



**POTTER HILL EARTHQUAKE
DAMAGE REPAIR & RESTORATION**

**INVITATION TO BID
19-36-207551**

AUGUST 30, 2019

**ALASKA RAILROAD CORPORATION
327 WEST SHIP CREEK AVENUE
ANCHORAGE, ALASKA 99501**

THIS PAGE INTENTIONALLY LEFT BLANK



ALASKA RAILROAD CORPORATION
327 W. Ship Creek Avenue
Anchorage, AK 99501
Phone 907-265-2355
Fax 907-265-2439
BatesT@akrr.com

August 30, 2019

INVITATION TO BID
19-36-207551

**POTTER HILL EARTHQUAKE DAMAGE REPAIR &
RESTORATION**

Response Required: This page must be completed and returned ensuring receipt of future addenda or additional information. Please email this form to BatesT@akrr.com , or fax to (907) 265-2439. All addenda will be forwarded to the contact name and number listed below.

Firms that have not returned this cover sheet will not be informed of addendums and will only be alerted to addendums by checking with the ARRC procurement officer or by checking ARRC's internet site: www.alaskarailroad.com, select Suppliers and then Invitation to Bids. Bidders must acknowledge the receipt of all issued addendums in their proposal/bid submittal.

Company _____

Address _____

Contact _____

Phone _____ Fax _____

Email _____

Please direct all responses and/or questions concerning this ITB to Tim Bates, Alaska Railroad Corporation, Contracts, 327 Ship Creek Avenue, Second Floor, Anchorage, AK 99501, telephone number 907-265-2355, fax number 907-265-2439 or at email address BatesT@akrr.com.

www.AlaskaRailroad.com

THIS PAGE INTENTIONALLY LEFT BLANK

THIS IS NOT AN ORDER INVITATION TO BID NUMBER: 19-36-207551
DATE OF INVITATION TO BID: August 30, 2019

INVITATION TO BID
ALASKA RAILROAD CORPORATION
CONTRACTS SECTION
POST OFFICE BOX 107500
ANCHORAGE, ALASKA 99510-7500
ATTENTION: TIM BATES (907) 265-2355
FAX NUMBER (907) 265-2439
BatesT@akrr.com

**ALASKA RAILROAD CORPORATION
POTTER HILL EARTHQUAKE DAMAGE REPAIR &
RESTORATION**

SEALED BIDS WILL BE RECEIVED **UNTIL 3:00 PM LOCAL TIME ON TUESDAY,
OCTOBER 1, 2019** AT WHICH TIME BIDS WILL BE PUBLICLY OPENED:

Alaska Railroad Corporation
Attn. Tim Bates, 2nd Floor
327 W. Ship Creek Avenue
Anchorage, Alaska 99501

IMPORTANT

Pre-Bid Conference and /Site Visit: A pre-bid conference and site visit will be held on **September 10th, 2019 at 1:00 pm** (sharp), local time. Interested bidders will meet at the Rabbit Creek Rifle Range, 15222 Seward Highway, Anchorage, AK. Please dress appropriately for weather and safety; hardhats, safety glasses and steel toe boots. This is not a mandatory meeting, although interested firms are encouraged to participate. A bidder's failure to attend the pre-bid conference will in no way relieve the bidder of the responsibility of performing the work in strict compliance with the true intent and meaning of the terms, conditions and specifications of this ITB.

Your bid package (qualifications and bids) must be complete. See instructions and conditions enclosed. Return bid packages in sealed envelopes according to the instructions in 19-36-207551. Bids received by facsimile transmission will not be considered for award. Bids shall be submitted on the forms furnished herein. Hand-delivered bids, amendments, or withdrawals must be received by ARRC's Contracts Section prior to the date and time listed above.

Contracting Officer: The person authorized to enter into and administer the Contract on behalf of the Owner. He has authority to make findings, determinations and decisions with respect to the Contract and, when necessary, to modify or terminate the Contract.

ARRC shall not be held responsible for bidder's lack of understanding of what is required by this bid. Should a bidder not understand any aspect of this bid, or require further explanation, or clarification regarding the intent or requirements of this bid, it shall be the responsibility of the bidder to seek guidance from the ARRC.

ARRC reserves the right to reject any and all bids, or any part thereof, negotiate changes in bids, accept any bids or any part thereof, waive minor informalities or defects in any bids, and not to award the proposed contract if it is in the best interest of the ARRC. Any resulting contract from this Invitation to Bid shall incorporate the Standard Instructions, and General Terms and Conditions incorporated in this Invitation to Bid.

This Invitation to Bid is not to be construed as a commitment of any kind nor does it commit the ARRC to pay for any costs incurred in the submission of an offer or for any other incurred cost prior to the execution of a formal contract

Bidder/contractor imposed terms and conditions which conflict with this Invitation to Bid terms and conditions are considered counter offers and, as such, will cause the Alaska Railroad Corporation to consider the bid non-responsive. PROSPECTIVE BIDDERS ARE CAUTIONED TO PAY PARTICULAR ATTENTION TO THIS CLAUSE.

ARRC Disadvantaged Business Enterprise (DBE) Program: ARRC is an equal opportunity corporation that encourages the participation of DBEs as prime contractors and subcontractors on its contracts funded in whole or in part by the Federal Transit Administration (FTA) or the Federal Highway Administration (FHWA). The ARRC has a race neutral DBE Program and does not set DBE goals on individual solicitations. Nonetheless, the ARRC aspires to achieve an overall DBE participation on federal contracts of 3.0 % in FY 2019-2021. If this contract is funded in whole or in part by funds from the FTA or the FHWA, it is imperative that you consult the Federal Terms and Conditions portion of this solicitation.



The Alaska Railroad is a member of Green Star (www.greenstarinc.org). ARRC earned an initial Green Star Award in 1994 and a Green Star Air Quality Award in 2007. The Alaska Railroad considers Green Star membership to be a positive business attribute, and regards a Green Star award as a tangible sign of an organization's commitment to environmental stewardship and continual improvement within its operations.

Please direct all responses and/or questions concerning this ITB to Tim Bates, Alaska Railroad Corporation, Contracts, 327 Ship Creek Avenue, Second Floor,

Anchorage, AK 99501, telephone number 907-265-2355, fax number 907-265-2439
or at email address BatesT@akrr.com.

Sincerely,

Tim Bates

Tim Bates
Contract Administrator

INDEX

APPENDIX A	REQUIRED DOCUMENTS
APPENDIX B	BIDDERS INSTRUCTIONS & SPECIAL REQUIREMENTS (Construction)
APPENDIX C	STATEMENT OF WORK
APPENDIX D	TECHNICAL SPECIFICATIONS
APPENDIX E	FORMS
APPENDIX F	REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONTRACTS
APPENDIX G	GENERAL CONDITIONS (CONSTRUCTION)
APPENDIX H	SUPPLEMENTAL CONDITIONS
APPENDIX I	CONSTRUCTION QUALITY CONTROL (CQC) PLAN
APPENDIX J	COST SCHEDULE

ATTACHMENTS:

1. ARRC MP103 SURVEY (13 pages)
2. ARRC MP103 COLOR MAP (1 page)
3. GOLDER GEOTECH FINAL REPORT, DATED 07/01/2019 (138 pages)
4. ARRC MP103 EARTHQUAKE DAMAGE IMPROVEMENT PLANS (12 pages)
5. PROJECT COMMUNICATIONS PROCEDURES (4 pages)
6. PAMPHLET 600 - Issue 38, Effective May 1, 2019

APPENDIX A

REQUIRED DOCUMENTS

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

1. Contractor Responsibility Questionnaire - [Form 395-0136]
2. Construction Bid Form - [Form 395-0121]
3. Bid Bond - [Form 395-0120]
4. Cost Schedule - Appendix J
5. Alaska Contractors License
6. Federal Requirements: Appendix F:
 25. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING-31USC 1352, 49 CFR Part 19, 20

REQUIRED AFTER NOTICE OF AWARD The successful proposer is required to complete and submit the following documents within **five (5) working days** after receipt of written notification:

1. Subcontractor List - [Form 395-0131]

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. Certificate of Insurance - [from Insurance Carrier]
2. Payment Bond - [Form 395-0126]
3. Performance Bond - [Form 395-0127]
4. Alaska Business Licenses
5. State of Alaska Department of Labor Notice of Work
6. Construction Contract - [Form 395-0122]; Notice to Proceed (from ARRC)
7. Construction Quality Control (CQC) Plan
8. Contractor's Site Health & Safety Plan

POST AWARD DOCUMENTATION

1. Weekly Certified Payrolls
2. Copy of State of Alaska Contractor Letter of Completion

APPENDIX B

BIDDERS INSTRUCTIONS & SPECIAL REQUIREMENTS (CONSTRUCTION)

To be considered for award, Bids must be made in accordance with the following requirements:

Duty to Seek Clarification: ARRC shall not be held responsible for a Bidder's lack of understanding of what is required by the Invitation to Bid. Should a Bidder not understand any aspect of the Invitation to Bid, or require further explanation or clarification regarding the intent or requirements of the same, it shall be the responsibility of the Bidder to seek clarification from ARRC prior to submitting his or her Bid.

Terms and Conditions: Any resulting contract from this Invitation to Bid shall incorporate the general terms and conditions contained in this bid package.

Contract Documents: Bidders shall familiarize themselves with the requirements of all of the Contract Documents which include, but are not limited to the "Bidders Instructions & Special Requirements", the Invitation to Bid, Bid and Contract Forms, General Conditions, Special Conditions, Specifications, Drawings, any Addenda issued prior to the receipt of Bids, and any other documents referenced or incorporated therein.

Examination and Interpretation of Documents: Each Bidder shall examine the Contract Documents carefully and shall make written requests to ARRC prior to Bid submission for interpretation or correction of any ambiguity, inconsistency, discrepancy, omission, or error therein which the bidder may discover. Any interpretation or correction will be issued in an Addendum by ARRC. Only a written interpretation or correction shall be binding. No Bidder shall rely on any interpretation or correction given by any other method.

Addenda: ARRC may modify the Invitation to Bid prior to the date fixed for opening of Bids by issuance of an Addendum to all parties who have been furnished the Bid Package for bidding purposes. Bidders must acknowledge receipt of all Addenda on the Construction Bid Form [Form 395-0121].

Qualification of Bidders: Pursuant to ARRC Procurement Rule 1600.3, before a Bid is considered for award, ARRC may request a Bidder to submit information regarding the Bidder's capability in all respects to fully perform the contract requirements or the individual integrity and reliability which will assure good faith performance. Such information shall include the Bidder's prior experience in performing comparable Work, the availability of necessary financing, equipment, facilities, expertise and personnel to perform the Work and whether he or she has ever been terminated or defaulted on construction work.

Bid Forms: Bids must be submitted on the forms provided by ARRC, completed in all respects as required by the Bid Forms and other Contract Documents and manually signed by an authorized official of the Bidder. Bidders may make copies of the Bid Forms for submission of Bids.

Submission of Bids: Bids must be sealed, marked, and addressed as directed in the Invitation to Bid and must be delivered to the office designated in the Invitation to Bid prior to the exact time set for opening bids. Late bids will not be considered.

Modification, Correction, Withdrawal of Bids: Modification, correction or withdrawal of Bids will be allowed only as provided in ARRC Procurement Rule 1200.8.

Bid Opening: Bids will be opened in public at the time set forth in the Invitation to Bid in accordance with ARRC Procurement Rule 1200.6. The contents of the Bids will be open for public inspection after the notice of intent to award a contract is given.

Evaluation of Bids: Bids will be evaluated in accordance with the provisions of ARRC Procurement Rule 1200.7. Alternative bids, if called for, are intended to provide ARRC a range of comparative costs which will allow identification of the combinations most responsive to ARRC's need. The order in which the alternatives are listed or set out in the Invitation to Bid should not be taken as any indication as to the order in which ARRC may elect to select the alternatives, if any. Bidders shall submit bid prices for all alternatives stated in the Invitation to Bid and are advised that the order in which the alternatives, if any, are chosen by ARRC, may affect which Bidder is the lowest responsive and responsible Bidder.

Bid Security: In accordance with ARRC Procurement Rule 1200.4, all Bids shall be accompanied by bid security in the form of a cashier's check or an acceptable Bid Bond, a form of which is provided herein, in the amount of five percent (5%) of the Bid price.

Rejection of Bids: ARRC reserves the right to waive minor defects or informalities in a Bid in accordance with the provisions of ARRC Procurement Rule 1200.8, or to reject any or all Bids in accordance with the provisions of ARRC Procurement Rule 1600.2.

Award of Contract: Unless the Invitation to Bid is canceled or all bids are rejected, the procurement officer shall award a contract based on the solicited bids with reasonable promptness by written notice to the lowest, responsible and responsive Bidder whose bid conforms in all material respects to the requirements and criteria set out in the Invitation to Bid.

Execution of Contract: A written contract must be signed by the Bidder to whom an award is made and returned to ARRC within ten (10) calendar days, together with all required performance and payment bonds, and certificate(s) of insurance in the amounts required by the Invitation to Bid. The Bidder to whom award is made shall not be permitted to occupy the project site until he has first obtained the required insurance and

submitted to ARRC proof of such insurance together with a statement certifying that said insurance conforms to requirements set forth in the Invitation to Bid.

Failure to Execute Contract: If the Bidder to whom the Contract is awarded refuses or neglects to execute it, or fails to furnish the required bonds and insurance within the time specified, the amount of his bid security may be retained by ARRC as liquidated damages.

Government Contract Requirements: If Federal funds will be used to pay for any part of the project described in the Invitation to Bid, any contract awarded hereunder will contain provisions requiring the successful Bidder to comply with all pertinent provisions, agreements, and clauses of the subject federal grant and all pertinent laws, regulations, Presidential directives, and executive orders to the extent they apply to the subject matter of the contract.

Drug and Alcohol-Free Workplace: Safety is paramount at ARRC. For that reason, ARRC maintains an alcohol and drug-free workplace and requires that the Contractor do the same. At all times during the performance of this contract, the Contractor shall have in place a written drug and alcohol program that includes, at a minimum, the following:

- a. a requirement that all applicants present a negative pre-employment drug screen prior to being hired by the Contractor;
- b. a requirement that employees submit to a "reasonable suspicion" drug and/or alcohol test when showing signs and symptoms of drug and/or alcohol influence on duty;
- c. a requirement that employees submit to "reasonable cause/post-accident" drug and alcohol tests following certain accidents or incidents (with the threshold level triggering testing to be determined by the Contractor);
- d. a provision defining a positive alcohol test as one that reveals a breath alcohol level of .02 or greater;
- e. a provision defining a positive drug test as one that reveals concentrations at the levels set forth in 49 C.F.R. § 40.87(b)(screening test) and 49 C.F.R. § 40.87(c)(confirmatory test) or greater;
- f. a provision that outlines the consequences of a positive drug or alcohol test and the consequences of an employee's refusal to submit to drug/alcohol testing; and
- g. a provision that establishes the conditions under which an employee may return to work following a positive drug and/or alcohol test, which at a minimum include an evaluation by a substance abuse professional and compliance with a recommended treatment program.

The Contractor agrees that at any time during the performance of this contract, if an ARRC employee reports to the Contractor that an employee of the Contractor or its subcontractor is showing signs and symptoms of drug/alcohol influence on duty, the Contractor shall remove the employee from ARRC property immediately and shall have the employee tested for drug/alcohol influence. If the employee tests positive, the Contractor shall ensure that the employee is not returned to work on the project until he/she has met the return to work requirements contained in the Contractor's written program.

Offer Acceptance Period: For the purpose of award, offers made in accordance with this ITB shall be good and firm for a period of thirty (30) days from the date of bid opening.

Site-Safety Plan Requirement: Before the contractor or any subcontractor begins any construction related work under this contract including but not limited to mobilization, equipment setup, storage, etc., taking place on sites under Alaska Railroad Corporation (ARRC) control, they will submit a site Health and Safety Plan to ARRC for compatibility acceptance.

The plan must be compatible with ARRC Safety Policies, including On-Track Safety, ARRC on-site employee safety including safety for Project Managers, Construction Managers, Flaggers, Visitors, Safety personnel, Quality Assurance staff, vendors, and the public. The plan must outline procedures for first aid, emergency response, chemical exposures, spills, site sign-in requirements for site-safety briefings, coordination with ARRC dispatch, Section 6.16 (SAFETY AND PROTECTION), Section 6.17 (WORK SAFETY ON RAILROAD PROPERTY), and Section 6.18 (EMERGENCIES), other sections of the contract GENERAL CONDITIONS, Appendix E.

A complete, detailed Site-Safety Plan shall be submitted to the Project Manager at least 10 days prior to commencement of any Work on the Project

Contractor's Instructions for Submitting Certified Payroll:

This contract includes work on an Alaska Railroad Corporation (ARRC) construction project, which is subject to the wage/certified payroll requirements of the Alaska Department of Labor Workforce Development (DOLWD) and/or it may include work on a federally funded construction project and be subject to U. S. Department of Labor Davis-Bacon Act wage/certified payroll requirements.

As part of the contract the following will be required:

1. All contractors on a construction project funded in whole or in part with federal funds shall pay laborers and mechanics the higher of the two wages listed in this contract from the U. S. Department of Labor (www.access.gpo.gov/davisbacon/ or <http://www.gpo.gov/davisbacon/ak.html>) or from the DOLWD (www.labor.state.ak.us/lss/home.htm). Contractors on an ARRC-funded construction project shall pay laborers and mechanics the appropriate wage established by the DOLWD under the Little Davis Bacon Act.

2. All contractors employing laborers and mechanics on the project for must submit weekly certified payrolls that contain the information listed on the DOLWD Weekly Certified Payroll Form 07-6058, pages 1 and 2. Page 2 is the “Statement of Compliance” and must bear an original signature. The prime contractor is responsible for gathering the certified payrolls from each subcontractor and for submitting them, along with their own, to ARRC.
3. These weekly certified payrolls must be sent to ARRC within seven days after the regular “payday” for that certified payroll at the following address:

Alaska Railroad Corporation
Attn: Certified Payroll Clerk
P.O. Box 107500
Anchorage, AK 99510-7500
Email: certifiedpayrollprocessor@akrr.com

The contractor and its subcontractors are also responsible for filing certified payrolls with DOLWD as required.

4. The certified payroll must be completely filled out by the contractor including, but not limited to:
 - i. **Contractor’s complete name**, including joint ventures, Inc., LLC, etc.
 - ii. **Contractor’s license number**, also called the contractor’s registration number, is required in addition to a business license to do construction work in the state
 - iii. **Employee’s**
 - a. Name
 - b. Address (domicile and mailing)
 - c. Social security number
 - d. Job classification
 - e. Hours worked
 - f. Wages/fringe benefits paid
 - iv. **Contracting agency project number**, which is the ARRC contract/purchase order number and is listed on the DOLWD finalized Notice of Work. This notice also lists the **DOLWD project number, project name, and location**. The prime contractor will supply all of this information to its subcontractors.
 - v. **Week ending date and payroll numbers**. The first week or part of a week of payroll will be designated as payroll number 1 for the first week, 2 for the second week, etc. until the final week worked on the project. If no work is completed during a given week, the contractor must nonetheless submit a certified payroll for that week, with the

appropriate consecutive payroll number for that week, and write “No Work Performed” on payroll.

- vi. The **Statement of Compliance** must be completely filled out indicating how fringe benefits are paid and listing the payroll period. The Statement of Compliance must be signed, dated, and filed within seven days of the payment date of the payroll.
- vii. **Stamp or write “Confidential”** on the certified payroll to help insure the privacy of contractor employees.

Sample copies of DOLWD certified payroll forms with the “Statement of Compliance” is shown in Figures 1 and 2 below.

Failure to timely submit complete and accurately filled out weekly certified payrolls to ARRC may result in the delay of payment on the contract.



CERTIFIED PAYROLL

Alaska Department of Labor & Workforce Development
 Labor Standards & Safety Division
 Wage & Hour Administration

Contractor Name Alaska Strong Steel, Inc Phone: 907-555-1212	Subcontractor X Contractor	Contractor License No. 28888	Week Ending 18-Dec-04	Payroll No. 1	Contracting Agency Project # 350-4	Dept. Labor Project # 04/12-1500	Date Work Started 12-Dec-04	Contract Amount \$50,000.00	Est. Completion Date October-05								
Project Name and Location Gold Creek Bridge Repair							DEDUCTIONS										
							FICA	FED WITH TAX	ESD	OTHER (EMPLOYEE) Medical Insurance	Total Deductions						
							Gross Amount Earned				Net Amount Paid	Check No. Issued					
Name, SSN, Permanent Domicile Address (NO P.O. BOX or RURAL ROUTES ACCEPTED) and Mailing Address (if different) for each employee Social Security numbers (SSN) MUST be included for all employees Joe H. Worker, SSN: 555-555-5555 316 Timber Lake Road Anchorage, AK 99515																	
	Union Membership? If NONE put N/A																
	Apprentice (%) If Applicable																
	Specific Work Class Code (Including certificate #'s for Electricians, Plumbers, Painters, Powdermen, Asbestos Workers, Truck Drivers, etc.)																
	Classification: S0301																
	OT	0.50	1.00					1.50	42.15	63.23							
	ST	8.00	8.00	8.00	8.00	8.00		32.00	28.10	898.20							
	FB	8.50	9.00	8.00	8.00	8.00		41.5	12.75	427.13	106.29	259.21	385.50	1074.06	#678	11/04/04	
	OT																
	ST																
	FB																
	OT																
	ST																
	FB																

Figure 1. Sample Certified Payroll Form with Social Security Numbers

STATEMENT OF COMPLIANCE

Contractors & Subcontractors Please Note!!!

SSN MUST be listed for each employee on payroll

8 AAC 30.020 CERTIFIED PAYROLL. (a) All Contractors (including owners/operators) who perform work on a public construction contract for the state or political subdivision of the state shall file with the Department a certified payroll (Form 07-6058) before Friday of each week that covers the preceding week.

(b) The certified payroll shall be submitted to the Department's regional office in which the work is performed.

Region I,
North of N63°

Labor Standards & Safety Div. DOLWD
675 7th Ave., Station J-1
Fairbanks, AK 99701-4593
(907) 451-2886 Fax: (907) 451-2885

Region II,
South of N63°

Labor Standards & Safety Div. DOLWD
3301 Eagle Street, Suite 301
Anchorage, AK 99503-4149
(907) 269-4900 Fax: (907) 269-4915

Region IIA, Southeast Alaska,
(From Yakutat south)

Labor Standards & Safety, DOLWD
P. O. Box 21149
1111 W. 8th Street, Rm 302
Juneau, AK 99801
(907) 465-4842 Fax: (907) 465-3554

In lieu of submitting Form 07-6058, contractors may submit his/her payroll form: **THE FORM MUST CONTAIN SOCIAL SECURITY NUMBERS FOR EACH EMPLOYEE.**

The contractor's payroll record must contain the same information required on this form.

Sec. 35.05.040 requires that all contractors or subcontractors who perform work on a public construction contract for the state or a political subdivision of the state shall, **BEFORE**

FRIDAY OF EACH WEEK, file with the Department of Labor and Workforce Development (DOLWD), a sworn affidavit for the previous week, setting out in detail the

number of workers employed, wages paid each week, job classification of each employee, hours worked each day and week, and other information which the DOLWD requires

CONTRACTORS WHO DISREGARD THEIR OBLIGATIONS TO THEIR EMPLOYEES, INCLUDING PAYMENT OF THE APPROPRIATE PREVAILING RATES OF PAY, UNCONDITIONAL PAYMENT,

AND PAYMENT NOT LESS THAN ONCE A WEEK MAY BE DEBARRED FROM PUBLIC CONSTRUCTION.

Date: 22-Dec-04

(2) Alaska Strong Steel, Inc.

(Contractor / Subcontractor)

I, Jane Doe, President do hereby state

(Name of Signatory Party) (Title)

(1) That I pay or supervise the payment of persons employed by

Alaska Strong Steel, Inc. on the

(Contractor / Subcontractor)

Gold Creek Bridge Project; that during the payroll

(Building or Work)

period commencing on 12-Dec-04, and ending on

(date)

18-Dec-04, all persons employed on said project have

(date)

been paid full weekly wages earned, that no rebates have

been or will be made either directly or indirectly to or on behalf of

said

Alaska Strong Steel, Inc.

(Contractor / Subcontractor)

from the full weekly wages earned by an person, and that no

deductions have been made either directly or indirectly from the

full wages earned by any person, other than permissible

deductions, on projects covered by Alaska Statute 36 as defined

in regulations issued by the Commissioner of Labor, or on Federal

Projects as defined in Regulations, Part 3 (29 CFR Subtitle A),

issued by the Secretary of Labor under the Copeland Act, as

amended (48 Stat. 948; 63 Stat. 108; 72 Stat. 967; 76 Stat. 357;

40 USC 276 (c), and described below:

(c) Each laborer, mechanic or field surveyor listed on

this payroll has been paid, as indicated on the payroll, an

amount not less than the sum of the applicable basic hourly

rate plus the amount of the required fringe benefits as

currently published by DOLWD, except as noted in Section

36.05.

(d) Exceptions:

Exception (Craft)	Explanation

Remarks:

The willful falsification of any of the above information may subject the contractor or subcontractor to civil or criminal prosecution. See Section 1091 of Title 18 and Section 231 of the United States Code. Also see AS 36.05.

Jane Doe

Signature (original signature required)

Jane Doe, President

Name & Title (print or type)

Figure 2 Sample Certified Payroll Statement of Compliance

APPENDIX C

STATEMENT OF WORK

Background:

On November 30th, 2018 Potter Hill which is located in South Anchorage, north of the Rabbit Creek Rifle Range and at approximately Mile Post (MP) 103 of the Alaska Railroad (ARRC) was damaged by a 7.1 magnitude earthquake. The extent of damage sustained by this earthquake included several massive landslides along the southern facing embankment and caused massive damage to parts of the existing drainage and outfall systems. The composition of the underlying soils/material has proven to be, in some areas, seismically unstable, weak and subjective to failure and erosion. If left unattended, the earthquake damage my impact train movements and operations in the near future.

Similar destruction as seen in the 11.30.18 earthquake occurred as a result of the historic 1964 Earthquake. In this case, the damage was so extensive that the ARRC had to move their track structure inland, install a drainage system to mitigate the underlying water issue at the site and construct the embankment structure. This damaged system will need to be modified/repared as part of the reconstruction process to achieve seismic stability and facility adequacy.

Since the 11.30.18 incident occurrence, Golder Associates has been working with the ARRC and professional surveyors to perform a professional geotechnical investigation and study of the disaster area to determine the status of the damaged facility as well as the embankment and its underlying materials with the intent to develop appropriate Engineering recommendations for design and repair. Since the disaster, the ARRC has also obtained professional surveys of the disturbed areas. These surveys include; precise ARRC Right of Way (ROW) boundary lines, existing drainage features and cross sectional figures for both pre and post disaster conditions.

Based on evaluated data and current AREMA / ARRC standards the engineered design for repairs has been established along with the plans, drawings and specifications needed to rebuild the facility. Engineering drawings, surveys, specifications and historic documentations will be provided to the contractor.

Scope of Work:

The ARRC is currently seeking to issue a Heavy Civil Construction contract for embankment and drainage system reconstruction. Site work is projected to occur between the fall of 2019 and summer of 2020 with a final project completion date set for September 16, 2020.

Repair work is to comply with all Plans, Drawings and Specifications and shall be constructed to the lines and grades provided with the survey for construction. The provided construction plan is based on typical section/profile drawings and recommendations provided by the design engineer.

The Contractor will be required to procure and deliver approximately 12,000 Cubic Yards of Class I Riprap or angular rock material. The Contractor will also be required to construct an access road from the Rabbit Creek Rifle Range Parking lot to the disaster site. This road may be used to

transfer the Riprap material, along with any other construction equipment support and materials required to complete this project. The road is to be made inaccessible during and at the conclusion of this project.

Within the damaged areas, and as indicated in the Plans, the contractor will to excavate a keyed toe which, once compacted and dressed, will be filled with the angular rock material which will act as the support for the embankment reconstruction. The approximate depth for this keyed in toe is a minimum of 12 feet below existing grade and as indicated within the plans.

Above the Rock toe the Contractor will shape and construct the embankment structure and fill material to the lines and grades as indicated in the plans and specifications. Excavation from adjacent slopes may be classified by the contractor to then be used as fill material as indicated in the plans. The embankment structure is to be constructed in appropriately compacted lifts with certain underlying features to be addressed during its construction. In areas of excess subsurface water seep, blanket drains shall be installed to prevent embankment saturation and subsequent future failure. Details for embankment construction and subsurface features are explained in detail within the plans and specifications.

The Contractor will be required to find the non-damaged ends of the partly destroyed surface drainage curvets within the multiple slide areas. New pipe and hardware is to be installed from the competent ends of the existing pipe. This new pipe will be laid from existing ends, out the side of the embankment and drained to the toe of the embankment. Survey shows five damaged culverts that need to be addressed, these culverts range in size from 12" to 24". Details for culvert and drainage feature repairs are identified in the plans and specifications. The contractor will also be required to regrade the toe of slope to drain away from the slope and reestablish vegetation accordingly.

In addition to failed embankment reconstruction and subsequently damaged drainage features, the contractor must clean and restore the trackside inlets to the existing drainage structures. These inlets are located along the opposite shoulder of the ARRC tracks from that of the failed embankment. In addition, the contractor will be required to regrade the existing, near track ditchline to preserve the inlets and their functionality.

An additive alternative for this contract will be to clean, maintain and restore all uptrack drainage features including ditchline drainage and culvert inlets. This work will occur on the ledge overlooking the mainline tracks and on the opposite side of the failed embankment.

Upon completion of construction activities, the contractor will be required to reseed and revegetate all damage and erodible surfaces. The contractor is to clean the site and remove possible access, preventing future trespass issues accordingly.

Deliverables:

BASE BID ITEMS:

Base Bid Items are to be separated and repetitive among all respective slide locations or job areas. Appropriate allocations for each bid line item should be used for each job site. All job site, or slide areas will be bid and treated as one single project.

Item No. 1 – Mobilization:

Mobilization shall be performed in accordance with the Plans and Specification Section 640.

Method of measurement for payment will be in accordance with subsection 640-4.01 of the Specifications.

Upon award, the Contractor is to submit a breakdown of the mobilization costs associated with each individual line item for Owner cost tracking purposes.

Item No. 2 – Clearing And Grubbing:

Clearing and Grubbing shall be performed in accordance with the plans and specification Section 201.

Item No. 3 – Embankment Reconstruction:

Embankment Reconstruction shall conform to Specification Sections 301, Section 205, Section 203 *Excavation and Embankment*, 204 *Structure Excavation for Conduits and Minor Structures*

SECTION 631 GEOTEXTILE FOR SUBSURFACE DRAINAGE AND EROSION CONTROL

The price for this item shall constitute full compensation for furnishing all labor, equipment, and materials, and performing all operations necessary to prepare and construct the embankment to the standards set forth in this package and as directed in the plans and specifications.

Measurement and payment for Embankment Reconstruction shall be calculated by the cubic yard and shall be computed using a TIN surface to TIN surface as computation from surveyed surfaces taken before and after material removal and placement. The contractor is responsible for providing pre and post construction surveys for the required line items. The contractor shall provide an approved construction survey in accordance with section 642.

Prepare the embankment substructure structure in accordance with section 203, in accordance with the lines and grades indicated in plans and cross sections. After construction of benching, the contractor must construct blanket/slope drains as indicated in the Plans and in accordance with Bid Line Item "*Install Blanket Drains*".

Finished slope and embankment structure shall meet the lines and grades and be constructed in accordance with the plans, cross sections and specifications outlined in this package.

Payment for embankment work will be made using the following professionally surveyed items.

203(3)	Unclassified Excavation (CY)
203(4)	Muck (CY)
203(6)	Borrow (CY)

Item No. 4 – Install Blanket Drains:

Blanket Drain Construction shall conform to Section 511-3.01-2.b *Mechanically Stabilized Earth (MSE) Wall*. - Drainage Blankets

Provide all labor, equipment, and materials required to install the Blanket/slope drains as indicated on the Plans. The Contractor is to provide an evenly placed angular stone blanket for which the minimum thickness should be 18 inches, and at least twice the average diameter size of the rocks. Material is to be placed in accordance with subsection 301-3.01 “PLACING” and shaped and compacted in accordance with subsection 301-3.03 “SHAPING AND COMPACTION”. All Blanket Drain Material is to only be placed on finished, compacted and accepted embankment slopes and benches.

The rock will be placed against the cut slope in native materials, interior of the new Gravel Fill. The layer of drainage rock would mimic the stepped benched excavation, both horizontal and vertical cuts. Drain rock should be wrapped in non-woven geotextile (meeting AREMA Ch.1 Section 10.2.2, 2019) with high permittivity for filtration. The contractor is to place the geotextile material in accordance with subsection 631-3.01.2.a “Subsurface Drainage”. Geotextile material is to be joined in accordance with subsection 631-3.01.3 “Joining”. Any damage to the geotextile shall be repaired in accordance with subsection 631-3.01.5 “Geotextile Repair” prior to backfilling the trench. Place the drain aggregate on the fabric to in accordance with subsection 631-3.01.4 “Material Placing and Spreading”.

Blanket / slope drains would also entail perforated pipe placed at the lowest bench in the Gravel Fill, and collector and outlet pipes through and out the toe and extend at least 30 feet west. A sketch of the blanket / slope drain is shown in the Plans.

Blanket Drains must be inspected, surveyed and accepted by the ARRC prior to additional material placement.

Method of measurement for payment will be in accordance with Section 109 with the volume at the locations specified in accordance with subsection 109-1.02.3 “Cubic Yard (yd3)”.

Item No. 5 – Place Angular Rock:

Construct embankment toe in accordance with section 203. If necessary, the contractor may elect to utilize methods listed within section 685. Place Geotextile fabric in the trench in accordance with section 631. Place Angular Rock Toe, in toe, in accordance with the Technical Specifications 611. After Placement of angular Rock seal the structure with Geotextile Fabric in accordance with section 631. Survey shall be performed in accordance with section 642, per and post rock placement.

Item No. 6 – Drainage Systems Restoration:

Provide all labor, equipment, and materials required to install and repair the sub-drain system as detailed in the Plans. The porous backfill (drain aggregate) shall conform to subsection 703-2.10, the corrugated steel pipe shall conform to subsection 707-2.01, and the non-woven geotextile material shall conform to subsection 729-2.02.

