation.
- q. The SWPPP is a dynamic document. Keep the SWPPP current by noting installation, modification, and removal of BMPs, and by using amendments, SWPPP amendment logs, Inspection Reports, corrective action logs, records of land disturbance and stabilization, and any other records necessary to document storm water pollution prevention activities and to satisfy the requirements of the CGP and this specification. See Subsection 641-3.03 for more information.
- 4. Recording Personnel and Contact Information in the SWPPP.

Identify the SWPPP Manager as the Storm Water Lead and Storm Water Inspector positions in the SWPPP. Document the SWPPP Manager's responsibilities in Section 2.0 Storm Water Contacts, of the SWPPP Template and:

- a. Identify that the SWPPP Manager does not have authority to sign inspection reports (unless the SWPPP Manager is also the designated project Superintendent).
- b. Identify that the SWPPP Manager cannot prepare the SWPPP unless the SWPPP Manager meets the Contract requirements for the SWPPP Preparer.

Include in the SWPPP proof of AK-CESCL, or other required certifications for the Superintendent and SWPPP Manager, and for any acting Superintendent and acting SWPPP Managers. If the Superintendent or SWPPP Manager is replaced, permanently or temporarily, by an acting Superintendent or acting SWPPP Manager; record in the SWPPP, on Form 25D-127, the names of the replacement personnel, and date of replacement. For temporary personnel, record their beginning and ending dates.

Provide 24-hour contact information for the Superintendent and SWPPP Manager. The Superintendent and SWPPP Manager must have 24-hour contact information for all Subcontractor SWPPP Coordinators and Utility SWPPP Coordinators.

Include in the SWPPP, proof of AK-CESCL or equivalent certifications of ATS operators. Record names of ATS operators and their beginning and ending dates, on Form 25D-127.

The Department will provide proof of AK-CESCL, or equivalent certifications for the Department's Project Engineer, Storm Water Inspectors, and Monitoring Person, and names and dates they are acting in that position. Include Department's staff certifications in SWPPP Appendix E. Include the Department's staff names, dates acting, and assignments in Section 2.0 of the SWPPP and on Form 25D-127.

641-2.02 HAZARDOUS MATERIAL CONTROL PLAN (HMCP) REQUIREMENTS.

Prepare the HMCP using the Department template for the prevention of pollution from storage, use, containment, cleanup, and disposal of all hazardous material, including petroleum products related to construction activities and equipment. Include the HMCP as an appendix to the SWPPP. Compile Material Safety Data Sheets in one location and reference that location in the HMCP.

641-2.03 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCC Plan) REQUIREMENTS.

Prepare and implement an SPCC Plan, required by 40 CFR 112; when both of the following conditions are present on the project:

- 1. Oil or petroleum products from a spill may reach navigable waters (defined in 40 CFR 112), and
- Total above ground storage capacity for oil and any petroleum products is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons).

Reference the SPCC Plan in the HMCP and SWPPP.

641-2.04 RESPONSIBILITY AND AUTHORITY OF THE SUPERINTENDENT AND SWPPP MANAGER.

The Superintendent shall certify the SWPPP, Inspection Reports, and other reports required by the CGP, except the eNOI and eNOT. The Superintendent may not delegate the task or responsibility of certifying these documents.

The Superintendent may assign certain duties to the SWPPP Manager.

- 1. Ensuring Contractor's and subcontractor's compliance with the SWPPP and CGP;
- 2. Ensuring the control of erosion, sedimentation, or discharge of pollutants;
- 3. Directing and overseeing installation, maintenance, and removal of BMPs;
- 4. Performing Inspections; and
- 5. Updating the SWPPP including adding amendments and forms.

When Bid Item 641.0007.0000 is part of the Contract, the SWPPP Manager must be a different person than the Superintendent, be available at all times to administer SWPPP requirements, and be physically present within the Project Zone or the project office, when construction activities are occurring.

The Superintendent and SWPPP Manager shall be knowledgeable in the requirements of Section 641, the SWPPP, CGP, BMPs, HMCP, SPCC Plan, environmental permits, and environmental commitments.

The Superintendent and SWPPP Manager shall have the Contractor's complete authority and be responsible for suspending construction activities that do not conform to the SWPPP or CGP.

641-2.05 MATERIALS.

Use materials suitable to withstand hydraulic, wind, and soil forces, and to control erosion and trap sediments according to the requirements of the CGP and the Specifications.

Use the seed mixture specified in the Contract or as directed by the Engineer.

Use soil stabilization material as specified in Section 727.

Use silt fences as specified in Section 729.

Use straw and straw products certified weed free of prohibited and restricted noxious weed seed and quarantined pests, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34). When straw or straw products certified according to 11 AAC 34 are not available, use non-certified products manufactured within Alaska before certified products manufactured in another state, country, or territory. Non-certified straw or straw products manufactured in another state, country, or territory shall not be used. Grass, legumes, or any other herbaceous plants produced as hay, shall not be substituted for straw, or straw products.

641-3.01 CONSTRUCTION REQUIREMENTS.

Comply with the SWPPP and the requirements of the CGP Part 5.0.

1. Before Construction.

The following actions must be completed before Construction Activity begins:

- a. The SWPPP Preparer must visit the Project. Document the visit on SWPPP Form 25D-106. The SWPPP must be developed or amended with the findings from the visit.
- b. The SWPPP must be approved by the Engineer on Form 25D-109.
- c. The Contractor must be authorized to begin work by the Engineer.
- d. The Project must have an eNOI for the Department and for the Contractor.
- e. The Department approved SWPPP must be submitted to DEC and Local Governments per CGP Part 2.1.2, Part 2.1.4, and Part 2.4.1.
- f. The Contractor has transmitted to the Engineer an electronic copy, and at least one hardcopy of the approved SWPPP.
- g. The Delegation of Authority, Forms 25D-108 and 25D-107, for both the Contractor and Engineer are signed.
- h. Main entrance signage must meet the requirements of CGP Part 5.10.2.

Post notices on the outside wall of the Contractor's project office, and near the main entrances of the construction project. Protect postings from the weather. Locate postings so the public can safely read them without obstructing construction activities or the traveling public (for example, at an existing pullout). Do not use retroreflective signs for the SWPPP posting. Do not locate SWPPP signs in locations where the signs may be confused with traffic control signs or devices. Update the notices if the listed information changes.

i. Track precipitation according to CGP Part 7.3.9. Submit the method to track precipitation to the Engineer for approval.

2. <u>During Construction</u>.

- a. Delineate the site. Comply with the CGP Part 4.2.1.
- b. BMPs. Install BMPs according to the SWPPP prior to the initiation of ground disturbance.
- c. Document subcontractors. Provide a copy of the SWPPP and the CGP to all subcontractors and utility companies before they begin soil-disturbing activities. Verify they understand and comply with the SWPPP and CGP.
 - (1) Document all subcontractors and utility companies that may work on the site, according to the CGP Part 5.3.1, and SWPPP Section 1.2.
 - (2) Require subcontractors and utility companies to sign the SWPPP Subcontractor Certification, Form 25D-105. Include Form 25D-105 in the SWPPP Appendix E.
 - (3) Inform subcontractors and utility companies, in a timely manner, of SWPPP amendments that affect them. Coordinate with subcontractors and utility companies to protect BMPs, including temporary and final stabilization from damage.
 - (4) Notify the Engineer immediately if the actions of any utility company or subcontractor do not comply with the SWPPP and the CGP.
- d. Provide Training. Provide ongoing training to all employees, subcontractors, and utility companies according to the CGP Part 4.14.
 - (1) Provide training no less than once a month during construction activity;
 - (2) Document training in the SWPPP Training Log on Form 25D-125. Include the training record in the SWPPP Appendix I.
- e. Protection and Restoration. Comply with Subsection 107-1.11.

- f. Good Housekeeping Measures. Comply with the SWPPP and CGP Part 4.8.
- g. Control Measures. Comply with the SWPPP and CGP Part 5.3.6.
 - (1) Maintain BMPs.
 - (2) Comply with requirements of the HMCP and SPCC Plan, and all local, state, and federal regulations that pertain to the handling, storage, containment, cleanup, and disposal of petroleum products or other hazardous materials.
 - (3) Keep the SWPPP and HMCP current, Subsection 641-2.01.3, SWPPP Considerations and Contents.

3. Winter Construction.

If winter construction activity occurs, the project must have BMPs in place, as per CGP Part 4.12.2. Inspections can be reduced to once per month if the project meets the CGP Part 6.2.4.

4. Storm Water Discharge Pollutant Reporting Requirements.

If an incident of non-compliance occurs, that may endanger health or the environment, a report must be made, CGP Appendix A, Part 3.4.

A permit non-compliance is any type of pollutant, such as turbidity or petroleum that enters storm water runoff and flows into a receiving water body, MS4, or wetland that is connected to waters of the U.S.

- a. Report the incident to the Engineer immediately;
- b. Report to DEC orally within 24 hours after the permittee becomes aware of the incident; and
- c. Report to DEC in writing within five days after the permittee becomes aware of the circumstances. To report in writing, complete the written noncompliance report on Form 25D-143, and file the written report with DEC. Coordinate the report with the Engineer. Include in the report:
 - (1) A description of the noncompliance and its causes;
 - (2) The exact dates and times of noncompliance;
 - (3) If not yet corrected the anticipated time the project will be brought back into compliance; and
 - (4) The corrective action taken or planned to reduce, eliminate and prevent reoccurrence.

d. Report an incident of noncompliance with COE Permits to the Engineer immediately. The Engineer will notify the COE.

5. <u>Hazardous Materials Reporting Requirements</u>.

Report any release of a hazardous substance immediately to the Engineer, as soon as the person has knowledge of the discharge.

Report spills of petroleum products or other hazardous materials to the Engineer and other agencies as required by law, and according to the CGP Part 9.3.

a. To water.

Any amount of hazardous material released must be reported immediately to the Engineer, DEC, and the Coast Guard.

b. To land.

Any release of a petroleum product, must be reported as soon as the person has knowledge of the discharge, CGP Part 9.3.2.

- (1) Release in excess of 55 gallons,
- (2) Release in excess of 10 gallons but less than 55 gallons, must be reported to the DEC within 48 hours after the person has knowledge of the discharge, and
- (3) Release in excess of 1 gallon to 10 gallons, must be recorded, logged, and provided to the DEC on a monthly basis.
- c. Use the HMCP and SPCC Plan for contact information to report spills to regulatory agencies.
- d. Implement measures to prevent the reoccurrence of and to respond to the release of hazardous materials.
- e. Prior to disposal of contaminated material, submit a Contaminated Media Transport and Treatment Disposal Approval Form to the DEC Division of Spill Prevention and Response. Dispose as approved by the DEC.

6. Maintenance of BMPs and Corrective Action.

Implement maintenance and corrective action as required by the CGP Part 4.13 and Part 8.0, SWPPP, and manufacturer's specifications, whichever is more restrictive.

- a. Implement corrective actions. Comply with the CGP Part 8.0 and the SWPPP.
- b. Corrective Action deadlines and documentation.
 - (1) Complete Corrective actions according to the CGP Part 8.2.

- (2) Document corrective actions in the Corrective Action Log, Form 25D-112, according to the SWPPP, CGP Part 5.9.2, and Part 8.3.
 - If a different BMP is installed to correct the condition leading to the corrective action, a SWPPP Amendment must be completed.
- (3) Document the conditions, in the Corrective Action Log, for corrective actions not completed according to the CGP 8.2. Notify the Engineer, and implement the corrective action as soon as possible.

The Engineer may assign a new complete-by date using a Delayed Action Item Report, Form 25D-113 (DAIR Form), if the Contractor is unable to complete the corrective action within the required timeframe. The DAIR Form can only be authorized and completed by the Engineer.

7. <u>Stabilization</u>.

- a. All Soil stabilization requirements must be met in accordance with CGP Part 4.5 and the SWPPP.
- b. When temporary or permanent seeding is required, provide a working hydro seeding equipment located within 100 miles of the project by road; with 1,000 gallon or more tank capacity, paddle agitation of tank, and the capability to reach the seed areas with an uniform mixture of water, seed, mulch and tackifier. If the project is located in an isolated community, the hydro-seeder must be located at the project.
- c. Apply temporary seed and stabilization measures after preparing the surface to reduce erosion potential and to facilitate germination and growth of vegetative cover according to Section 618 and 619.
- d. Apply permanent seed and other stabilization measures after land-disturbing activity has permanently ceased. Comply with the CGP, SWPPP, and Contract Sections 618, 619, 724, and 727.
- e. Incorporate final or temporary stabilization immediately after installing culverts or other drainage structures to satisfy the CGP Part 4.5, SWPPP and Engineer. Stabilize under any bridge and in areas upstream and downstream of culverts, drainages and areas disturbed by related construction activities after installation, or before deactivating stream bypass or diversion.
- f. Stabilization before Fall Freeze-up, and Spring Thaw.
 Stabilize Construction Activities within the Project Zone with BMPs prior to the anticipated date of fall freeze-up, according to the SWPPP and CGP Part 4.12.
 Exceptions to stabilization prior to anticipated date of fall freeze-up include:

- (1) Where temporary stabilization activities are precluded by snow cover or frozen ground conditions prior to the anticipated date of fall freeze-up, stabilization measures must be initiated as soon as practicable following the actual spring thaw.
- (2) When winter construction activity is authorized by the Engineer and conducted according to the Contract.

8. Ending CGP Coverage.

- a. The Engineer will determine the date that the following conditions for ending CGP coverage have been met within the Project Zone:
 - (1) Land disturbing activities have ceased;
 - (2) Final Stabilization has been achieved on all portions of the Project Zone, including Department furnished material sources, disposal sites, staging areas, equipment areas, etc., according to the CGP Part 4.5.2; and
 - (3) Temporary BMPs have been removed.
- b. After the Engineer has determined the conditions for submitting an eNOT have been met according to the CGP Part 10.2, the Department will:
 - (1) Send written notice to the Contractor with the date that the conditions were met;
 - (2) Submit an eNOT to DEC within 30 days, and
 - (3) Provide a copy of the eNOT and DEC's acknowledgement letter to the Contractor.
- c. If the Contractor's CGP eNOI acreage includes Support Activities and any other areas where the Department is not an Operator, the Contractor may not be able to file an eNOT at the same time as the Department.
- d. The Contractor must submit a copy of each signed eNOT and DEC's acknowledgement letter to the Department within three days of filing the eNOT or receiving a written response. Insert the eNOT and DEC acknowledgement letter in the SWPPP Appendix Q.
- e. The Contractor is responsible for coordinating local government inspections of work and ending permit coverage with local governments. See Subsection 641-1.03.6 for more information.
- 9. Ending Inspections, BMP maintenance, and SWPPP Updates in the Project Zone.

The Contractor is responsible for continuing inspections, BMP maintenance, and SWPPP updates until permit coverage is ended.

10. Transmit final SWPPP.

Transmit one electronic copy of the final SWPPP to the Engineer according to Subsection 641-1.03.1.

641-3.02 SWPPP DOCUMENTS, LOCATION ON-SITE, AVAILABILITY, AND RECORD RETENTION.

The SWPPP and related documents maintained by the Contractor are the Record for demonstrating compliance with the CGP. Copies of SWPPP documents transmitted to the Engineer under the requirements of this specification are informational and do not relieve the Contractor's responsibility to maintain complete records as required by the CGP and this specification.

Keep the SWPPP, HMCP, and SPCC Plan at the on-site project office. If there is not an on-site project office, keep the documents at a locally available location that meets CGP requirements and is approved by the Engineer. Records may be moved to another office for record retention after the eNOTs are filed. Records may be moved to another office during winter shutdown. Update on-site postings if records are relocated during winter shutdown. Provide the Department with copies of all Records.

Retain Records including a copy of the SWPPP, for at least three years after the date of eNOT according to the CGP Part 9.4.

The SWPPP and related documents must be made available for review and copy, to the Department and other regulatory agencies that request them. See CGP Parts 5.10, 6.6 and 9.5.

641-3.03 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS.

Perform Inspections, prepare Inspection Reports, and prepare SWPPP Amendments in compliance with the SWPPP and the CGP using Department forms from the DOT&PF Construction Forms website.

1. <u>Inspection during Construction</u>.

Conduct Inspections according to the schedule and requirements of the SWPPP and CGP Part 6.0, except inspect once every seven calendar days regardless of the precipitation amount, Subsection 641-2.01.3.n.

Inspections required by the CGP and SWPPP must be performed by the Contractor's SWPPP Manager and the Department's Storm Water Inspector jointly, unless approved by the Engineer, when:

a. One of the inspectors is not on site, access is only by air, and weather delayed or canceled flights;

- b. One of the inspectors is sick;
- The project is on a reduced frequency inspection schedule with no staff on site, the only access to the site is by air, and it is economical to send only one inspector; or
- d. When the Engineer determines a safety concern that makes joint inspection impracticable.