Excavate the trench to the dimensions and grade required by the Plans and in accordance with subsection 605-3.01 "PIPE INSTALLATION". Prepare the trench floor in accordance with subsection 631-3.01.1 "Surface Preparation" and place the geotextile material in accordance with subsection 631-3.01.2.a "Subsurface Drainage". Geotextile material is to be joined in accordance with subsection 631-3.01.3 "Joining". Any damage to the geotextile shall be repaired in accordance with subsection 631-3.01.5 "Geotextile Repair" prior to backfilling the trench. Place the drain aggregate on the fabric to in accordance with subsection 631-3.01.4 "Material Placing and Spreading" and subsection 605-3.01. Grade, shape, and compact the bed to the lines and grades shown in the plans.

Install the pipe within the trench in accordance with subsection 605-3.01 and in accordance with the following. The outfall pipe sections are to extend from the start of the damage or break to where the pipe protrudes the designed embankment turning and extending to the toe. Pipe material shall comply with Subsection 706-2.01. Excavations for pipe shall comply with section 603-3.01 and with section 205. Removal of waste pipe and structures shall conform with specification section 202, disposal methods shall be approved by the ARRC. Laying pipe shall comply with subsection 603-3.02. Joining pipe shall comply with subsection 603.3.03. Backfill trench with drain aggregate as noted in subsection 605-3.01, wrap the geotextile as specified herein, and backfill the remainder of the trench with materials previously approved for use on this project to the elevation shown on the Plans.

Outfall extensions are also to be installed to direct runoff to the base of the embankment at the two known 12" diameter outfalls, which are currently buried under vegetation and spoils and must be exposed and cleared. These outfall locations currently show signs of seeping water and are indicated on the plans. Efforts to locate the buried pipes should be reasonable but should not require excavation deeper than 10 feet into the side of the existing embankment. Initial ground movement is not expected to have impacted these pipes.

The accepted quantity will be paid for at the linear foot unit price (as measured in-place) and in accordance with Section 109 and subsection 605(1). This line item will be separated into the three separate culvert sizes found on site; 12", 18" and 24".

It is the intent of the contract to preserve undisturbed, under track portions of the existing drainage structures. The existing drainage system should be utilized and repaired as

necessary to restore the facility to its pre-disaster conditions. 1964 Construction Plan Drawings have been attached for reference and guidance.

Should any under track, drainage structures and pipes (10 feet beyond the face of the damaged slope) appear to have sustained major damage as a result of the earthquake, and are found to be unsalvageable; the contractor shall notify the owner imminently.

Where required to prevent caving of the excavation, the Contractor shall provide shoring and bracing as indicated in the specifications and plans.

The Contractor may dewater excavations as work progresses by providing positive surface drainage, including surface ditches and removing subsurface inflation. Where surface drainage cannot practicably be provided, the Contractor may dewater by pumping as necessary to allow inspection of the existing material in place, and in areas of embankment and to allow the specified compaction and placement of embankment material or pipe bedding material.

After the completion of repairs on existing subdrains and the installation of new underground drainage structures and cross drain outlets, drainage of the subsurface water is to be channeled and maintained in these systems throughout the construction process. Disbursement of concentrated flow at out falls is required as necessary to maintain SWPPP compliance.

Item No. 7 – Seeding and Stabilization:

Upon completion of Embankment Earthwork, Drainage System Installation, repairs, and rock placement the Contractor must perform slope track walking and site stabilization to include seeding in accordance with Section 618 Seeding and Section 619 Soil Stabilization.

Seed shall be comprised of materiel complying with requirements established in specification section 724 – SEED.

If required, Fertilizer within compliance with Section 725 shall be utilized to promote growth.

Measure for payment will be made on a per acre basis. Acceptance and establishment will be based on Sections 618-3.05, 618-3.06 and Section 109.

Although the above track slide areas did not fail in the November 30th Earthquake, Additional slope stabilization for uphill slopes may be considered by the ARRC

Item No. 8 – Survey:

Provide a surveyor or third-party surveying firm to perform all surveying, staking, cross sections and essential items for the completion of the project and perform the necessary calculations required to accomplish the work in conformance with the Plans and Specifications on addition to standard engineering and survey practices. The surveyor

may also be directed and/or required to perform any task outlined in Section 642 "Construction Surveying and Monuments".

All calculations used to determine final pay item quantities (e.g. volumes) must be signed and sealed by a Professional Land Surveyor registered in the State of Alaska.

The accepted quantity will be paid for at the agreed upon lump sum price, incrementally on an agreed upon breakdown, and in accordance with Section 109.

ADDITIVE ALTERNATIVE BID ITEMS:

Item No. A-1 - Adjust Upslope Trench – Clean Upslope Inlets:

All necessary work and effort required to maintain and restore the existing manholes, inlets and ditch line elevations to achieve restoration of the trackside drainage system and to restore it to its original and pre-disaster design and as indicated on the plans, drawings and specifications.

Work shall include the removal and disposal of accumulated debris found in the inlets structures and ditch lines. Ground disturbing activities will require appropriate SWPPP procedures, revegetation, and soil stabilization performed in accordance with Section 641. Ditch Line restoration may required tree and stump removal within the flow line.

All ditch line work must produce smooth transitions and be graded to drain with a minimum of 2% grade between drain inlets and grade brakes.

Inspection of work is required prior to final payment; approval will require verification that the pipelines are clear and free flowing and that ditch lines are smoothly graded to drain between the manholes. Pipeline inspection, performed by the contractor in the presence of the ARRC may be performed using water, smoke or another approved method.

Measure for payment: Per Each Inlet
Ditch line Grading Payment: Per Linear Foot

Item No. A-2 – Secure Exposed Drainage Piping (Up Eastern, Non-Disturbed Slope):

The contractor will be responsible for securing and burying the exposed 18" drain pipe running from the above track ditch line and drainage inlet.

The contractor must provide a plan, to be approved by the ARRC, prior to any earth disturbing activities. Work minimally impact to the surrounding vegetation and should result in a uniform coverage of the pipe with smooth transitions from existing ground to over the pipe cover.

Material Placement should conform to Section 602 of the Specifications.

Upon completion, the exposed pipe shall be secured and buried and the slope stabilized in accordance with Specification Section 619.

Payment will be based upon acceptance and a lump sum price and in accordance with Section 109.

Item No. A-3 – Adjust Trackside Trench - Grade for Manholes & Clean Inlets:

All necessary work and effort required to maintain the existing manholes, inlets and ditch line elevations to achieve restoration of the trackside drainage system and to restore it to its original and pre disaster design, as indicated on the plans, drawings and specifications.

Work shall include remove and disposal of accumulated debris found in the inlets structures and the excess material currently covering said inlets. Ground disturbing activities will require appropriate SWPPP procedures, revegetation, and soil stabilization performed in accordance with Section 641.

All ditch line work must produce smooth transitions and be graded to drain with a minimum of 2% grade between manholes and grade brakes, draining into established and cleaned inlets.

Inspection of work is required prior to final payment; approval will require verification that the pipelines are clear and free flowing and that ditch lines are smoothly graded to drain between the manholes. Pipeline inspection, performed by the contractor in the presence of the ARRC may be performed using water, smoke or another approved method.

Measure for payment inlet upkeep: Per Each
Ditch line Grading Payment: Per Linear Foot

Item No. A-4 – Drain Impounded Water at Toe of Embankment:

There are currently two over-flow points for water impounded at the toe of the embankment. Each of those are to be deepened and ditch lined in accordance with specification section 610. Potential drainage areas are outside of ARRC ROW and will require coordination with landowners (State of Alaska) and applicable regulatory agencies.

Approximate locations of the potential drainage points are: STA: 5232+00 and STA: 5225+00.

The Contractor, will be responsible for obtaining all necessary permits and permissions to restore these drainage features.

All information shall be reviewed and accepted by the ARRC before implementation.

A detailed description for delivering this item should be provided in the bidding documents.

The task will be payed based on a lump sum bid price and in accordance with Section 109.

APPENDIX D

TECHNICAL SPECIFICATIONS TABLE OF CONTENTS

REFERENCED STANDARD SPECIFICATIONS. The following sections of the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2017 edition, are incorporated into these Specifications as though physically contained herein. Additional sections referenced by the following sections shall also apply, except when noted otherwise.

All references to the Alaska Department of Transportation and Public Facilities, the Department, the State, the Engineer, and similar references shall mean the “Owner.” or “Owner’s Representative”, as defined in the General Conditions and Special Conditions.

DIVISION 100 - GENERAL PROVISIONS

109 Measurement & Payment

DIVISION 200 - EARTHWORK

201 Clearing & Grubbing (completely replaced by modifications)
202 Removal of Structures and Obstructions (completely replaced by modifications)
203 Excavation & Embankment
204 Structure Excavation for Conduits & Minor Structures
205 Excavation, Backfill, & Foundation Fill for Major Structures

DIVISION 300 - BASES

301 Aggregate Base & Surface Course

DIVISION 600 - MISCELLANEOUS CONSTRUCTION

602 Structural Plate Pipe
603 Culverts & Storm Drains
605 Underdrains
607 Fences
610 Ditch Lining
611 Riprap
617 Railroad Crossings
618 Seeding
619 Soil Stabilization (completely replaced by modifications)
630 Geotextile for Embankment Separation & Stabilization
631 Geotextile for Subsurface Drainage and Erosion Control
633 Silt Fence
634 Geogrid Soil Reinforcement
640 Mobilization & Demobilization
641 Erosion, Sediment, & Pollution Control
642 Construction Surveying & Monuments
643 Traffic Maintenance
685 Corduroy

DIVISION 700 - MATERIALS

703	Aggregates
706	Concrete & Plastic Pipe
707	Metal Pipe
724	Seed
725	Fertilizer
726	Topsoil
727	Soil Stabilization Material
729	Geosynthetics (completely replaced by modifications)

MODIFICATIONS TO THE REFERENCED STANDARD SPECIFICATIONS. The following pages contain modifications to the referenced sections of the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2017 edition, listed on the previous page. These modifications are a combination of the ADOT/PF standard modifications and Special Provisions for this project.

SECTION 109

MEASUREMENT AND PAYMENT

109-1.02 MEASUREMENT OF QUANTITIES.

Following item 3.e. Weight, add the following:

- f. Geometric Surface Differencing. When volumes are computed utilizing digital terrain modeling surface differencing techniques, the differenced surfaces are required to meet National Map Accuracy Standards for 0.5 foot contours unless otherwise specified.

SECTION 201

CLEARING AND GRUBBING

Delete this section in its entirety and replace with the following:

201-1.01 DESCRIPTION. Clear, remove and dispose of all vegetation and debris within designated areas of the project, except objects that are designated to remain or are to be removed under other sections of these Specifications. Preserve from injury or defacement all vegetation and objects designated to remain. This work shall consist of cutting and disposing of all trees, down timber, stubs, brushes, slash and debris in the construction zone as indicated on the plans.

201-2.01 MATERIALS. None

CONSTRUCTION REQUIREMENTS

201-3.01 GENERAL. The Owner's Representative will designate the limits of work and all trees, shrubs, plants and other things to remain. Preserve all things designated to remain.

Keep erosion potential to a minimum.

Preserve survey stakes, boundary markers, benchmarks, and tie points until such time as their usefulness has ceased and the Owner's Representative gives permission for their destruction.

The Contractor shall use appropriate erosion control methods, as approved by the Owner's Representative, to prevent impact to existing streams, natural drainage ways, and wetlands.

Damage to vegetation outside the construction limits is prohibited. In the unlikely event this occurs, the vegetation damaged by the Contractor shall be fenced around, protected and allowed to recover. Fertilizer shall be applied immediately to encourage regrowth and recovery using methods appropriate to the location of the damaged vegetation.

No wetlands may be disturbed outside of the grading limits during the clearing and grubbing activities. No mechanical land clearing activities resulting in soil disturbance or fills in wetlands or waters are permissible. If soils are disturbed, the contractor shall assume responsibility and restore the site to the satisfaction of the Owner's Representative. The Owner does not assume

responsibility for mechanical land clearing resulting in soil disturbance or fills that result from the clearing and/or grubbing activities.

All tree felling and cutting of brush and bushes shall be completed within the time frame specified by regulatory permits to avoid destruction of active bird nests, eggs, or nestlings. Tree cutting/felling and cutting of brush and bushes will not be allowed during the period of May 1st through July 15th, without written authorization from the Owner's Representative.

Any vegetation, trees, down timber, stubs, brush, bushes, stumps, tree roots, debris and other objectionable material left in the construction zone from earlier clearing operations shall become the property of the Contractor and shall be removed from the Project site.

All temporary stockpiles created by the Contractor shall be removed or placed in designated final disposal areas and the sites re-graded and stabilized prior to completion of the work.

Upon completion of Clearing, the Contractor shall provide the Owner with a minimum of 48 hours notice prior to Grubbing to allow the Owner's Representative to conduct a survey for nesting birds.

201-3.02 CLEARING. Cut and dispose of all trees, down timber, stubs, slash, brush, bushes and debris from all areas designated.

Fell trees toward the center of the area to be cleared, in order to minimize damage to the trees that are to be left standing. Remove and dispose of trees unavoidably falling outside the specified limits. Cut trees and brush to a height of not more than 6 inches above the surrounding ground.

Removal and disposal of all trees, down timber, stubs, brush, bushes and debris will not be allowed during the period of May 1st through July 15th, without written authorization from the Owner's Representative.

201-3.03 GRUBBING. Remove and dispose of all stumps, roots, moss, grass, turf, peat, or debris within excavation limits, and within fill limits. Remove slash, brush and trees wherever this material is encountered in the construction zone. The removal of slash, brush and trees in the construction zone shall be incidental to clearing and grubbing. Grub all side hill fill areas where benching will be required per Section 203-3.03. Grub any other areas designated on the plans or in the Supplemental Conditions. The grubbing shall progress in such a manner that erosion will be kept to a minimum.

Except in areas to be excavated, backfill stump holes and other holes with suitable materials and compact according to the Specifications.

201-3.04 HAND CLEARING. Cut and dispose of all trees, down timber, stubs, brush, bushes and debris from all areas designated, with minimal disturbance to grass and/or moss cover. Do not use equipment on wheels or tracks in areas designated as hand clearing, except as stated below.

Where shown on the Plans, you may use a mechanical brush cutter, provided such work is performed within the allowed time frame specified in the Special Provisions.

Cut stumps flush with the ground. In areas to be covered by least 8 feet of embankment fill, stumps may extend up to 6 inches above natural ground, except where geotextile is specified.

No hand clearing areas have been designated in the ITB.

201-3.05 SELECTIVE TREE REMOVAL. Remove and dispose of selected trees, as designated by the Owner's Representative that are located outside of the normal clearing and grubbing limits. The Owner's Representative may designate trees to be removed under this item at any time during the Contract life, subject to conditions in Subsection 201-3.04, Hand Clearing. Cut off designated trees no more than 6 inches above the ground surface.

201-3.06 DISPOSAL. Dispose of all vegetation and debris removed by clearing or grubbing by chipping or other approved methods at approved upland locations.

Within the clearing limits, the Contractor may chip or mulch clearing debris and slash less than 4 inches in diameter and trees less than 4 inches in diameter in place. After chipping or mulching material in place, the chips from chipping or mulching must be 3 inches or less in size and may not accumulate to be more than 4 inches in depth. Some spreading of the material may be required to maintain a maximum of 4 inches of depth. In areas adjacent to wetlands or water bodies, the 4 inch depth shall be maximized to avoid potential impacts following thaw.

Felled or downed trees 4 inches and larger in diameter encountered in the construction zone shall be removed from the project site by the Contractor. This work shall be incidental to the "Clearing", "Hand Clearing" or "Selective Tree" pay items.

The Contractor shall make all necessary arrangements with property owners for obtaining suitable disposal locations to dispose of vegetation and debris at upland locations outside the project limits. The Contractor will be responsible for providing the Owner's Representative with a copy of permission documents that contain a waiver of all claims against the ARRC and MSB for any damage to such land which may result and a copy of all permits required by law for disposal before commencing work. All costs involved for obtaining disposal areas; permission from landowners; waivers of claims; and all applicable permits shall be included in the bid price.

Burning will not be permitted.

201-5.01 BASIS OF PAYMENT.

Backfill and compaction of holes left from removal of stumps or other objects are subsidiary.

Damaged Vegetation Outside the Clearing Limits. If repair of damaged vegetation is required, no additional payment will be made for temporary erosion control measures, construction fencing, seed or fertilizer applied to damaged vegetation areas by the contractor. Damaged areas outside the clearing limits and repair to these damaged areas will be incidental to Bid Item covering this work.

Damage to Wetlands. If repair of damaged wetlands is required, no additional payment will be made for temporary erosion control measures, construction fencing, seed or fertilizer applied, additional equipment or labor to repair wetland areas by the contractor to the Owner's Representative's satisfaction. Damaged wetland areas and repair to these damaged areas will be incidental to Bid Item covering this work.

Payment will be made as a Lump Sum Bid Item covering to cover this work.

SECTION 203

EXCAVATION AND EMBANKMENT

203-1.01 DESCRIPTION.

Add the following: This work shall also consist of the removal of contaminated soil/material.

Add the following: This work shall also consist of Obliteration of Trails.

203-2.01 MATERIALS.

Delete Item 2a and replace with the following:

a. Common Excavation. Any excavation other than Muck.

Delete Item 2c and replace with the following:

c. Muck Excavation. Soils, organic matter, and other material below the design subgrade surface not suitable for foundation material regardless of moisture content.

Add the following to Item 3, Borrow: Selected Material, Type A, B, or C when required, shall meet the requirements of Subsection 703-2.07.

Add the following to Item 3, Borrow: The Embankment Fill Material shall generally be comprised of sand and gravel fill and should be well-graded aggregate with maximum 15 percent passing the No. 200 US sieve, and contain no organic or other deleterious matter. On-site materials can be re-used, as long as it meets all requirements, including densities, listed herein and is not excessively wet.

203-3.01 GENERAL. Add the following: The Contractor shall submit an Excavation Plan for review by the Owner's Representative that outlines their means and methods for conducting excavation and embankment work for the project. The Owner's Representative shall have 7 days after receipt of the plan to review the Excavation Plan. The Contractor shall not begin earthwork operations until the plan has been reviewed and returned with either no exceptions taken, or approved as noted. The Excavation Plan shall include, at a minimum, the equipment that will be used to excavate and haul material from cut areas, the types of soil material they expect to encounter during excavation, and how the soil materials will be utilized. The Excavation Plan shall also describe, in detail, the Contractor's approach to handling materials during the excavation, hauling and placement process and protecting soil materials from excess moisture. The approved Excavation Plan shall be kept on-site during construction. The Excavation Plan shall be updated at least 7 days prior to any changes in the Contractor's means and methods for conducting excavation and embankment. The Owner's Representative shall have 3 working days to review each Excavation Plan update. The Contractor shall not implement changes to means and methods until the update has been reviewed and returned with either no exceptions taken, or approved as noted.

Access along all haul routes shall be maintained by the Contractor. All costs for maintaining traffic, haul routes and crossings shall be borne by the Contractor. An approved Traffic Control Plan conforming to Section 643 is required prior to beginning work that involves entering, exiting or hauling materials on public roadways. The Contractor may dispose of unsuitable material in the disposal area shown on the plans; disposal elsewhere within the right of way will not be allowed.

Obliteration of Trails consists of scarifying the trail areas identified on the plans inside the project right of way to remove the trail.

After construction of embankment or excavation, operate tracked equipment in such a manner as to leave a uniform pattern of grooves perpendicular to the fall of the slope. The slope tracking is required for both cut and fill slopes, and will be performed prior to topsoil placement. Additional slope tracking will be required after topsoil placement.

203-3.03 EMBANKMENT CONSTRUCTION. Fourth paragraph, add the following: Remove all vegetation prior to benching and plow or step the grubbed surface. Thoroughly mix and compact the new material with the existing material to a horizontal distance of two feet minimum.

Add the following: Prior to placement of fill, benches must be cut into the existing and damaged slopes. The newly constructed benches shall be compacted, as required, and built up to achieve to the specified lines and grades indicated the plans.

Add the following: Frozen areas, ice lenses, and saturated soils may be encountered on this project, including material sources. These frozen areas, ice lenses, and saturated soils are not defined and any such area that may be encountered by the Contractor in the performance of the contract work will not be considered unforeseeable within the terms of the contract such as to entitle the Contractor to any adjustment in contract price or contract time.

Delete the first sentence of the tenth paragraph, and substitute the following: Roadway embankments shall be placed in horizontal layers not exceeding 6 inches in thickness measured before compaction. Each layer of classified material shall have its joint offset from the joint below, longitudinally by one foot and transversely by 20 feet.

Delete the last sentence of the eleventh paragraph and substitute the following: Do not place rocks over 6 inches in largest dimension within 3 feet of finish profile grade.

Delete the fourteenth paragraph and substitute the following: When embankments are to be constructed across wet or swampy ground, which will not support the weight of heavy hauling and spreading equipment, the Contractor shall choose methods of embankment construction and use such hauling and spreading equipment that will least disturb the soft foundation. When soft foundations are encountered, and when approved by the Owner's Representative, the lower part of the fill may be constructed by dumping and spreading successive vehicle loads of material in a uniformly distributed layer of a thickness not greater than necessary to support the vehicle while placing subsequent layers. Afterward the remainder of the embankment shall be constructed in layers and compacted as specified. It is not the policy of the ARRC to allow an increase in the planned depth of embankment material over soft, wet, or swampy ground for the sole purpose of providing support for heavy hauling and spreading equipment, unless the Contractor proves to the satisfaction of the Owner's Representative that the planned depth is inadequate to support required vehicles and equipment. . If the use of smaller hauling vehicles or different methods of embankment construction than originally planned are necessary to comply with the soft, wet or swampy ground, this shall not be the basis for a claim for extra compensation. The contract unit price for the various pay items involved shall be full compensation for all labor, materials, and equipment necessary to perform the work outlined herein.

Add the following: In areas where the option of using corduroy is utilized, place logs with a minimum diameter of 4 inches and a minimum length of 10 feet directly on the prepared surface.

All branches and roots must be removed prior to placement. The logs should be as close together as possible with no more than a 2-inch space between logs (side-by-side and end-to-end). Lay logs perpendicular to the alignment centerline and across the entire grading limits. Logs on the edges of the grading limits may be cut shorter than 10 feet to not extend beyond the grading limit boundary. All labor, materials, and equipment related to corduroy shall be subsidiary to Pay Item 201(1A), Clearing.

Delete the sixteenth paragraph and substitute the following: All embankments shall be constructed with moisture and density control unless the Owner's Representative determines that such controls are not feasible.

Add the following: Where the plans call for placement of selected material and excavation is required, the existing material may be left in place if tests determine that it will meet the appropriate selected material requirements. Any reduction in excavation or borrow quantities as a result of this condition shall not constitute a basis for adjustment in contract unit prices except as provided for in the Contract Documents.

The existing material at the bottom of all excavations shall be proof rolled in order to provide a firm and unyielding surface for the new roadway section in addition to the requirements of 203-3.04.

Regarding should be performed beyond the toe of the embankment and within the ROW to allow for drainage away from the structure.

203-3.04 COMPACTION WITH MOISTURE AND DENSITY CONTROL. Delete this subsection in its entirety and substitute the following: In all areas unless noted otherwise on the project plans or specifications, construct embankments with moisture and density control from specified materials placed and compacted at approximately their optimum moisture content. Adjust the moisture content of the embankment materials as appropriate to meet the compaction requirements, and to maintain moisture content to within 2 percent of the optimum moisture content, after adjusting the optimum moisture content for oversize material. Compact embankment to not less than 95 percent of the maximum dry density as determined by AASHTO T 180, or ATM 212.

All embankments within 20 feet of a bridge abutment shall be compacted full width to not less than 100 percent of the maximum density regardless of depth below subgrade. All material used within this zone shall be graded to pass the 3-inch sieve.

Add the following:

Quality Assurance

The Owner will accomplish project quality assurance testing using qualified technicians and a Professional Engineer registered in the State of Alaska. The Owner's quality assurance has final authority on passing or failing material and site work.

Quality Control

The Contractor shall submit a Quality Control Plan for review by the Owner's Representative as described in Appendix's – Construction Quality Control Plan (CQC) Plan. The Contractor shall

not begin earthwork operations until the plan has been reviewed and returned either with no exceptions taken or approved as noted. The following standards shall be used in the Contractor's quality control program:

In-place field densities will be determined by ASTM D 2167-08, or WAQTC FOP for AASHTO T 310 and WAQTC FOP for AASHTO T 224. Sample and test embankment gradation in accordance with AASHTO T 27 and T 11. Size of sample for gradation shall be determined by nominal maximum particle size following the Alaska Amendment to WAQTC FOP for AASHTO T 27 and T 11.

Determine the maximum dry density of free-draining, non-plastic, cohesionless materials with less than 10 percent by weight passing the No. 200 sieve by ATM 212. (For some materials it may be necessary to perform both ATM 212 and AASHTO T 180, in which case use the highest maximum dry density obtained.) For materials with greater than 80 percent by weight passing the No. 4 sieve, use AASHTO T 180, Method A with the plus No. 4 material removed and treated as oversize. Use AASHTO T 180, Method D for materials with greater than 60 percent by weight passing the 3/4-inch sieve with the plus 3/4-inch material removed and treated as oversize.

Perform AASHTO T 180 in accordance with Note 8 (waive the 12-hour stand time if the sample has not been dried to less than 4 percentage points below the optimum moisture content). Modify the test method to determine the moisture content of each trial from the complete specimen and report to the nearest 0.1 percent. For the first test of material from a given source, and when otherwise deemed necessary, include specific gravity test results and gradation by WAQTC FOP for AASHTO T 27/T 11 in the AASHTO T 180 report. Perform bulk specific gravity and absorption of coarse aggregate testing for material retained on the No. 4 sieve by WAQTC FOP for AASHTO T 85. Perform apparent specific gravity testing on material passing the No. 4 sieve by AASHTO T 100. Plot a zero-air-voids curve based on the weighted average specific gravity in accordance with the Alaska Addendum to WAQTC FOP for AASHTO T 180. Calculate an adjusted maximum dry density and optimum moisture content in accordance with the WAQTC FOP for AASHTO T 224 using measured values for specific gravity. Follow the Alaska Addendum to WAQTC FOP for AASHTO T 224 for materials that are too coarse to test (TCTT).

Alternately in lieu of providing a quality control testing for each lift of fill and with approval from the ARRC, an on-site proven method to compact embankment to not less than 95 percent of the maximum dry density as determined by AASHTO T 180, or ATM 212 may be implemented by the Contractor. Compaction shall take place on each lift of fill placed and lifts shall not exceed 6 inches placed loose. The contractor shall accommodate additional passes with the compaction equipment upon request of the Owner's Representative.

The frequency of quality control for embankment materials tests will be as follows:

Standard density as required by changes in the material	
Field Density	1 per 1,000 cubic yards
Gradation	1 per 3,000 cubic yards

These frequencies may be adjusted up or down at the discretion of the Owner's Representative as conditions warrant.

Add the following Subsection:

203-3.07 CONTAMINATED SOIL/MATERIAL. The Contractor shall segregate contaminated soil/material if encountered during excavation, as determined by the Owner's Representative. The Contractor shall transport all designated contaminated soil/material to specially designed Potentially Contaminated Materials Storage Area (PCMSA). Locations of PCMSA's will be identified by the Owner's Representative in the directive authorizing the work. These stockpile areas will be located within the project limits. Soil segregation and transport will be conducted under the supervision of the Owner's Representative. The Owner's Representative shall have stop work authority.

The Contractor will be responsible for construction of Potentially Contaminated Materials Storage Area (PCMSA). The segregation, transportation, stockpiling, and disposal of contaminated soil material from the property will be included in this work. The PCMSA shall be constructed in accordance with the Local, State and Federal Regulations.

Add the following Subsection:

203-3.08 EMBANKMENT CONSTRUCTION OVER FROZEN GROUND. No fill may be placed over frozen ground. If frozen ground is found then the contractor shall remove frozen materials prior to placing fill.

The Contractor may construct embankment over frozen ground where the alignment crosses wet, boggy areas. Embankments may only be constructed over frozen ground with written approval of the Owner's Representative. If the contractor chooses to construct embankments over frozen ground, the contractor shall submit an Embankment Plan that outlines the type of equipment to be used, the approximate schedule of activities, and methods to be used to adhere to the requirements in this section.

Prior to placing fill on frozen ground, the entire footprint of the fill shall be prepared by trimming the vegetation to within 6 inches of the ground surface and snow and ice shall be cleared such that no more than 1 inch of snow and/or surface ice is present. The vegetation and snow/ice clearing shall be accomplished such that the surface root matting of organics is not disturbed or penetrated by equipment tracks or blades greater than 3 inches below the natural ground surface.

Fill placed over frozen ground shall consist of Embankment Stabilization Material and shall not contain frozen chunks greater than 4 inches in diameter. The material shall be dry and it shall be placed in loose lift thicknesses not to exceed 6 inches. The maximum embankment height to be developed on frozen ground is 4 feet above original ground. The placement of the geotextile indicated on the plans at the base of the embankment as shown in the plans shall take place concurrently so that snow and ice are not allowed to accumulate on top of the geotextile layer.

Compaction shall take place on each lift of fill placed over frozen ground. Compaction effort shall consist of a minimum of 4 passes with a static grid roller having a minimum operating weight of 33,000 pounds. The contractor shall accommodate additional passes with the grid roller upon request of the Owner's Representative.

Fill placement over frozen ground shall not take place during rain or snow events. If snow or ice accumulates on the embankment surface, it must be completely removed prior to continuation of the filling effort. The embankment surface shall be crowned at all times during the filling process. After the embankment has reached 3 or 4 feet in height as shown on the plans, the surface shall

be sealed for the remainder of the winter season with a minimum of 4 passes with a smooth, static drum roller rated at a minimum operating weight of 33,000 pounds.

Normal embankment construction under thawed conditions (in the summer construction season) may continue once the snow and ice has melted from the embankment surface and the upper 2 feet of Embankment Stabilization Material has thawed. To prepare the surface, the upper 6 inches shall be scarified and compacted with moisture density control as described in 203-3.06. The top 3 feet of Selected Material Type A in the embankment shall not be placed until the embankment fill and subgrade soils under the embankment have thawed.

Add the following text: It is possible that in some areas, the embankment surface may be submerged after the spring thaw occurs. In these areas, Embankment Stabilization Material or crushed rock aggregate shall be placed by bulking in fill from upland alignment areas adjacent to the submerged areas. Once the embankment surface is above the surrounding bog elevation, geogrid fabric shall be placed on the grade and the remainder of the embankment shall be constructed.

203-4.01 METHOD OF MEASUREMENT. Add the following:

Muck Excavation will only be measured below the design grade as directed by the Owner's Representative. Removal and replacement of Muck Excavation as determined by the Owner's Representative will be measured after excavation and prior to backfill placement. Backfill of muck excavations shall meet the compaction requirements of the Contract Documents and Technical Specification 203-3.04.

The construction of Potentially Contaminated Storage Stockpile Areas and Contaminated Soil/Material Removal will be measured under Section 109 and as specified in the contract or directive authorizing the work.

For contaminated soils generated by contractor activities: Construction of containment storage areas for purposes of contractor vehicle maintenance, wash-down activities, etc. that may be required under the Contractor's Hazardous Materials Control Plan will be the responsibility of the Contractor and will not be measured for payment.

No measurement will be made for traffic control, flagging, haul routes and/or haul route maintenance but will be considered subsidiary to Excavation or Borrow items.

203-5.01 BASIS OF PAYMENT. Add the following:

No payment will be made for excavation that is embanked outside the limits of the lines and slopes described in the typical sections and cross sections as defined in the plans and contract documents.

No payment will be made for traffic control, flagging, or haul routes and/or haul route maintenance but will be considered subsidiary to relevant Excavation or Borrow items.

Excavation and removal or re-compaction of already placed embankment material that does not meet the compaction requirements will be conducted by the Contractor at no extra cost to the Owner. The Owner will only remit payment for soil fill in its final resting place that meets the

requirements of the Contract Documents. The Owner will not pay for material that is placed and then excavated to repair areas that do not meet the compaction requirements.

Muck Excavation payment will be determined by the Owner's Representative in accordance with the contract unit price for Muck Excavation. Muck Excavation replacement will be at the contract unit price for the type of Borrow specified by the Owner's Representative. Payment for Borrow used will be for all labor, equipment and materials to place the Borrow to the requirements specified in Section 203.

Payment for item 203(30) Contaminated Soil/Material Removal will be at the prices specified in the directive authorizing the work and shall be full compensation for construction of Potentially Contaminated Storage Areas and Contaminated Soil/Material Removal.

Payment for embankment work will be made using the following surveyed items.

203(3)	Unclassified Excavation (CY)
203(4)	Muck (CY)
203(6)	Borrow (CY)

SECTION 204

STRUCTURE EXCAVATION FOR CONDUITS AND MINOR STRUCTURES

SECTION 205

EXCAVATION, BACKFILL, AND FOUNDATION FILL FOR MAJOR STRUCTURES

SECTION 301

AGGREGATE BASE & SURFACE COURSE

SECTION 603

CULVERTS & STORM DRAINS

603-2.01 MATERIALS. Add the following to the list of materials:

Delete the paragraph following the materials list and replace with:

When Item 603(17), Pipe, or Items 603(17-___), ___ Inch Pipe, are listed in the bid schedule, furnish either Polymer Coated Corrugated Steel Pipe, or Galvanized Corrugated Steel Pipe. End Sections for Pipe must be of the same material as the pipe.

Add the following paragraph: All materials shall be in accordance with American Railway Engineering and Maintenance-of-Way Association (AREMA) specifications. All culverts shall be adequate for E-80 loads.

603-3.01 GENERAL. Delete the first paragraph and replace with the following: Excavation, bedding, and backfill must conform to the requirements of Subsections 204-2.01 and 204-3.01, and the details on the Plans and is subsidiary to culvert installation.

SECTION 605

UNDERDRAINS

605-2.01 MATERIALS. Add the following:

Non-Perforated PVC Pipe	Subsection 706-2.06
Sand Blanket	Subsection 703-2.12
Drain Rock	Subsection 703-2.13

605-3.01 PIPE INSTALLATION. Delete the second sentence of the first paragraph and replace with the following. Place and compact a bedding layer of drain rock for perforated pipe or sand blanket material for non-perforated pipe, as shown in the Plans, in the bottom of the trench for its full width and length.