When this is the case, the Operator who conducts the Inspection must provide a copy of the Inspection Report to the other Operator within three days of the Inspection date and document the date of the report transmittal in Appendix K.

2. Inspection Reports.

Use only the Department SWPPP Construction Site Inspection Report, Form 25D-100, to record Inspections. Changes or revisions to Form 25D-100 are not permitted, except for adding or deleting data fields that list: Location of Discharge Points and Site Specific BMPs. Complete all fields in the Inspection Report; do not leave any field blank.

The Superintendent or SWPPP Manager must review and correct all errors within three days of the date of inspection.

Inspection Reports must be signed by the person described in the CGP Appendix A, Part 1.12 or by a duly authorized representative of that person. Only the Superintendent can certify the Inspection Form.

Insert a Complete-by-Date for each corrective action listed that complies with the CGP Part 8.2.

Provide a copy of the completed, unsigned Inspection Report to the Engineer by the end of the next business day following the inspection.

The Engineer may coordinate with the Superintendent to review and correct any errors or omissions before the Superintendent signs the report. Corrections are limited to adding missing information or correcting entries to match field notes and conditions present at the time the Inspection was performed. The signed and certified Inspection Report must be provided to the Engineer on the same day the Superintendent signed the form.

The Engineer will sign and certify the Inspection Report and will return the original to the Contractor within three working days if compliant with the CGP and SWPPP.

If the Inspection Report is not compliant with the CGP or SWPPP, the Engineer may make corrections after the Superintendent has signed and certified the Inspection

Report. The Engineer will initial and date each correction. If the Engineer makes corrections, the Superintendent must recertify the Inspection Report by entering a new signature and date in the white space below the original signature and date lines. Send a copy of the recertified Inspection Report to the Engineer on the day it is recertified. When an Inspection Report, certified by both the Superintendent and Engineer, requires corrections:

- a. Document the corrections in an addendum memo addressing only the omitted or erroneous portions.
- b. Superintendent and Engineer sign and certify the updated Inspection Report and the addendum memo.
- c. File the corrected Inspection Report and addendum memo in Appendix K and update the amendment log.

The issuance of an addendum memo does not relieve the Contractor of liquidated damages that may have been incurred as a result of the error on the original certified inspection report.

3. Items and Areas to Inspect.

Conduct inspections of all areas required by the CGP Part 6.4 and SWPPP.

4. Reduced Inspection Frequencies.

Conduct Inspections according to the inspection schedule indicated in the approved SWPPP. Any change in inspection frequency must be approved by the Engineer, and beginning and ending dates documented as an amendment to the SWPPP.

The frequency of inspections may be reduced according to the CGP Part 6.2.1 if the site is stabilized and the reduced frequency is approved by the Engineer. At actively staffed sites, inspect within two business days of the end of a storm event that results in a discharge from the site.

5. Winter Shutdown Inspections.

Conduct winter shutdown inspection 14 calendar days after the anticipated fall freezeup date and conditions under the CGP Parts 4.12.and 6.2.3, and the SWPPP are met. The Engineer may approve suspension of inspections and waive requirements for updating the Grading and Stabilization Activities Log and Daily Record of Rainfall, Form 25D-115, during winter shutdown.

Inspections must resume on a regular frequency or reduced inspection frequency identified in the SWPPP, at least 21 days before anticipated spring thaw, CGP Part 6.2.3. Resume updating the Daily Record of Rainfall Form at the start of the 21-day spring thaw inspection.

6. Inspection before Project Completion.

Conduct Inspection to ensure Final Stabilization is complete throughout the Project, and temporary BMPs that are required to be removed are removed. Temporary BMPs that are biodegradable and are specifically designed and installed with the intent of remaining in place until they degrade, may remain in place after project completion if approved by the Engineer.

7. SWPPP Amendments and SWPPP Amendment Log.

The SWPPP Amendment Log, Form 25D-114, must be filled out by an individual who holds a current AK-CESCL, or equivalent certification. The Superintendent or the SWPPP Manager must sign and date amendments to the SWPPP and updates to the SWPPP Amendment Log.

SWPPP Amendments must be approved by the Engineer. Amendments must occur:

- a. Whenever there is a change in design, construction operation, or maintenance at the construction site that has or could cause erosion, sedimentation or the discharge of pollutants that has not been previously addressed in the SWPPP;
- b. If an Inspection identifies that any portion of the SWPPP is ineffective in preventing erosion, sedimentation, or the discharge of pollutants;
- c. Whenever an Inspection identifies a problem that requires additional or modified BMPs or a BMP not shown in the original SWPPP is added;
- d. If the Inspection frequency is modified (note beginning and ending dates);
- e. When there is a change in personnel who are named in the SWPPP, according to Subsection 641-2.01;
- f. When an inspection is not conducted jointly;
- g. When an eNOI modification is filed;
- h. When a Noncompliance Report is filed with the DEC.

Place all correspondence with the DEC, EPA or MS4s in Appendix Q.

Amend the SWPPP as soon as practicable after any change or modification, but in no case, later than seven days following identification of the need for an amendment. All SWPPP Amendments must have an amendment number, be dated, and signed.

Keep the SWPPP Amendment Log current. Prior to a scheduled Inspection or submittal of an inspection, submit to the Engineer a copy of the pages of the Amendment Log that contain new entries since the last submittal. Include copies of any documents amending the SWPPP.

Keep the SWPPP Amendment Log in appendix M.

8. Site Maps.

Maintain site maps in accordance with CGP Part 5.3.5 and the SWPPP Template 5.0. It is acceptable to have separate site maps for BMPs, grading and stabilization activities.

9. Corrective Action Log.

The Superintendent and SWPPP Manager are the only persons authorized to make entries on the SWPPP Corrective Action Log, Form 25D-112.

The Corrective Action Log must document corrective actions required by the conditions listed in the CGP Part 8.0. Document the need for corrective action within 24 hours of either:

- a. Identification during an inspection, or
- b. Discovery by the Department's or Contractor's staff, a subcontractor, or a regulatory agency inspector.
- b. If a corrective action is discovered outside of an inspection, update the log with the date of discovery, the proposed corrective action, and the date the corrective action was completed.
- c. Keep the Corrective Action Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection.

Keep the Corrective Action Log in Appendix J.

10. Grading and Stabilization Activities Log.

The Superintendent and SWPPP Manager are the only persons authorized to date and initial entries on the SWPPP Grading and Stabilization Activities Log, Form 25D-110. Use the SWPPP Grading and Stabilization Activities Log, to record land disturbance and stabilization activities.

Keep the Grading and Stabilization Activities Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection. Keep the Grading and Stabilization Activities Log organized and completed to demonstrate compliance with the CGP Part 4.5.

Keep the Grading and Stabilization Activities Log in Appendix G.

11. Daily Record of Rainfall.

Use SWPPP Daily Record of Rainfall, Form 25D-115, to comply with CGP Part 7.3.9. Submit a copy to the Engineer with each completed Inspection Report. Keep the Daily Record of Rainfall current in Appendix N.

12. Staff Tracking Log.

Use the SWPPP Project Staff Tracking, Form 25D-127, to identify project staff that are required to be AK-CESCL certified or an equivalent qualification, CGP Appendix C. Complete this form to document the positions of Superintendent, SWPPP Manager, Engineer, DOT&PF Storm Water Inspector, and when these positions have changed personnel, either permanently or temporarily. Update the SWPPP Project Staff Tracking Form within 24 hours of any changes in personnel, qualifications, or other staffing items related to administration of the CGP or Section 641.

641-3.04 FAILURE TO PERFORM WORK.

The Engineer has authority to suspend work and withhold monies for an incident of non-compliance with the CGP, or the SWPPP, that may endanger health or the environment or for failure to perform work related to Section 641.

Non-compliance.

- 1. **Incidents of Non-compliance.** Failure to:
 - a. Obtain appropriate permits before Construction Activities occur;
 - b. Perform SWPPP Administration;
 - c. Perform timely Inspections;
 - d. Update the SWPPP;
 - e. Transmit updated SWPPP, Inspection Reports, and other updated SWPPP forms to the Engineer;
 - f. Maintain effective BMPs to control erosion, sedimentation, and pollution in accordance with the SWPPP, the CGP, and applicable local, state, and federal requirements;
 - g. Perform duties according to the requirements of Section 641;
 - h. Meet requirements of the CGP, SWPPP, or other permits, laws, and regulations related to erosion, sediment, or pollution control; or
 - i. Any other requirements established or included in the Contract.
- 2. **Notice of non-compliance**, either oral or written will include:

- a. Reason/defects
- b. Corrective actions required
- c. Time allowed for completing the corrective action
- 3. **Levels of Non-compliance and Response** correspond with harm to the workers, the public or the environment and whether the harm is:
 - a. **Not-imminent**, the Engineer will either orally or in writing, or both, provide notice to the Contractor indicating the incident of non-compliance. Contractor's that take corrective action and complete the action to the satisfaction of the Engineer, within the time specified, may return to the status of compliance, and avoid elevating the response to imminent.
 - b. **Imminent**, the Engineer will orally provide notice to the Contractor of non-compliance and promptly provide written notice to suspend work until corrective action is completed.

Additional actions, taken against the Contract whether the level of non-compliance is Not-imminent or Imminent, may include:

- a. Withholding monies until corrective action is completed
- b. Assessing damages or equitable adjustments
- c. Employing others to perform the corrective action and deduct the cost

No additional Contract time or additional compensation is allowed due to delays caused by the Engineer's suspension of work.

641-3.05 ACCESS TO WORK.

The Project, including any related off-site areas or support activities, must be made available for inspection, or sampling and monitoring, by the Department and other regulatory agencies. CGP Part 6.6.

641-4.01 METHOD OF MEASUREMENT.

See Section 109 and as follows:

Item 641.0002.0000 measured as specified in the Directive authorizing the work.

Item 641.0006.0000, measured as specified in Table 641-2 Version C.

641-5.01 BASIS OF PAYMENT.

- 1. BMP Values. Table 641-1 BMP Values Reserved.
- 2. <u>Erosion, Sediment, and Pollution Control Liquidated Damages</u>. Liquidated Damages assessed according to Table 641-2 are not an adjustment to the Contract amount. These damages charges are related to Contract performance but are billed by the Department to the Contractor, independent of the Contract amount. An amount equal to the Liquidated Damages may be withheld, for unsatisfactory performance, from payment due under the Contract until the Contractor remits payment for billed Liquidated Damages.

TABLE 641-2- VERSION C EROSION, SEDIMENT AND POLLUTION CONTROL – LIQUIDATED DAMAGES

Code	Specification Section Number and Description	Deductible Amount in Dollars	Cumulative Deductible Amounts in Dollars
Α	641-1.05 Failure to have a qualified (AK-CESCL or equivalent) SWPPP Manager	Calculated in Code B or F	
В	Failure to meet SWPPP requirements of: (1) 641-2.01.1 Name of SWPPP Preparer (2) Not Applicable (3) 641-3.03.8 Sign and Date SWPPP amendments by qualified person. (4) 641-3.02 Records maintained at project and made available for review	\$750 per omission	
С	Not Applicable.		
D	641-3.03.5 Failure to stabilize a Project prior to fall freeze-up.	\$5,000 per Project per year	
E	641-2.01.1. Failure to conduct pre- construction inspections before Construction Activities on all projects greater than 1 acre.	\$2,000 per Project	
F*	641-3.03. Failure to conduct and record CGP Inspections 641-3.03.1 Personnel conducting Inspections and Frequency 641-3.03.2 Inspection Reports, use Form 25D-100, completed with all required information	\$750 per Inspection	Additional \$750 for every additional 7 day period without completing the required inspection.
G	641-3.01.4 Corrective action, failure to timely accomplish BMP maintenance	•	

Code	Specification Section Number and Description	Deductible Amount in Dollars	Cumulative Deductible Amounts in Dollars	
	and/or repairs. In effect until BMP maintenance and/or repairs is completed.			
Н	641-3.01.3 Failure to provide to the Engineer and DEC a timely oral noncompliance report of violations or for a deficient oral noncompliance report	\$750 for the first day the report is late or deficient	Additional \$750 for every 14-day period without the required information	
I	641-3.01.3 Failure to provide to the Engineer and DEC a timely written noncompliance report, use Form 25D-143, of violations or for a deficient written noncompliance report	\$750 for the first day the report is late or deficient	Additional \$750 for every 14-day period without the required information	
J	641-3.04 Failure to comply with the requirements of the CGP, approved SWPPP, and Section 641, except as listed above	\$750 per occurrence for the first day of noncompliance	every day the deficiency remains	

^{*}CODE F. Liquidated Damages according to Code F will not be billed for typographic errors and minor data entry errors, except the liquidated damages will be assessed for these errors when:

- a. the Contractor has previously been notified, and subsequent inspection reports repeat the same or similar error,
- b. multiple inspection reports are submitted after the submission due date and the same or similar errors are repeated on multiple overdue reports,
- c. an error in recording the inspector's AK-CESCL certification date results in an inspector performing the inspection during a period when their certification was lapsed or was otherwise invalid

See Subsection 641-3.04 Failure to Perform Work, for additional work and payment requirements.

Item 641.0001.0000 Erosion, Sediment, and Pollution Control Administration. At the Contract lump sum price for administration of all work under this Section. Includes, but is not limited to, SWPPP and HMCP and SPCC Plan preparation, agency fees for SWPPP reviews, SWPPP amendments, pre-construction Inspections, Inspections, monitoring, reporting, and recordkeeping or copying Records related to the SWPPP and required by the CGP, and Record retention.

Item 641.0002.0000 Temporary Erosion, Sediment and Pollution Control by Directive. At the contingent sum prices specified in the Directive using time and materials to authorize the work, for all labor, supervision, materials, equipment, and incidentals to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs. Prices for this item will be by time and materials according to Subsection 109-1.05, or by mutual agreement between the Engineer and Contractor. All additional Erosion, Sediment, and Pollution Control Administration necessary due to this item will not be paid for separately but will be subsidiary to other bid items.

Item 641.0006.0000 Withholding. The Engineer may withhold an amount equal to Liquidated Damages, assessed according to Section 641, from payment due the Contractor. Liquidated Damages for violations of the Contract, CWA, and CGP are determined by the Engineer according to Table 641-2. The Engineer may withhold payment due the Contractors until the Contractor pays the Liquidated Damages to the Department. The Department will not release performance bonds until Liquidated Damages assessed according to Section 641 are paid to the Department, and all requirements according to Subsection 103-1.05 are satisfied.

<u>Subsidiary Items</u>. Temporary erosion, sediment, and pollution control measures that are required outside the Project Zone are subsidiary. Work required by the HMCP and SPCC Plan including hazardous material storage, containment, removal, cleanup and disposal, are subsidiary to Item 641.0001.0000 Erosion, Sediment and Pollution Control Administration.

<u>Work under other pay items</u>. Work that is paid for directly or indirectly under other pay items will not be measured and paid for under Section 641. This work includes but is not limited to:

- Dewatering;
- 2. Shoring;
- 3. Bailing;
- 4. Permanent seeding;
- 5. Installation and removal of temporary work pads;
- 6. Temporary accesses;
- 7. Temporary drainage pipes and structures;
- 8. Diversion channels:
- 9. Settling impoundment; and
- 10. Filtration.

Permanent erosion, sediment, and pollution control measures will be measured and paid for under other Contract items, when shown on the bid schedule.

<u>Work at the Contractor's Expense</u>. Temporary erosion, sediment, and pollution control measures that are required due to carelessness, negligence, or failure to install temporary or permanent controls as scheduled or ordered by the Engineer, or for the Contractor's convenience, are at the Contractor's expense.

Payment will be made under:

PAY ITEM

Item Number Item Description			
641.0001.0000	Erosion, Sediment and Pollution Control	LS	
	Administration		
641.0002.0000	Temporary Erosion, Sediment and Pollution Control	CS	

PAY ITEM

Item Number	Item Description	
641.0006.0000	Withholding	CS

SECTION 642 CONSTRUCTION SURVEYING AND MONUMENTS

642-3.01 GENERAL Add the following

Upon completion of staking the grading points as seen in the Plans, consult with the Project Engineer for verification of point data. Staked grading points may be adjusted at the Project Engineer's direction or with the Project Engineer's approval.

(06/16/25) PARKS-Special Provision

SECTION 643

TRAFFIC MAINTENANCE

643-1.01 DESCRIPTION. Protect and control traffic during the contract. Furnish, erect, maintain, replace, clean, move and remove the traffic control devices required to ensure the safety of the park users and general public. Perform all administrative responsibilities necessary to implement the work. The site may be closed except for the time period between and including August 25th to September 30th.