Delete the fourth paragraph and replace with the following. After the pipe installation has been inspected and approved, place the remainder of the bedding material in uniform layers not more than 6 inches deep and compacted to meet Subsection 203-3.04 to the required height. Fill the trench above the bedding material with specified material.

605-4.01 METHOD OF MEASUREMENT. Delete the second paragraph.

605-5.01 BASIS OF PAYMENT.

Delete the first three sentences and replace with the following: Excavation, bedding, rodent screen and/or sand blanket material, drain rock, and backfill are subsidiary.

SECTION 611

RIRAP

611-1.01 DESCRIPTION. Add the following: This work shall also consist of placing riprap as shown on the plans.

611-2.01 MATERIALS. Add the following to the list of materials:

Geotextile, Erosion Control	729-2.02
-----------------------------	----------

611-3.01 CONSTRUCTION REQUIREMENTS. Add the following paragraphs:

Prepare surface for geotextile by the removal of stumps, brush, boulders, and sharp objects. Fill holes and large ruts with material approved by the Owner's Representative.

Unroll geotextile directly onto the prepared surface. Stretch geotextile to remove any creases or wrinkles. Do not expose geotextiles to the elements for longer than 5 days after removal of protective covering. Join geotextile by overlapping, with the upgrade geotextile lying over the downgrade geotextile. Overlapped sections shall overlap a minimum of 3 feet. Geotextile fabric material and placements shall comply with requirements found within section 631. Fabric shall be placed over the top of the Angular Rock once placed and before backfill of borrow.

The embankment toe must first be appropriately graded, shaped, compacted, dewatered and accepted by the ARRC prior to material placement.

Angular, structural rock fill shall be placed within the finished toe and on the prepared slopes within the lines/grades and limits shown on the plans. The finished slopes shall present a uniform and regular surface not steeper than those shown on the drawings. The Contractor shall maintain the rock toe and surrounding areas until final acceptance. Any material displaced shall be replaced, at the Contractor's expense, to the slopes, lines, and grades shown on the drawings.

The Angular Rock Fill should be keyed-in at the toe of the slope by using the following minimum standards.

- Depth of 10 feet depth,
- Width of the key should be 5 feet minimum at its base, and
- Excavation slopes within the keyway should be minimum 1H:1V.
- The base of the keyway must be inspected and accepted by the ARRC.

Rock Fill shall be comprised of evenly-graded stones that are hard and angular. Stone shapes should have breadth and width at least $\frac{1}{4}$ of their length. Not more than 10 percent of particles may be smaller than 3 inches. At least 70 percent of particles shall have two angular to subangular faces.

During placing and spreading of riprap on geotextile, do not drive construction equipment directly on the geotextile or on any riprap in place on the geotextile. For geotextile repair, overlay torn area with geotextile with a minimum 3 foot overlap around the edges of the torn area. Ensure that the patch remains in place when material is placed over the affected area.

Outlets for the stone keyway should be provided at each of the major seep areas or at least every 600 feet and outlined in the plans or as directed by the ARRC. Outlets shall be trenched drain rock. Trenched drain channels must be compacted and lined and wrapped with geotextile fabric.

Tolerances:

Angular Rock fill shall be placed to the full thickness shown on the drawings. No minus tolerance will be permitted. A tolerance of plus 6 inches for Angular Rock from the lines and grades shown on the drawings will be allowed. The outside slopes shall present a uniform appearance with a minimum of material projecting outside the finished slope surface.

611-5.01 BASIS OF PAYMENT. *Add the following:* Surface preparation, excavation, furnishing and placing geotextile, and finishing riprap at culvert outfalls shall be subsidiary.

No payment will be made for excavation that is embanked outside the limits of the lines and slopes described in the typical sections and cross sections as defined in the plans and contract documents.

Method of measurement for payment will be in accordance with Section 109 and Section 611(1) "Cubic Yard (yd3)". Volumes based on Survey.

SECTION 617

RAILROAD CROSSINGS

SECTION 618

SEEDING

Delete entire section and replace with the following:

618-1.01 DESCRIPTION. Establish a living vegetative cover in conformance with the Plans and Specifications. This work consists of soil preparation, seeding, establishing and maintaining vegetation-covered areas.

618-2.01 MATERIALS. Use materials that conform to the following:

Water	Use water for irrigating trees, plants, and seeded areas that is free of elements harmful to plant growth.
Seed Type A, B, or C	Section 724 (Modification)
Fertilizer	Section 725
Soil Stabilization Material	Subsection 727-2.01

618-3.01 SOIL PREPARATION. Clear all areas to be seeded of stones 4" and larger in diameter and of all weeds, plant growth, sticks, stumps and other debris or irregularities which may interfere with the seeding, establishment, and maintenance of the vegetated areas.

Prior to the application of seed, prepare slopes using one or more of the following methods:

1. Manual Raking – Requires manual labor with landscaping rakes to produce a uniform pattern of grooves perpendicular to the fall of the slope.
2. Mechanical Raking - Requires the use of a scarifying slope board to produce grooves with an approximate width of 1" x 1" depth and no more than 6" apart. The resultant indentations shall leave a uniform pattern of grooves perpendicular to the fall of the slope.

3. Mechanical Track Walking - Requires operating tracked equipment in such a manner as to leave a uniform pattern of grooves perpendicular to the fall of the slope.

The top and bottom of slopes may be rounded to facilitate tracking or raking. Do not disrupt drainage flowlines.

Where the fill is adjacent to wetlands, the equipment performing slope preparation shall be kept entirely on the fill slope and shall not encroach on the wetlands.

618-3.02 SEEDING SEASON. Perform seeding after the ground is free of snow; within 14 days of cessation of local ground disturbing activity; and no sooner than June 1 and no later than Aug 15, unless approved by the Owner's Representative. Should the construction schedule or weather preclude seeding during the fall season, the Contractor shall be required to perform seeding as soon as climatic and ground conditions permit in the following spring, at the direction of the Owner's Representative. Do not seed when windy conditions, climatic conditions, or ground and soil conditions would hinder seeding establishment. Do not apply on saturated soils. Do not apply if precipitation is anticipated within 24 to 48 hours.

618-3.03 APPLICATION METHOD. Use the Hydraulic Method unless given approval for Mechanical Method by the Owner's Representative.

Hydraulic Method:

1. Seeding by the hydraulic method consists of furnishing and placing a slurry of dye, seed, fertilizer, mulch and water. Strictly comply with product and equipment manufacturer's instructions and recommendations. Apply the slurry mixtures in such a manner, and at a rate of application, that results in an even distribution of all materials.

2. An appropriate dye mix shall be used to change the color to dark green for the purpose of increased solar heat absorption and assisting in application visibility.

3. Do not place seed in the slurry prior to 30 minutes before application. Add the proportionate amount of seed to the water slurry in the hydraulic seeder last, after the proportionate amounts of mulch and fertilizer have been added. Apply the slurry mixture in such a manner, and at a rate of application, that results in an even distribution of all materials. Apply seed, fertilizer, and mulch together in one application.

4. Hydraulic seeding equipment must be capable of maintaining continuous slurry agitation so that a homogeneous, uniform mixture is applied throughout the complete tank load. The pump must be capable of producing sufficient pressure to maintain a continuous, non-fluctuating spray capable of reaching the extremities of the seeding area with the pump & nozzle unit located on the roadbed. Provide sufficient hose to reach areas not practical to seed from the pump & nozzle unit situated on the road bed. Strictly comply with product and equipment manufacturer's instructions and recommendations for slurry mixing. Confirm loading rates with equipment manufacturer.

5. The slurry shall be applied to a damp soil surface (sprinkled down) using a 50-degree tip, fan-type nozzle and shall include applying the slurry back up over the top of slope cuts, merging with the existing vegetation interface, and shall be applied from two opposite directions for complete and uniform ground cover.

Mechanical Method:

1. Use mechanical spreaders, seed drills or other approved mechanical seeding equipment when seed and fertilizer are to be applied in dry form.
2. Water seeding area both prior to and after the application of fertilizer.
3. Spread fertilizer separately from seed.
4. Lightly harrow or cover seed to incorporate.

618-3.04 APPLICATION RATE. Apply seed, fertilizer, and mulch at the rates specified in the table below.

MATERIALS	TYPE	APPLICATION RATE PER ACRE
Seed*	As specified in Subsection 724-2.02	Total 43 lb**
Fertilizer	20-20-10	500 lb
Mulch with Tackifier***	Wood Fiber with Guar Tackifier	3000 lb

*Do not remove the required tags from the seed containers.

**On approval by the Owner's Representative, minimally disturbed wetland areas may be seeded at half the application rate specified.

***Mulch is not required for mechanical seeding. Application rate may be as per manufactures recommendation on approval by Owner's Representative.

618-3.05 MAINTENANCE. Protect seeded areas against erosion and sedimentation. Protect seeded areas against traffic by approved warning signs or barricades. Provide adequate water in a non-erosive manner throughout the seeded area to establish a living vegetative mat. Contractor is responsible for identifying, retracking, reseeding, refertilizing and remulching damaged areas and areas not showing evidence of satisfactory growth within 3 weeks of seeding. A second application of fertilizer is not required.

Maintain seeded areas in a satisfactory condition until either Project Completion or the Owner's Representative accepts the seeding, whichever is sooner.

618-3.06 PERIOD OF ESTABLISHMENT. The establishment period extends until a living vegetative mat equivalent to 70% of background cover density is established.

The Owner's Representative may, but is not required to, determine the Project is complete except for the Period of Establishment, and issue a certificate of Substantial Completion. After Substantial Completion, work or materials due under this subsection during any remaining Period of Establishment are considered warranty obligations that continue to be due prior to Final Project Completion.

618-3.07 ACCEPTANCE. During visual inspection, each station and each side of the road will be considered a separate area. The Owner's Representative will accept seeding when a living vegetative mat equivalent to 70% of background cover density is established in the inspection area. The Contractor shall reseed areas that are not acceptable to the Owner's Representative, and those actions and materials are subsidiary.

618-4.01 METHOD OF MEASUREMENT. Section 109 and as follows:

Measurement for seeding is within the project grading limits. Seeding of additional disturbed areas, including any disturbed wetlands, is subsidiary and will not be measured for payment. Soil preparation, seed, fertilizer, mulch, dye, and all water, labor, and equipment, used in this work including identifying, retracking, reseeding, and remulching damaged areas, is subsidiary and will not be measured directly for payment.

Seeding Type A/B by the Acre. By the plan area of ground surface acceptably seeded and maintained.

618-5.01 BASIS OF PAYMENT. The accepted quantity will be paid for at the contract price, per unit of measurement, for the pay items listed below that appear on the bid schedule. No payment will be made until a living vegetative mat with 70% of background cover density has been established. Payment will be made under:

Pay Item Pay Unit: 618(4) Seeding Type A/B Acre

SECTION 619

SOIL STABILIZATION

SECTION 630

GEOTEXTILE FOR EMBANKMENT SEPARATION AND STABILIZATION

630-3.01 CONSTRUCTION. Delete the numbered paragraph 1. Surface Preparation and replace with the following:

1. Surface Preparation. Prepare the surface by removing sharp objects and cutting all vegetation to within 6 inches of the ground surface, leaving the organic mat intact. Fill holes and large ruts with material shown on the Plans or as approved.

630-5.01 BASIS OF PAYMENT.

Subsidiary to pay items.

SECTION 633

SILT FENCE

SECTION 634

GEOGRID SOIL REINFORCEMENT

634-1.01 DESCRIPTION. Remove and replace with the following:

Furnish and install geogrid and geoweb material at locations shown on the Plans.

634-2.01 MATERIALS. Add the following below Geogrid in this section.

Geoweb Subsection 729-2.06

634-3.02 SURFACE PREPARATION. Delete the numbered paragraph 1. Soft Ground (CBR 1-3) in its entirety

634-3.03 GEOGRID PLACEMENT. Delete the section in its entirety and substitute the following:

1. Placement. Overlap geogrid panels at all joints a minimum of 2 feet in the direction that fill will be placed. If overlap is not able to be maintained during fill placement, tie panels together securely with manufacturer-recommended pins or bars. Hand-tension geogrid and stake to the ground at the edges, overlaps, and in the center of each roll, at 30 foot intervals.

634-5.01 BASIS OF PAYMENT. Add the following pay item:

Subsidiary to pay items.

SECTION 640

MOBILIZATION AND DEMOBILIZATION

640-4.01 METHOD OF MEASUREMENT. Delete the numbered paragraph 3 and substitute the following:

3. The remaining balance of the amount bid for Mobilization and Demobilization will be paid after all submittals required under the Contract are received and approved.

Payment is under the Lump Sum Bid Item covering this work.

SECTION 641

EROSION, SEDIMENT, AND POLLUTION CONTROL

SECTION 642

CONSTRUCTION SURVEYING AND MONUMENTS

Method of Payment: 642(1) Construction Surveying Lump Sum

SECTION 643

TRAFFIC MAINTENANCE

SECTION 685

CORDUROY

685-1.01 DESCRIPTION. Prepare surfaces and furnish and place logs to create a layer of corduroy for embankment stabilization as shown in the Plans.

685-2.01 MATERIALS.

Logs. Use trees with a minimum diameter of 4 inches and a minimum of 10 feet long. Remove branches and roots.

CONSTRUCTION REQUIREMENTS

685-3.01 GENERAL.

1. Surface Preparation. Prepare the surface by removing sharp objects and cutting all vegetation to within 6 inches of the ground surface, leaving the organic mat intact. Fill holes and large ruts with material shown on the Plans or as approved.

2. Corduroy Placement. Place logs directly on to the prepared surface. The logs should be as close together as possible with no more than a 2 inch space between logs (side-by-side and end-to-end). Lay logs perpendicular to the alignment centerline and across the entire grading limits. Logs on the edges of the grading limits may be cut shorter than 10 feet to not extend beyond the grading limit boundary.

685-4.01 METHOD OF MEASUREMENT.

By the square yard, in final position, determined by multiplying plan neat line width by the measured length in final position parallel to installation centerline along the ground surface for installations acceptably completed. No allowance will be made for overlap.

685-5.01 BASIS OF PAYMENT.

Payment will be made under:

SECTION 703

AGGREGATES

703-2.07 SELECTED MATERIAL. *Delete the numbered paragraph 2. Type B and substitute the following:*

2. Type B. Aggregate containing no muck, frozen material, roots, sod or other deleterious matter and with a plasticity index not greater than 6 as tested by WAQTC FOPs for AASHTO T 89 and T 90. Meet the following gradation as tested by WAQTC FOP for AASHTO T 27/T11:

Sieve Size	Percent Passing
No. 4	20-55%
No. 200	0-10% determined on the minus 3-inch portion of the sample

4. Type D. Aggregate containing no muck, frozen material, roots, sod or other deleterious matter and with a plasticity index not greater than 6 as tested by WAQTC FOPs for AASHTO T 89 and T 90. Meet the following gradation as tested by WAQTC FOP for AASHTO T 27/T 11:
Sieve Percent Passing by Weight

No. 4	20-55%
No. 200	0-15%, determined on the minus 3-inch portion of the sample

Add the following Subsection:

703-2.13 DRAIN ROCK. The Contractor shall supply drain rock consisting of screened or washed rock. The drain rock shall meet the following general guidelines:

Sieve Size	Percent Passing
5 inches	100
2.5 inches	90 to 100
1.5 inches	25 to 60
3/4 inch	10 to 25
1/4 inch	0 to 5
#200	0 to 0.3

The rock shall have a percentage wear of not more than 60, as determined by AASHTO T 96. Only rock that is free draining and uncontaminated with fines shall be placed in trench subdrains. Ballast shall be considered an acceptable alternative to drain rock.

SECTION 707

METAL PIPE

Delete Subsection 707-2.07 and replace with the following:

707-2.07 GALVANIZED STEEL WATER CONDUIT. Meet the following:
Galvanized Pipe ASTM A 53 or ASTM A 120, galvanized per AASHTO M 111
Galvanized Fittings ASTM A 234 galvanized per AASHTO M 232

Add the following Subsection:

707-2.08 Polymer Coated Corrugated Steel Pipe, Pipe Arches, and Underdrains.

Meet the applicable requirements of AASHTO M 245 and M 246 for conduits and coupling bands. Meet the specified sectional dimensions, gages, and type of polymeric coating. Fully coat coupling bands with polymeric material.

Use the same gage of steel for special sections, such as flared end sections, as the conduit to which they are joined. Meet the requirements of AASHTO M 245 and M 246. Use the type of coating and invert paving specified.

Meet the specified minimum size of perforations after coating.

SECTION 724

SEED

724-2.02 MATERIALS. *Add the following:* Unless directed otherwise by the Owner's Representative, seed shall be as follows:

On all embankment fill slopes adjacent to wetlands, use Seed Type B. In any disturbed wetland areas, use Seed Type C.

Seed Type B	% of Total Mix	Minimum Percent Sproutable Seed (pure live seed)
Tufted Hairgrass (<i>Deschampsia caespitosa</i> 'Nortran')	60%	71
Red Fescue (<i>Festuca rubra</i> 'Arctared' or 'Boreal')	30%	78
Annual Ryegrass (<i>Lolium multiflorum</i>)	10%	76

Seed Type C	% of Total Mix	Minimum Percent Sproutable Seed (pure live seed)
Tufted Hairgrass (<i>Deschampsia caespitosa</i> 'Nortran')	60%	71
American Sloughgrass (<i>Beckmannia syzigachne</i> 'Egan')	30%	67
Alpine Bluegrass (<i>Poa alpina</i> 'Grueing')	5%	72
Annual Ryegrass (<i>Lolium multiflorum</i>)	5%	76

SECTION 725

FERTILIZER

725-2.02 MATERIALS. *Add the following:* Successful seed germination shall be enhanced through the use of a low-release nitrogen, phosphorus, and potassium (N-PK) fertilizer (20-20-10) that will be applied at a rate of 450 pounds per acre using a hydraulic hydroseeding method.

Fertilizer shall be mixed into the hydroseed slurry for areas receiving hydroseeding.

Fertilizer shall be broadcast by hand in areas where machinery use is not recommended and wherever the dry seeding method is used.

Dry fertilizer shall be applied shortly before a rainfall or watered after application whenever possible.

An application of 8-32-16 fertilizer at a rate of 5 pounds per thousand square feet shall be applied to areas where vegetation has been damaged by construction immediately after vacating site.

SECTION 727

SOIL STABILIZATION MATERIAL

727-2.01 MULCH. *Add the following:*

3. Wood Fiber with Guar Tackifier. Submit manufacturer's product data and installation instruction. Provided certification by the manufacturer that the product meets or exceeds all requirements

Processed wood fiber with the following characteristics:

a. Wood shall be composed of long strand, thermally refined (within a pressure vessel) wood fibers that have been pressure treated to 80-85 psi with steam and heat treated for 15 minutes at 380-440 degrees Fahrenheit. The commercial product EcoFibre™ is acceptable but other products may be used on approval by the Owner's Representative.

b. Contains no germination- or growth-inhibiting factors.

c. Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form a homogeneous slurry.

d. Will form a blotter-like ground cover on application, having moisture absorption and percolation properties and the ability to cover and hold grass seed in contact with soil.

e. Dyed dark green for the purpose of increased solar heat absorption and to facilitate inspection of its placement.

Ship the mulch material in packages of uniform weight (plus or minus 5%) and bearing the name of the manufacturer and the air-dry weight content

Use a commercial guar based tackifier on all slopes in the following proportions:

Wood Fiber: 85% +/- 3%
 Guar Based Tackifier: 3% +/- 1%
 Moisture Content: 12% +/- 3%

4. High-Performance Flexible Growth Medium (HP-FGM). Submit manufacturer's product data and installation instruction. Provided certification by the manufacturer that the product meets or exceeds all requirements.

Processed wood and man-made fibers, mineral activators, crosslinked biopolymers and water absorbents with the following characteristics:

- a. Wood fibers shall be thermally processed for 5 minutes at 380 degrees Fahrenheit at a pressure greater than 50 psi.
- b. Crimped, man-made biodegradable interlocking fibers shall contain a minimum of 50 million fibers per bag
- c. Mineral activators shall contain a minimum of 80 million particles per bag.
- d. Is phytosanitized, and contains no germination- or growth-inhibiting factors.
- e. HP-FGM shall conform to the following property values when uniformly applied at a rate of 3500 pounds per acre under laboratory conditions.

Property	Test Method	Req. Value (English)	Req. Value (SI)
Physical			
Mass Per Unit Area	ASTM D6566 ¹	12 oz/yd ² minimum	405 g/m ² minimum
Thickness	ASTM D6525 ¹	0.22 inch minimum	5.6 mm. minimum
Wet Bond Strength	ASTM D6818 ¹	9 lb/ft	131 N/m
Ground Cover	ASTM D6567 ¹	99% minimum	99% minimum
Water Holding Capacity	ASTM D7367	1600% minimum	1600% minimum
Material Color	Observed	Green	Green
Cover Factor ²	Large Scale Testing ⁴	0.01 maximum	0.01 maximum
% Effectiveness ³	Large Scale Testing ⁴	99 % minimum	99 % minimum
Cure time	Observed	0 - 2 hours	0 - 2 hours
Vegetation Establishment	ASTM D7322 ¹	800 % minimum	800 % minimum
Yield ⁵	Calculated	2.6 minimum	2245 minimum
Kinetic Energy Absorption Potential ⁶	Calculated	2.0 minimum	734 minimum
Functional Longevity ⁷	ASTM D5338	> 12 months	> 12 months
Ecotoxicity	EPA 2021.0	96-hr LC50 > 100%	96-hr LC50 > 100%
Effluent Turbidity	Large Scale Testing ⁴	100 NTU maximum	100 NTU maximum
Biodegradability	ASTM D5338	100% minimum	100% minimum

1. ASTM test methods developed for Rolled Erosion Control Products and have been modified to accommodate Hydraulically-Applied Erosion Control Products.
 2. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface.
 3. % Effectiveness = One minus Cover Factor multiplied by 100%.
 4. Data to be provided from Utah Water Research Laboratory only (with the following minimum parameters: 2.5H:1V slope, Sandy Loam Soil, 4 mm average raindrops, 5 in/hr event for 60 minutes) .
 5. Yield = (Mass per Unit Area)*(Thickness)*(Ground Cover Percentage)
 6. Kinetic Energy Absorption Potential = (Wet Bond Strength)*(Thickness)
 7. Functional Longevity is the estimated time period, based upon ASTM D5338 testing and field observations, that a material can be anticipated to provide erosion control and agronomic benefits as influenced by composition, as well as site-specific conditions, including; but not limited to – temperature, moisture, light conditions, soils, biological activity, vegetative establishment and other environmental factors.
- Mix the HP-FGM components in the following proportions. No chemical additives with the exception of fertilizer, soil pH modifiers, extended-term dyes and biostimulant material should be added.

Thermally Processed Wood Fiber: 80% +- 3%
 Crosslinked Biopolymers and Water Absorbents: 10% +- 1%
 Crimped, Man-made Biodegradable Interlocking Fibers: 5% +- 1%
 Mineral Activators: 5%+- 1%

SECTION 729

GEOSYNTHETICS

Delete this section in its entirety and replace with the following:

729-2.01 GEOTEXTILE, SEPARATION AND STABILIZATION.

1. Separation and Stabilization. Shall be a woven geotextile material and meet the physical requirements in Table 729-1.

729-2.02 GEOTEXTILE, SUBSURFACE DRAINAGE AND EROSION CONTROL.

1. Subsurface Drainage. Meet AASHTO M 288 for Subsurface Drainage.
2. Erosion Control. Meet AASHTO M 288 for Permanent Erosion Control except that the minimum permeability of the fabric shall be 0.002 cm/sec.

729-2.03 PAVING FABRIC. Meet AASHTO M 288 for Paving Fabric.

729-2.04 SILT FENCE. Meet AASHTO M 288 for Temporary Silt Fence except that the minimum permeability of the fabric shall be 0.002 cm/sec.

729-2.05 GEOGRID. Biaxial or Triaxial polymer grid, specifically fabricated for use as a soil reinforcement, having high tensile strength, modulus, and stiffness in both principal directions (for biaxial grid) or in three directions (for triaxial grid). Use a single-layered, integrally-formed grid structure. Use either extruded or punched and drawn polypropylene or high density polyethylene. Geogrid must be UV-stabilized, chemically inert, and meet the physical requirements in Table 729-2 (biaxial grid) or Table 729-3 (triaxial grid).

Package, label, handle, and store geogrid material according to ASTM D 4873.

729-2.06 GEOWEB. Material shall be polyethylene stabilized with carbon black. Individual cells shall be uniform in shape and size when expanded. Geoweb must meet the physical requirements in Table 729-4.

**TABLE 729-1
GEOTEXTILE, SEPARATION AND STABILIZATION MINIMUM AVERAGE ROLL VALUES**

Non-woven geotextile	
Apparent Opening Size by ASTM D4751	US Sieve 80
Puncture by ASTM D6241	525 lb
Trapezoidal Tear by ASTM D4533	80 lb
Grab Tensile/Elongation by ASTM D4632	205 lb/50 percent
Woven geotextile	
Apparent Opening Size by ASTM D4751	US Sieve 40
Tensile Modulus @ 2% strain (CD) ASTM D4595	90,000 lbs/ft
Factory Seam Strength ASTM D4884	3000 lbs/ft
UV Resistance ASTM D4355	80 (% retained)

**TABLE 729-2
BIAXIAL GEOGRID MINIMUM AVERAGE ROLL VALUES**

Aperture Dimension	1 in.
Minimum Rib Thickness	0.05 in.
True Initial Modulus in Use	27,420 lb/ft
True Tensile Strength @ 2% Strain by ASTM D6637-01	410 lb/ft
True Tensile Strength @ 5% Strain by ASTM D6637-01	810 lb/ft
Junction Efficiency by GRI-GG2-01	93 percent
Flexural Stiffness by ASTM D5732-95	4.2 lb-in
Aperture Stability by COE-Kinney, 2001	6.5 degrees

**TABLE 729-3
 TRIAXIAL GEOGRID MINIMUM AVERAGE ROLL VALUES**

	Longitudinal	Diagonal	Transverse	General
Rib Pitch	1.6 in.	1.6 in.		
Mid-Rib Depth		0.08 in.	0.06 in.	
Mid-Rib Width		0.04 in.	0.05 in.	
Rib Shape				Rectangle
Aperture Shape				Triangle

**TABLE 729-4
 GEOWEB MINIMUM AVERAGE ROLL VALUES**

Individual Cell Dimensions (plus/minus 10%)	11.3 inches by 12.5 inches
Nominal Area (plus/minus 1%)	71.3 square inches
Nominal Cell Depth	6 inches
Strip Sheet Thickness	50 mils, minus 5%, plus 10%
Short Term Seam Peel-Strength Test	480 lbf

END OF TECHNICAL SPECIFICATIONS

APPENDIX E

FORMS

THIS PAGE INTENTIONALLY LEFT BLANK

CONTRACTOR RESPONSIBILITY QUESTIONNAIRE

PART I - INSTRUCTIONS

1. All Bidders/Proposers submitting a Bid/Proposal for federally funded contracts are to complete and submit all Parts of this Questionnaire with their Bid or Proposal. Failure to complete and return this questionnaire, any false statements, or failure to answer question when required, may render the bid/proposal non-responsive. All responses must be typewritten or printed in ink. All information must be legible.
2. Please state "not applicable" in questions clearly not applicable to Bidder/Proposer in connection with this solicitation. Do not omit any question.
3. The completed Questionnaire must be sworn to by a partner (if partnership), a duly authorized officer or individual (if a corporation or LLC), or a principal (if a sole proprietorship).
4. The term "Proposer" includes the term "Bidder" and also refers to the firm awarded the Contract. The term "Proposal" includes the term "Bid".
5. ARRC reserves the right to inquire further with respect to Proposer's responses; and Proposer consents to such further inquiry and agrees to furnish all relevant documents and information as requested by ARRC. Any response to this document prior or subsequent to Proposer's Proposal which is or may be construed as unfavorable to Proposer will not necessarily automatically result in a negative finding on the question of Proposer's responsibility or a decision to terminate the contract if it is awarded to Proposer.

PART II - IDENTITY OF PROPOSER

1. Proposer's Full Legal Name: _____
2. The Proposer represents that it operates as the following form of legal entity: (Check whichever applies and fill in any appropriate blanks.)
 - an individual or sole proprietorship
 - a general partnership
 - a limited partnership
 - a joint venture consisting of: _____
and _____
(List all joint ventures on a separate sheet if this space is inadequate.)
 - a non-profit organization
 - a corporation organized or incorporated under the laws of the following state or country: _____ on the following date: _____
 - a limited liability company organized under the laws of the following state or country: _____ on the following date: _____
3. Proposer's federal taxpayer identification number: _____
4. Proposer's Alaska business license number: _____

5. Proposer's contractor's license number (for construction only): _____

6. Proposer's legal address: _____

Telephone Number: (____) _____ Fax Number: (____) _____

7. Proposer's local or authorized point of contract address:

Name: _____ Title: _____

Address: _____

Telephone Number: (____) _____ Fax Number: (____) _____

8. How long has the Proposer been in business? _____

9. Has Proposer been in business under another name? If so, identify name and dates used.

10. Does your firm consider itself to be an MBE, WBE or DBE?

YES NO

If answer is "YES," attach a copy of certification.

11. Number of employees: _____ including _____ employees in the State of Alaska.

PART III-CONTRACTING HISTORY

1. Has the Proposer been awarded any contracts within the last five years by ARRC, the State of Alaska, or any other public entity for the same or reasonably similar goods or services sought by this solicitation? If none, answer "No". If yes, on a separate sheet of paper describe those contracts beginning with the most recent. State the name of the contracting entity; give a brief description of the contract and the contract number, the dollar amount at award and at completion, date completed; state the contract period, the status of the contract, and the name, address, and telephone number of a contact person at the agency. Indicate if award was made to Proposer as prime contractor or joint venture. Proposer need not provide more than three such descriptions.

YES NO

2. Has the Proposer been awarded any private sector contracts within the last five years for the same or reasonably similar goods or services sought by this solicitation? If none, answer "No." If yes, on a separate sheet of paper provide the name and address of the contracting entity, a brief description of work, the dollar amount at award and at completion, date completed, status of the contract and name, address and telephone number of contact person as to each, beginning with the most recent. Indicate if Proposer acted as prime contractor or joint venture. Proposers need not provide more than three such descriptions.

YES NO

NOTE: ANY "YES" ANSWERS TO #3 BELOW MUST BE FULLY EXPLAINED ON A SEPARATE SHEET OF PAPER AND ATTACHED TO THIS QUESTIONNAIRE.

3. In the past five years has the Proposer been the subject of any of the following actions?
- A. Been suspended, debarred, disqualified, or otherwise declared ineligible to bid?
YES NO
 - B. Failed to complete a contract for a public or private entity?
YES NO
 - C. Been denied a low-bid contract in spite of being the low bidder?
YES NO
 - D. Had a contract terminated for any reason, including default?
YES NO
 - E. Had liquidated damages assessed against it during or after completion of a contract?
YES NO
 - F. Been a defaulter, as principal, surety or otherwise?
YES NO
 - G. Been denied an award of a public contract based upon a finding by a public agency that your company was not a responsible contractor?
YES NO
 - H. A public entity requested or required enforcement of any of its rights under a surety agreement on the basis of your company's default or in lieu of declaring your company in default?
YES NO
 - I. Been denied a performance or payment bond by a surety company?
YES NO
 - J. Been required to pay back wages and/or penalties for failure to comply with state or federal prevailing wage or overtime laws?
YES NO
4. Does Proposer currently possess the financial, organizational, technical, equipment, facilities, and other resources necessary to supply the goods or services sought by this solicitation? If no, on a separate sheet of paper describe how you intend to obtain the resources necessary to supply the goods or services sought by this solicitation.
YES NO
5. Does Proposer have any present or anticipated commitments and/or contractual obligations that might impact its ability to meet the required delivery or performance requirements of this solicitation? If yes, on a separate sheet of paper describe any apparent conflicts as between the requirements/commitments for this solicitation with respect to the use of Proposer's resources, such as management, technical expertise, financing, facilities, equipment, etc.

YES NO

PART IV-CIVIL ACTIONS

If "Yes" to Parts IV or V, provide details on a separate sheet of paper including a brief summary of cause(s) of action; indicate if Proposer, its principals, officers or partners were plaintiffs or defendants; define charges explicitly, by what authority, court or jurisdiction, etc. In the case of tax liens, please indicate whether the liens were resolved with the tax authorities. Please submit proof of payment or agreements to pay the liens. Complete details are required!

1. Violations Of Civil Law. In the past five years has Proposer, any of its principals, officers or partners been the subject of an investigation of any alleged violation of a civil antitrust law, or other federal, state or local civil law?

YES NO

2. Lawsuits With Public Agencies. At the present time is, or during the past five years has Proposer, any of its principals, officers or partners been a plaintiff or defendant in any lawsuit or arbitration regarding services or goods provided to a public agency?

YES NO

3. Bankruptcy. During the past five years, has the Proposer filed for bankruptcy or reorganization under the bankruptcy laws?

YES NO

4. Judgments, Liens And Claims. During the past five years, has the Proposer been the subject of a judgment, lien or claim of \$25,000 or more by a subcontractor or supplier?

YES NO

5. Tax Liens. During the past five years, has the Proposer been the subject of a tax lien by federal, state or any other tax authority?

YES NO

PART V-COMPLIANCE WITH LAWS AND OTHER REGULATIONS

1. Criminal: In the past five years has the Proposer, any of its principals, officers, or partners been convicted or currently charged with any of the following:

A. Fraud in connection with obtaining, attempting to obtain, or performing a public contract, agreement or transaction?

YES NO

B. Federal or state antitrust statutes, including price fixing collusion and bid rigging?

YES NO

C. Embezzlement, theft, forgery, bribery, making false statements, submitting false information, receiving stolen property, or making false claims to any public agency?

YES NO

D. Misrepresenting minority or disadvantaged business entity status with regard to itself or one of its subcontractors?

YES NO

E. Non-compliance with the prevailing wage requirements of the State of Alaska or similar laws of any other state?

YES NO

F. Violation of any law, regulation or agreement relating to a conflict of interest with respect to a government funded procurement?