643-1.02 DEFINITIONS.

<u>Alaska Traffic Manual (ATM)</u>. The Manual on Uniform Traffic Control Devices (MUTCD) along with Alaska Supplement.

<u>Traffic</u>. The movement of the park users and general public through and around the project site. Traffic may consist of vehicles, pedestrians, and bicyclists.

<u>Traffic Control Plan (TCP)</u>. A drawing or drawings indicating the method or scheme for safely guiding and protecting traffic and workers in a traffic control zone. The TCP depicts the traffic control devices and their placement and times of use.

<u>Traffic Control Zone</u>. A portion of the project that affects traffic and requires traffic control to safely guide and protect traffic and workers.

643-1.03 TRAFFIC CONTROL PLAN. Create and implement an approved TCP before beginning work within the project limits.

The TCP includes, but is not limited to, signs, barricades, traffic cones, plastic safety fence, and all other items required to direct traffic through or around the traffic control zone according to these Specifications and the ATM. Address in the TCP placement of traffic control devices, including location, spacing, size, mounting height and type. Include code designation, size, and legend per the ATM and Alaska Sign Design Specifications (ASDS).

Submit new or modified TCPs to the Engineer for approval. Allow 1 week for the Engineer to review any TCP or each subsequent correction. You may change an approved TCP during construction provided you allow 48 hours for review and the Engineer approves the changes.

643-2.01 MATERIALS. Provide traffic control devices meeting the following requirements:

- 1. <u>Signs</u>. Use signs, including sign supports, that conform to Section 615, the ATM, and ASDS.
- 2. <u>Barricades and Vertical Panels</u>. Use barricades and vertical panel supports that conform to the ATM. Use Type III Barricades at least 8 feet long. Use reflective sheeting that meet AASHTO M 268 Type II or III.
- 3. <u>Warning Lights.</u> Use Type A (low intensity flashing), Type B (high intensity flashing) or Type C (steady beam) warning lights that conform to the ATM.
- 4. <u>Drums.</u> Use plastic drums that conform to the requirements of the ATM. Use reflective sheeting that meets AASHTO M 268 Type II or III.
- 5. <u>Traffic Cones and Tubular Markers.</u> Use reflectorized traffic cones and tubular markers that conform to the requirements of the ATM. Use traffic cones and tubular markers at least 28 inches high. Use reflective sheeting that meets AASHTO M 268 Type II or III.
- 6. <u>Plastic Safety Fence.</u> Use 4-foot-high construction orange fence manufactured by one of the following companies, or an approved equal:
 - a. "Safety Fence" by Jackson Safety, Inc., Manufacturing and Distribution Center, 5801 Safety Drive NE, Belmont, Michigan, 49306. Phone (800) 428-8185.
 - b. "Flexible Safety Fencing" by Carsonite Composites, LLC, 19845 U.S. Highway 76, Newberry, South Carolina, 29108. Phone (800) 648-7916.
 - c. "Reflective Fencing" by Plastic Safety Systems, Inc., 2444 Baldwin Road, Cleveland, Ohio 44104. Phone (800) 662-6338.

643-3.01 GENERAL CONSTRUCTION REQUIREMENTS. Keep the work, and portions of the project affected by the work, in good condition to accommodate traffic safely. Provide and maintain traffic control devices and services inside and outside the project limits, day and night, to guide traffic safely.

All closures must be included in the Traffic Control Plan (TCP) and coordinated through the Project Engineer. Please give the Project Engineer 2 weeks' notice prior to any closures.

Immediately notify the Engineer of any traffic related accident that occurs within the project limits as soon as you, an employee, or a subcontractor becomes aware of the accident

643-3.02 TRAFFIC CONTROL DEVICES. Before starting construction, erect permanent and temporary traffic control devices required by the approved TCPs. Use traffic control devices only when they are needed.

Use only one type of traffic control device in a continuous line of delineating devices.

Keep signs, drums, barricades, and other devices clean at all times. Immediately replace any devices provided under this Section that are lost, stolen, destroyed, inoperable or deemed unacceptable while used on the project.

Use only traffic control devices that meet the requirements of the "Acceptable" category in the American Traffic Safety Services Association (ATSSA) "Quality Guidelines for Temporary Traffic Control Devices".

643-3.03 AUTHORITY OF THE ENGINEER. When existing conditions adversely affect the public's safety or convenience, the Contractor will receive an oral notice. A written notice will follow the oral notice according to Subsection 105-1.01, Authority of the Engineer. The notice will state the defects, the corrective actions required, and the time required to complete such actions. If you fail to take corrective actions within the specified time, the Engineer will immediately close down the offending operations until you correct the defects. The Engineer may require outside forces to correct unsafe conditions. The cost of work by outside forces will be deducted from any monies due under the terms of this Contract.

643-4.01 METHOD OF MEASUREMENT. Item 643.0002.0000 Traffic Maintenance is a lump sum item and will not be measured directly for payment. The approved schedule of values and Engineer's approval shall constitute method of measurement.

643-5.01 BASIS OF PAYMENT. Item 643.0002.0000 Traffic Maintenance will be paid for at the contract lump sum price. Payment shall be full compensation for all the labor, equipment, material, and incidentals necessary to complete the work under this Section.

Payment will be made under:

PAY ITEM

Item Number	Item Description	Unit
643.0002.0000	Traffic Maintenance	LS

(06/18/13) PARKS-Special Provision

SECTION 646 CPM SCHEDULING

Replace Subsection 646-2.01 with the following:

646-2.01 SUBMITTAL OF SCHEDULE.

Submit a detailed initial CPM Schedule at the preconstruction conference for the Engineer's acceptance as set forth below.

The construction schedule for the entire Project shall not exceed the specified contract time. Allow the Engineer 14 days to review the initial CPM Schedule. Revise promptly. The finalized CPM Schedule must be completed and accepted before beginning work on the Project.

646-3.01 REQUIREMENTS AND USE OF SCHEDULE.

Replace the first sentence of No. 2 Schedule Updates. with the following:

Hold job site progress meetings with the Engineer for the purpose of updating the CPM Schedule. Meet with the Engineer monthly or as deemed necessary by the Engineer.

CR646.1-23.0501

646-4.01 METHOD MEASUREMENT. Replace with the following:

This item will be considered as subsidiary to item 640.0001.0000 Mobilization and Demobilization.

646-5.01 BASIS OF PAYMENT. Replace with the following:

Non-compliance with CPM Schedule update requirements is considered unsatisfactory performance and may result in withholding progress payments according to subsection 109-1.06.

When 646.0001.0000 pay items do not appear in the Bid Schedule, work required to meet the requirements found in Section 646-3.01 will not be paid for directly but will be considered as subsidiary to item 640.0001.0000 Mobilization and Demobilization.

SECTION 647 EQUIPMENT RENTAL

647-1.01 DESCRIPTION. This item consists of furnishing construction equipment, operated, fueled, and maintained, on a rental basis for use in construction of extra or unanticipated work at the direction of the Engineer. Construction equipment is defined as that equipment actually used for performing the items of work specified and shall not include support equipment such as, but not limited to, hand tools, power tools, electric power generators, welders, small air compressors and other shop equipment needed for maintenance of the construction equipment.

The work is to be accomplished under the direction of the Engineer, and the Contractor's operations shall at all times be in accordance with the Engineer's instructions. These instructions by the Engineer shall be to the Contractor's supervisory personnel only, not to the operators or laborers. In no case shall these instructions by the Engineer be construed as making the Department liable for the Contractor's responsibility to prosecute the work in the safest and most expeditious manner.

647-2.01 EQUIPMENT FURNISHED. In the performance of this work, the Contractor shall furnish, operate, maintain, service, and repair equipment of the numbers, kinds, sizes, and capacities set forth on the Bid Schedule or as directed by the Engineer. The operation of equipment shall be by skilled, experienced operators familiar with the equipment.

The kinds, sizes, capacities, and other requirements set forth shall be understood to be minimum requirements. The number of pieces of equipment to be furnished and used shall be, as the Engineer considers necessary for economical and expeditious performance of the work. The equipment shall be used only at such times and places as the Engineer may direct.

Equipment shall be in first class working condition and capable of full output and production. The minimum ratings of various types of equipment shall be as manufactured and based on manufacturer's specifications. Alterations will not be considered acceptable in achieving the minimum rating. Equipment shall be replaced at any time when, in the opinion of the Engineer, their condition is below that normal for efficient output and production.