YES NO

G. Falsification, concealment, withholding and/or destruction of records relating to a public agreement or transaction?

YES NO

H. Violation of a statutory or regulatory provision or requirement applicable to a public or private agreement or transaction?

YES NO

I. Do any principals, officers or partners in Proposer's company have any felony charges pending against them that were filed either before, during, or after their employment with the Proposer?

YES NO

2. Regulatory Compliance. In the past five years, has Proposer or any of its principals, officers or partners:

A. Been cited for a violation of any labor law or regulation, including, but not limited to, child labor violations, failure to pay correct wages, failure to pay into a trust account, failure to remit or pay withheld taxes to tax authorities or unemployment insurance tax delinquencies?

YES NO

B. Been cited and assessed penalties for an OSHA or Alaska/OSHA "serious violation"?

YES NO

C. Been cited for a violation of federal, state or local environmental laws or regulations?

YES NO

D. Failed to comply with Alaska corporate registration, federal, state or local licensing requirements?

YES NO

E. Had its corporate status, business entity's license or any professional certification, suspended, revoked, or had otherwise been prohibited from doing business in the State of Alaska?

YES NO

PART VI-FINANCIAL

Copies of the following documents are to be submitted with this Questionnaire:

1. Proposer's current Alaska Business License, if required by state law.
2. Proposer's Financial Statements (see specific requirements below):

A. PUBLICLY TRADED COMPANIES: Financial information will be accessed on-line. However, if additional information is needed, it will be specifically requested from the Proposer.

B. NON-PUBLICLY TRADED COMPANIES WITH AUDITED OR REVIEWED FINANCIAL STATEMENTS: Statements, including balance sheet, statement of earnings and retained income, with footnotes, for the most recent three years.

C. NON-PUBLICLY TRADED COMPANIES WITHOUT AUDITED OR REVIEWED FINANCIAL STATEMENTS: Company generated financial statements, including balance sheet, statement of earnings and retained income for the most recent three years. The Chief Financial Officer of the corporation, a partner, or owner, as appropriate, must certify these financial statements.

D. SOLE PROPRIETORSHIPS: Refer to C. If financial statements are not generated, please fill out and sign the Financial Statement form attached hereto. Submit one form for each of the most recent three years.

NOTE: ARRC reserves the right to ask for additional documentation if it is reasonably required to make a determination of integrity and responsibility relevant to the goods or services the Proposer will provide to ARRC if awarded a contract. All financial information provided is considered confidential and not subject to public disclosure under Alaska law.

PART VII -VERIFICATION AND ACKNOWLEDGMENT

The undersigned recognizes that the information submitted in the questionnaire herein is for the express purpose of inducing ARRC to award a contract, or to allow Proposer to participate in ARRC projects as contractor, subcontractor, vendor, supplier, or consultant. The undersigned has read and understands the instructions for completing this Questionnaire.

STATE OF _____

COUNTY OF _____

I, (printed name) _____, being first duly sworn, state that I am the (title) _____ of Proposer. I certify that I have read and understood the questions contained in the attached Questionnaire, and that to the best of my knowledge and belief all information contained herein and submitted concurrently or in supplemental documents with this Questionnaire is complete, current, and true. I further acknowledge that any false, deceptive or fraudulent statements on the Questionnaire will result in denial or termination of a contract.

I authorize ARRC to contact any entity named herein, or any other internal or outside resource, for the purpose of verifying information provided in the Questionnaire or to develop other information deemed relevant by ARRC.

Signature of Certifying Individual

Date

Subscribed and sworn to before me this _____ day of _____, 20__

Signature of Notary

Notary Public in and for the State of _____

My Commission Expires: _____

NOTICE TO PROPOSERS

A material false statement, omission or fraudulent inducement made in connection with this Questionnaire is sufficient cause for denial of a contract award or revocation of a prior contract award, thereby precluding the Proposer from doing business with, or performing work for ARRC, either as a vendor, prime contractor, subcontractor, consultant or subconsultant for a period of five years. In addition, such false submission may subject the person and/or entity making the false statement to criminal charges under applicable state and/or federal law.

Financial Statement

To be completed by Proposers that do not produce company generated financial statements, including balance sheet, statement of earnings and retained income for the most recent three years (one sheet per year.)

ASSETS

Cash on Hand and in Banks	\$ _____
Account and Notes Receivable	\$ _____
Fixed Assets (net of depreciation)	\$ _____
Other Assets	\$ _____
Total Assets	\$ _____

LIABILITIES

Accounts Payable	\$ _____
Notes Payable to Banks in next twelve months	\$ _____
Notes Payable to Others	\$ _____
Taxes Payable	\$ _____
Long Term Liabilities (More than twelve months)	\$ _____
Other Liabilities	\$ _____
Total Liabilities	\$ _____
Net Worth	\$ _____

INCOME FROM OPERATIONS

Revenue	\$ _____
Interest	\$ _____
Cost of Goods Sold (if appropriate)	\$ _____
Gross Profit	\$ _____
General & Administrative Expenses	\$ _____
Depreciation	\$ _____
Interest Paid	\$ _____
Net Gain or Loss	\$ _____

I hereby certify that the above information is true and accurate to the best of my knowledge and belief. I understand false statements may result in denial of a contract, and possible debarment for a period of five years.

Signature of Owner or Officer

Date Signed

Company Name

For the Year Ended

Federal ID #

**ALASKA RAILROAD CORPORATION
CONSTRUCTION BID FORM of**

NAME _____

ADDRESS _____

To the CONTRACTING OFFICER, ALASKA RAILROAD CORPORATION:

In compliance with your Invitation to Bid Number, Invitation to Bid 19-36-207551, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the Potter Hill Earthquake Damage Repair & Restoration, located at or near Anchorage, Alaska according to the plans and specifications and for the amount and prices named herein as indicated on the Cost Schedule, which is made a part of this Bid.

The Undersigned declares that he/she has carefully examined the contract requirements and that he/she has made a personal examination of the site of the work; that he/she understands that the quantities, where such are specified in the Cost Schedule or on the plans for this Project, are approximate only and subject to increase or decrease, and that he/she 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 **Ten (10) 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 Alaska Railroad Corporation as liquidated damages, and said Contracting Officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within **Ten (10) Calendar Days** after the effective date of the Notice to Proceed and to complete the work by _____, unless extended in writing by the Contracting Officer.

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

The Undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each).

Addenda No.	Date Issued	Addenda No.	Date Issued	Addenda No.	Date Issued
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NON-COLLUSION AFFIDAVIT

The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he/she nor the firm, association, or corporation of which he/she is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this Bid.

The Undersigned has read the foregoing proposal and hereby agrees to the conditions stated therein by affixing his/her signature below:

Signature

Name and Title of Person Signing

Telephone Number

Facsimile Number

Form 395-0121 (12/99)

ALASKA RAILROAD CORPORATION - BID BOND

for ITB 19-36-207551 Potter Hill Earthquake Damage Repair & Restoration

DATE BOND EXECUTED

PRINCIPAL (Legal name and business address)	TYPE OF ORGANIZATION
	<input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION
	STATE OF INCORPORATION

SURETY(IES) (Name and business address)		
A.	B.	C.

PENAL SUM OF BOND	DATE OF BID
--------------------------	--------------------

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the Alaska Railroad Corporation (ARRC), 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 or proposal in writing, date as shown above, on the following project: _____, in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefore, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he/she is offered the proposed contract for award, and if Principal fails to enter into the contract, then the obligation to ARRC created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL				
Signature(s)	1.	2.	3.	Corporate Seal
Name(s) & Titles [Typed]	1.	2.	3.	

CORPORATE SURETY(IES)				
S U R E T Y A	Name of Corporation		State of Incorporation	Liability Limit \$
	Signature(s)	1.	2.	Corporate Seal
	Name(s) & Titles [Typed]	1.	2.	

CORPORATE SURETY(IES)

S U R E T Y B	Name of Corporation		State of Incorporation	Liability Limit \$
	Signature(s)	1.	2.	Corporate Seal
	Name(s) & Titles [Typed]	1.	2.	

CORPORATE SURETY(IES)

S U R E T Y C	Name of Corporation		State of Incorporation	Liability Limit \$
	Signature(s)	1.	2.	Corporate Seal
	Name(s) & Titles [Typed]	1.	2.	

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.

Form 395-0120

ALASKA RAILROAD CORPORATION

SUBCONTRACTOR LIST

[First Tier Subcontractors Only]

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 (5th) Working Day** after receipt of written notice from the Alaska Railroad Corporation.

Failure to submit this form with all required information by the due date will result in the bidder being declared non-responsive and may result in the forfeiture of the Bid Security.

Scope of work must be clearly defined. If an item of work is to be performed by more than one (1) firm, indicate the portion or percent of work to be done by each.

Check as applicable: All work on the below-referenced project will be accomplished without subcontracts greater than ½ of 1% of the contract amount.

Or

Subcontractor List is as follows:

FIRM NAME, ADDRESS, TELEPHONE NUMBER	BUSINESS LICENSE NUMBER AND CONTRACTOR'S REGISTRATION NUMBER	SCOPE OF WORK TO BE PERFORMED	TOTAL DOLLAR AMOUNT OF WORK

[CONTINUE SUBCONTRACTOR INFORMATION ON REVERSE]

I hereby certify that the above-listed licenses and registrations were valid at the time bids were received for this project. For contracts involving Federal-aid funding, Alaska Business License and Contractor Registration will be required prior to award of a subcontract.

COMPANY NAME

SIGNATURE BY AND FOR THE BIDDER

COMPANY ADDRESS

PRINTED NAME OF BIDDER

COMPANY ADDRESS

DATE OF BID

CONTACT PHONE NUMBER

CONTACT FAX NUMBER

Form 395-0131

FIRM NAME, ADDRESS, TELEPHONE NUMBER	BUSINESS LICENSE NUMBER AND CONTRACTOR'S REGISTRATION NUMBER	SCOPE OF WORK TO BE PERFORMED	TOTAL DOLLAR AMOUNT OF WORK

**ALASKA RAILROAD CORPORATION
PAYMENT BOND**

KNOW ALL PERSONS BY THESE PRESENTS:

That _____
of: _____ as Principal,
and _____
of: _____ as Surety,
firmly bound and held unto the Alaska Railroad Corporation 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 Alaska Railroad Corporation, 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 Alaska Railroad Corporation,
on the _____ of _____, 20_____,
for _____, said work to be done
according to the terms of said contract. **ARRC Project: ITB 19-36-207551, Potter Hill Earthquake
Damage Repair & Restoration**

NOW, THEREFORE, the conditions of the foregoing obligation is 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.

IN WITNESS WHEREOF, We have hereunto set our hands and seals this _____ day of
_____, 20_____.

Principal: _____

Address: _____

Telephone Number: _____

Contact Name: _____

By: _____

By: _____

Surety: _____

Address: _____

Contact Name: _____

By: _____

By: _____

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

Alaska Railroad Corporation [Authorized Representative] _____ Date
(Instructions on Next Page)

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, telephone number, and point of contact of the Principal and Surety shall be inserted 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 entered in words and in figures.
4. 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.

Form 395-0126

**ALASKA RAILROAD CORPORATION
PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS:

That _____
of: _____ as Principal,
and _____
of: _____ as Surety,
firmly bound and held unto the Alaska Railroad Corporation 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 Alaska Railroad Corporation, 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 Alaska Railroad Corporation,
on the _____ of _____, 20____,
for _____,

said work to be done according to the terms of said contract. **ARRC Project: ITB 19-36-207551,
Potter Hill Earthquake Damage Repair & Restoration**

NOW, THEREFORE, the conditions of the foregoing obligation is such that if the said Principal shall well
and truly perform and complete all obligations and work under said contract and if the Principal shall
reimburse upon demand of the Alaska Railroad Corporation any sums paid him/her which exceed the
final payment determined to be due upon completion of the project, then these presents shall become null
and void; otherwise they shall remain in full force and effect.

IN WITNESS WHEREOF, We have hereunto set our hands and seals this _____ day of
_____, 20_____.

Principal: _____

Address: _____

Telephone Number: _____

Contact Name: _____

By: _____

By: _____

Surety: _____

Address: _____

Contact Name: _____

By: _____

By: _____

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

Alaska Railroad Corporation

[Authorized Representative] Date

(Instructions on Next Page)

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, telephone number, and point of contact of the Principal and Surety shall be inserted 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 entered in words and in figures.
4. 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.

Form 395-0127

**ALASKA RAILROAD CORPORATION
CONSTRUCTION CONTRACT**

Contract Number: _____ OC

This CONTRACT, between the ALASKA RAILROAD CORPORATION, herein called ARRC, acting by and through its Contracting Officer, and _____.

a Corporation, incorporated under the laws of the State of Alaska, its successors and assigns, hereinafter called the Contractor, is effective the date of the signature of the Contracting Officer on this document.

Billing Information: Invoices shall be submitted to Accounts Payable, Alaska Railroad Corporation, PO Box 107500, Anchorage, AK 99510-7500. Please reference your contract number on all invoices and correspondence.

WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by ARRC, 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 following project: **ITB 19-36-207551, Potter Hill Earthquake Damage Repair & Restoration** at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of: **Bid amount _____ dollars and /cents (\$_____.00)** for the Base Bid and such other items as are mentioned in the original Bid, which Bid and prices named, together with the Contract Documents (Invitation to Bid, Addenda & Contract) and Contractors Bid are made a part of this Contract and accepted as such, the project being situated near Anchorage, Alaska.

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 shall be allowed by ARRC, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by ARRC. In no event shall ARRC 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 ARRC. 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 any 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 ARRC, **September 16, 2020.**

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 ARRC, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, ARRC shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, ARRC shall have

the right to recover liquidated damages as spelled out in General Conditions, Construction. The bonds given by the Contractor in the sum of: **100% of Bid Amount \$_____ Payment Bond, and 100% of Bid Amount \$_____ Performance Bond**, to secure the proper compliance with the terms and provisions of this Contract, are submitted herewith and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree to its terms and conditions.

CONTRACTOR

Name of Contractor

Signature

Date

Name and Title

(Corporate Seal)

ALASKA RAILROAD CORPORATION

Contracting Officer (Signature)

Date

Typed or Print Name

Form 395-0122

APPENDIX F

REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONTRACTS [Revised June 9, 2017]

The following contract provisions shall apply, where applicable, to all work performed on the contract by the contractor's own organization and by subcontractors. As provided in this Section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions and further require their inclusion in any lower tier subcontracts or purchase orders that may in turn be made. Incorporation by reference shall not be allowed. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all applicable Required Contract Provisions.

1. CARGO PREFERENCE REQUIREMENTS - 46 USC 55305; 46 CFR Part 381 [Applicable to all Federal-aid contracts involving equipment, materials or commodities which may be transported by ocean vessel]

Cargo Preference-Use of United States Flag Vessels - The contractor agrees: **a. to use** privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; **b. to furnish** within twenty (20) working days following the date of loading for shipments originating within the United States or within thirty (30) working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding subsection to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to ARRC (through the contractor in the case of a subcontractor's bill-of-lading.) **c. to include these** requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

2. DEBARMENT, SUSPENSION, INELIGIBILITY & VOLUNTARY EXCLUSION - 2 CFR Part 180 & Part 1200; 2 CFR 200.213; Executive Orders 12549 & 12689 [Applicable to all Federal-aid contracts which exceed \$25,000]

The Contractor shall comply and facilitate compliance with U.S. DOT regulations, "Non-procurement Suspension and Debarment," 2 CFR Part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement)," 2 CFR Part 180. As such, the Contractor shall verify that its principals, affiliates, and subcontractors are eligible to participate in this federally funded contract and are not presently declared by any Federal department or agency to be:

- a) Debarred from participation in any federally assisted Award;
- b) Suspended from participation in any federally assisted Award;
- c) Proposed for debarment from participation in any federally assisted Award;
- d) Declared ineligible to participate in any federally assisted Award;
- e) Voluntarily excluded from participation in any federally assisted Award; or
- f) Disqualified from participation in any federally assisted Award.

By signing this contract and/or submitting its bid or proposal, the Contractor, bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the ARRC. If it is later determined by the ARRC that the Contractor, bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the ARRC, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The Contractor, bidder or proposer agrees to comply with the requirements of 2 CFR Part 180, subpart C, as supplemented by 2 CFR Part 1200, while its offer is valid and throughout the period of any contract that may arise from its offer. The contractor, bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

3. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS - 40 USC 3141-3148; 49 USC 5333(a); 29 CFR Part 5; 2 CFR Part 200, App. II (D) [Applicable to all Federal-aid construction contracts which exceed \$2,000]

(1) Minimum wages - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the

amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or

(C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(v)(A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or

(C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(2) Withholding - ARRC shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, ARRC may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to ARRC for transmission to the Federal grantor agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal grantor agency or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees - (i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the

contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements - The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

(6) Subcontracts - The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment - A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements - All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards - Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

4. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - 40 USC 3701-3708.; 29 CFR Part 5; 29 CFR 1926; 2 CFR Part 200, App. II (E) [Applicable to all Federal-aid construction in excess of \$100,000 and all nonconstruction contracts which employ mechanics and laborers on a public work in excess of \$100,000]

A. Overtime (Applicable to construction and nonconstruction contracts)

(1) Overtime requirements - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) Withholding for unpaid wages and liquidated damages - ARRC shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) Subcontracts - The contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.

(5) Payrolls and basic records - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship

programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

B. Contract Work Hours and Safety Standards Act (Applicable to construction contracts only) (i) The Contractor agrees to comply with section 107 of the Contract Work Hours and Safety Standards Act, 40 USC § 333, and applicable DOL regulations, "Safety and Health Regulations for Construction" 29 CFR Part 1926. Among other things, the Contractor agrees that it will not require any laborer or mechanic to work in unsanitary, hazardous, or dangerous surroundings or working conditions.

(ii) **Subcontracts** - The Contractor also agrees to include the requirements of this section in each subcontract. The term "subcontract" under this section is considered to refer to a person who agrees to perform any part of the labor or material requirements of a contract for construction, alteration or repair. A person who undertakes to perform a portion of a contract involving the furnishing of supplies or materials will be considered a "subcontractor" under this section if the work in question involves the performance of construction work and is to be performed: (1) directly on or near the construction site, or (2) by the employer for the specific project on a customized basis. Thus, a supplier of materials which will become an integral part of the construction is a "subcontractor" if the supplier fabricates or assembles the goods or materials in question specifically for the construction project and the work involved may be said to be construction activity. If the goods or materials in question are ordinarily sold to other customers from regular inventory, the supplier is not a "subcontractor." The requirements of this section do not apply to contracts or subcontracts for the purchase of supplies or materials or articles normally available on the open market.

5. FEDERAL WATER POLLUTION CONTROL ACT- 33 USC 1251-1387; 2 CFR Part 200, App. II (G) [Applicable to all Federal-aid contracts which exceed \$150,000]

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. The Contractor agrees to report each violation to ARRC and understands and agrees that ARRC will, in turn, report each violation as required to assure notification to the Federal grantor agency and the appropriate EPA Regional Office. (2) The Contractor also agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal funds.

6. CLEAN AIR ACT - 42 USC 7401-7671q; 2 CFR Part 200, App. II (G) [Applicable to all Federal-aid contracts which exceed \$150,000]

(1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 USC 7401 et seq. The Contractor agrees to report each violation to ARRC and understands and agrees that ARRC will, in turn, report each violation as required to assure notification to the Federal grantor agency and the appropriate EPA Regional Office. (2) The Contractor also agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal funds.

7. ACCESS TO RECORDS AND REPORTS – 49 USC 5325(g); 2 CFR 200.333; 49 CFR Part 633 [Applicable to all Federal-aid contracts]

Access to Records - The following access to records requirements apply to this Contract:

1. Contractor agrees to provide ARRC, the Federal grantor agency, the Comptroller General, or any of their duly authorized representatives access to the Contractor's books, documents, papers and records which are directly pertinent to this contract for the purpose of making audit, examination, excerpts and transcriptions.
2. Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

3. Contractor agrees to comply with the record retention requirements in accordance with 2 CFR 200.333. Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain the same until ARRC, the Federal grantor agency, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

4. Contractor agrees to permit the Federal grantor agency and its contractors access to the sites of performance under this contract as reasonably may be required.

5. Contractor agrees to include these requirements in each subcontract financed in whole or in part with Federal funds.

8. CHANGES TO FEDERAL REQUIREMENTS – [Applicable to all Federal-aid contracts]

Federal Changes - Contractor shall at all times comply with all applicable Federal regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement between ARRC and the Federal grantor agency, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

9. NO GOVERNMENT OBLIGATION TO THIRD PARTIES [Applicable to all Federal-aid contracts]

(1) ARRC and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to ARRC, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

10. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS – 49 USC 5323j(1); 31 USC 3801-3812; 49 CFR Part 31; 18 USC 1001 [Applicable to all Federal-aid contracts]

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 USC §3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the Federally assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance, the Government reserves the right to impose the penalties of 18 USC §1001 and 49 USC 5323(I) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

11. SEISMIC SAFETY REQUIREMENTS - 42 USC 7701 et seq. & 49 CFR Part 41; Executive Order 12699 [Applicable only to Federal-aid contracts for the construction of new buildings or additions to existing buildings]

Seismic Safety - The contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations, 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The contractor also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

12. ENERGY CONSERVATION REQUIREMENTS - 42 USC 6321 et seq. & 49 CFR Part 622, Subpart C [Applicable to all Federal-aid contracts]

Energy Conservation - The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

13. CIVIL RIGHTS AND EQUAL OPPORTUNITY REQUIREMENTS – 49 USC 5332; 29 USC 623, 42 USC 2000e, 42 USC 6102, 42 USC 12112, 42 USC 12132, 29 CFR Part 1630, & 41 CFR Parts 60 et seq. [Applicable to all Federal-aid contracts]

Civil Rights - The following requirements apply to the underlying contract:

1. **Nondiscrimination** - In accordance with 49 USC 5332 and Title VI of the Civil Rights Act, as amended, 42 USC 2000e, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC 6102, and section 202 of the Americans with Disabilities Act of 1990, 42 USC 12132, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements the Federal grantor agency may issue.

2. **Equal Employment Opportunity** - The following equal employment opportunity requirements apply to the underlying contract:

(a) **Race, Color, Creed, National Origin, Sex** - In accordance with 49 USC 5332 and Title VII of the Civil Rights Act, as amended, and 42 USC §2000e, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 USC 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of

compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements the Federal grantor agency may issue.

(b) Age - In accordance with the Age Discrimination in Employment Act, 29 USC 621-634, U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 CFR Part 1625, the Age Discrimination Act of 1975, as amended, 42 USC 6101 *et seq.*, U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 CFR Part 90, and 49 USC 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements Federal grantor agency may issue.

(c) Disabilities - In accordance with section 504 of the Rehabilitation Act of 1973, as amended, 29 USC 794, the Americans with Disabilities Act of 1990, as amended, 42 USC 12101 *et seq.*, the Architectural Barriers Act of 1968, as amended, 42 USC 4151 *et seq.*, and 49 USC 5332, the Contractor agrees that it will not discriminate against individuals on the basis of disability. In addition, the Contractor agrees to comply with any implementing requirements the Federal grantor agency may issue.

3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance, modified only if necessary to identify the affected parties.

14. VIOLATION AND BREACH OF CONTRACT - 2 CFR 200.326; 2 CFR Part 200, App. II(A)
[Applicable to all Federal-aid contracts in excess of \$150,000]

Rights and Remedies of the ARRC

Except as may be otherwise provided in the contract documents, in the event that ARRC deems the contractor guilty of a default or breach of any provision under the Contract, ARRC shall have any and all rights and remedies provided by applicable law, including, but not limited to the following:

1. The right to take over and complete the work or any part thereof as agent for and at the expense of the Contractor, either directly or through other contractors;
2. The right to cancel this Contract as to any or all of the work yet to be performed;
3. The right to specific performance, an injunction or any other appropriate equitable remedy; and
4. The right to money damages.

Rights and Remedies of Contractor

Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Contract, which may be committed by the ARRC, the Contractor expressly agrees that no default, act or omission of the ARRC shall constitute a material breach of this Contract, entitling Contractor to cancel or rescind the Contract (unless the ARRC directs Contractor to do so) or to suspend or abandon performance. Contractor claims or disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in accordance with ARRC's Procurement Rules.

Performance During Dispute - Unless otherwise directed by ARRC, Contractor shall continue performance under this contract while matters in dispute are being resolved.

Notification - In addition to the notice requirements set out elsewhere in this Contract, if the contractor becomes aware of any act or occurrence which may form the basis of a claim by the contractor for additional compensation or an extension of time for performance, or if any dispute arises regarding a question of fact or interpretation of the contract, the contractor shall immediately inform the Project Manager. If the matter cannot be resolved by agreement within 7 days, the contractor shall, within the next 14 days, submit an Intent to Claim in writing to the Project Manager. The claim, if not resolved, shall be presented to the Project Manager, in writing, within 60 days following receipt of the Intent to Claim. Receipt of the claim will be acknowledged in writing by the Project Manager. The Contractor agrees that unless these written notices

are provided, the contractor will have no entitlement to additional time or compensation for such act, event or condition.

Presenting Claim - A claim shall be submitted in accordance with ARRC Procurement Rule 1800.12 and shall specifically include the following:

1. The act, event or condition giving rise to the claim.
2. The contract provisions which apply to the claim and under which relief is provided.
3. The item or items of contract work affected and how they are affected.
4. The specific relief requested, including additional contract time if applicable, and the basis upon which it was calculated.

Claim Validity, Additional Information, & Project Manager's Actions - The claim, in order to be valid, must not only show that the contractor suffered damages or delay but that those conditions were actually a result of the act, event or condition complained of and that the contract provides entitlement to relief to the contractor for such act, event, or condition. The Project Manager reserves the right to make written request to the contractor at any time for additional information which the contractor may possess relative to the claim. The contractor agrees to provide the Project Manager such additional information within 30 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the claim. The claim, if not resolved by agreement within 60 days of its receipt, will automatically be forwarded to the Manager of Purchasing & Materials for formal written decision.

Decision on Claim - The contractor will be furnished the Manager of Purchasing & Materials' decision within the next 90 days, unless additional information is requested by the ARRC. The Manager of Purchasing & Materials' decision is final and conclusive unless fraudulent as to the Claim.

Notice of Appeal - Within 14 days of receipt of the Manager of Purchasing & Materials' decision, the contractor may deliver a Notice of Appeal to ARRC in accordance with ARRC Procurement Rule 1800.13 and request a hearing. The Notice of Appeal shall include specific exceptions to the Manager of Purchasing & Materials' decision, including specific provisions of the contract, which the contractor intends to rely upon in the appeal. General assertions that the Manager of Purchasing & Materials' decision is contrary to law or to fact are not sufficient.

Decision on Appeal - The decision of the ARRC on appeal will be rendered within 90 days after the conclusion of a hearing conducted under ARRC Procurement Rule 1800.15 or the date of receipt of the Notice of Appeal, whichever is later. The time limits given above may be extended by mutual consent. The decision of ARRC on appeal shall be final and conclusive unless the Contractor appeals to the superior court in accordance with ARRC Procurement Rule 1800.18.

15. NONSEGREGATED FACILITIES [Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more]

1. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO Provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

2. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, or national origin, age or disability, because of habit, local

custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

3. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to the award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

16. NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS - 16 USC 470 et seq.
[Applicable to all Federal-Aid contracts]

In the performance of this contract, neither Contractor nor its subcontractors shall take any action (which term includes but is not limited to the seeking of any required federal license or permit, and the extraction of material or natural resources from any source whatsoever) that may affect a district, site, building, structure or object that is included in or eligible for inclusion in the National Register of Historic Places without prior notice to ARRC and compliance with the requirements of the National Historic Preservation Act of 1966, 16 USC 470 et seq. Contractor is advised that both historic and cultural sites may be eligible for inclusion on the National Register.

17. FLY AMERICA REQUIREMENT - 49 USC 40118; 41 CFR 301-10 [Applicable to all Federal-aid contracts which may involve the international air transportation of equipment, materials, commodities, products or personnel]

a) *Definitions.* As used in this clause--

“International air transportation” means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States

“United States” means the 50 States, the District of Columbia, and outlying areas.

“U.S.-flag air carrier” means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

b) When Federal funds are used to fund travel, Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 USC 40118) (Fly America Act) requires contractors, recipients, and others use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.

d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

Statement of Unavailability of U.S.-Flag Air Carriers

International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons. See FAR § 47.403. [*State reasons*]:

The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

18. RECYCLED PRODUCTS - 42 USC 6962; 40 CFR PART 247; 2 CFR 200.322 [Applicable to all Federal-aid contracts for items designated by the EPA, for the purchase of \$10,000 or more of one of these items during the fiscal year]

The Contractor agrees to provide a preference for those products and services that conserve natural resources, protect the environment, and are energy efficient by complying with and facilitating compliance with Section 6002 of the Resource Conservation and Recovery Act, as amended, 42 USC 6962, and U.S. Environmental Protection Agency (U.S. EPA), "Comprehensive Procurement Guideline for Products Containing Recovered Materials," 40 CFR Part 247. The Contractor agrees to include these requirements in each subcontract financed in whole or in part with Federal funds.

19. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION TERMS - FTA Circular 4220.1F [Applicable to all FTA funded contracts]

The provisions herein include, in part, certain Standard Terms and Conditions required by USDOT, whether or not expressly set forth in the contract provisions. All contractual provisions required by USDOT, as set forth in FTA Circular 4220.1F are incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this agreement. The contractor shall not perform any act, fail to perform any act, or refuse to comply with any ARRC requests which would cause ARRC to be in violation of the FTA terms and conditions.

20. DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM - 49 CFR Part 26. [Applicable to all FTA and FHWA funded contracts]

1. Assurance - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of U.S. Department of Transportation-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the ARRC deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible. 49 CFR 26.13(b).

2. Contract Goal – ARRC runs a completely race-neutral DBE program. Accordingly, this contract has no specific contract goal for the participation of Disadvantaged Business Enterprises (DBEs). ARRC does have an overall annual goal that it strives to meet, however. The ARRC therefore strongly encourages the contractor to use the services of small businesses, including DBEs, as subcontractors whenever possible. The ARRC requests that the contractor consider such measures as: (1) subcontracting to small businesses, including DBEs, portions of the work the contractor might otherwise do with its own forces; (2) reducing or waiving subcontractor bonding requirements for small businesses, including DBEs; (3) reviewing the list of businesses certified in the Small Business Administration's 8(a) Business Development Program for potential subcontractors [contact the SBA at (907) 271-4022]; and (4) reviewing the list of businesses certified as DBEs by the Alaska Unified Certification Program for potential subcontractors [<http://www.dot.state.ak.us/cvlrts/directory.shtml>].

3. Prompt Payment - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than thirty (30) days from the receipt of each payment the prime contractor receives from the ARRC. The prime contractor agrees further to return retainage payments to each subcontractor within thirty (30) days after the subcontractor's work is

satisfactorily completed, even if the prime contractor's work has not been completed. Any retainage not returned to a subcontractor will be reported to the ARRC by the prime contractor. This clause applies to both DBE and non-DBE subcontractors.

21. FHWA BUY AMERICA REQUIREMENTS - 23 CFR 635.410 [Applicable only to FHWA funded construction contracts in excess of \$150,000]

Unless a waiver has been granted by the FHWA, all steel and iron materials which are incorporated into the work, and the action of applying a coating to a covered material (i.e., steel and iron), shall be manufactured in the United States except that minor amounts of steel and iron materials of foreign manufacture may be used, provided the aggregate cost of such materials does not exceed one tenth of one percent (0.1 percent) of the total contract amount, or \$2500, whichever is greater. Coating includes epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of a material subject to the requirements of this section. For the purposes of this section, the cost is the value of the products as they are delivered to the project. When steel and iron materials manufactured in the United States are shipped to a foreign country where non-steel or iron products are installed on or in them (i.e., electronic components in a steel cabinet), the steel and iron is considered to meet the requirements of this section. A certification of materials origin, attesting to compliance with this provision, shall be furnished to the Engineer prior to incorporating any steel or iron products into the project. Bidders may submit an alternate bid for the project based on the use of foreign iron or steel materials. In this event, the contract will be awarded to the bidder who submits the lowest total responsive bid based on furnishing domestic iron and steel materials unless such total bid exceeds the lowest total responsive bid based on furnishing foreign steel and iron materials by more than 25 percent.

Certificate of Compliance with 23 CFR 635.410

The bidder or offeror hereby certifies that it will comply with the requirements of 23 CFR 635.410.

Date: _____

Signature: _____

Company Name: _____

Title: _____

22. FTA BUY AMERICA REQUIREMENTS - 49 USC 5323(j); 49 CFR Part 661 [Applicable only to FTA funded projects that involve the purchase of more than \$150,000 of iron, steel, manufactured goods or rolling stock]

Buy America - The contractor agrees to comply with 49 USC 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless all steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7. Separate requirements for rolling stock are set out at 49 USC 5323(j)(2)(C) and 49 CFR 661.11.

A bidder or offeror must submit to the ARRC the appropriate Buy America certification (below) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive.

Certification requirement for procurement of steel, iron, or manufactured products:

Certificate of Compliance with 49 USC 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 USC 5323(j)(1) and the applicable regulations in 49 CFR Part 661.6.

Date: _____
Signature: _____
Company Name: _____
Title: _____

Certificate of Non-Compliance with 49 USC 5323(j)(1)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 USC 5323(j) and 49 CFR 661.6, but it may qualify for an exception pursuant to 49 USC 5323(j)(2)(A), 5323(j)(2), as amended, and the applicable regulations in 49 CFR 661.7.

Date: _____
Signature: _____
Company Name: _____
Title: _____

Certification requirement for procurement of rolling stock and associated equipment:

Certificate of Compliance with 49 USC 5323(j)

The bidder or offeror hereby certifies that it will comply with the requirements of 49 USC 5323(j) and the regulations at 49 CFR 661.11.

Date: _____
Signature: _____
Company Name: _____
Title: _____

Certificate of Non-Compliance with 49 USC 5323(j)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 USC 5323(j) and 49 CFR 661.11, but may qualify for an exception pursuant to 49 USC 5323(j)(2)(C), and the applicable regulations at 49 CFR 661.7.