Equipment shall be fully operated, which shall be understood to include the operators, oilers, tenders, fuel, oil, air hose, lubrication, repairs, maintenance, insurance, and incidental items and expenses.

647-2.02 EQUIPMENT OPERATORS AND SUPERVISION PERSONNEL. Equipment operators shall be competent and experienced and shall be capable of operating the

equipment to its capacity. Personnel furnished by the Contractor shall be, and shall remain during the work hereunder, employees solely of the Contractor.

The Contractor shall furnish, without direct compensation, a job superintendent or Contractor's representative together with such other personnel as are needed for Union, State, or Federal requirements and in servicing, maintaining, repairing and caring for the equipment, tools, supplies, and materials provided by the Contractor and involved in the performance of the work. Also, the Contractor shall furnish, without direct compensation, such transportation as may be appropriate for the personnel.

647-3.01 CONSTRUCTION REQUIREMENTS. The performance of the work shall be according to the instructions of the Engineer, and with recognized standards and efficient methods.

The Contractor shall furnish equipment, tools, labor, and materials in the kinds, number, and at times directed by the Engineer and shall begin, continue, and stop any of the several operations involved in the work only as directed by the Engineer.

Normally, the work is to be done when weather conditions are reasonably favorable, 6 days per week, Mondays through Saturdays, except holidays.

The Engineer will begin recording time for payment each shift when the equipment begins work on the project. The serial number and brief description of each item of equipment listing in the bid schedule and the number of hours, or fractions thereof to the nearest one quarter hour, during which equipment is actively engaged in construction of the project shall be recorded by the Engineer. Each day's activity will be recorded on a separate sheet or sheets, which shall be verified and signed by the Contractor's representative at the end of each shift, and a copy will be provided to the Contractor's representative.

647-4.01 METHOD OF MEASUREMENT. Section 109.

Hourly Rental Rate: Includes the equipment rate plus the operating costs including: furnishing, travel time, operating, maintaining/servicing and repairing the equipment along with the costs incidental to the equipment and its' operation.

647-5.01 BASIS OF PAYMENT. Payment is for the time that fully operational equipment is engaged in the performance of the work directed by the Engineer. Time not paid for includes: idle periods, maintaining/servicing and repairing the equipment, making change-overs of equipment parts, and time to travel to and from the project. Payment will only be for time supported by certified payroll.

Furnishing and operating equipment that is heavier, has larger capacity, or greater power than specified will not entitle the Contractor to extra compensation.

PAY ITEM

Item Number	Item Description	Unit
647.0001.0000	Hydraulic Excavator, 1 CY, 100 HP, Minimum	HOUR

CR647-110316R

SECTION 702 ASPHALT MATERIALS

Replace Subsection 701-2.01 with the following:

702-2.01 ASPHALT BINDER. Meet AASHTO M 320 or M 332 for the specified Performance Grade, except as indicated in Table 702-2.01-1 Exceptions to Performance-Graded Binder Specifications.

TABLE 702-2.01-1
EXCEPTIONS TO PERFORMANCE GRADED ASPHALT BINDER SPECIFICATIONS

Performance	AASHTO	Viscosity	MSC	R, AASH	ITO T 350	PAV,	Direct
Grade	Specification	AASHTO				Dynamic	Tension
		T 316	J _{NR3.2}	J _{NR} Diff	%	Shear	AASHTO
			kPa ⁻¹	JNR DITT	Recovery _{3.2}	AASHTO	T 314
						T 315	
PG 52-28	M 320	None				None	Delete
PG 52-34 E	M 332	None	None	Delete	60 min.	None	Delete
PG 58-28 E	M 332	None	None	Delete	60 min.	None	Delete
PG 58-34 V	M 332	None	None	Delete	60 min.	None	Delete
PG 64-28 E	M332	None	None	Delete	60 min.	None	Delete
PG 52-40 E	M 332	None	None	Delete	75 min.	None	Delete
PG 58-34 E	M 332	None	0.25	Delete	85 min.	None	Delete
			max.				
PG 64-40 E	M 332	1 Does	0.10	Delete	95 min.	5000	Delete
		1 Pa•s	max.			max.	
		max.				@ 4°C	

None indicates no exceptions from the listed test. Delete indicates this property is not required from the listed test.

Use asphalt binders without re-refined engine oil bottoms (REOB)/vacuum tower extenders (VTAE) as a modifier. REOB/VTAE are materials as defined in the Asphalt Institute document IS-235. Furnish a certificate of compliance according to Subsection 106-1.05.1 certifying that REOB/VTAE were not used as a modifier of asphalt binder.

HSM20.44-23.0801

702-2.03 EMULSIFIED ASPHALT.

Replace item 1. with the following:

 Cationic Emulsified Asphalt. Meet AASHTO M 208, except CRS-2P meet AASHTO M316.

HSM20.32-21.1231

702-2.07 WARM MIX ASPHALT (WMA). Add the following to Table 702-3:

WMA Technology	Process Types	WMA Supplier
AD-here ULTRA 1	Chemical Additive	Arkema – Road Science
Cecabase RT	Chemical Additive	Arkema – Road Science

HSM20.44-23.0801

SECTION 703 AGGREGATES

703-2.03 AGGREGATE FOR BASE AND SURFACE COURSE.

In Table 703-1 replace the line for Degradation Value with the following:

TABLE 703-1
AGGREGATE QUALITY PROPERTIES FOR BASE AND SURFACE COURSE

PROPERTY	BASE COURSE	SURFACE COURSE	TEST METHOD
Micro-Deval	15%, max.	15%, max.	AASHTO T 327

HSM20.40-050122

Replace Subsection 703-2.04 with the following:

703-2.04 AGGREGATE FOR HOT MIX ASPHALT. Process and crush aggregate that is free from clay balls, organic matter, other deleterious material, and not coated with dirt or other finely divided mineral matter. Aggregate used must consist of sound, tough, durable rock of uniform quality.

Remove all natural fines passing a No. 4 sieve before crushing aggregates for Type IV, and V mixes.

Coarse Aggregate. Aggregate retained on the No. 4 Sieve.

Meet Table 703-3 requirements:

TABLE 703-3 COARSE AGGREGATE QUALITY FOR HMA

Description	Specification	Type II, Class A	Type I; Type II, Class B; Type III	Type IV	Type V
LA Wear, % max.	AASHTO T 96	45	45	45	45
Micro-Deval, % max.	AASHTO T 327	18	18	18	18
Sodium Sulfate Loss, % max. (5 cycles)	AASHTO T 104	9	9	9	9
Fracture, % min.	ATM 305	90, 2 face	80, 1 face	90, 2 face	98, 2 face

Description	Specification	Type II, Class A	Type I; Type II, Class B; Type III	Type IV	Type V
Flat-Elongated Pieces, % max.	ATM 306				
1:5		8	8	8	8
Absorption, % max.	ATM 308	2.0	2.0	2.0	2.0
Nordic Abrasion, % max.	ATM 312	-	-	-	-

<u>Fine Aggregate</u>. Aggregate passing the No. 4 sieve.

Aggregate shall meet the quality requirements of AASHTO M 29, including S1.1, Sulfate Soundness.

Aggregate for Type II, Class A mix shall not contain more than 10% natural fines (blend sand and mineral filler) added to the crushed aggregate and shall not exhibit rut depth larger than 1/4-inch, as determined by ATM 419.

Fine aggregate for Type IV and V mixes:

- do not blend back natural sand
- shall be non-plastic as determined by ATM 205
- shall have a minimum uncompacted void content (Fine Aggregate Angularity) determined by AASHTO T 304, Method A, of 45%

TABLE 703-4
BROAD BAND GRADATIONS FOR HOT MIX ASPHALT AGGREGATE
Percent Passing by Weight

SIEVE	GRADATION						
SIEVE	Type I	Type II	Type III	Type IV	Type V		
1 inch	100	-	-	-	-		
3/4 inch	80-90	100	-	-	100		
1/2 inch	60-84	77-99	100	100	65-90		
3/8 inch	48-78	68-88	80-90	80-95	55-80		
No. 4	28-63	48-68	44-81	55-70	40-60		
No. 8	14-55	33-53	26-70	35-50	≤ 45		
No. 16	9-44	20-40	16-59	20-40	≤ 35		

SIEVE	GRADATION				
SIEVE	Type I	Type II	Type III	Type IV	Type V
No. 30	6-34	14-30	9-49	15-30	≤ 25
No. 50	5-24	9-21	6-36	10-24	≤ 20
No. 100	4-16	6-16	4-22	5-15	≤ 12
No. 200	4-7	3-6	4-7	4-7	4-7

CR703.1-050122

703-2.07 SELECTED MATERIAL.