Date: _____
Signature: _____
Company Name: _____
Title: _____

23. FRA BUY AMERICA REQUIREMENTS-SUPPLIES - 41 USC 10a-d; 48 CFR Part 25 [Applicable only to FRA funded contracts for the purchase of goods, supplies or equipment in excess of \$150,000]

(a) The FRA requires its grantees to comply with The Buy American Act (41 U.S.C. 10) which provides that preference be given to domestic end products.

Components, as used in this clause, means those articles, materials, and supplies incorporated directly into the end products.

Domestic end product, as used in this clause, means (1) an unmanufactured end product mined or produced in the United States, or (2) an end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (b) (2) or (3) of this clause shall be treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

End products, as used in this clause, means those articles, materials, and supplies to be acquired for public use under this contract.

(b) The Contractor shall deliver only domestic end products, except those-

(1) For use outside the United States;

(2) That government agencies have determined are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality. A current list of such items is contained in 48 CFR 25.108.

(3) For which the agency determines that domestic preference would be inconsistent with the public interest; or

(4) For which the agency determines the cost to be unreasonable under 48 CFR 25.105. The offered price of a domestic end product shall be determined to be unreasonable when the lowest acceptable domestic offer exceeds the lowest acceptable foreign offer, inclusive of duty, by more than 6 percent, if the domestic offer is from a large business or more than 12 percent, if the domestic offer is from a small business concern.

A bidder must submit to ARRC the Buy America certification (below) with its bid response for FRA funded supply contracts. Bids that are not accompanied by a completed Buy America certification may be rejected as nonresponsive.

Certificate of Compliance with 41 USC 10a-d - Supplies

The bidder or offeror hereby certifies that the products it proposes to supply hereunder comply with the requirements of 49 USC 10a-d and the applicable regulations in 48 CFR Part 25.

Date: _____

Signature: _____

Company Name: _____

Title: _____

24. FRA BUY AMERICA REQUIREMENT-CONSTRUCTION - 41 USC 10a-d; 48 CFR Part 25
[Applicable only to FRA funded construction contracts in excess of \$150,000]

(a) The FRA requires its grantees to comply with The Buy American Act (41 U.S.C. 10) which provides that preference be given to domestic construction materials. As used in this clause-

Components means those articles, materials, and supplies incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site for incorporation into the building or work. Construction material also includes an item brought to the site pre-assembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, which are discrete systems incorporated into a public building or work and which are produced as a complete system, shall be evaluated as a single and distinct construction material regardless of when or how the individual parts or components of such systems are delivered to the construction site.

Domestic construction material means (1) an unmanufactured construction material mined or produced in the United States, or (2) a construction material manufactured in the U.S., if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of cost of all its components. Materials of foreign origin of the same class or kind as the materials listed in 48 CFR 25.108 shall be treated as domestic.

(b)(1) The Buy American Act (41 USC 10a-10d) requires that only domestic construction material be used in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) The requirement in paragraph (b)(1) of this clause does not apply to the excepted construction materials or components listed by the Government as follows: NONE

(3) Other foreign construction material may be used on this project if ARRC determines that-

(i) The cost would be unreasonable (the cost of a particular domestic construction material shall be determined to be unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent, unless the agency head determines a higher percentage to be appropriate);

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(4) The Contractor agrees that only domestic construction materials will be used by the Contractor, subcontractors, material men, and suppliers in the performance of this contract, except for foreign construction materials, if any, listed in paragraph (b)(2) or allowed under paragraph (b)(3) of this clause.

(c) *Request for determination.* (1) Contractors requesting to use foreign construction material under paragraph (b)(3) of this clause shall provide adequate information for ARRC evaluation of the request for a determination regarding the inapplicability of the Buy American Act in time to allow determination before submission of bids or offers. Each submission shall include a description of the foreign and domestic construction materials, including unit of measure, quantity, price, time of delivery or availability, location of the construction project, name and address of the proposed contractor, and a detailed justification of the reason for use of foreign materials cited in accordance with paragraph (b)(3) of this clause. A submission based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause. The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(2) If ARRC determines after contract award that an exception to the Buy American Act applies, the contract shall be modified to allow use of the foreign construction material, and adequate consideration shall be negotiated. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration shall not be less than the differential established in paragraph (b)(3)(i) of this clause.

(3) If ARRC does not determine that an exception to the Buy American Act applies, the use of that particular foreign construction material will be a failure to comply with the Act.

(d) For evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the following information and any applicable supporting data based on the survey of suppliers shall be included in the request:

**FOREIGN AND DOMESTIC CONSTRUCTION
MATERIALS PRICE COMPARISON**

Construction material description	Unit of Measure	Quantity	Price (Dollars) ^{1/}
Item 1: Foreign construction material Domestic construction material			
Item 2: Foreign construction material Domestic construction material			

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary. Include other applicable supporting information.

^{1/}Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

A bidder must submit to ARRC the Buy America certification (below) with its bid response for FRA funded construction. Bids that are not accompanied by a completed Buy America certification may be rejected as nonresponsive.

Certificate of Compliance with 41 USC 10a-d - Construction

The bidder or offeror hereby certifies that the construction materials it proposes to provide hereunder comply with the requirements of 49 USC 10a-d and the applicable regulations in 48 CFR Part 25.

Date: _____

Signature: _____

Company Name: _____

Title: _____

25. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING - 31 USC 1352; 2 CFR 200.450; 2 CFR 200 App. II(j); 49 CFR Part 20 [Applicable to all Federal-aid contracts and to all related subcontracts which exceed \$100,000]

A bidder must submit to ARRC the below certification with its bid response for any Federally funded contract that exceeds \$100,000. Bids that are not accompanied by a completed certification may be rejected as nonresponsive.

1. The undersigned Contractor certifies, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. The undersigned also agrees that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
3. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 USC 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____ certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 USC 3801, *et seq.*, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official: _____

Name and Title of Contractor's Authorized Official: _____

Date: _____

26. FTA PRE-AWARD AND POST DELIVERY AUDITS REQUIREMENTS - 49 USC 5323; 49 CFR Part 663 [Applicable only to FTA funded contracts for the purchase of rolling stock in excess of \$150,000]

Pre-Award and Post-Delivery Audit Requirements - The Contractor agrees to comply with 49 USC 5323(l) and FTA's implementing regulation at 49 CFR Part 663 and to submit the following certifications:

(1) **Buy America Requirements:** The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Bidder/Offeror certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

(2) **Solicitation Specification Requirements:** The Contractor shall submit evidence that it will be capable of meeting the bid specifications.

(3) **Federal Motor Vehicle Safety Standards (FMVSS):** The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

27. CERTIFICATION REGARDING COMPLIANCE WITH 49 CFR 26.49 - ESTABLISHMENT OF DBE GOAL [Applicable to all FTA funded contracts for Transit Vehicles]

Certificate of Compliance with 49 CFR 26.49

The bidder or offeror hereby certifies that it has established a DBE goal and submitted it to the FTA for approval in accordance with the provisions of 49 CFR 26.49.

Date: _____

Signature: _____

Company Name: _____

Title: _____

28. SAFE OPERATION OF MOTOR VEHICLES - 23 USC Part 402; Executive Order No. 13043; Executive Order No. 13513; U.S. DOT Order No. 3902.10 [Applicable to all federally funded third party contracts]

Seat Belt Use - The Contractor is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company-rented vehicles, or personally operated vehicles. The terms "company-owned" and "company-leased" refer to vehicles owned or leased either by the Contractor or ARRC.

Distacted Driving - The Contractor agrees to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an electronic device supplied by an employer, and driving a vehicle the driver owns or rents, a vehicle Contactor owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this agreement.

29. PATENT RIGHTS – 2 CFR Part 200, App. II(F); 37 CFR Part 401 [Applicable all federally funded contracts with a small business firm or nonprofit organization for the performance of experimental, developmental or research work]

This Project is funded through a Federal award for experimental, developmental, or research work purposes. As such, certain Patent Rights and Data Rights apply to all subject data first produced in the performance of this contract. The Contractor shall grant the ARRC intellectual property access and licenses deemed necessary for the work performed under this contract and in accordance with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the federal grantor agency. The terms of an intellectual property agreement and software license rights will be finalized prior to execution of this contract and shall, at a minimum, include the following restrictions: Except for its own internal use, the Contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Contractor authorize others to do so, without the written consent of ARRC and the federal grantor agency, until such time as they may have either released or approved the release of such data to the public. This restriction on publication, however, does not apply to any contract with an academic institution. For purposes of this agreement, the term "subject data" means recorded information whether or not copyrighted, and that is delivered or specified to be delivered as required by the contract. Examples of "subject data" include, but are not limited to computer software, standards, specifications, engineering drawings and associated lists, process sheets, manuals, technical reports, catalog item identifications, and related information, but do not include financial reports, cost analyses, or other similar information used for performance or administration of the Contract.

1. The Federal Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use for "Federal Government Purposes," any subject data or copyright described below. For "Federal Government Purposes," means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its Federal license to any other party.

(a) Any subject data developed under the contract, whether or not a copyright has been obtained; and

(b) Any rights of copyright purchased by the Contractor using Federal assistance in whole or in part by the federal grantor agency.

2. Unless the federal grantor agency determines otherwise, the Contractor performing experimental, developmental, or research work required as part of this contract agrees to permit the federal grantor agency to make available to the public, either its license in the copyright to any subject data developed in the course of the contract, or a copy of the subject data first produced under the contract for which a copyright has not been obtained. If the experimental, developmental, or research work, which is the subject of this contract, is not completed for any reason whatsoever, all data developed under the contract shall become subject data as defined herein and shall be delivered as the Federal Government may direct.

3. Unless prohibited by state law, upon request by the Federal Government, the Contractor agrees to indemnify, save, and hold harmless the Federal Government, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under that contract. The Contractor shall be required to indemnify the Federal Government for any such liability arising out of the wrongful act of any employee, official, or agents of the Federal Government.

4. Nothing contained in this clause on rights in data shall imply a license to the Federal Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Federal Government under any patent.

5. Data developed by the Contractor and financed entirely without using Federal assistance provided by the Federal Government that has been incorporated into work required by the underlying contract is exempt from the requirements herein, provided that the Contractor identifies those data in writing at the time of delivery of the contract work.

6. The Contractor agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance.

30. TERMINATION – 2 CFR 200.339; 2 CFR Part 200 App. II(B) [Applicable to all federally funded contracts in excess of \$10,000]

Except as may be otherwise provided in the contract documents, the following termination provisions apply to this contract:

1. ARRC may, for its sole convenience, terminate this contract in whole or in part, at any time by giving written notice of its intention to do so. In the event of such termination, Contractor shall be entitled to receive payment in accordance with the payment provisions of this contract for charges incurred prior to the effective date of termination. Contractor shall not be paid for any work done after receipt of a notice of cancellation or for any costs incurred by Contractor's suppliers or subcontractors which Contractor could reasonably have avoided. In no event shall ARRC be liable for unabsorbed overhead or anticipatory profit on unperformed work.

2. In addition to ARRC's right to terminate this contract for its convenience, ARRC may, by written notice of default to Contractor, terminate the contract in whole or in part in the following circumstances:

(a) The Contractor refuses or fails to perform its obligations under the contract, or fails to make progress so as to significantly endanger timely completion or performance of the contract in accordance with its terms, and Contractor does not cure such default within a period of ten (10) days after receipt of written notice of default from ARRC or within such additional cure period as ARRC may authorize; or

(b) Reasonable grounds for insecurity arise with respect to Contractor's expected performance and Contractor fails to furnish adequate assurance of due performance (including assurance of performance in accordance with the time requirements of the contract) within ten (10) days after receipt of a written request by ARRC for adequate assurance; or

(c) Contractor becomes insolvent or makes an assignment for the benefit of creditors or commits an act of bankruptcy or files or has filed against it a petition in bankruptcy or reorganization proceedings.

3. Upon receipt of a notice of cancellation or termination, Contractor shall immediately discontinue all performance and it shall immediately cause any of its suppliers or subcontractors to cease such work unless the notice directs otherwise and deliver immediately to ARRC all products, reports, plans, drawings, specifications, data, summaries or other materials and information, whether completed or in process, accumulated by Contractor in performance of the contract. The rights and remedies of ARRC provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law.

APPENDIX G

GENERAL CONDITIONS

(CONSTRUCTION)

(Revised 11/14/05)

1. ARTICLE 1 - DEFINITIONS:

Wherever used in the Contract Documents the following terms, or pronouns in place of them, are used, the intent and meaning, unless a different intent or meaning is clearly indicated, shall be interpreted as set forth below.

The titles and headings of the Sections, Subsections and Articles herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Whenever used in the Specifications or other Contract Documents the following terms have the meaning indicated which are applicable to both the singular and plural thereof. Working titles which have a masculine gender, are intended to refer to persons of either sex.

Terms not defined below shall have their ordinary accepted meanings within the context which they are used. "Webster's Third New International Dictionary of the English Language, Unabridged, Copyright 1961", or subsequent revision thereof, shall provide ordinarily accepted meanings. Words which have a well-known technical or trade meaning when used to describe Work, materials or equipment shall be interpreted in accordance with such meaning.

Addenda: All clarifications, corrections, or changes issued graphically or in writing by the Owner after the Invitation to Bid but prior to the opening of Bids.

Application for Payment: The form provided by the Owner which is used by the Contractor in requesting progress or Final payments and which is to include such supporting documentation as is required by the Contract Documents.

Approved or Approval: Means written approval by the Owner or his authorized representative as defined in paragraph 2.1.

ARRC Procurement Rules: Means the Rules governing the procurement of supplies, services, professional services and construction adopted by ARRC in accordance with A.S. 36.30.015(e). Said Rules may be downloaded from ARRC's web site, www.alaskarailroad.com, under General Information, Purchasing/Contracts.

A.S.: Initials which stand for Alaska Statute.

Award: The acceptance, by the Owner, of the successful Bid.

Bid: The offer of a Bidder, on the prescribed form to perform the Work in accordance with the Contract Documents at the prices quoted.

Bid Bond: The security furnished with a Bid to guarantee that the Bidder will enter into a Contract if his Bid is accepted by the Owner.

Bidder: Any individual, firm, corporation or any acceptable combination thereof, or joint venture submitting a Bid for the advertised Work.

Calendar Day: Every day shown on the calendar, beginning and ending at midnight.

Change Order: A written order by the Owner directing changes to the Contract, within its general scope.

Conditions of the Contract: Those portions of the Contract Documents which define the rights and responsibilities of the contracting parties and of others involved in the Work. The Conditions of the Contract include General Conditions, Supplementary Conditions and other Conditions specified in the Invitation to Bid.

Contract: The Contract Documents form the Contract between the Owner and the Contractor for the Work to be performed. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral.

Contract Documents: The Contract Form, Addenda, the bidding requirements and Contractor's Bid (including all appropriate bid tender forms), the Bonds, the Conditions of the Contract and all other Contract requirements, the Specifications, and the Drawings furnished by the Owner to the Contractor, together with all Change Orders and documents approved by the Contracting Officer for inclusion, modifications and supplements issued on or after the Effective Date of the Contract.

Contracting Officer: The person authorized to enter into and administer the Contract on behalf of the Owner. He has authority to make findings, determinations and decisions with respect to the Contract and, when necessary, to modify or terminate the Contract.

Contractor: The individual, firm, corporation or any acceptable combination thereof, contracting with the Owner for performance of the Work.

Contract Amount: The total moneys payable by the Owner to the Contractor under the terms of the Contract Documents.

Contract Time: The number of Calendar Days or the date specified in the Contract and authorized time extensions which identify how much time the Contractor is allowed to achieve Final Completion.

Consultant: A person, firm, agency or corporation retained by the Owner to prepare Contract Documents, perform construction administration services, or other Project related services.

Defective: An adjective which refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or Approval referred to in the Contract Documents, or has been damaged prior to the Owner's Approval of Final payment.

Directive: A written communication to the Contractor from the Owner interpreting or enforcing a Contract requirement or ordering commencement of an item of Work.

Drawings: The drawings which show the character and scope of the Work to be performed and which have been furnished by the Owner or the Owner's Consultant and are by reference made a part of the Contract Documents.

Effective Date of the Contract: The date on which the Contract is fully executed by both Contractor and the Owner.

Final Completion: The Work (or specified part thereof) has progressed to the point that all Work is complete as determined by the Owner.

General Requirements: Sections of the Contract Documents which contain administrative and procedural requirements as well as requirements for temporary facilities.

Holidays: The Owner recognizes the following Holidays:

New Years Day - January 1
President's Day - Third Monday in February
Memorial Day - Last Monday in May
Independence Day - July 4
Labor Day - First Monday in September
Columbus Day-Second Monday in October
Veteran's Day - November 11
Thanksgiving Day - Fourth Thursday in November
Christmas Day - December 25

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal Holidays. If the holiday should fall on a Sunday, Sunday and the following Monday are both legal Holidays.

Install: Means to build into the Work, ready to be used in complete and operable condition and in compliance with the Contract Documents.

Invitation to Bid: The public announcement, as required by law, inviting Bids for Work to be performed and/or materials to be furnished.

Notice of Intent to Award: The written notice by the Owner to all Bidders identifying the apparent successful Bidder and establishing the Owner's intent to execute the Contract when all conditions required for execution of the Contract are met.

Notice to Proceed: A written notice to the Contractor to begin the Work and establishing the date on which the Contract Time begins.

Owner: The Alaska Railroad Corporation ("ARRC") or its authorized representative(s).

Payment Bond: The security furnished by the Contractor and his Surety to guarantee payment of the debts arising out of performance of the Work.

Performance Bond: The security furnished by the Contractor and his Surety to guarantee performance and completion of the Work in accordance with the Contract Documents.

Project: The total construction, of which the Work performed under the Contract Documents is the whole or a part.

Project Manager: The authorized representative of the Owner who is responsible for administration of the Contract.

Regulatory Requirements: All laws, rules, regulations, ordinances, codes and/or orders applicable to the Work.

Shop Drawings: All Drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by the Contractor to illustrate material, equipment, fabrication, or erection for some portion of the Work.

Specifications: Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative and procedural details applicable thereto.

Subcontractor: An individual, firm, or corporation to whom the Contractor sublets part of the Contract.

Substantial Completion: Although not fully completed, the Work (or a specified part thereof) has progressed to the point where, in the opinion of the Owner as evidenced by the Owner's written notice, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended. The terms "Substantially Complete" and "Substantially Completed" as applied to any Work refer to Substantial Completion thereof.

Supplemental Agreement: A written agreement between the Contractor and the Owner covering Work that is not within the general scope of the Contract.

Surety: The corporation, partnership, or individual, other than the Contractor, executing a bond furnished by the Contractor.

Unit Price Work: Work to be paid for on the basis of unit prices.

Work: Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, will culminate in the entire completed Project, or the various separately identifiable parts thereof.

2. ARTICLE 2 - AUTHORITIES AND LIMITATIONS:

2.1 AUTHORITIES AND LIMITATIONS:

2.1.1 The Owner alone, shall have the power to bind the Owner and to exercise the rights, responsibilities, authorities and functions vested in the Owner by the Contract Documents, except that the Owner shall have the right to designate in writing authorized representatives to act for him.

2.1.2 Wherever any provision of the Contract Documents specifies an individual or organization, whether Governmental or private, to perform any act on behalf of or in the interests of the Owner that individual or organization shall be deemed to be the Owner's authorized representative under this Contract but only to the extent so specified.

2.1.3 The Owner may, at any time during the performance of this Contract, vest in any such authorized representatives additional power and authority to act for the Owner or designate additional representatives, specifying the extent of their authority to act for the Owner. A copy of each document vesting additional authority in or removing that authority from an

authorized representative or designating an additional authorized representative shall be furnished to the Contractor.

2.1.4 The Owner reserves the right to appoint a new Project Manager without affecting any of the Contractor's obligations to the Owner under this Contract.

2.1.5 The Contractor shall perform the Work in accordance with any written order (including but not limited to instruction, direction, interpretation or determination) issued by an authorized representative in accordance with the authorized representative's authority to act for the Owner.

2.1.6 The Contractor assumes all the risk and consequences of performing the Work in accordance with any order (including but not limited to instruction, direction, interpretation or determination) of anyone not authorized to issue such order, and of any order not in writing.

2.1.7 Should the Owner or his authorized representative designate Consultant(s) to act for the Owner as provided for in Paragraph 2.1.1, the performance or nonperformance of the Consultant under such authority to act, shall not give rise to any Contractual obligation or duty of the Consultant to the Contractor, any subcontractor, any supplier, or any other organization performing any of the Work or any Surety representing them.

2.1.8 The term "Owner" when used in the text of these General Conditions or other Contract Documents following this section shall also mean any duly authorized representative of the Owner when authorized in accordance with Paragraph 2.1.1.

2.2 EVALUATIONS BY OWNER:

2.2.1 The Owner will decide all questions which may arise as to:

2.2.1.1 Quality and acceptability of materials furnished;

2.2.1.2 Quality and acceptability of Work performed;

2.2.1.3 Compliance with the Schedule of Progress;

2.2.1.4 Interpretation of Contract Documents;

2.2.1.5 Acceptable fulfillment of the Contract on the part of the Contractor.

2.2.2 In order to avoid cumbersome terms and confusing repetition of expressions in the Contract Documents, whenever the terms "as ordered", "as directed", "as required", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used it shall be understood as if the expression were followed by the words "the Owner".

2.2.3 When such terms are used to describe a requirement, direction, review or judgment of the Owner as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise).

2.2.4 The use of any such term or adjective shall not be effective to assign to the Owner any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

2.3 MEANS & METHODS:

2.3.1 The means, methods, techniques, sequences or procedures of construction, or safety precautions and the program incident thereto, and the failure to perform or furnish the Work in accordance with the Contract Documents are the sole responsibility of the Contractor.

2.4 VISITS TO SITE:

2.4.1 The Owner will make visits to the site, off-site fabrication sites and approved remote storage sites at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents.

2.4.2 Such observations or the lack of such observations shall in no way relieve the Contractor from his duty to perform the Work in accordance with the Contract Documents.

3. ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE:

3.1 INCOMPLETE CONTRACT DOCUMENTS:

3.1.1 The execution of the Contract by the Contractor is considered a representation that the Contractor examined the Contract Documents to make certain that all sheets and pages were provided and that the Contractor is satisfied as to the conditions to be encountered in performing the Work.

3.1.2 The Owner expressly denies any responsibility or liability for a Bid submitted on the basis of an incomplete set of Contract Documents.

3.2 COPIES OF CONTRACT DOCUMENTS:

3.2.1 The Owner shall furnish to the Contractor up to five copies of the Contract Documents.

3.2.2 Additional copies will be furnished, upon request, at the cost of reproduction stated in the Invitation to Bid.

3.3 SCOPE OF WORK:

3.3.1 The Contract Documents comprise the entire Contract between the Owner and the Contractor concerning the Work.

3.3.2 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the Regulatory Requirements of the place of the Project.

3.3.3 It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of the Contract to create in the public or any member thereof a third party benefit, or to authorize anyone not a party to this Contract to maintain a suit pursuant to the terms or provisions of the Contract.

3.4 INTENT OF CONTRACT DOCUMENTS:

3.4.1 It is the intent of the Contract Documents to describe a functionally complete Project to be constructed in accordance with the Contract Documents.

3.4.2 Any work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied, without any adjustment in Contract Amount or Contract Time, whether or not specifically called for.

3.4.3 Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Regulatory Requirements of any governmental authority, whether such reference be specific or by implication, shall mean the edition stated in the Contract Documents or if not stated the latest standard specification, manual, code or Regulatory Requirements in effect at the time of advertisement for the Project (or, in the Effective Date of the Contract if there was no advertisement).

3.4.4 However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the Owner and the Contractor, or any of their Consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the Owner or any of the Owner's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

3.4.5 Unless otherwise specified in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

3.5 DISCREPANCY IN CONTRACT DOCUMENTS:

3.5.1 Before undertaking the Work, the Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures, and dimensions shown thereon and all applicable field measurements.

3.5.2 Work in the area by the Contractor shall imply verification of figures, dimensions and field measurements.

3.5.3 If, during the above study or during the performance of the Work, the Contractor finds a conflict, error, discrepancy or omission in the Contract Document, or a discrepancy between the Contract Documents and any standard specification, manual, code, or regulatory requirement which affects the Work, the Contractor shall promptly report such discrepancy in writing to the Owner.

3.5.4 The Contractor shall obtain a written interpretation or clarification from the Owner before proceeding with any Work affected thereby.

3.5.5 Any adjustment made by the Contractor without this determination shall be at his own risk and expense.

3.5.6 However, the Contractor shall not be liable to the Owner for failure to report any conflict, error or discrepancy in the Contract Documents unless the Contractor had actual knowledge thereof or should reasonably have know thereof.

3.6 DISCREPANCY - ORDER OF PRECEDENCE:

3.6.1 When conflicts, errors, or discrepancies within the Contract Documents exist, the order of precedence from most governing to least governing will be as follows:

3.6.1.1 Supplementary Conditions

3.6.1.2 General Conditions

3.6.1.3 Technical Specification

3.6.1.4 Drawings

3.6.1.5 Standard Construction Details

3.6.1.6 Standard Specifications

3.6.2 The Contractor shall not take advantage of any apparent error or omission in the Contract Documents. If the Contractor discovers an error or omission, the Owner shall be promptly notified. The Owner will make corrections and interpretation as necessary to fulfill the intent of the Contract. Scaled measurements shall not be used when the dimensions on the plan are given or can be computed.

3.7 CLARIFICATIONS AND INTERPRETATIONS:

3.7.1 The Owner will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as the Owner may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

3.8 REUSE OF DOCUMENTS:

3.8.1 Neither the Contractor nor any subcontractor, or supplier or other person or organization performing or furnishing any of the Work under a direct or indirect Contract with the Owner shall have or acquire any title to or ownership rights in any of the Contract Documents (or copies thereof) prepared by or for the Owner and they shall not reuse any of the Contract Documents on extensions of the Project or any other Project without written consent of the Owner.

3.8.2 Contract Documents prepared by the Contractor in connection with the Work shall become the property of the Owner.

4. ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS:

4.1 AVAILABILITY OF LANDS:

4.1.1 The Owner shall furnish as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for use of the Contractor in connection with the Work.

4.1.2 Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the Owner, unless otherwise provided in the Contract Documents.

4.1.3 The Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 VISIT TO SITE:

4.2.1 The execution of the Contract by the Contractor is considered a representation that the Contractor has visited and carefully examined the site and is satisfied as to the conditions to be encountered in performing the Work and as to the requirements of the Contract Documents.

4.3 EXPLORATIONS AND REPORTS:

4.3.1 Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by the Owner in preparation of the Contract Documents.

4.3.2 The Contractor may for his purposes rely upon the accuracy of the factual data contained in such reports, but not upon interpretations or opinions drawn from such factual data contained therein or for the completeness or sufficiency thereof.

4.3.3 Except as indicated in the immediately preceding sentence and in paragraphs 4.4 and 9.9, Contractor shall have full responsibility with respect to surface and subsurface conditions at the site.

4.4 UTILITIES:

4.4.1 The horizontal and vertical locations of known underground utilities as shown or indicated by the Contract Documents are approximate and are based on information and data furnished to the Owner by the owners of such underground utilities.

4.4.2 The Contractor shall have full responsibility for:

4.4.2.1 Reviewing and checking all information and data concerning utilities.

4.4.2.2 Locating all underground utilities shown or indicated in the Contract Documents which are affected by the Work.

4.4.2.3 Coordination of the Work with the owners of all utilities during construction.

4.4.2.4 Safety and protection of all utilities as provided in paragraph 6.16.

4.4.2.5 Repair of any damage to utilities resulting from the Work in accordance with paragraphs 4.4.4 and 4.5.

4.4.3 If Work is to be performed by any utility owner, the Contractor shall cooperate with such owner to facilitate the Work.

4.4.4 In the event of interruption to any utility service as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the utility owner and the Owner.

4.4.5 If service is interrupted repair Work shall be continuous until the service is restored.

4.4.6 No Work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

4.5 DAMAGED UTILITIES:

4.5.1 When utilities are damaged by the Contractor, the utility owner shall have the choice of repairing the utility or having the Contractor repair the utility.

4.5.2 In the following circumstances, the Contractor shall reimburse the utility Owner for repair costs or provide at no cost to the utility owner or the Owner, all materials, equipment and labor necessary to complete repair of the damage:

4.5.2.1 When the utility is shown or indicated in the Contract Documents.

4.5.2.2 When the utility has been located by the utility owner.

4.5.2.3 When no locate was requested by the Contractor for utilities shown or indicated in the Contract Documents.

4.5.2.4 All visible utilities.

4.5.2.5 When the Contractor could have, otherwise, reasonably been expected to be aware of such utility.

4.6 UTILITIES NOT SHOWN OR INDICATED:

4.6.1 If, while directly performing the Work, an underground utility is uncovered or revealed at the site which was not shown or indicated in the Contract Documents and which the Contractor could not reasonably have been expected to be aware of, the Contractor shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.18) identify the Owner of such underground facility and give written notice thereof to that owner and to the Owner.

4.6.2 The Owner will promptly review the underground utility to determine the extent to which the Contract Documents and the Work should be modified to reflect the impacts of the discovered utility.

4.6.3 The Contract Documents will be amended or supplemented to the extent necessary through the issuance of a Change Order by the Owner.

4.6.4 During such time, the Contractor shall be responsible for the safety and protection of such underground utility as provided in paragraph 6.16.

4.6.5 The Contractor may be allowed an increase in the Contract Amount or an extension of the Contract Time, or both, to the extent that they are directly attributable to the existence of any underground utility that was not shown or indicated in the Contract Documents and which the Contractor could not reasonably have been expected to be aware of.

4.7 SURVEY CONTROL:

4.7.1 The Owner will identify sufficient horizontal and vertical control data to enable the Contractor to survey and layout the Work.

4.7.2 All survey control work shall be performed under the direct supervision of a registered Land Surveyor.

4.7.3 Upon completion of survey work, all equipment and unused materials shall be removed and the Owner's property shall be left in a neat and clean condition satisfactory to the Owner.

4.7.4 Should the Contractor or its subcontractor fail to comply with the preceding subparagraph, the Owner may perform the required clean-up. All Owner costs and expenses for performing this work shall be collected from the Contractor.

5. ARTICLE 5 - BONDS, INSURANCE, AND INDEMNIFICATION:

5.1 DELIVERY OF BONDS:

5.1.1 When the Contractor delivers the executed Contract to the Owner, the Contractor shall also deliver to the Owner such bonds as the Contractor may be required to furnish in accordance with paragraph 5.2.

5.2 BONDS:

5.2.1 The Contractor shall furnish Performance and Payment Bonds, each in an amount as shown on the Contract as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents.

5.2.2 These bonds shall remain in effect for one year after the date of Final Completion and until all obligations under this Contract, except special guarantees as per paragraph 12.7, have been met.

5.2.3 All bonds shall be furnished on forms provided by the Owner (or copies thereof) and shall be executed by such Sureties as are authorized to do business in the State of Alaska.

5.2.4 The Owner may at his option copy the Surety with notice of any potential default or liability.

5.3 REPLACEMENT OF BOND AND SURETY:

5.3.1 If the Surety on any bond furnished in connection with this Contract is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.2, or otherwise becomes unacceptable to the Owner, or if any such Surety fails to furnish reports as to his financial condition as requested by the Owner, the Contractor shall within five days thereafter substitute another bond and Surety, both of which must be acceptable to Owner.

5.4 INSURANCE REQUIREMENTS:

5.4.1 The Contractor shall carry and maintain throughout the life of this Contract, at its own expense, insurance not less than the amounts and coverage herein specified, and the Owner shall be named as an additional named insured under the insurance coverage so specified, with respect to the performance of the Work.

5.4.2 There shall be no right of subrogation against the Owner or its agents performing work in connection with the Work, and this waiver of subrogation shall be endorsed upon the policies.

5.4.3 Insurance shall be placed with the companies acceptable to the Owner, and these policies providing coverage thereunder shall contain provisions that no cancellation or material changes in the policy shall become effective except upon 30 days prior written notice thereof to the Owner.

5.4.4 Prior to commencement of the Work, the Contractor shall furnish certificates to the Owner, in duplicate, evidencing that the insurance policy provisions required hereunder are in force.

5.4.5 Acceptance by the Owner of deficient evidence of insurance does not constitute a waiver of Contract insurance requirements.

5.4.6 The Contractor shall furnish the Owner with certified copies of policies upon request. The minimum coverages and limits required are as follows:

5.4.7 Worker's Compensation insurance in accordance with the statutory coverages required by the State of Alaska and Employers Liability insurance with limits not less than \$1,000,000 and, where applicable, insurance in compliance with any other statutory obligations, whether State or Federal, pertaining to the compensation of injured employees assigned to the Work, including but not limited to Voluntary Compensation, Federal Longshoremen and Harbor

Workers Act, Maritime and the Outer Continental Shelf's Land Act and the Federal Employers Liability Act.

5.4.8 Commercial General Liability with limits not less than \$2,000,000 per occurrence and \$2,000,000 aggregate for Bodily Injury and Property Damage, including coverage for Premises and Operations Liability, Products and Completed Operations Liability, Contractual Liability, Broad Form Property Damage Liability and Personal Injury Liability. Coverage shall not contain any exclusions of Explosion, Collapse, or Underground.

5.4.9 Commercial Automobile Liability on all owned, non-owned, hired and rented vehicles with limits of liability of not less than \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage per each accident or loss.

5.4.10 If Work involves use of aircraft, Aircraft Liability insurance covering all owned and non-owned aircraft with a per occurrence limit of not less than \$5,000,000.

5.4.11 If Work involves use of watercraft, Protection and Indemnity insurance with limits not less than \$5,000,000 per occurrence. Hull and Machinery coverage is to be carried on the vessel for the full current market value. This coverage requirement may be waived at the discretion of the Owner if the Contractor self-insures the equipment and will waive all rights of recovery against the Owner in writing.

5.4.12 Where applicable, Professional Liability insurance with limits of not less than \$1,000,000 per claim and \$2,000,000 aggregate, subject to a maximum deductible \$10,000 per claim. The Owner has the right to negotiate increase of deductibles subject to acceptable financial information of the policyholder.

5.4.13 Where applicable, Pollution Liability insurance with a Project limit of not less than \$5,000,000 to include coverage for Asbestos, Hazardous Materials, Lead or other related environmental hazards.

5.4.14 Builder's Risk Insurance: Coverage shall be on an "All Risk" completed value basis and protect the interests of the Owner the Contractor and his subcontractors. Coverage shall include all materials, equipment and supplies that are intended for specific installation in the Project while such materials, supplies and equipment are located at the Project site and in transit from port of arrival to jobsite and while temporarily located away from the Project site.

5.4.15 All insurance policies as described above are required to be written on an "occurrence" basis. In the event occurrence coverage is not available, the Contractor agrees to maintain "claims made" coverage for a minimum of two years after Project Completion.

5.5 INDEMNIFICATION:

5.5.1 The Contractor shall indemnify, save harmless, and defend the Owner and its agents and its employees from any and all claims or actions for injuries or damages sustained by any person or property arising directly or indirectly from the Work or the Contractor's performance of this Contract; however, this provision has no effect if, but only if, the sole proximate cause of the injury or damage is the negligence of the Owner or its agents.

6. ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES:

6.1 SUPERVISION OF WORK:

6.1.1 The Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

6.1.2 All Work under this Contract shall be performed in a skillful and workmanlike manner. The Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

6.1.3 The Contractor shall keep on the Work at all times during its progress a competent resident superintendent. The Owner shall be advised in writing of the

superintendent's name, local address, and telephone number. This written advice is to be kept current until Final Completion.

6.1.4 The superintendent will be the Contractor's representative at the site and shall have full authority to act and sign documents on behalf of the Contractor.

6.1.5 All communications given to the superintendent shall be as binding as if given to the Contractor.

6.1.6 The Contractor shall cooperate with the Owner in every way possible.

6.2 CHARACTER OF WORKERS:

6.2.1 The Contractor shall provide a sufficient number of competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents.

6.2.2 The Contractor shall at all times maintain good discipline and order at the site.

6.2.3 The Owner may, in writing, require the Contractor to remove from the Work any employee the Owner deems incompetent, careless, or otherwise detrimental to the progress of the Work, but the Owner shall have no duty to exercise this right.

6.3 CONTRACTOR TO FURNISH:

6.3.1 Unless otherwise specified in the Contract Documents, the Contractor shall furnish and assume full responsibility for all materials, equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.4 MATERIALS AND EQUIPMENT:

6.4.1 All materials and equipment shall be of specified quality and new, except as otherwise provided in the Contract Documents. If required by the Owner, the Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment.

6.4.2 All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to the Owner or any of the Owner's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 2.3 or 2.4.

6.5 ANTICIPATED SCHEDULES:

6.5.1 The construction of this project shall be planned and recorded with a Critical Path Method ("CPM") schedule. The schedule shall be used for coordination and monitoring of all work under the contract including all activity of subcontractors, manufacturers, supplies, utility companies and review activity of the Owner. Within a reasonable time prior to the preconstruction conference, the Contractor shall submit for Owner's approval, a detailed initial CPM schedule. The schedule shall meet the requirements set forth below. The construction time for the entire project shall not exceed the specified Contract Time. Following the Owner's review, if revisions to the proposed CPM schedule are required, the Contractor shall do so promptly. The CPM schedule must be finalized within 30 days of the Notice to Proceed.

6.5.2 The CPM schedule shall be presented as a Precedence Diagram Network developed in the activity-on-node format and shall include a description of no less than 15 major project activities, the duration of each of the project activities, the resources required for each of the project activities, including:

6.5.2.1 Labor, showing workdays per week, holidays, shifts per day, men per shift, and hours per shift;

6.5.2.2 Equipment, including the number of units of each type of equipment; and

6.5.2.3 Materials.

6.5.3 Owner reserves the right to adjust or add to the required project activities.

6.5.4 The activity-on-node diagram shall show the sequence and interdependence of all activities required for complete performance of all items of Work under this Contract, including shop drawings submittals and reviews and fabrication and delivery activities. No activity duration shall be longer than 15 working days without the Owner's approval. Owner reserves the right to limit the number of activities on the schedule.

6.5.5 Before proceeding with any Work on site, the Contractor shall prepare, submit, and receive the Owner's approval of a 60-Day Preliminary Schedule. The Preliminary Schedule shall provide a detailed breakdown of activities scheduled for the first 60 days of the project and summary of activities for Work beyond 60 days. Said schedule shall include mobilization, submittals, procurement, and construction.

6.5.6 No Work may be pursued at the site without an approved 60-Day Preliminary Schedule or an approved CPM schedule. A Finalized CPM Schedule with detailed breakdown of activities for the entire contract period shall be submitted prior to the first progress payment and accepted prior to application of the second progress payment. The Contractor shall create a baseline schedule of the Accepted Finalized Schedule.

6.5.7 Within fifteen days after the date of the Notice to Proceed, the Contractor shall submit to the Owner for review: anticipated schedule of Shop Drawing submissions, and anticipated Schedule of Values for all of the Work which will include quantities and prices of items aggregating the Contract Amount and will subdivide the Work into no less than 15 line item component parts to serve as the basis for progress payments during construction.

6.5.8 Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by the Contractor at the time of submission

6.5.9 The CPM schedule shall be submitted in an MS Project format. For each submittal required hereunder, Contractor shall submit one copy in an electronic format and one hard copy.

6.6 FINALIZING SCHEDULES:

6.6.1 Prior to processing the first Application for Payment, the Owner and the Contractor will finalize the schedules required by paragraph 6.5.

6.6.2 Acceptance by the Owner of the progress schedule will neither impose on the Owner nor relieve the Contractor from full responsibility for the progress or scheduling of the Work.

6.6.3 If accepted, the Finalized Schedule of Shop Drawings and other required submissions will be acceptable to the Owner as providing a workable arrangement for processing the submissions. If accepted the Finalized Schedule of Values will be acceptable to the Owner as an approximation of anticipated value of Work accomplished over the anticipated Contract Time.

6.6.4 Receipt and acceptance of a schedule submitted by the Contractor shall not be construed to assign responsibility for performance or contingencies to the Owner or relieve the Contractor of his responsibility to adjust his forces, equipment, and work schedules as may be necessary to insure completion of the Work within prescribed Contract Time.

6.6.5 Should the prosecution of the Work be discontinued for any reason, the Contractor shall notify the Owner at least 24 hours in advance of resuming operations.

6.7 ADJUSTING SCHEDULES:

6.7.1 Job site progress meetings will be held bi-weekly by the Owner and the Contractor for the purpose of updating the CPM schedule. Progress will be reviewed to verify finish dates of completed activities, remaining duration of uncompleted activities, and any proposed logic and/or time estimate revisions. The Contractor shall submit a reviewed CPM schedule within seven (7) calendar days after this meeting. The revised schedule shall show finish dates of completed activities and updated times for the remaining Work, including any addition, deletion, or revision of activities required by contract modification. In submitting a revised CPM schedule, the Contractor shall state specifically the reason for the revision and the adjustments made in this schedule or methods of operation to ensure completion of all Work within the Contract Time.

6.7.2 The Contract Time will be adjusted only for causes specified in this Contract. As determined by CPM analysis, only delays in activities, which affect milestones dates or contract completion dates will be considered for a time extension. It is understood and agreed by the Owner and the Contractor that float is shared equally. Project float is the time between the scheduled completion of the Work and Substantial Completion and is a resource available to both the Owner and the Contractor. Neither owns the float: the Project owns the float. As such, liability for delay of the Substantial Completion date rests with the party whose actions, last in time, actually cause delay to the Substantial Completion date.

6.7.3 In addition to the CPM schedule, every week during construction, the Contractor shall submit a work plan detailing his/her proposed operations for the forthcoming two (2) weeks. The work plan presented shall be a time scaled Two Week Look Ahead bar chart based and correlated by activity number to the current schedule. In the event portions of the Work affecting critical milestone dates or contract completion dates are in danger of being delayed, or actually are delayed, the Contractor shall develop and present a plan for remedial action. This plan shall detail the following:

- 6.7.3.1 work activities;
- 6.7.3.2 manpower involved by trade;
- 6.7.3.3 work hours;
- 6.7.3.4 equipment involved; and
- 6.7.3.5 the location of the work to be performed.

6.7.4 Preparation and updating of the CPM schedule and Two Week Work Plans will not be paid for directly. Failure to submit the CPM work schedule and Two Week Work Plans as specified will result in partial withholding of progress payments.

6.8 SUBSTITUTES OR "OR-EQUAL" ITEMS:

6.8.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required.

6.8.2 Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by the Owner only if sufficient information is submitted by the Contractor which clearly demonstrates to the Owner that the material or equipment proposed is equivalent or equal in all aspects to that named.

6.8.3 Requests for review of substitute items of material and equipment will not be accepted by the Owner from anyone other than the Contractor.

6.8.4 If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall make written application to the Owner for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified.

6.8.5 The application will state that the evaluation and acceptance of the proposed substitute will not delay the Contractor's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct Contract with the Owner for Work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.

6.8.6 All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated.

6.8.7 The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the Owner in evaluating the proposed substitute.

6.8.8 The Owner may require the Contractor to furnish at the Contractor's expense additional data about the proposed substitute.

6.8.9 The Owner may reject any substitution request which the Owner determines is not in the best interest of the Owner.

6.9 SUBSTITUTE MEANS AND METHODS:

6.9.1 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, the Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Owner, if the Contractor submits sufficient information to allow the Owner to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents.

6.10 EVALUATION OF SUBSTITUTION:

6.10.1 The Owner will be allowed a reasonable time within which to evaluate each proposed substitute. The Owner will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without the Owner's prior written acceptance which will be evidenced by either a Change Order or a Shop Drawing approved in accordance with paragraphs 6.19 and 6.20. The Owner may require the Contractor to furnish at the Contractor's expense a special Performance Bond or other Surety with respect to any substitute.

6.11 DIVIDING THE WORK:

6.11.1 The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among subcontractors or suppliers or delineating the Work to be performed by any specific trade, except as required by law.

6.12 SUBCONTRACTORS:

6.12.1 The Contractor may utilize the services of licensed specialty subcontractors on those parts of the Work which, under normal contracting practices, are performed by licensed specialty subcontractors, in accordance with the following conditions:

6.12.2 The Contractor shall not award any Work to any subcontractor without prior written Approval of the Owner. This Approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor which shall contain required E.E.O. Documents, evidence of insurance, and a copy of the proposed subcontract executed by the subcontractor.

6.12.3 No acceptance by the Owner of any such subcontractor shall constitute a waiver of any right of the Owner to reject Defective Work.

6.12.4 The Contractor shall be fully responsible to the Owner for all acts and omissions of the subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect Contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions.

6.12.5 All Work performed for Contractor by a subcontractor will be pursuant to an appropriate written agreement between Contractor and the subcontractor which specifically binds the subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the Owner and contains waiver provisions as required by paragraph 13.17 and termination provisions as required by Article 14.

6.12.6 Nothing in the Contract Documents shall create any contractual relationship between the Owner and any such subcontractor, supplier or other person or organization, nor shall it create any obligation on the part of the Owner to pay or to see to the payment of any moneys due any such subcontractor, supplier or other person or organization except as may otherwise be required by Regulatory Requirements.

6.12.7 The Owner will not undertake to settle any differences between or among the Contractor, subcontractors, or suppliers.

6.12.8 The Contractor and subcontractors shall coordinate their Work and facilitate general progress of Work.

6.12.9 Each trade shall afford other trades every reasonable opportunity for installation of their Work and storage of materials.

6.12.10 If cooperative Work of one trade must be altered due to lack of proper supervision, or failure to make proper provisions in time by another trade, such conditions shall be remedied by the Contractor with no change in Contract Amount or Contract Time.

6.12.11 The Contractor shall include on his own payrolls any person or persons working on the Contract who are not covered by written subcontract, and shall ensure that all subcontractors include on their payrolls all persons performing Work under the direction of the subcontractor.

6.13 USE OF PREMISES:

6.13.1 The Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project limits and approved remote storage sites and lands and areas identified in and permitted by Regulatory Requirements, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

6.13.2 The Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work.

6.13.3 Should any claim be made against the Owner by any such owner or occupant because of the performance of the Work, the Contractor shall defend, indemnify and hold the Owner and its agents harmless therefrom.

6.14 STRUCTURAL LOADING:

6.14.1 The Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.15 RECORD DOCUMENTS:

6.15.1 The Contractor shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Field Memos, Work Orders, Change Orders, Supplemental

Agreements, and written interpretations and clarifications issued pursuant to paragraph 3.7 in good order and annotated to show all changes made during construction.

6.15.2 Copies of these record documents together with all approved samples and a counterpart of all approved Shop Drawings shall be provided to the Owner on site.

6.15.3 Upon completion of the Work, the annotated record documents, samples and Shop Drawings will be delivered to the Owner.

6.15.4 Record documents shall accurately record variations in the Work which vary from requirements shown or indicated in the Contract Documents.

6.16 SAFETY AND PROTECTION:

6.16.1 The Contractor alone shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

6.16.2 The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.16.2.1 All employees on the Work and other persons and organizations who may be affected thereby;

6.16.2.2 All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

6.16.2.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

6.16.3 In the performance of this contract, the Contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation. The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the Owner may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the Work covered by the contract.

It is a condition of this contract, and shall be made a condition of each subcontract entered into pursuant to this contract, that the Contractor and any subcontractor shall not permit any employee in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous, or dangerous to his/her health or safety, as determined under the OSHA construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

6.16.4 The Contractor shall notify owners of adjacent property and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.

6.16.5 All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the Contractor with no change in Contract Amount or Contract Time except as stated in paragraph 4.6, except damage or loss attributable to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, or the public enemy or governmental authorities.

6.16.6 The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until Final Completion except as otherwise expressly provided in connection with Substantial Completion.

6.16.7 The Contractor shall designate a responsible safety representative at the site. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Owner.

6.17 WORK SAFETY ON RAILROAD PROPERTY:

6.17.1 The safety of personnel, property, rail operations, and the public is of paramount importance in the prosecution of the Work pursuant to this contract. As reinforcement and in furtherance of overall safety measures to be observed by Contractor (and not by way of limitation), the following special safety rules shall be followed while working on Alaska Railroad Corporation ("ARRC") property. Further railroad safety information may be obtained from the ARRC Safety Office at 907-265-2440. Safety information is also available on the ARRC website at www.alaskarailroad.com.

6.17.2 In the event Contractor or its subcontractor will be performing construction or other activities on or in close proximity to a railroad track, the Contractor shall be responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection ("RWP") regulations (49 CFR 214, Subpart C). Under 49 CFR 214, Subpart C, railroad contractors are responsible for the training of their employees on these regulations. All RWP related Work shall be conducted in strict compliance with the RWP safety standards set forth in 49 CFR 214, Subpart C and the Contractor will be required to submit a Railroad Safety Plan to ARRC to demonstrate compliance with said safety standards prior to beginning any RWP related Work. Specific information on Railroad Safety Plans may be obtained from the ARRC Safety Office at 907-265-2440.

6.17.3 In the event Contractor will be performing construction or other activities on a railroad bridge, the provisions of 49 CFR 214 regarding bridge worker safety shall apply. All bridge related Work shall be conducted in strict compliance with the bridge worker safety standards set forth in 49 CFR 214 and the Contractor will be required to submit a Railroad Safety Plan to ARRC to demonstrate compliance with said safety standards prior to beginning any bridge related Work.

6.17.4 Contractor shall arrange with ARRC to keep itself informed on the time of arrival of all trains and shall stop any of Contractor's or Subcontractor's operations which might be or cause a hazard to the safe passage of the train past the Work site from 10 minutes before the expected arrival of the train until it has passed or at any other time as directed by the flagman.

6.17.5 ARRC flag protection is required before any activity can occur on or near a railroad operating facility such as a track, yard, bridge or shop building. For incidental work, such as surveying or inspection, an ARRC qualified flagman will provide a safety briefing prior to the commencement of the Work to discuss how and when protection from train traffic is to be provided. For any activity involving a disturbance or potential disturbance to the track, track embankment, or any railroad facility, ARRC may require a specific Railroad Safety Plan prior to startup. Projects which involve activities which cross the tracks or are longitudinal to the tracks will require a specific Railroad Safety Plan and a one hour ARRC provided training course for Contractor's project supervisors prior to the initiation of Work on ARRC property.

6.17.6 The Contractor and/or Subcontractor shall arrange for ARRC flag protection when performing any Work within 20 feet of any track. All Work within 20 feet of the track shall cease when a train passes and all Contractor and Subcontractor employees shall maintain a distance of at least 20 feet from the track until the train has safely passed. In addition, any Work that could come within 20 feet of the track will cease when a train passes. For example, crane or pile driving activities shall stop when trains pass when the maximum boom and suspended load radius can come within 20 feet of the tracks. Pile driving shall not be done

when trains are passing the Work site. Vehicles and other construction equipment shall not be operated or parked closer than 20 feet from any track without ARRC flag protection.

6.17.7 Track outages require ARRC's prior approval. Prior to a proposed track outage, the Contractor shall submit a closure plan to ARRC for approval. The plan will describe the Work to be accomplished, the equipment, manpower and other resources required, and the schedule. Once approved by ARRC, the Contractor shall follow the plan. ARRC reserves the right to assume control of the Work to reestablish rail service if the schedule is not met. Contractor shall bear all costs and damages which may result from failure to meet the closure schedule.

6.17.8 Whenever an ARRC flag person is required for performance of the Work, he or she will be provided by the ARRC at no expense to the Contractor. A minimum of 48 hours notice is required for ARRC flag protection.

6.18 EMERGENCIES:

6.18.1 In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Owner, is obligated to act to prevent threatened damage, injury or loss.

6.18.2 The Contractor shall give the Owner prompt written notice if the Contractor believes that any significant changes in the Work or variations from the Contract Documents is required because of the action taken in response to an emergency. A change will be authorized by one of the methods indicated in paragraph 9.2, as determined appropriate by the Owner.

6.19 SHOP DRAWINGS AND SAMPLES:

6.19.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the Contract Documents, the Contractor shall submit to the Owner for review and Approval in accordance with the accepted schedule of Shop Drawing submissions the required number of all Shop Drawings, which will bear a stamp or specific written indication that the Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as the Owner may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable the Owner to review the information as required.

6.19.2 The Contractor shall also submit to the Owner for review and Approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that the Contractor has satisfied Contractor's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

6.19.3 Before submission of each Shop Drawing or sample the Contractor shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.19.4 At the time of each submission the Contractor shall give the Owner specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to the Owner for review and Approval of each such variation.

6.19.5 All variations of the proposed Shop drawing from that specified will be identified in the submission and available maintenance, repair and replacement service will be indicated.

6.19.6 The submittal will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such variation, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the Owner in evaluating the proposed variation.

6.19.7 If the variation may result in a change of Contract Time or Amount, or Contract responsibility, and is not minor in nature, the Contractor must submit a written request for Change Order with the variation to notify the Owner of his intent.

6.19.8 The Owner may require the Contractor to furnish at the Contractor's expense additional data about the proposed variation.

6.19.9 The Owner may reject any variation request which the Owner determines is not in the best interest of the Owner.

6.20 SHOP DRAWING AND SAMPLE REVIEW:

6.20.1 The Owner will review with reasonable promptness Shop Drawings and samples, but the Owner's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto.

6.20.2 The review of a separate item as such will not indicate acceptance of the assembly in which the item functions.

6.20.3 The Contractor shall make corrections required by the Owner and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review.

6.20.4 The Contractor shall direct specific attention in writing to revisions other than the corrections called for by the Owner on previous submittals.

6.20.5 The Owner's review of Shop Drawings or samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless the Contractor has in writing advised the Owner of each such variation at the time of submission as required by paragraph 6.19.4.

6.20.6 The Owner, if he so determines, may give written Approval of each such variation by Change Order, except that, if the variation is minor and no Change Order has been requested a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample review comments shall suffice as a modification.

6.20.7 No Approval by the Owner will relieve the Contractor from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.20.3.

6.20.8 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to the Owner's review of the pertinent submission will be at the sole expense and responsibility of the Contractor.

6.21 MAINTENANCE DURING CONSTRUCTION:

6.21.1 The Contractor shall maintain the Work during construction and until Substantial Completion, at which time the responsibility for maintenance shall be established in accordance with paragraph 13.10.

6.22 CONTINUING THE WORK:

6.22.1 The Contractor shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the Owner.

6.22.2 No Work shall be delayed or postponed pending resolution of any disputes, disagreements, or claims except as the Contractor and the Owner may otherwise agree in writing.

6.23 CONSENT TO ASSIGNMENT:

6.23.1 The Contractor shall obtain the prior written consent of the Owner to any proposed assignment of any interest in, or part of this Contract.

6.23.2 The consent to any assignment or transfer shall not operate to relieve the Contractor or his Sureties of any of his or its obligations under this Contract or the Performance Bonds.

6.23.3 Nothing herein contained shall be construed to hinder, prevent, or affect an assignment of monies due, or to become due hereunder, made for the benefit of the Contractor's creditors pursuant to law.

6.24 USE OF EXPLOSIVES:

6.24.1 When the use of explosives is necessary for the prosecution of the Work, the Contractor shall exercise the utmost care not to endanger life or property, including new Work and shall follow all Regulatory Requirements applicable to the use of explosives.

6.24.2 The Contractor shall be responsible for all damage resulting from the use of explosives.

6.24.3 All explosives shall be stored in a secure manner in compliance with all Regulatory Requirements, and all such storage places shall be clearly marked.

6.24.4 Where no Regulatory Requirements apply, safe storage shall be provided not closer than 1,000 feet from any building, camping area, or place of human occupancy.

6.24.5 The Contractor shall notify each public utility owner having structures in proximity to the site of his intention to use explosives. Such notice shall be given sufficiently in advance to enable utility owners to take such steps as they may deem necessary to protect their property from injury.

6.24.6 However, the Contractor shall be responsible for all damage resulting from the use of the explosives, whether or not, utility owners act to protect their property.

6.25 CONTRACTOR'S RECORDS:

6.25.1 Records of the Contractor and subcontractors relating to personnel, payrolls, invoices of materials, and any and all other data relevant to the performance of the Contract, must be kept on a generally recognized accounting system.

6.25.2 Such records must be available during normal Work hours to the Owner for purposes of investigation to ascertain compliance with Regulatory Requirements and provisions of the Contract Documents.

6.25.3 Payroll records must contain the name and address of each employee, his correct classification, social security number, rate of pay, daily and weekly number of hours of worked, deductions made, and actual wages paid and any other information required by the U.S. and/or State Department of Labor.

6.25.4 The Contractor and subcontractors shall make employment records available for inspection by the Owner and representatives of the U.S. and/or State Department of Labor and will permit such representatives to interview employees during working hours on the Project.

6.25.5 Records of all communications between the Owner and the Contractor and other parties, where such communications affected performance of this Contract, must be kept by the Contractor and maintained for a period of three years from Final Completion.

6.25.6 The Owner or its assigned representative may perform an audit of these records during normal work hours after written notice to the Contractor.

6.26 CONSTRUCTION QUALITY CONTROL PLAN:

6.26.1 The Contractor shall establish and maintain an effective quality management system. The quality management system shall consist of plans, procedures, and the organization necessary to provide material, equipment, and workmanship to comply with the requirements of the contract documents. The system shall cover the proposed sequence of the work including both on-site and off-site operations. To meet this requirement, the Contractor shall prepare a Construction Quality Control (CQC) plan that addresses all quality control requirements specified in the contract documents. A complete, detailed CQC plan shall be submitted to the Project Manager at least 10 days prior to commencement of any Work on the Project. The CQC must be approved in writing by the Project Manager prior to proceeding with the Work. The Contractor shall not revise the CQC or the quality staffing levels or replace any of the key personnel specified therein without prior written approval from the Project Manager.

7. ARTICLE 7 - LAWS AND REGULATIONS:

7.1 LAWS TO BE OBSERVED:

7.1.1 The Contractor shall keep fully informed of all Federal and State Regulatory Requirements and all Orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work.

7.1.2 The Contractor shall at all times observe and comply with all such Regulatory Requirements, orders and decrees; and shall defend and indemnify the Owner and its representatives against claim or liability arising from or based on the violation of any such Regulatory Requirement, order, or decree whether by the Contractor, subcontractor, or any employee of either.

7.1.3 Except where otherwise expressly required by applicable Regulatory Requirements, the Owner shall not be responsible for monitoring Contractor's compliance with any Regulatory Requirements.

7.2 PERMITS, LICENSES, AND TAXES:

7.2.1 The Contractor shall procure all permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work. As a condition of performance of this Contract, the Contractor shall pay all Federal, State and local taxes incurred by the Contractor, in the performance of the Contract. Proof of payment of these taxes is a condition precedent to Final payment by the Owner under this Contract.

7.2.2 The Contractor's certification that taxes have been paid (as contained in the Release of Contract) will be verified with the Department of Revenue and Department of Labor, prior to Final payment.

7.2.3 If any Federal, State or local tax is imposed, charged, or repealed after the date of Bid opening and is made applicable to and paid by the Contractor on the articles or supplies herein contracted for, then the Contract shall be increased or decreased accordingly by a Change Order.

7.3 PATENTED DEVICES, MATERIALS AND PROCESSES:

7.3.1 If the Contractor employs any design, device, material, or process covered by letters of patent, trademark or copyright, the Contractor shall provide for such use by suitable legal agreement with the patentee or owner.

7.3.2 The Contractor and the Surety shall, defend, indemnify and save harmless the Owner and its agents, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and

damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

7.4 COMPLIANCE OF SPECIFICATION AND DRAWINGS:

7.4.1 If the Contractor observes that the Specification and Drawings supplied by the Owner are at variance with any Regulatory Requirements, Contractor shall give the Owner prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 9.2. as determined appropriate by the Owner.

7.4.2 If the Contractor performs any Work knowing or having reason to know that it is contrary to such Regulatory Requirements, and without such notice to the Owner, the Contractor shall bear all costs arising therefrom; however, it shall not be the Contractor's primary responsibility to make certain that the Specifications and Drawings supplied by the Owner are in accordance with such Regulatory Requirements.

7.5 ACCIDENT PREVENTION:

7.5.1 The Contractor shall comply with AS 18.60.075 and all pertinent provisions of the Construction Code Occupational Safety and Health Standards issued by the Alaska Department of Labor.

7.6 SANITARY PROVISIONS:

7.6.1 The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees and Owner representatives in strict accordance with the requirements of the State and local Boards of Health, OSHA or of other bodies or tribunals having jurisdiction.

7.7 BUSINESS REGISTRATION:

7.7.1 The Contractor shall comply with AS 08.18.011, as follows: *"it is unlawful for a person to submit a bid or Work as a Contractor until he has been issued a certificate of registration by the Department of Commerce. A partnership or joint venture shall be considered registered if one of the general partners or venturers whose name appears in the name under which the partnership or venture does business is registered."*

7.8 PROFESSIONAL REGISTRATION AND CERTIFICATION:

7.8.1 All craft trades, architects, engineers and land surveyors, electrical administrators, explosive handlers, and welders employed under the Contract shall specifically comply with applicable provisions of AS 08.18, 08.48, 08.40, 08.52, and 08.99.

7.8.2 Provide copies of individual licenses within seven days following a request from the Owner.

7.9 LOCAL BUILDING CODES:

7.9.1 The Contractor shall comply with AS 35.10.025 which requires construction in accordance with applicable local building codes including the obtaining of required permits.

7.10 AIR QUALITY CONTROL:

7.10.1 The Contractor shall comply with all applicable provision of AS 46.03.04 as pertains to Air Pollution Control.

7.11 ARCHAEOLOGICAL OR PALEONTOLOGICAL DISCOVERIES:

7.11.1 When the Contractor's operation encounters prehistoric artifacts, burials, remains of dwelling sites, or paleontological remains, such as shell heaps, land or sea mammal bones or tusks, the Contractor shall cease operations immediately and notify the Owner.

7.11.2 No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed.

7.11.3 Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra Work, such shall be covered by an appropriate Contract change document.

7.12 WAGES AND HOURS OF LABOR:

7.12.1 The Contractor shall submit certified payrolls bearing an original signature on a weekly or biweekly basis to the State Department of Labor as required by law, and shall comply with all other applicable labor reporting laws. The Contractor shall also submit certified payrolls bearing an original signature, along with those of its subcontractors, to the Owner on a weekly basis and shall retain copies of the payrolls for a minimum of three (3) years.

7.12.2 The Contractor shall be responsible for the submission and retention of certified payrolls of all of its subcontractors.

7.12.3 The certification shall affirm that the payrolls are current and complete, that the wage rates contained therein are not less than the applicable rates referenced in the Contract Documents, and that the classification set forth for each laborer or mechanic conforms with the work he performed.

7.12.4 The Contractor and its subcontractors shall attend all hearings and conferences and produce such books, papers, and documents all as requested by the Department of Labor.

7.13 THE FOLLOWING LABOR PROVISIONS SHALL ALSO APPLY TO THIS CONTRACT:

7.13.1 The Contractor and his subcontractors shall pay all employees unconditionally and not less than once a week. Wages may not be less than those stated in the Invitation to Bid, regardless of the contractual relationship between the Contractor or Subcontractors and laborers, mechanics, or field surveyors. The scale of wages to be paid shall be posted by the Contractor in a prominent and easily accessible place at the site of the Work. The Owner shall withhold so much of the accrued payments as is necessary to pay laborers, mechanics, or field surveyors employed by the Contractor or Subcontractors the difference between the rates of wages required by the Contract to be paid laborers, mechanics, or field surveyors on the Work, and the rates of wages in fact received by laborers, mechanics or field surveyors.

7.14 OVERTIME WORK HOURS AND COMPENSATION:

7.14.1 Pursuant to 40 U.S.C. 327-330 and AS 23.10.060, the Contractor shall not require nor permit any laborer or mechanic in any workweek in which he is employed on any Work under this Contract to work in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all such hours worked in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek whichever is the greater number of overtime hours.

7.14.2 In the event of any violation of this provision, the Contractor shall be liable to any affected employee for any amounts due and penalties and to the Owner for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of this provision in the sum of \$10.00 for each Calendar Day on which such employee was required or permitted to be employed on such Work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by this paragraph.

7.15 COVENANT AGAINST CONTINGENT FEES:

7.15.1 The Contractor warrants that no person or selling agent has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.

7.15.2 For breach or violation of this warranty, the Owner shall have the right to annul this Contract without liability or, in its discretion, to deduct such improper consideration from the Contract Amount or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

7.16 OFFICIALS NOT TO BENEFIT:

7.16.1 No member of or delegate to the U.S. Congress, the State Legislature, or other State or Owner officials shall be admitted to any share or part of this Contract, nor to any benefit that may arise there from. However, this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

7.17 PERSONAL LIABILITY OF PUBLIC OFFICIALS:

7.17.1 In carrying out any of the provisions thereof, or in exercising any power or authority granted to the Owner by the Contract, there will be no liability upon the Owner nor upon its agents or authorized as its representatives, either personally or as officials of the State of Alaska, it being always understood that in such matters they act as agents and representatives of the Owner.

8. ARTICLE 8 - OTHER WORK:

8.1 RELATED WORK AT SITE:

8.1.1 The Owner reserves the right at any time to contract for and perform other or additional work on or near the Work covered by the Contract.

8.1.2 When separate contracts are let within the limits of the Project, the Contractor shall conduct his work so as not to interfere with or hinder the work being performed by other contractors. The Contractor shall join his work with that of the others in an acceptable manner and shall perform it in proper sequence to that of others.

8.1.3 If the fact that other such work is to be performed is identified or shown in the Contract Documents, the Contractor shall assume all liability, financial or otherwise, in connection with this Contract and indemnify and save harmless the Owner and its agents from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by the Contractor because of the presence and operations of other contractors.

8.1.4 If the fact that such other work is to be performed was not identified or shown in the Contract Documents, written notice thereof will be given to the Contractor prior to starting any such other work. If the Contractor believes that such performance will require an increase in Contract Amount or Contract Time, the Contractor shall notify the Owner of such required increase within fifteen (15) calendar days following receipt of the Owner's notice. Should the Owner find such increase(s) to be justified, a Change Order will be executed.

8.2 ACCESS, CUTTING, AND PATCHING:

8.2.1 The Contractor shall afford each utility owner and any other contractor who is a party to such a direct contract with the Owner (or the Owner, if the Owner is performing the additional work with the Owner's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work and shall properly connect and coordinate the Work with the work of others.

8.2.2 The Contractor shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other Work, the Contractor shall not endanger any Work of others by cutting, excavating or otherwise altering their Work and will only cut or alter such other Work with the written consent of the Owner.

8.2.3 The duties and responsibilities of the Contractor under this paragraph are for the benefit of other contractors to the extent that there are comparable provisions for the benefit of the Contractor in said direct Contracts between the Owner and other contractors.

8.3 DEFECTIVE WORK BY OTHERS:

8.3.1 If any part of the Contractor's Work depends for proper execution or results upon the Work of any such other Contractor, utility owner, or the Owner, the Contractor shall inspect and promptly report to the Owner in writing any delays, defects or deficiencies in such Work that render it unavailable or unsuitable for such proper execution and results. The Contractor's failure to so report will constitute an acceptance of the other Work as fit and proper for integration with Contractor's Work except for latent or non-apparent defects and deficiencies in the other Work.

8.4 COORDINATION:

8.4.1 If the Owner contracts with others for the performance of other Work at the site, Owner will have authority and responsibility for coordination of the activities among the various contractors.

9. ARTICLE 9 - CHANGES:

9.1 OWNER'S RIGHT TO CHANGE:

9.1.1 Without invalidating the Contract and without notice to any Surety, the Owner may, at any time or from time to time, order additions, deletions or revisions in the Work within the general scope of the Contract, including but not limited to changes:

9.1.1.1 In the Contract Documents;

9.1.1.2 In the method or manner of performance of the Work;

9.1.1.3 In Owner-furnished facilities, equipment, materials, services, or site;

9.1.1.4 Directing acceleration in the performance of the Work.

9.2 AUTHORIZATION OF CHANGES WITHIN THE GENERAL SCOPE:

9.2.1 Additions, deletions, or revisions in the Work within the general scope of the Contract as specified in paragraph 9.1 shall be authorized by one or more of the following ways:

9.2.1.1 Directive (pursuant to paragraph 9.3)

9.2.1.2 A Change Order (pursuant to paragraph 9.4)

9.2.1.3 Owner's acceptance of Shop Drawing variations from the Contract Documents as specifically identified by the Contractor as required by paragraph 6.19.4.