Replace 1. Type A with the following:

1. <u>Type A</u>. Aggregate containing no muck, frozen material, roots, sod or other deleterious matter and with a plasticity index not greater than 6 as tested by ATM 204 and ATM 205. Meet the following gradation as tested by ATM 304:

<u>Sieve</u>	Percent Passing by Weight
No. 4	20-55%
No. 200	0-6%, determined on the minus 3-inch portion of the sample

CR703.1-050122

703-2.10 POROUS BACKFILL MATERIAL.

Add the following to the end of the paragraph:

Use Gradation A unless otherwise specified.

HSM20.33-123121

703-2.13 STRUCTURAL FILL. Replace Table 703-12 with the following:

TABLE 703-12
AGGREGATE GRADATION FOR STRUCTURAL FILL

SIEVE	PERCENT PASSING BY WEIGHT
3-inch	100
3/4-inch	75-100
No. 4	20-55
No. 200	0-6

Replace Subsection 703-2.16 with the following:

703-2.16 RECYCLED ASPHALT PAVEMENT (RAP). RAP shall be free of contamination and deleterious materials. RAP maximum particle size shall not exceed 1.5-inch.

CR703.1-050122

SECTION 712 MISCELLANEOUS

712-2.08 GLASS BEADS.

Replace the 2nd sentence with the following:

Glass Beads shall contain no more than 200 ppm of lead or 200 ppm of arsenic when tested in accordance with EPA testing methods 3052, 6020B, or 6020C.

HSM20.35-123121

SECTION 727 SOIL STABILIZATION MATERIAL

727-2.00 GENERAL. Free of restricted and prohibited noxious weeds (11 AAC 34), seeds, chemical printing ink, germination and growth inhibitors, herbicide residue, chlorine bleach, (except where specified: rock, metal, plastics) and other deleterious materials and not harmful to plants, animals and aquatic life. Wood cellulose "paper" fiber, wood chips, sawdust, and hay are not permitted as stand-alone stabilization materials.

727-2.01 MULCH. Flexible blanket/covering, temporary degradable (bio/photo) form of erosion control. Use one of the following:

Dry Erosion Control, Stabilization Products. Hand applied or spread with mulch blower equipment.

- 1. <u>Straw</u>. Use straw, in an air-dried condition, from oats, wheat, rye, barley, or other approved grain crops that are free from noxious weeds, seeds, mold, or other materials detrimental to plant life. Straw material shall be certified weed-free straw using North American Invasive Species Management Association (NAISMA) Standards. In-lieu of certified weed-free straw provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.
- 2. Shredded Bark Mulch. Shredded bark and wood with the following characteristics:
 - a. Not containing resin, tannin, or other compounds in quantities harmful to plant life.
 - b. Maximum length of individual pieces is 2 inches with 75% passing through a 1 inch sieve.
 - c. Will form a uniform ground cover/mat, have moisture absorption, retention, and percolation properties, not be susceptible to spreading by wind or rain providing a good growth medium.
 - d. May contain up to 50% shredded wood material.
 - e. Shredded wood material aged 1 year minimum prior to use.

Hydraulic Erosion Control Products (HECPs) Applied hydraulically.

A fiber mulch matrix: biodegradable and composed of wood, straw, coconut and other fibers natural and man-made. When applied, create a continuous, porous, absorbent high water holding, flexible blanket/mat/mulch/covering making intimate contact with, and adhering to sloped soil surface; permitting water infiltration; resists erosion and promotes rapid germination and accelerated plant growth. The fibers may be thermally processed, and cross-linked with a hydro-colloidal or linear anionic tackifier (curing period 24-48 hours) or mechanically-bonded (no curing period). When agitated in slurry tanks with

water the fibers will become uniformly suspended, without clumping to form homogeneous slurry.

The HECPs shall be delivered premixed by the manufacturer. The HECP will contain only the materials provided in the sealed containers from the manufacturer. No added components are permitted after the manufacturer seals the product container, before application, during application or otherwise. Submit documentation dated within 3 years of application, from an independent accredited laboratory as approved by the Engineer, showing that the product's testing performance meets the requirements for the slope(s) to be protected on the project, according to the National Transportation Product Evaluation Program (NTPEP), Erosion Control Technology Council (ECTC) and or the Texas DOT/Texas Transportation Institute (TTI) Laboratory.

If the HECP contains cotton or straw provide documentation that the material is certified weed free using NAISMA Standards. In-lieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.

The HECP shall contain a dye to facilitate placement and inspection of the material.

1. Wood Strand, Fiber.

A blend of angular, loose, long thin wood pieces with a high length to width ratio and that are frayed. Minimum 95% of strands between 2 inches and 10 inches, at least 50% of the length shall have a width thickness between 1/16 and 1/8 inch. No single strand shall have a width or thickness greater than 1/2 inch. Processed wood fiber with the following characteristics:

- a. Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form homogeneous slurry.
- b. Will form a blotter-like uniform ground cover on application, have moisture absorption, retention and percolation properties, the ability to cover, and hold grass seed in contact with soil, and not create a hard crust upon drying providing a good growth medium.
- 2. <u>Dried Peat Moss</u>. Partially decomposed fibrous or cellular stems and leaves of any of several species of Sphagnum mosses with the following characteristics:
 - a. Chopped or shredded to allow distribution through normal hydraulic type seeding equipment and capable of being suspended in water to form part of a homogeneous slurry.
 - b. Free from woody substances and mineral matter such as sulfur or iron and with a pH value of between 4.0 and 6.5.
 - c. Furnished in an air dry condition and containing less than 35% moisture by weight. Have a water holding capacity of not less than 800% by weight on an oven dry basis.

- 3. Fiber Matrix (FM) Mulch Types.
 - a. Stabilized Mulch Matrices (SMMs)
 - b. Bonded Fiber Matrices (BFMs)
 - c. Mechanical Bonded Fiber Matrix (MBFM)
 - d. Polymer Stabilized Fiber Matrix (PSFM)
 - e. Fiber Reinforced Matrices (FRMs)
 - Flexible Growth Medium (FGM)
 - Extended-Term Flexible Growth Medium (ET-FGM)

727-2.02 MATTING. Fiber mulches, mulch matrices, nets and turf reinforcement mats manufactured from wood fibers, straw, jute, coir, polyolefins, PVC, nylon and others creating dimensionally stable nets, meshes, geotextiles and blankets; creating a continuous, porous, absorbent, flexible blanket/mat/mulch/covering making intimate contact with and adhering to sloped soil surface, resisting erosion and promoting rapid germination and accelerated plant growth.

Rolled Erosion Control Products (RECPs) (Temporary Degradable and Permanent Erosion Control)

Use RECPs that bear the Quality and Date Oversight and Review (QDOR) Seal from the ECTC. Independent test results from the NTPEP, that the mulch, when tested according to ASTM 6459 Standard Test Method for Determination of Rolled Erosion Control Products (RECP), Performance in Protecting Hillslopes from Rainfall-Induced Erosion, meets the performance requirement using the Revised Universal Soil Loss Equation (RUSL).

Functional Longevity.

- 1. Temporary Degradable.
 - a. Duration.
 - Short-Term RECPs. (RECPs 3 12 months)
 C Factor = .15 maximum
 Test Soil Type = Sandy Loam
 (National Resources Conservation Service (NCRS) Soil Texture Triangle)
 - Moderate (Extended) -Term RECPs. (RECPs 24 months)
 C Factor = .05 maximum
 Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)
 - 3) Long-Term RECPs. (RECPs 36 months)
 C Factor = .01 maximum
 Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)

b. Product types.