9.3 DIRECTIVE:

9.3.1 The Owner shall provide written clarification or interpretation of the Contract Documents (pursuant to paragraph 3.7).

9.3.2 The Owner may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Amount or the Contract Time and are consistent with the overall intent of the Contract Documents.

9.3.3 The Owner may order the Contractor to correct Defective Work or methods which are not in conformance with the Contract Documents.

9.3.4 The Owner may direct the commencement or suspension of Work or emergency related Work (as provided in paragraph 6.18).

9.3.5 Upon the issuance of a directive to the Contractor by the Owner, the Contractor shall immediately proceed with the performance of the Work as prescribed by such directive.

9.3.6 If the Contractor believes that the changes noted in a directive may cause an increase in the Contract Amount or an extension of Contract Time, the Contractor shall immediately provide written notice to the Owner depicting such increases before proceeding with the directive, except in the case of an emergency.

9.3.7 If the Owner finds the increase in Contract Amount or the extension of Contract Time justified, a Change Order will be issued.

9.3.8 If however, the Owner does not find that a Change Order is justified, the Owner may direct the Contractor to proceed with the Work.

9.3.9 The Contractor shall cooperate with the Owner in keeping complete daily records of the cost of such Work.

9.3.10 If a Change Order is ultimately determined to be justified, in the absence of agreed prices and unit prices, payment for such Work will be made on a cost of the Work basis as provided in paragraph 10.4.

9.4 CHANGE ORDER:

9.4.1 A change in Contract Time, Contract Amount, or responsibility may be made for changes within the scope of the Work only by Change Order.

9.4.2 Upon receipt of an executed Change Order, the Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents except as otherwise specifically provided.

9.4.3 Changes in Contract Amount and Contract Time shall be made in accordance with Articles 10 and 11.

9.5 SHOP DRAWING VARIATIONS:

9.5.1 Variations by Shop Drawings shall only be eligible for consideration under paragraph 9.4 when the conditions affecting the price, time, or responsibility are identified by the Contractor in writing and a request for a Change Order is submitted as per paragraph 6.19.7.

9.6 CHANGES OUTSIDE THE GENERAL SCOPE; SUPPLEMENTAL AGREEMENT

9.6.1 Any change which is outside the general scope of the Contract, as determined by the Owner, must be authorized by the appropriate representatives of the Owner and the Contractor.

9.7 UNAUTHORIZED WORK:

9.7.1 The Contractor shall not be entitled to an increase in the Contract Amount or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in this Article 9, except in the case of an emergency as provided in paragraph 6.18 and except in the case of uncovering Work as provided in paragraph 12.4.4.

9.8 NOTIFICATION OF SURETY:

9.8.1 If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents including, but not limited to, Contract Amount or Contract Time is required by the provisions of any Bond to be given to a Surety, the giving of any such notice will be the Contractor's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

9.9 DIFFERING SITE CONDITIONS:

9.9.1 The Contractor shall promptly, and before such conditions are disturbed (except in an emergency as permitted by paragraph 6.18), notify the Owner in writing of:

9.9.1.1 subsurface or latent physical conditions at the site differing materially from those indicated in the Contract, and which could not have been discovered by a careful examination of the site, or

9.9.1.2 unknown physical conditions at the site, or an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in this Contract.

9.9.2 The Owner shall promptly investigate the conditions, and if the Owner finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or time required for, performance of this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly.

9.9.3 Any claim for additional compensation by the Contractor under this clause shall be made in accordance with Article 15 and shall not be allowed unless the Contractor has first given the notice required by this Contract.

9.9.4 In the event that the Owner and the Contractor are unable to reach an agreement concerning an alleged differing site condition, the Contractor will be required to keep an accurate and detailed record which will indicate the actual cost of the Work done under the alleged differing site condition.

9.9.5 Failure to keep such a record shall be a bar to any recovery by reason of such alleged differing site conditions. The Owner shall be given the opportunity to supervise and check the keeping of such records.

9.10 VALUE ENGINEERING PROPOSALS BY THE CONTRACTOR:

9.10.1 Proposals may be submitted to the Owner for modifying the plans, specifications, or other requirements of the Contract for the sole purpose of reducing the total costs of construction without impairing in any manner the essential functions or characteristics of the project, including service life, economy of operations, ease of maintenance, benefits to the traveling public, desired appearance or design and safety standards. After execution of the Contract, an initiative may be recommended by the Contractor or, if applicable, sponsoring governmental agency. The initiative must be identified as a Value Engineering Proposal (VEP), and may include modifications to the plans or specifications, construction phasing or procedures, or other contract requirements. Any cost savings generated to the Contract as a result of VEP offered by the Contractor and approved by Owner will be shared equally between the Contractor and Owner as specified in paragraph 9.14. Bid prices are not to be based on the anticipated approval of a VEP. If a VEP is rejected, the Contract shall be completed in accordance with the original terms of the Contract or as otherwise modified. Any decision whether to approve or accept a VEP shall be within the sole discretion of Owner. Owner will bear no liability for any delay in considering a VEP, the refusal to accept or approve such a proposal, or any other matter connected with a VEP.

9.11 SUBMITTAL & REVIEW OF VEP CONCEPT OR IDEA:

9.11.1 The Contractor shall initially submit a brief letter proposal with graphics to Owner to illustrate the concept or idea. The Contractor shall indicate whether adequate time is available in its schedule for formal submittal and review prior to VEP implementation.

9.11.2 Owner will review the concept or idea within ten days of the Contractor's initial submittal and inform the Contractor in writing whether the concept or idea has merit and should be submitted as a formal VEP.

9.11.3 If Owner determines that the time for response is indicated in the Contractor's letter proposal is insufficient for review, Owner may choose to evaluate the need for a

noncompensable time extension to the Contract. Its evaluation will be based on the additional time needed by the Owner for its review and the effect on the Contractor's schedule occasioned by the added time. The need for such a time extension will be evaluated in accordance with Article 11.

9.12 FORMAL SUBMITTAL OF THE VEP:

9.12.1 Within 30 days after Owner has determined the VEP concept or idea has merit, the Contractor shall formally submit a proposal. The proposal shall include sufficient data for Owner to make an informed decision regarding the proposal and shall include, at a minimum, the following information:

9.12.1.1 A statement that the Proposal is submitted as a VEP.

9.12.1.2 A description of the difference between the existing contract and the proposed change and the advantages and disadvantages of each, including effects on service life, economy of operations, ease of maintenance, benefits to the traveling public, desired appearance and safety.

9.12.1.3 A complete set of plans and specifications showing the proposed revisions relative to the original contract features and requirements supported by design computations as necessary for a thorough and expeditious evaluation.

9.12.1.4 A complete analysis indicating the final estimated costs and quantities to be replaced by the VEP compared to the new costs and quantities generated by the VEP.

9.12.1.5 A statement specifying the date by which a Change Order adopting the VEP must be executed to obtain the maximum cost reduction.

9.12.1.6 A statement detailing the effect the VEP will have on the time for completing the Contract.

9.12.1.7 A description of any previous use or testing of the VEP and the conditions and results. If the VEP was previously submitted on another Owner project, indicate the date, contract number, and the action taken by Owner.

9.12.1.8 A detailed statement indicating the costs for developing the changes, along with the costs for preparing the value engineering joint proposal.

9.13 VEP CONDITIONS:

9.13.1 Value Engineering Proposals will be considered only when all of the following conditions are met:

9.13.1.1 A VEP, approved or not approved by Owner applies only to the contract on which it is submitted. A submitted VEP becomes the property of Owner. The VEP shall contain no restrictions imposed by the Contractor on its use or disclosure. Owner has the right to use, duplicate and disclose in whole or in part any data necessary for the utilization of the VEP. Owner retains the right to use any accepted VEP or part thereof on other projects without obligation to the Contractor. This provision is not intended to deny rights provided by law with respect to patented materials or processes.

9.13.1.2 If Owner is already considering certain revisions to the Contract or has considered or approved changes in the Contract of a like nature on other contracts which are subsequently incorporated in a VEP, Owner may reject the VEP and may change the Contract without obligation to the Contractor.

9.13.1.3 The Contractor shall have no claim for additional costs or delays resulting from the rejection of a VEP, including development costs, loss of anticipated profits, increased material or labor costs except as allowed in paragraph 9.14.

9.13.1.4 Owner will determine if a VEP qualifies for consideration and evaluation. It may reject any VEP that requires excessive time or costs for review, evaluation or investigation, or that is not consistent with Owner's design policies and criteria for the project.

9.13.1.5 Owner will reject all or any portion of work performed under an approved VEP if unsatisfactory results are obtained. The Owner will direct the removal of rejected work and require construction to proceed under the original contract requirements without reimbursement for rejected work performed under the VEP, or for its removal. Where modifications to the VEP are approved to adjust to field or other conditions, reimbursement will be limited to the total amount payable for the work at the contract bid prices as if it were constructed under the original contract requirements. The rejection or limitation of reimbursement shall not constitute the basis of any claim against Owner for delay or for other costs.

9.13.1.6 The proposed work shall not contain experimental features but shall contain features that have been used under similar or acceptable conditions on other projects or locations acceptable to Owner.

9.13.1.7 VEPs will not be considered if equivalent options are already provided in the Contract.

9.13.1.8 The savings generated by the VEP must be sufficient to warrant a review and processing. A savings resulting solely from the elimination or reduction in quantity of a single bid item will not be considered as a VEP. A savings resulting from the elimination or reduction in quantity of a bid item specified as part of a VEP will be considered.

9.13.1.9 Additional information needed to evaluate VEPs shall be provided in a timely manner. Untimely submittals of additional information will result in rejection of the VEP. Where design changes are proposed, the additional information could include results of field investigations and surveys, design computations, and field change sheets.

9.13.1.10 The Contractor may submit VEPs for an approved subcontractor. Reimbursement will be made to the Contractor. Subcontractors may not submit a VEP except through the Contractor.

9.13.1.11 The Contractor shall ensure the VEP is sealed by an Alaska Registered Engineer.

9.14 VEP ACCEPTANCE, REJECTION & PAYMENT:

9.14.1 Within 30 days of the Contractor's formal submission of the VEP, Owner will accept or reject the VEP.

9.14.2 The Contractor will be notified in writing by the Owner as to whether the proposal has been accepted. The decision by Owner is final and shall not be subject to the provisions of Article 15.

9.14.3 If the VEP is rejected, Owner will share equally in the Contractor's costs for developing and presenting the proposal, and the Contractor will share equally in the cost to Owner for investigating and evaluating the proposal. A Change Order will be executed to adjust the Contract Amount for the net increase or decrease in monies resulting from the Contractor's development costs as listed above in paragraph 9.12.1.8, and Owner's evaluation costs. The Change Order will terminate Owner's review of the VEP.

9.14.4 If the VEP is accepted in whole or part, the necessary contract modifications and contract price adjustments will be made by the execution of a Change Order which will specifically state that it is executed pursuant to the provisions of this subsection. Owner will be the sole judge of the acceptability of a VEP and of the estimated net savings in construction costs from the adoption of all or any part of the VEP.

9.14.5 The Contractor shall continue to perform the Work in accordance with the requirements of the Contract until a Change Order incorporating the VEP has been executed, or until the Contractor has been given written acceptance or rejection by the Owner.

9.14.6 The executed Change Order shall incorporate the changes in the plans, specifications, or other requirements of the Contract which are necessary to permit the VEP, or such part of it which has been accepted, to be put into effect, and shall include any conditions

upon which Owner's approval thereof is based. The executed Change Order shall extend or decrease the Contract Time if required by Owner.

9.14.7 The executed Change Order shall provide that the Contractor be paid 50% of the net savings amount as reflected by the difference between the cost of the revised work and the cost of the related construction required by the original contract computed at contract bid prices. The net savings will take into account the Contractor's cost of developing the VEP and implementing the change, and reducing this amount by Owner's cost for investigating and evaluating the VEP, including any ascertainable collateral costs to Owner. Such collateral costs may include increased costs for maintenance, operation, related work items, additional work items, or elements of related or additional work items.

9.14.8 The executed Change Order shall also provide for the adjustment of the Contract Amount. The Contract Amount shall be adjusted by subtracting Owner's share of the accrued net savings.

9.14.9 The amount specified to be paid to the Contractor in the executed Change Order shall constitute full compensation to the Contractor for the VEP and the performance of the work thereof pursuant to the said Change Order.

10. ARTICLE 10 - CONTRACT AMOUNT; COMPUTATION AND CHANGE:

10.1 CONTRACT AMOUNT:

10.1.1 The Contract Amount constitutes the total compensation (subject to authorized adjustments) payable to the Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the Contractor shall be at his expense without change in the Contract Amount. The Contract Amount may only be changed by a Change Order or Supplemental Agreement.

10.2 CLAIM FOR CHANGE IN CONTRACT AMOUNT:

10.2.1 Any claim for an increase or decrease in the Contract Amount shall be submitted in accordance with the terms of Article 15, and shall not be allowed unless the notice requirements of this Contract have been met.

10.3 CHANGE ORDER PRICE DETERMINATION:

10.3.1 The value of any Work covered by a Change Order for an increase or decrease in the Contract Amount shall be determined in one of the following ways:

10.3.2 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraph 10.9).

10.3.3 By mutual acceptance of a lump sum price which includes overhead and profit.

10.3.4 When 10.3.1 and 10.3.2 are inapplicable, on the basis of the Cost of the Work (determined as provided in paragraphs 10.4 and 10.5) plus a contractor's fee for overhead and profit (determined as provided in paragraph 10.6).

10.4 COST OF THE WORK:

10.4.1 The term Cost of the Work means the sum of all costs necessarily incurred and paid by the Contractor in the proper performance of the Work.

10.4.2 Except as otherwise may be agreed to in writing by the Owner, such costs shall be in amount no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 10.5:

10.4.2.1 Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications agreed upon by the Owner and the Contractor.

10.4.2.2 Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work.

10.4.2.3 Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include Social Security Contributions, Unemployment, Excise and Payroll Taxes, Workers' or Workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto.

10.4.2.4 Such employees shall include superintendents and foremen at the site.

10.4.2.5 The expenses of performing Work after regular working hours, on Saturday, Sunday or Legal Holidays, shall be included in the above to the extent authorized by the Owner.

10.4.2.6 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and suppliers' field services required in connection therewith. All cash discounts shall accrue to the Contractor unless the Owner deposits funds with the Contractor with which to make payments, in which case the cash discounts shall accrue to the Owner. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the Owner, and the Contractor shall make provisions so that they may be obtained.

10.4.2.7 Payments made by the Contractor to subcontractors for Work performed by subcontractors. If required by the Owner, Contractor shall obtain competitive quotes from subcontractors or suppliers acceptable to the Contractor and shall deliver such quotes to the Owner who will then determine which quotes will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of Cost of the Work plus a fee, the subcontractor's Cost of the Work shall be determined in the same manner as the Contractor's Cost of Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

10.4.2.8 Costs of special Consultants (including but not limited to engineers, architects, testing laboratories, and surveyors) employed for services necessary for the completion of the Work.

10.4.2.9 Supplemental costs including the following:

10.4.2.9.1 The proportion of necessary transportation, travel and subsistence expenses of the Contractor's employees incurred in discharge of duties connected with the Work.

10.4.2.9.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of the Contractor.

10.4.2.9.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from the Contractor or others in accordance with rental agreements approved by the Owner and the costs of transportation, loading, unloading, Installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

10.4.2.9.4 Sales, consumer, use or similar taxes related to the Work, and for which the Contractor is liable, imposed by Regulatory Requirements.

10.4.2.9.5 Fees for permits and licenses.

10.4.2.9.6 Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by the Contractor in connection with the performance and furnishing of the Work provided they have resulted from causes other than the negligence of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses

shall include settlements made with the written consent and Approval of the Owner. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining the Contractor's Fee. If, however, any such loss or damage requires reconstruction and the Contractor is placed in charge thereof, the Contractor shall be paid for services a fee in accordance with paragraph 10.6.

10.4.2.9.7 The cost of utilities, fuel and sanitary facilities at the site.

10.4.2.9.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

10.4.2.9.9 Cost of premiums for additional bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by the Owner in accordance with Article 5.

10.5 EXCLUDED COSTS:

10.5.1 The term Cost of the Work shall not include any of the following:

10.5.1.1 Payroll costs and other compensation of Contractor's officers, executives, principles (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agency, expeditors, timekeepers, clerks and other personnel employed by Contractor whether at the site or in Contractor's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.2.1 - all of which are to be considered administrative costs covered by the Contractor's Fee.

10.5.1.2 Expenses of Contractor's principal and branch offices other than Contractor's office at the site.

10.5.1.3 Any part of Contractor's capital expenses including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

10.5.1.4 Cost of premiums for all bonds and for all insurance whether or not Contractor is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.2.9.9 above).

10.5.1.5 Costs due to the negligence of Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

10.5.1.6 Costs for the use of small tools having a value of five hundred dollars (\$500) or less.

10.5.1.7 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 CONTRACTOR'S FEE:

10.6.1 The Contractor's Fee allowed to Contractor for overhead and profit shall be a mutually agreed upon fixed fee, or if none can be agreed upon, a fee based on the following percentages of the various portions of the Cost of the Work:

10.6.1.1 For costs incurred under subparagraphs 10.4.2.1 through 10.4.2.6, the Contractor's Fee shall be 15%;

10.6.1.2 For costs incurred under subparagraphs 10.4.2.7, 10.4.2.8 and 10.4.2.9, the Contractor's Fee shall be 10%; and if a subcontract is on the basis of Cost of the Work plus a fee, the maximum allowable to the Contractor on account of overhead and profit of all subcontractors shall be 10%;

10.6.2 No fee shall be payable on the basis of costs itemized under paragraph 10.5;

10.6.3 The amount of credit to be allowed by the Contractor to the Owner for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in Contractor's Fee by a mutually agreed upon amount or if none can be agreed upon, then an amount equal to 5% of the net decrease; and

10.6.4 When both additions and credits are involved in any one change, the adjustment in Contractor's Fee shall be computed on the basis of the net change in accordance with subparagraphs 10.6.1.1. and 10.6.1.2.

10.7 COST BREAKDOWN:

10.7.1 Whenever the cost of any Work is to be determined pursuant to paragraphs 10.4 and 10.5, the Contractor will submit in a form acceptable to the Owner an itemized cost breakdown together with supporting data.

10.8 CASH ALLOWANCES:

10.8.1 It is understood the Contractor has included in the Contract Amount all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such subcontractors or suppliers and for such sums within the limit of the allowances as may be acceptable to the Owner. Contractor agrees that:

10.8.1.1 The allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

10.8.1.2 Contractor's cost for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Amount and not in the allowances. No demand for additional payment on account of any thereof will be valid. Prior to Final payment, an appropriate Change Order will be issued to reflect actual amounts due the Contractor on account of Work covered by allowances, and the Contract Amount shall be correspondingly adjusted.

10.9 UNIT PRICE WORK:

10.9.1 Where the Contract Documents provide that all or part of the work is to be Unit Price Work, initially the Contract Amount will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract.

10.9.2 The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Amount.

10.9.3 Determinations of the actual quantities and classifications of Unit Price Work performed by the Contractor will be made by the Owner in accordance with paragraph 10.10.

10.9.4 Each unit price will be deemed to include an amount considered by the Contractor to be adequate to cover the Contractor's overhead and profit for each separately identified item.

10.9.5 If the "Basis of Payment" clause in the Contract Documents relating to any unit price in the bid schedule requires that the said unit price cover and be considered compensation for certain Work or material essential to the item, this same Work or material will not also be measured or paid for under any other pay item which may appear elsewhere in the Contract Documents.

10.9.6 Payment to the Contractor shall be made only for the actual quantities of Work performed and accepted or materials furnished, in conformance with the Contract Documents.

10.9.7 When the accepted quantities of Work or materials vary from the quantities stated in the bid schedule, or change documents, the Contractor shall accept as payment in full,

payment at the stated unit prices for the accepted quantities or Work and materials furnished, completed and accepted, except as provided below:

10.9.7.1 When the quantity of Work to be done or material to be furnished under any item, for which the total cost of the item exceeds 10% of the total Contract Amount, is increased by more the 25% of the quantity stated in the bid schedule, or change documents, either party to the Contract, upon demand, shall be entitled to an equitable unit price adjustment on the portion of the Work above 125% of the quantity stated in the bid schedule.

10.9.7.2 When the quantity of Work to be done or material to be furnished under any major item, for which the total cost of the item exceeds 10% of the total Contract Amount, is decreased by more than 25% of the quantity stated in the bid schedule, or change documents, either party to the Contract, upon demand, shall be entitled to an equitable price adjustment for the quantity of Work performed or material furnished, limited to a total payment of not more than 75% of the amount originally bid for the item.

10.10 DETERMINATIONS FOR UNIT PRICES:

10.10.1 The Owner will determine the actual quantities and classifications of Unit Price Work performed by the Contractor .

10.10.2 The Owner will review with the Contractor preliminary determinations on such matters before certifying the prices on the Bid Schedule.

10.10.3 The Owner's certification thereon will be final and binding on the Contractor, unless, within ten days after the date of any such decision, the Contractor delivers to the Owner written notice of intention to appeal from such a decision.

11. ARTICLE 11 - CONTRACT TIME; COMPUTATION & CHANGE:

11.1 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED:

11.1.1 The Contract Time will commence to run on the day indicated in the Notice to Proceed.

11.2 STARTING THE WORK:

11.2.1 No Work on Contract items shall be performed before the effective date of the Notice to Proceed. The Contractor shall notify the Owner at least 24 hours in advance of the time actual construction operations will begin. The Contractor may request a limited Notice to Proceed after Award has been made, to permit him to order long lead materials which could cause delays in Project completion. However, granting is within the sole discretion of the Owner, and refusal or failure to grant a limited Notice to Proceed shall not be a basis for claiming for delay, extension of time, or alteration of price.

11.3 COMPUTATION OF CONTRACT TIME:

11.3.1 When the Contract Time is specified on a Calendar Days basis, all Work under the Contract shall be completed within the number of Calendar Days specified.

11.3.2 The count of Contract Time begins on the day following receipt of the Notice to Proceed by the Contractor, if no starting day is stipulated therein.

11.3.3 Calendar Days shall continue to be counted against Contract Time until and including the date of Final Completion of the Work.

11.3.4 When the Contract completion time is specified as a fixed calendar date, it shall be the date of Final Completion.

11.4 TIME CHANGE:

11.4.1 The Contract Time may only be changed by a Change Order or Supplemental Agreement.

11.5 EXTENSION DUE TO DELAYS:

11.5.1 The right of the Contractor to proceed shall not be terminated nor the Contractor charged with liquidated or actual damages because of any delays to the completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to the following: acts of God or of the public enemy, acts of the Owner in contractual capacity, acts of another contractor in the performance of a contract with the Owner, floods, fires, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and delays of subcontractors or suppliers due to such causes.

11.5.2 Any delay in receipt of materials on the site, caused by other than one of the specifically mentioned occurrences above, does not of itself justify a time extension.

11.5.3 The Owner shall ascertain the facts and the extent of the delay and extend the time for completing the Work when the findings of fact justify such an extension.

11.6 ESSENCE OF CONTRACT:

11.6.1 All time limits stated in the Contract Documents are of the essence of the Contract.

11.7 REASONABLE COMPLETION TIME:

11.7.1 It is expressly understood and agreed by and between the Contractor and the Owner that the date of beginning and the time for Final Completion of the Work described herein are reasonable times for the completion of the Work.

11.8 DELAY DAMAGES:

11.8.1 Whether or not the Contractor's right to proceed with the Work is terminated, he and his sureties shall be liable for damages resulting from his refusal or failure to complete the Work within the specified time. Liquidated damages for delay shall be paid by the Contractor or his Surety to the Owner in the amount as specified in the Supplementary Conditions for each Calendar Day the completion of the Work or any part thereof is delayed beyond the Contract Time required by the Contract, or any extension thereof. If such amount of liquidated damages is not established by the Contract Documents, then the Contractor and his Surety shall be liable to the Owner for any actual damages occasioned by such delay.

11.8.2 The Contractor acknowledges that the liquidated damages established herein are not a penalty but rather constitute an estimate of damages that the Owner will sustain by reason of delayed completion. These liquidated damages are intended as compensation for losses difficult to estimate, and include those items enumerated in the Supplementary Conditions.

11.8.3 These damages will continue to run both before and after termination in the event of default termination. These liquidated damages do not cover excess costs of completion or the Owner's costs, fees, and charges related to re-procurement.

11.8.4 If a default termination occurs, the Contractor or his Surety shall pay in addition to these damages, all excess costs and expenses related to completion as provided by Article 14.2.9.

12. ARTICLE 12 - QUALITY ASSURANCE:

12.1 WARRANTY AND GUARANTY:

12.1.1 The Contractor warrants and guarantees to the Owner that all Work will be in accordance with the Contract Documents and will not be Defective.

12.1.2 Prompt notice of all defects shall be given to the Contractor. All Defective Work, whether or not in place, may be rejected, corrected or accepted as provided for in this Article.

12.2 ACCESS TO WORK:

12.2.1 The Owner and the Project Managers, testing agencies and governmental agencies with jurisdiction interests will have access to the Work at reasonable times for their observation, inspecting and testing. The Contractor shall provide proper and safe conditions for such access.

12.3 TESTS AND INSPECTIONS:

12.3.1 The Contractor shall give the Owner timely notice of readiness of the Work for all required inspections, tests or Approvals.

12.3.2 If Regulatory Requirements of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, the Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish the Owner the required certificates of inspection, testing or Approval.

12.3.3 The Contractor shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with Owner's acceptance of a supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for Approval prior to the Contractor's purchase thereof for incorporation in the Work.

12.3.4 The cost of all inspections, tests and Approvals in addition to the above which are required by the Contract Documents shall be paid by the Contractor.

12.3.5 The Owner may perform additional tests and inspections which it deems necessary to insure quality control. All such failed tests or inspections shall be at the Contractor's expense.

12.3.6 If any Work (including the Work of others) that is to be inspected, tested or approved is covered without written concurrence of the Owner, it must, if requested by the Owner, be uncovered for observation.

12.3.7 Such uncovering shall be at the Contractor's expense unless the Contractor has given the Owner timely notice of Contractor's intention to cover the same and the Owner has not acted with reasonable promptness in response to such notice.

12.3.8 Neither observations nor inspections, test or Approvals by the Owner of others shall relieve the Contractor from the Contractor's obligations to perform the Work in accordance with the Contract Documents.

12.4 UNCOVERING WORK:

12.4.1 If any Work is covered contrary to the written request of the Owner, it must, if requested by the Owner, be uncovered for the Owner's observation and replaced at the Contractor's expense.

12.4.2 If the Owner considers it necessary or advisable that covered Work be observed, inspected or tested, the Contractor, at the Owner's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Owner may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.

12.4.3 If it is found that such Work is Defective, the Contractor shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professional) and the Owner shall be entitled to an appropriate decrease in the Contract Amount.

12.4.4 If, however, such Work is not found to be Defective, the Contractor shall be allowed an increase in the Contract Amount or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

12.5 OWNER MAY STOP THE WORK:

12.5.1 If the Work is Defective, or the Contractor fails to supply suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, the Owner may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other party.

12.6 CORRECTION OR REMOVAL OF DEFECTIVE WORK:

12.6.1 If required by the Owner, the Contractor shall promptly, as directed, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Owner, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. The Contractor shall bear all direct, indirect and consequential costs of such correction removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.7 ONE YEAR CORRECTION PERIOD:

12.7.1 If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be Defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Owner's written instructions, either correct such Defective Work, or, if it has been rejected by the Owner, remove it from the site and replace it with conforming Work.

12.7.2 If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the Owner may have the Defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by the Contractor.

12.7.3 In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the Owner before Substantial Completion of all the Work, the correction period for the item may begin on an earlier date if so provided in the Specifications or by Change Order.

12.7.4 Provisions of this paragraph are not intended to shorten the Statute of Limitations for bringing an action.

12.8 ACCEPTANCE OF DEFECTIVE WORK:

12.8.1 Instead of requiring correction or removal and replacement of Defective Work, the Owner may accept Defective Work, and in this event, the Contractor shall bear all direct, indirect and consequential costs attributable to the Owner's evaluation of and determination to accept such Defective Work (costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals).

12.8.2 If any such acceptance occurs prior to Final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Owner shall be entitled to an appropriate decrease in the Contract Amount.

12.8.3 If the Owner has already made Final payment to the Contractor, an appropriate amount shall be paid by the Contractor or his Surety to the Owner.

12.9 OWNER MAY CORRECT DEFECTIVE WORK:

12.9.1 If the Contractor fails within a reasonable time after written notice from the Owner to proceed to correct Defective Work or to remove and replace rejected Work as required by the

Owner in accordance with paragraph 12.6, or if the Contractor fails to perform the Work in accordance with the Contract Documents, or if the Contractor fails to comply with any other provision of the Contract Documents, the Owner may, after seven days' written notice to the Contractor, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph the Owner shall proceed expeditiously.

12.9.2 To the extent necessary to complete corrective and remedial action, the Owner may exclude the Contractor from all or part of the site, take possession of all or part of the Work, and suspend the Contractor's services related thereto, take possession of the Contractor's tool, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or approved remote storage sites or for which the Owner has paid the Contractor but which are stored elsewhere, the Contractor shall allow the Owner and his authorized representatives such access to the site as may be necessary to enable the Owner to exercise the rights and remedies under this paragraph.

12.9.3 All direct, indirect and consequential costs of the Owner or its agents in exercising such rights and remedies will be charged against the Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Owner shall be entitled to an appropriate decrease in the Contract Amount.

12.9.4 Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all cost of repair and replacement of Work of others destroyed or damaged by correction, removal or replacement of the Contractor's Defective Work.

12.9.5 The Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by the Owner of the Owner's rights and remedies hereunder.

13. ARTICLE 13 - PAYMENTS TO CONTRACTOR AND COMPLETION:

13.1 SCHEDULE OF VALUES:

13.1.1 The Schedule of Values established as provided in paragraph 6.6 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Owner. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 PRELIMINARY PAYMENTS:

13.2.1 Upon Approval of the Schedule of Values the Contractor may be paid for direct costs substantiated by paid invoices and other prerequisite documents required by the Contract Documents. Direct costs shall include the cost of Bonds, insurance, approved materials stored on the site or at approved remote storage sites, deposits required by a supplier prior to fabricating materials, and other approved direct mobilization costs substantiated as indicated above. These payments shall be included as a part of the total Contract Amount as stated in the Contract.

13.3 APPLICATION FOR PROGRESS PAYMENT:

13.3.1 The Contractor shall submit to the Owner for review an Application for Payment filled out and signed by the Contractor covering the Work completed as of the date of the Application for Payment and accompanied by such supporting documentation as required by the Contract Documents.

13.3.2 Progress payments will be made as the Work progresses on a monthly basis.

13.4 REVIEW OF APPLICATION FOR PROGRESS PAYMENT:

13.4.1 Owner will, either indicate in writing a recommendation of payment, or return the Application for Payment to the Contractor indicating in writing the Owner's reasons for refusing to recommend payment.

13.4.2 If the latter case, the Contractor may make the necessary corrections and resubmit the Application for Payment.

13.5 STORED MATERIALS AND EQUIPMENT:

13.5.1 If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that the Owner has received the materials and equipment free and clear of all charges, security interests and encumbrances and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the Owner's interest therein, all of which will be satisfactory to the Owner.

13.5.2 No payment will be made for perishable materials that could be rendered useless because of long storage periods.

13.5.3 No progress payment will be made for living plant materials until planted.

13.5.4 The payment may be reduced by an amount equal to transportation and handling cost if the materials are stored offsite, in a remote location, or will require special handling.

13.6 CONTRACTOR'S WARRANTY OF TITLE:

13.6.1 The Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to the Owner no later than the time of payment free and clear of any claims, liens, security interests and further obligations.

13.7 WITHHOLDING OF PAYMENTS:

13.7.1 The Owner may withhold or refuse payment for any of the reasons listed below provided it gives written notice of its intent to withhold and of the basis for withholding:

13.7.2 The Work is Defective, or completed Work has been damaged requiring correction or replacement, or has been installed without Approval of Shop Drawings, or by an unapproved subcontractor.

13.7.3 The Contract Amount has been reduced by Change Order.

13.7.4 The Owner has been required to correct Defective Work or complete Work in accordance with paragraph 12.9.

13.7.5 The Owner's actual knowledge of the occurrence of any of the events enumerated in subparagraphs 14.2.1.1 through 14.2.1.11 inclusive.

13.7.6 Claims have been made against the Owner or against the funds held by the Owner on account of the Contractor's actions or inactions in performing this Contract, or there are other items entitling the Owner to a set off.

13.7.7 Subsequently discovered evidence or the results of subsequent inspections or tests, nullify any previous payments for reasons stated in subparagraphs 13.7.1 through 13.7.5.

13.7.8 The Contractor has failed to fulfill or is in violation of any of his obligations under any provision of this Contract.

13.8 RETAINAGE:

13.8.1 At any time the Owner finds that satisfactory progress is not being made it may in addition to the amounts withheld under 13.7 retain a maximum amount equal to 10% of the total amount earned on all subsequent progress payments.

13.8.2 This retainage may be released at such time as the Owner finds that satisfactory progress is being made.

13.9 REQUEST FOR RELEASE OF FUNDS:

13.9.1 If the Contractor believes the basis for withholding is invalid or no longer exists, immediate written notice of the facts and Contract provisions on which the Contractor relies, shall be given to the Owner, together with a request for release of funds and adequate documentary evidence proving that the problem has been cured.

13.9.2 In the case of withholding which has occurred at the request of the Department of Labor, the Contractor shall provide a letter from the Department of Labor stating that withholding is no longer requested.

13.9.3 Following such a submittal by the Contractor, the Owner shall have a reasonable time to investigate and verify the facts and seek additional assurances before determining whether release of withheld payments is justified.

13.10 SUBSTANTIAL COMPLETION:

13.10.1 When the Contractor considers the Work ready for its intended use the Contractor shall notify the Owner in writing that the Work of a designated portion thereof is substantially complete (except for items specifically listed by the Contractor as incomplete) and request that the Owner issue a certificate of Substantial Completion.