- 1) <u>Mulch-Control Nets (MCNs)</u>. Planar woven natural fiber or extruded geosynthetic mesh used to anchor loose fiber matting/mulches.
- 2) <u>Erosion Control Blankets (ECBs)</u>. Processed natural and/or polymer fibers, yarns or twines mechanically, structurally, or chemically bound together to form a continuous matrix with a minimum weight of 8 oz/yd² and a limiting shear stress of 0.45 lb/ft².
- 3) Netless. Fibers mechanically interlocked and/or chemically adhered together.
- 4) <u>Single-net and Double-net</u>. Fibers mechanically bound together by single or double netting.
- 5) Open Weave Textiles (OWTs). Fibers woven into a continuous matrix.
- c. Materials.
 - 1) Burlap. Standard weave with a weight of 3.5 to 10 oz/yd².
 - 2) <u>Jute Mesh Fabric</u>. Cloth of a uniform, open, plain weave of undyed and unbleached single jute yarn. Use yarn that is loosely twisted and not varying in thickness more than one-half its normal diameter. Furnish jute mesh in rolled strips meeting the following requirements:
 - a) Width: 45 to 48 inches, \pm 1 inch
 - b) 78 warp-ends per width of cloth (minimum)
 - c) 41 weft-ends per yard (minimum)
 - d) Weight: 20 ounces per linear yard, ± 5%
 - 3) Woven Paper or Sisal Mesh Netting. Woven from twisted yarns available in rolls 45 to 48 inches wide. Mesh may vary from closed to open weave, ranging from 1/8 to 1/4 inch openings. Shrinkage after wetting may not exceed 20% of the surface area.
 - 4) Knitted Straw Mat. Commercially manufactured ECB. Use photodegradable netting and biodegradable thread. Use straw, in an air-dried condition, from oats, wheat, rye, barley, or other approved grain crops that are certified weed free of prohibited and restricted noxious weed seed and quarantined pests, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34), and in conjunction with North American Invasive Species Management Association (NAISMA) standards, and free of mold, or other objectionable materials detrimental to plant life. When straw or straw products certified according to 11 AAC 34 are not available, use non-certified products manufactured within Alaska before certified products manufactured in another state, country, or territory. Non-certified products manufactured in Alaska In-

lieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw. Non-certified straw or straw products manufactured in another state, country, or territory shall not be used. ECB may contain coconut or fiber to reinforce the straw.

- 5) Woven/Curled Wood blanket. Machine produced mat of curled wood shavings with a minimum of 80% 6-inch or longer fibers, with consistent thickness and the fibers evenly distributed over the entire area of the blanket. Smolder resistant without the use of chemical additives. Cover the top side of the blanket with biodegradable extruded plastic mesh.
- 6) <u>Coconut (Coir Fiber)</u>. Machine produced mat, ECB of consistent thickness and coir fiber evenly distributed over the area of the mat. Use bio/photo degradable netting and thread.

2. Permanent.

- a. Product Types and Materials.
 - 1) Turf Reinforcement Mats (TRMs). A rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh, and/or other elements, processed into a permanent, three-dimensional matrix of sufficient thickness with a minimum weight of 8 oz/yd² and a minimum limiting shear stress of 1.5 lb/ft². TRMs (may be supplemented with degradable components) shall impart immediate erosion protection, enhance vegetation establishment during and after maturation and permanent vegetation reinforcement providing long-term functionality.

727-2.03 SEDIMENT RETENTION FIBER ROLLS (SRFRs). Fiber rolls also referred to as wattles. Manufacture of photodegradable or biodegradable fabric netting without preservative treatment, evenly woven, free of crusted material, cuts, and tears. Manufacture stakes of photodegradable or biodegradable material (wood stakes, except as approved by the Engineer).

1. Filter Sock (Wattle)

- a. Fabric netting.
- b. Filled with wood fiber, straw, flax, rice, coconut fiber material.
- c. Minimum diameter 5 inches.

2. Compost Sock.

- a. Extra Heavy weight fabric netting with a minimum strand width of 5 mils.
- b. Filled with coarse compost.
- c. Minimum diameter 8 inches.

3. Coir Log.

- a. Woven wrap bristle coir twine netting.
- b. Filled with 100% coconut (coir) fiber uniformly compacted.
- c. Segments maximum length 20 foot, diameter as suited to the application and a density of 7 lbs/pcf or greater.
- d. Coir twine strength equal to 80 lb minimum weaved to a 2 inch x 2 inch opening pattern.
- e. Ties made of hemp rope by 1/4 inch diameter.

727-2.04 COMPOST. Suitable for serving as a soil amendment or an erosion control material. Sanitized, mature compost meeting local, state, and Federal quality requirements tested and certified by the U.S. Composting Council (USCC) under the Seal of Testing Assurance (STA) Program. Biosolids compost must meet the Standards for Class A biosolids outlined in 40 Code of Federal Regulations (CFR) Part 503. Additionally, meet the requirements of the AASHTO specifications:

- 1. <u>Compost Blankets</u>. Standard Practice for Compost for Erosion/Sediment Control (Compost Blankets) R 52.
- 2. <u>Compost Filter Berms and Filter Socks</u>. Standard Practice for Compost for Erosion/Sediment Control (Filter Berms and Filter socks) R 51.

727-2.05 TACKIFIER. Tackifier, viscous overspray, generally composed of dry powered vegetable gums derived from guar gum, psyllium and sodium alginase; asphaltic emulsions; petroleum distillates; co-polymer emulsions; and lignosulfonates and used to anchor soil, compost, seed, the mulch fibers to one another, and the ground. Contain no growth or germination inhibiting materials nor significantly reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry material. Tackifier options include:

- 1. Type A. Organic tackifier with certification of plant sources; or
- 2. <u>Type B</u>. Synthetic tackifier with certification confirming product is not harmful to plants, animals, or aquatic life.

727-2.06 POLYACRYLAMIDE (PAM). Use as a tie-down for soil, compost, seed and as a flocculent. Polyacrylamide (PAM) products shall meet the requirements of American National Standards Institute (ANSI)/National Sanitation Foundation International (NSF) Standard 60 for drinking water treatment, be anionic (not cationic), linear and not cross-linked with an average molecular weight greater than 5 Mg/mole, minimum 30 percent charge density; contain at least 80% active ingredients and a moisture content not exceeding 10% by weight.

Deliver PAM in a dry granular powder or liquid form.

727-2.07 GEOTEXTILE-ENCASED CHECK DAM AND SEDIMENT BARRIER. Urethane foam core encased in geotextile material (silt fence material Section 633), minimum 8 inches height by minimum base width of 16 inches by minimum 7 foot length. Overhang the geotextile 6 inch minimum each end with apron type ties by 24 inches each side of the foam core.

727-2.08 SANDBAG.

- 1. <u>Sandbag Sack Fabric</u>. Fabric shall be a nonwoven, needle punched design meeting the Minimum Average Roll Values (MARV) verified in accordance with ASTM D4759.
- 2. <u>Seam Thread</u>. Similar durability to the sandbag sack fabric.
- 3. Sandbag Fill Material.
 - a. Selected Material

703-2.07

Type B

4. <u>Cinch Ties</u>. Plastic ties or equivalent tie recommended by the sandbag manufacturer.

727-2.09 MANUFACTURED INLET PROTECTION SYSTEM.

- 1. Manufacturers:
 - a. Ultra Tech International Ultra-DrainGuard
 - b. Bowhead Environmental and Safety StreamGuard Exert II Sediment Insert
 - c. Enpac Catch Basin Insert, Oil and Sediment or
 - d. Approved equal.

727-2.10 CLEAR PLASTIC COVERING. A clear plastic covering meeting the requirements of the National Institute of Standards and Technology (NIST) voluntary Product Standard PS 17 - 69 for polyethylene sheeting having a minimum thickness of 6 mils.

727-2.11 STAPLES. U-shaped staples for anchoring matting, approximately 6 inches long and 1 inch wide. Machine-made: No. 11 gage or heavier steel wire. Hand-made: 12-inch lengths of No. 9 gage or heavier steel wire.

CR727-12.0508R2

APPENDIX A PERMITS

PERMIT DESCRIPTION	ISSUE DATE	EXPIRE DATE
Fairbanks North Star Borough Floodway Development Permit	6/10/2025	NA
Alaska Office of History & Archeology Historic Properties Affected Review per A.S. 41.35.070	NA	NA

APPENDIX B SURVEY REQUIREMENTS

1. Alaska Construction Surveying Requirements (US Customary Units)

APPENDIX C EROSION SEDIMENT CONTROL PLAN (ESCP)

The Alaska Department of Natural Resources (ADNR) Division of Parks and Outdoor Recreation (DPOR) Design and Construction Section (D&C) has created this Erosion and Sediment Control Plan (ESCP). This ESCP shall be amended by the Contractor to incorporate the projects material source sites, HMCP, SPCC, and any other modification the contractor determines is necessary.

The Contractor shall use the attached ESCP to meet Alaska Department of Environmental Conservation requirements for construction.

APPENDIX D MASTER MATERIAL CERTIFICATION LIST (MCL)