13.10.2 Within a reasonable time thereafter, the Owner, the Contractor and appropriate Consultant(s) shall make an inspection of the Work to determine the status of completion.

13.10.3 If the Owner does not consider the Work substantially complete, the Owner will notify the Contractor in writing giving the reasons therefore. If the Owner considers the Work substantially complete, the Owner will within fourteen days execute and deliver to the Contractor a certificate of Substantial Completion with a tentative list of items to be completed or corrected.

13.10.4 At the time of delivery of the certificate of Substantial Completion the Owner will deliver to the Contractor a written division of responsibilities pending Final Completion with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties which shall be consistent with the terms of the Contract Documents.

13.10.5 The Owner shall be responsible for all Owner costs resulting from the initial inspection and the first re-inspection, and the Contractor shall pay all costs incurred by the Owner resulting from re-inspections, thereafter.

13.11 ACCESS FOLLOWING SUBSTANTIAL COMPLETION:

13.11.1 The Owner shall have the right to exclude the Contractor from the Work after the date of Substantial Completion, but the Owner shall allow Contractor reasonable access to complete or correct items on the tentative list.

13.12 FINAL INSPECTION:

13.12.1 Upon written notice from the Contractor that the entire Work or an agreed portion thereof is complete, the Owner will make a Final inspection with the Contractor and appropriate Consultants and will notify the Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or Defective.

13.12.2 The Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

13.12.3 The Contractor shall pay for all costs incurred by the Owner resulting from re-inspections.

13.13 FINAL APPLICATION FOR PAYMENT:

13.13.1 After the Contractor has completed all such corrections to the satisfaction of the Owner and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of payment to all laborers, subcontractors and Suppliers, certificates of inspection, marked-up record documents and other documents all as required by the Contract Documents, and after the Owner has indicated that the Work is acceptable (subject to the provisions of paragraph 13.16), the Contractor may make application for Final payment following the procedure for progress payments.

13.13.2 The Application for Final Payment shall be accompanied by all certificates, warranties, guaranties, releases, affidavits, and other documentation required by the Contract Documents.

13.14 FINAL PAYMENT AND FINAL COMPLETION:

13.14.1 If on the basis of the Owner's observation of the Work during construction and Final inspection, and the Owner's review of the Application for Final Payment and accompanying documentation all as required by the Contract Documents, the Owner is satisfied that the Work has been completed and the Contractor's other obligations under the Contract Documents have been fulfilled, the Owner will process Application for Final Payment.

13.14.2 Otherwise, the Owner will return the Application for Final Payment to the Contractor, indicating in writing the reasons for refusing to process Final payment, in which case the Contractor shall make the necessary corrections and resubmit the Application for Final Payment.

13.14.3 If, through no fault of the Contractor, Final Completion of the Work is significantly delayed, the Owner shall, upon receipt of the Contractor's Final Application for Payment, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by the Owner for Work not fully completed or corrected is less than the retainage provided for in paragraph 13.8, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Owner with the application for such payment.

13.14.4 Such payment shall be made under the terms and conditions governing Final Payment, except that it shall not constitute a waiver of claims.

13.15 FINAL ACCEPTANCE:

13.15.1 Following receipt of the Contractor's Release with no exceptions, and certification that laborers, subcontractors and material men have been paid, certification of payment of payroll and revenue taxes, and Final payment to the Contractor, the Owner will issue a letter of Final Acceptance, releasing the Contractor from further obligations under the Contract, except as provided in paragraph 13.16.

13.16 CONTRACTOR'S CONTINUING OBLIGATION:

13.16.1 The Contractor's obligation to perform and complete the Work and pay all laborers, subcontractors, and material men in accordance with the Contract Documents shall be absolute.

13.16.2 Neither any progress or Final payment by the Owner, nor the issuance of a certificate of Substantial Completion, nor any use or occupancy of the Work or any part thereof by the Owner, nor any act of acceptance by the Owner nor any failure to do so, nor any review and Approval of a Shop Drawing or sample submission, nor any correction of Defective Work by the Owner will constitute an acceptance of Work not in accordance with the Contract

Documents or a release of the Contractor's obligation to perform the Work in accordance with the Contract Documents.

13.17 WAIVER OF CLAIMS BY CONTRACTOR:

13.17.1 The making and acceptance of Final payment will constitute a waiver of all claims by the Contractor against the Owner other than those previously made in writing and still unsettled.

13.18 NO WAIVER OF LEGAL RIGHTS:

13.18.1 The Owner shall not be precluded or be estopped by any payment, measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefor, from showing the true amount and character of the Work performed and materials furnished by the Contractor, nor from showing that any payment, measurement, estimate or certificate is untrue or is incorrectly made, or that the Work or materials are Defective.

13.18.2 The Owner shall not be precluded or estopped, not with standing any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor or his Sureties, or both, such damages as it may sustain by reason of Contractor's failure to comply with requirements of the Contract Documents.

13.18.3 Neither the acceptance by the Owner, or any representative of the Owner, nor any payment for or acceptance of the whole or any part of the Work, nor any extension of the Contract Time, nor any possession taken by the Owner, shall operate as a waiver of any portion of the Contract or of the power herein reserved, or of any right to damages.

13.18.4 A waiver by the Owner of any breach of the Contract shall not be held to be a waiver of any other subsequent breach.

13.19 DEDUCTIONS:

13.19.1 The Owner may deduct from the amount of any payment made to the Contractor any sums owed to the Owner by the Contractor including but not limited to:

- 13.19.1.1 Past due sales tax,
- 13.19.1.2 port and harbor fees,
- 13.19.1.3 property tax or rent.

13.19.2 Before making any such deductions, the Owner shall have provided Contractor written notice of the amount claimed by the Owner to be due and owing from the Contractor.

14. ARTICLE 14 - SUSPENSION OF WORK, DEFAULT AND TERMINATION:

14.1 OWNER MAY SUSPEND WORK:

14.1.1 The Owner may, at any time suspend the Work or any portion thereof by notice in writing to the Contractor. If the Work is suspended without cause the Contractor shall be allowed an increase in the Contract Amount or an extension of the Contract Time, or both, directly attributable to any suspension if the Contractor makes an approved claim therefore as provided in Article 15.

14.1.2 However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that suspension is due to the fault or negligence of the Contractor, or that suspension is necessary for Contract compliance, or that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.

14.1.3 In case of suspension of Work, the Contractor shall be responsible for preventing damage to or loss of any of the Work already performed and of all materials whether stored on or off the site or approved remote storage sites.

14.2 DEFAULT OF CONTRACTOR:

14.2.1 If the Contractor:

14.2.1.1 Fails to begin the Work under the Contract within the time specified in the Contract Documents, or

14.2.1.2 Fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workmen or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 6.6 as revised from time to time), or

14.2.1.3 Performs the Work unsuitably or neglects or refuses to remove materials or to correct Defective Work.

14.2.1.4 Discontinues the prosecution of the Work, or

14.2.1.5 Fails to resume Work which has been discontinued within a reasonable time after notice to do so, or

14.2.1.6 Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency except as prohibited by 11 U.S.C. 363, or

14.2.1.7 Allows any final judgment to stand against him unsatisfied for period of 60 days, or

14.2.1.8 Makes an assignment for the benefit of creditors without the consent of the Owner, or

14.2.1.9 Disregards Regulatory Requirements of any public body having jurisdiction, or

14.2.1.10 Otherwise violates in any substantial way any provisions of the Contract Documents, or

14.2.1.11 For any cause whatsoever, fails to carry on the Work in an acceptable manner, the Owner may give notice in writing to the Contractor and his Surety of such delay, neglect, or default.

14.2.2 If the Contractor or Surety, within the time specified in the above Notice of Default, shall not proceed in accordance therewith, then the Owner may, upon written notification to the Contractor or Surety of the fact of such delay, neglect or default and the Contractor's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the Contractor.

14.2.3 The Owner may terminate the services of the Contractor, exclude the Contractor from the site and take possession of the Work and of all the Contractor's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the Contractor (without liability to the Contractor for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the Owner has paid the Contractor but which are stored elsewhere, and finish the Work as the Owner may deem expedient.

14.2.4 The Owner may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Owner are required for the completion of said Contract in an acceptable manner.

14.2.5 The Owner may, by written notice to the Contractor and his Surety or his representative, transfer the employment of the Work from the Contractor to the Surety, or if the Contractor abandons the Work undertaken under the Contract, the Owner may, at his option with written notice to the Surety and without any written notice to the Contractor, transfer the employment for said Work directly to the Surety.

14.2.6 The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the Owner for Approval prior to beginning completion of the Work. Approval of such Contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.

14.2.7 Upon receipt of the notice terminating the services of the Contractor, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefore, without termination of the continuing full force and effect of this Contract.

14.2.8 In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the Contractor to make any claim for the same or any part thereof.

14.2.9 If the Contract is terminated for default, the Contractor and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the Owner in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other re-procurement costs.

14.2.10 Following termination the Contractor shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the Owner and any amounts due to persons for whose benefit the Owner has withheld funds, such excess shall be paid by the Owner to the Contractor.

14.2.11 If the damages, costs, and expenses due the Owner exceed the unpaid balance, the Contractor and his Surety shall pay the difference.

14.2.12 If, after notice of termination of the Contractor's right to proceed under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 RIGHTS OR REMEDIES:

14.3.1 Where the Contractor's services have been so terminated by the Owner, the termination will not affect any rights or remedies of the Owner against the Contractor then existing or which may thereafter accrue.

14.3.2 Any retention or payment of moneys due the Contractor by the Owner will not release the Contractor from liability.

14.4 CONVENIENCE TERMINATION:

14.4.1 The performance of the Work may be terminated by the Owner in accordance with this section in whole or in part, whenever, for any reason the Owner shall determine that such termination is in the best interest of the Owner.

14.4.2 Any such termination shall be effected by delivery to the Contractor of a Notice of Termination, specifying termination is for the convenience of the Owner the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.

14.4.3 Immediately upon receipt of a Notice of Termination and except as otherwise directed by the Owner the Contractor shall:

14.4.3.1 Stop Work on the date and to the extent specified in the Notice of Termination;

14.4.3.2 Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;

14.4.3.3 Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;

14.4.3.4 With the written Approval of the Owner, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;

14.4.3.5 Submit to the Owner a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Owner;

14.4.3.6 Transfer to the Owner the completed or partially completed record Drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the Owner;

14.4.3.7 Take such action as may be necessary, or as the Owner may direct, for the protection and preservation of the property related to the Contract which is in the possession of the Contractor and in which the Owner has or may acquire any interest.

14.4.4 The Contractor shall proceed immediately with the performance of the above obligations.

14.4.5 When the Owner orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with the Basis of Payment clause of the Contract.

14.4.6 Materials required for completion and on hand but not incorporated in the Work will be paid for at cost plus 15% with materials becoming the property of the Owner or the Contractor may retain title to the materials and be paid an agreed upon lump sum.

14.4.7 Materials on order shall be canceled, and the Owner shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges.

14.4.8 The Contractor shall be paid 10% of the cost, freight not included, of materials canceled, and direct expenses only for Contractor chartered freight transport which cannot be canceled without charges, to the extent that the Contractor can establish them.

14.4.9 The extra costs due to cancellation of Bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the Owner.

14.4.10 Charges for loss of profit or consequential damages shall not be recoverable except as provided above.

14.4.11 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless one or more extensions in writing are granted by the Owner upon request of the Contractor made in writing within the 90 day period.

14.4.12 Upon failure of the Contractor to submit his termination claim within the time allowed, the Owner may determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor so determined.

14.4.13 The Contractor and the Owner may agree upon whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of the Work pursuant to paragraph 14.4.

14.4.14 The Contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. In the event of the failure of the Contractor and the Owner to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the Contractor in connection with the termination of the Work the Owner shall determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall pay to the Contractor the amount determined as follows:

14.4.14.1 All costs and expenses reimbursable in accordance with the Contract not previously paid to the Contractor for the performance of the Work prior to the effective date of the Notice of Termination;

14.4.14.2 So far as not included above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;

14.4.14.3 The reasonable costs of settlement with respect to the terminated portion of the Contract heretofore, to the extent that these costs have not been covered under the payment provisions of the Contract.

14.4.15 The Contractor shall have the right of appeal under the Owner's claim procedures, as defined in Article 15, for any determination made by the Owner, except if the Contractor has failed to submit his claim within the time provided and has failed to request an extension of such time, Contractor shall have no such right of appeal. In arriving at the amount due the Contractor under this section, there shall be deducted:

14.4.15.1 All previous payments made to the Contractor for the performance of Work under the Contract prior to termination;

14.4.15.2 Any claim for which the Owner may have against the Contractor;

14.4.15.3 The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold pursuant to the provisions of this section and not otherwise recovered by or credited to the Owner; and,

14.4.15.4 All progress payments made to the Contractor under the provisions of this section.

14.4.16 Where the Work has been terminated by the Owner said termination shall not affect or terminate any of the rights of the Owner against the Contractor or his Surety then existing or which may thereafter accrue because of a default.

14.4.17 Any retention or payment of monies by the Owner due to the Contractor under the terms of the Contract shall not release the Contractor or his Surety from liability.

14.4.18 Unless otherwise provided for in the Contract Documents, or by applicable statute, the Contractor, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the Owner at all reasonable times at the office of the Contractor, all its books, records, documents, and other evidence bearing on the cost and expenses of the Contractor under this Contract and relating to the Work terminated hereunder.

15. ARTICLE 15 - CLAIMS AND DISPUTES:

15.1 NOTIFICATION:

15.1.1 In addition to the notice requirements set out elsewhere in this Contract, if the Contractor becomes aware of any act or occurrence which may form the basis of a claim by the Contractor for additional compensation or an extension of time for performance, or if any dispute arises regarding a question of fact or interpretation of the Contract, the Contractor shall immediately inform the Project Manager.

15.1.2 If the matter cannot be resolved by agreement within 7 days, the Contractor shall, within the next 14 days, submit an Intent to Claim in writing to the Project Manager.

15.1.3 The Claim, if not resolved, shall be presented to the Project Manager, in writing, within 60 days following receipt of the Intent to Claim.

15.1.4 Receipt of the Claim will be acknowledged in writing by the Project Manager.

15.1.5 The Contractor agrees that unless these written notices are provided, the Contractor will have no entitlement to additional time or compensation for such act, event or condition.

15.1.6 The Contractor shall in any case continue diligent performance of the Contract.

15.2 PRESENTING CLAIM:

15.2.1 The Claim shall be submitted in accordance with ARRC Procurement Rule 1800.12 and shall specifically include the following:

15.2.1.1 The act, event or condition giving rise to the claim.

15.2.1.2 The Contract provisions which apply to the claim and under which relief is provided.

15.2.1.3 The item or items of Contract Work affected and how they are affected.

15.2.1.4 The specific relief requested, including additional Contract Time if applicable, and the basis upon which it was calculated.

15.3 CLAIM VALIDITY, ADDITIONAL INFORMATION, & PROJECT MANAGER'S ACTIONS:

15.3.1 The Claim, in order to be valid, must not only show that the Contractor suffered damages or delay but that those conditions were actually a result of the act, event or condition complained of and that the Contract provides entitlement to relief to the Contractor for such act, event, or condition.

15.3.2 The Project Manager reserves the right to make written request to the Contractor at any time for additional information which the Contractor may possess relative to the Claim.

15.3.3 The Contractor agrees to provide the Project Manager such additional information within 30 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the Claim.

15.3.4 The Claim, if not resolved by agreement within 60 days of its receipt, will automatically be forwarded to the Owner for formal written decision.

15.4 OWNER'S DECISION:

15.4.1 The Contractor will be furnished the Owner's Decision within the next 90 days, unless additional information is requested by the Owner.

15.4.2 The Owner's Decision is final and conclusive unless fraudulent as to the Claim.

15.5 NOTICE OF APPEAL:

15.5.1 Within 14 days of receipt of the Owner's Decision, the Contractor may deliver a Notice of Appeal to the Owner in accordance with ARRC Procurement Rule 1800.13 and request a hearing.

15.5.2 The Notice of Appeal shall include specific exceptions to the Owner's Decision, including specific provisions of the Contract, which the Contractor intends to rely upon in the appeal.

15.5.3 General assertions that the Owner's Decision is contrary to law or to fact are not sufficient.

15.6 OWNER'S DECISION ON APPEAL:

15.6.1 The decision of the Owner on appeal will be rendered within 90 days after the conclusion of a hearing conducted under ARRC Procurement Rule 1800.15 or the date of receipt of the Notice of Appeal, whichever is later.

15.6.2 The time limits given above may be extended by mutual consent.

15.6.3 The decision of the Owner on appeal shall be final and conclusive unless the Contractor appeals to the superior court in accordance with ARRC Procurement Rule 1800.18.

16. ARTICLE 16 - MISCELLANEOUS:

16.1 GOVERNING LAW:

16.1.1 This Contract shall be governed by the laws of the State of Alaska and the provisions of ARRC's Procurement Rules.

16.2 CONTRACT CLAUSES:

16.2.1 If any contract clause is declared null and void, then all other clauses shall remain in force.

APPENDIX H

SUPPLEMENTAL CONDITIONS

Repairs for Damaged incurred as a result of the 7.1 Magnitude Earthquake occurring on November 30th, 2018 at Potter Hill shall be carried out in accordance with the American Railway Engineering and Maintenance-of-Way Association (AREMA) guidelines dated 2017 and the Alaska Department of Transportation and Public Facilities (ADOT&PF) Standard Specifications for Highway Construction dated 2015, except as amended and supplemented by the Contract Documents.

SC – 01 Escrow Bid Documentation:

1. The purpose of this specification is to preserve the bid documents of the successful bidder (Contractor) for use by the parties in any claims or litigation between ARRC and Contractor arising out of this contract. The Contractor shall submit a legible copy of bid documentation used to prepare its bid for this contract to ARRC. Such documentation shall be placed in escrow with a document storage facility designated by ARRC and preserved by that facility as specified in the following sections of this specification. The Contractor is encouraged to submit the bid documentation in the Contractor's standard format. It is not the intention of this specification to cause extra work during the preparation of the Contractor's bid, but to ensure that the documentation will be adequate to enable complete understanding and proper interpretation for the intended use.
2. Bid Documentation: The term "bid documentation" as used in this specification means all writings, working papers, computer print outs, charts and all other data compilations which contain or reflect information, data, and calculations used by the Contractor to determine each bid item of the bid in bidding for this project. The term "bid documentation" includes, but is not limited to; Contractor equipment rates, Contractor overhead rates, labor rates, construction schedules upon which the bid is based, efficiency or productivity factors, arithmetic extensions, and quotations from subcontractors and material suppliers, and assumptions to the extent that such rates, quotations, and assumptions were used by the Contractor in formulating and determining the amount of the bid. The term "bid documentation" also includes any manuals, which are standard to the industry, used by the Contractor in determining the bid for this project. Such manuals may be included in the bid documentation by reference. Such reference shall include the name and date of the Publication and the Publisher. The term does not include bid documents provided by ARRC for use by the Contractor in bidding this project.

The Contractor shall obtain and furnish in the submission the same level of bid documentation for each subcontractor with a subcontract exceeding \$200,000.00 regardless of tier. Subcontractor bid documentation shall be submitted in a sealed container as part of the Contractor submission. The subcontractor shall prepare the affidavit as described below.

3. Submittal of Bid Documentation: The Contractor shall submit the bid documentation in a sealed container to the ARRC designated document depository for safekeeping no later than five (5) calendar days following notification of intent to award the Contract by ARRC.

The container shall be clearly marked "Bid Documentation" and shall also show on the face of the container the Contractor's name and address, the date of submission, the Project Name and Project Number. ARRC will not award the contract until the Bid Documentation has been so deposited.

4. Affidavit: In addition to the bid documentation, an affidavit, signed under oath by an individual authorized by the Contractor to execute bidding proposals shall be submitted directly to the Contracting Officer. The affidavit shall attest the following:
 - a) The affiant has personally examined the bid documentation and that it includes all documents used to prepare the bid for this project;
 - b) The sealed container contains all bid documentation submitted;
 - c) The sealed container contains all of the bid documentation used to determine the bid and no other bid documentation shall be utilized by the Contractor in litigation brought by Contractor arising out of this contract; and
 - d) Should a dispute arise, the Contractor's rights to use bid preparation documentation other than those in escrow are waived.
5. Duration and Use: The bid documentation shall remain in escrow, without access by either party, until one of the following occurs:
 - a) There is a dispute related to a Change Order. With a neutral observer present, both parties will have joint access to review and copy the bid documentation.
 - b) The Contractor files a written claim or initiates Contract-related litigation against ARRC. With a neutral observer present, both parties will have joint access to review and copy the bid documentation.
 - c) The Contractor completes the Contract and provides ARRC with a complete and final release of any claims with no exceptions listed. Such action is sufficient grounds for Contractor to obtain the release and custody of the escrowed bid documentation.
6. Refusal or Failure to Provide Bid Documentation: Failure or refusal to provide bid documentation renders the Contractor's bid non-responsive. Failure or refusal to provide subcontractor bid documentation will result in subcontract disapproval. These remedies are not exclusive and ARRC may take such other action as is available to it under the law.
7. Confidentiality and Bid Documentation: The bid documentation in escrow is, and will remain, the property of the Contractor and subcontractors. Except as otherwise provided herein, the escrow materials cannot be released without Contractor approval. The escrowed materials will be returned to Contractor once any litigation is concluded, outstanding claims are resolved, and the final release has been delivered to ARRC.
8. Cost and Escrow Instructions: The cost of escrow will be borne by ARRC. ARRC will provide escrow instructions to the depository consistent with this specification.
9. Payment: All costs of complying with this specification shall be included in the overall Contract bid price.

SC-02 Contract Time

1. Notice to Proceed: It is anticipated that the awarded Contractor will receive the Notice to Proceed (NTP) within (3) weeks of the bid opening; dependent on the Contractor satisfactorily submitting items required by the Contract Documents.

2. Site Access and Use: Except for restrictions indicated herein, the Contractor may access the project limits as indicated in the Contract Drawings after issuance of a NTP and Permission from the ARRC. Access prior to this date must be approved and coordinated with the Owner. Railroad operations must be maintained as outlined in these specifications.
3. Substantial Completion: Substantial Completion shall be on or before October 22, 2020 unless accepted and agreed upon otherwise by the Owner. This work includes the embankment structure, repair and maintenance to drain pipes, outfalls, inlet drains and ditch lines – properly completed, approved by the Owner and fully serviceable for the intended use.
4. Initial Project Completion: Initial Project Completion shall be complete on or before twenty-one (21) days after Substantial Completion. This work includes any outstanding rework or punch list items, site cleanup, and demobilization.
5. Final Completion: Final Completion of all work shall be on or before November 15, 2020. This work includes any outstanding work that could not be completed due to the winter construction season (e.g. embankment seeding, etc.).

SC-03 Liquidated Damages

Liquidated damages will be assessed in the amount of \$2,400 per day for each calendar day of delay beyond the date of Substantial Completion stated in the SC-02 or any extension thereof which may be granted pursuant to the General Conditions or these Supplemental Conditions.

SC-04 Minimum Work to be Performed by the Contractor

The Contractor shall perform with their own organization not less than 60% of the original contract base amount.

SC-05 Project Scheduling

This Supplemental Condition supersedes the requirements of General Condition Sections 6.5.1 to 6.5.6 inclusive and 6.5.9. Note that certain scheduling requirements are specified in 6.5.7 and 6.5.8.

1. Project Schedule Submittal: The construction of the project shall be planned and recorded with a Critical Path Method (CPM) schedule. The schedule shall be used for coordination and monitoring of all work under the contract including all activity of subcontractors, manufacturers, supplies, utility companies, Owner, and review activity of the Owner. The Contractor shall submit for the Owner's approval a detailed initial CPM schedule within thirty (30) days of the NTP. The schedule shall meet the requirements set forth below. The construction time for the entire project shall not exceed the specified Contract Time. Following the Owner's review, if revisions to the proposed CPM schedule are required, the Contractor shall do so promptly. No work may be pursued at the site without an approved CPM schedule.
2. CPM Schedule Requirements:

- a) The schedule shall be in MS Project compatible format. Electronic format versions shall be submitted via CD or email as requested by the Owner's Representative. Hard copies shall be submitted in a color plot two (2) 24"x36" sheet if required for legibility.
- b) The CPM schedule shall include each major task item and sub task item necessary to thoroughly represent the construction activities and critical path to project completion.
- c) The CPM schedule shall include any anticipated work stoppages (e.g. holidays that will be observed).
- d) The CPM schedule shall be resource loaded with prime and subcontractor associated task items.
- e) The CPM schedule shall include a narrative that explains the basis for the Contractor's determination of construction logic and estimated duration and labor-hours. The schedule must reflect the available track closures, for the construction tasks that make the track impassable, that avoid interruption of the Owner's freight intermodal operation in Whittier described in these Supplemental Conditions. The CPM schedule shall include estimated quantities and production rates, hours per shift, work days per week, weather allowances, planned holidays, and types, number, and capacities of major construction equipment to be used.
- f) The ARRC reserves the right to rely on the accuracy of completed, current, and future activities depicted in the CPM schedule.
- g) After all contract work items are complete the Contractor shall submit along with the final application for payment, a "record" CPM schedule showing actual start and finish dates for all the work items.

SC-06 Determination of Delay Impacts

1. If the updated completion time for any significant work item included within the CPM Schedule does not fall within the time allowed by the Contract Schedule, the sequence of work and/or duration shall be revised by the Contractor through concurrent operations, additional manpower, additional shifts, or overtime, additional equipment or alternative construction methods until the schedule produced indicates that all significant contract completion, occupancy dates, and milestones shall be met. No additional costs will be allowed if such expediting measures are necessary to meet the agreed completion date or dates, except as provided elsewhere in the Contract Documents.
2. The Contractor represents that allowances have been made for all delays and hindrances incidental to the Work, including delays in securing materials or workmen, except for excusable delays.
3. Whenever the Contractor foresees any delay in the prosecution of the Work or immediately upon the occurrence of any delay which the Contractor regards as a Compensable or Excusable Delay the Contractor shall:
 - a) Give notice to the Owner's Representative, in writing within four (4) days, of the event causing the delay.
 - b) Take immediate steps, short of acceleration, to prevent, if possible, the occurrence or continuance of the delay, or to mitigate the impact of the delay.
 - c) Submit a written proposal to the Owner's Representative within ten (10) days after

giving notice of the delay proposing the amount of adjustment in Contract Price or Contract Time with adequate documentation to support the proposal.

d) Upon receipt of written notice of delay, the Owner's Representative shall determine the length of the delay and the extent to which the prosecution and completion of the work are being delayed.

4. The Owner's Representative will determine whether the delay is to be considered a compensable, excusable, or non-excusable delay and shall give notice to the Contractor of its determination, or of any additional information required to make a determination.
5. If the delay is a non-excusable delay, the Contractor shall be responsible for overcoming the delay and complying with the contract time. If the delay is a compensable or excusable delay, and the Contractor has given proper notice, the contract time will be extended by the amount of the delay's impact on the critical path. If the delay is a compensable delay, the contract price will be adjusted in accordance with the procedures applicable to a Change Order. Regardless of whether the delay is excusable, non-excusable, or compensable, the Contractor shall continue performing any portion of the work that is unaffected by circumstances causing or contributing to the delay.
6. The Contractor shall make no claim for additional time or compensation for any delay unless timely written notice is given to the Owner's Representative.
7. The Owner may withhold the granting of any time adjustment until the impact on the contract time can be determined.
8. In no event shall the Owner be liable to the Contractor for claims of additional compensation or damages arising out of, or resulting from, delays caused by or within the control of the Contractor or delays beyond the control of both the Owner and the Contractor.
9. If there are concurrent delays, one or more of which is an excusable delay and one or more of which is a non-excusable delay, the delay shall be deemed excusable. If one is compensable and the other is non-compensable, the delay will be non-compensable.
10. An excusable, non-compensable time adjustment will be granted for weather conditions of unusual intensity for the locality where work is performed.
11. Prosecution of the Work: The Contractor shall prosecute the work regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion of the work within the Contract time.
12. Definitions:
 - a) Compensable Delay: A delay entitling the Contractor to a compensation adjustment if the delay causes an increase in cost and/or a time adjustment, provided that the notice provisions of the contract documents are satisfied. A delay shall be Compensable Delay if it results solely from a change order, a concealed condition, or a breach of obligation by the Owner.
 - b) Compensation Adjustment: An equitable adjustment in accordance with the contract documents that may either increase or decrease the contract price.
 - c) Excusable Delay: A delay entitling the Contractor to a time adjustment but not to a compensation adjustment. A delay shall be an excusable delay if it results from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, or subcontractor(s) including, but not restricted to, acts of God, acts of a public enemy, acts of another contractor in the performance of a contract with the Owner, fires, epidemics, quarantine restrictions, industry-wide strikes, freight

embargos, or unusually severe weather.

- d) Non-excusable Delay: Any delay that is neither compensable nor excusable.
- e) Unusually Severe Weather:
 - i. The Contractor will be allowed an extension of time only for activities delayed for an entire day and the activity is on the critical path defined by the most current approved CPM update.
 - ii. During periods when weather or other conditions are unfavorable for construction, the Contractor shall pursue only such portions of the work that will not be damaged by the weather conditions.
 - iii. Occurrence of unusually severe weather shall be agreed upon by the Contractor and Owner's Representative.

SC – 07 Equipment:

- 1. Determination of Time and Material Rates:
 - a) Within fourteen (14) days of Award of Contract, the Contractor and Owner's Representative will meet and determine a schedule of rates for labor and equipment to be used by the Contractor for potential Change Order work accomplished on a Time and Materials basis. The resulting schedule of rates will be approved by the Owner and the Contractor. Equipment rates shall not exceed local area monthly rental rates for similar equipment.
 - b) For Time and Materials work, the Owner will not pay premium time for overtime work or holiday work unless it is authorized in advance in writing by the Owner. The Contractor shall provide certified payroll records for all labor included in requests for a Time and Materials payment.
- 2. Provision of equipment: The Contractor shall:
 - a) Provide compaction equipment appropriate for the material types to obtain the densities specified in the Contract Documents.
 - b) Operate and maintain compaction equipment in accordance with the manufacturer's instructions and recommendations. If inadequate densities are obtained at the optimum moisture content of the material, provide larger and/or different type equipment at no cost to the Owner.
 - c) Provide equipment for applying water of a type and quality adequate for the work, free of leaks and equipped with a distributor bar or other approved device to ensure uniform application.
 - d) Provide equipment for mixing and drying of material, such as motor graders, discs, or other equipment.
 - e) All equipment shall be cleaned prior to entering the project limits to mitigate the spread of nonnative invasive plants.
 - f) Ensure that equipment brought onto the project is kept in good working order.
 - g) Remove from within the project limits any item of equipment that is not operational for maintenance reasons or lack of an operator for a period of seven (7) continuous days.

The contractor may apply, with justification, to the Owner's Representative for exception to this specification.

SC-08 **Progress Meetings and Reports**

1. There shall be a weekly progress meeting, date and time to be determined, at the Owner's Job Office location. Attendance at this meeting by Contractor supervisory personnel is mandatory. Other contractor or sub-contractor personnel may be invited to discuss specific issues.
2. The CPM schedule shall be up-dated bi-weekly (every two weeks) at this meeting. The updated CPM shall be submitted to the Owner's Representative by noon on the preceding Monday to allow review.
3. The required weekly work plan submission in General Conditions Section 6.7.3 shall cover the current week and the following two (2) weeks, three (3) weeks total.
4. The required weekly work plan submission shall include all active sub-contract work.
5. The Contractor shall give the Owner 7 days notice prior to any changes in the Contractor's shifts, hours or days of operation.
6. The Contractor shall provide 48 hours notice to the Owner's Representative to schedule required Quality Assurance testing.
7. The Contractor shall submit a daily report in acceptable format to the Owner's Representative at the end of each workday. This report shall cover:
 - a) Description of project tasks accomplished that day including work of each subcontractor by station and type of work accomplished. Include Pay Item Number for the work performed.
 - b) Materials installed.
 - c) List of major equipment utilized and hours worked
 - d) Estimate of quantities of materials installed or work items
 - e) Personnel who worked on the project and hours worked.
 - f) Any major equipment repairs started or underway. Status of repair and/or removal from Project.
 - g) Weather to include amount of precipitation.
 - h) SWPPP related activity, inspection, documentation and/or reporting.
 - i) Details of problems encountered.
 - j) Next day's planned activities.
8. Procedures for submitting Project Communications, Submittals and RFI's is attached in the Appendix.

SC-09 Progress Payments

1. The Contractor shall submit monthly pay applications on the forms provided by the ARRC. A digital copy in Microsoft Excel format shall accompany the hardcopy application.
2. Monthly pay applications shall be accompanied by:
 - a) Required copies of certified payroll.
 - b) Monthly Progress Report.
 - c) Updated CPM project schedule including the original baseline and progress accompanied with explanations of any indicated delays.
 - d) Updated percentage completion of the Schedule of Values.
3. Pay applications will not be processed until all required documentation is provided to the Owner's Representative.
4. A copy of the ARRC Standard Operating Procedure for Certified Payroll Handling will be provided to the Contractor upon contract award.
5. Monthly progress payment applications shall reflect the percentage completion of the line items included in the Schedule of Values.
6. Retainage: Under General Conditions Section 13.8, Retainage: Change 13.8.1. to read: "The Owner will retain a maximum amount equal to 10% of the total amount earned on all progress payments until substantial completion of the project." Section 13.8.2 shall be omitted.

SC-10 Lump Sum Price Bid Items

This Supplemental Condition supersedes the requirements of General Condition Sections 6.5.7 time requirements for submitting Schedule of Values for all of the work which will include quantities and prices of aggregating the Contract Amount and will subdivide the Work must be submitted at the time of the Bid Submission.

The contractor shall submit a Schedule of Values that accurately represents the itemized costs used to develop each of lump sum Pay Item(s). The Schedule of Values shall have line items for each Pay Item. At a minimum, the Schedule of Values Pay Items shall include a line item for each of the major tasks, materials and work. Major line items shall be sub-divided so no one line item within a Pay Item shall exceed \$100,000.00. The line item(s) totals shall equal the Pay Item and the Pay Items shall equal the aggregate Contract Amount.

Lump Sum Price Bid Items shall include all materials, equipment, labor, supervision, transportation, disposal, administration and all other incidentals necessary to complete the project in accordance with referenced specifications, these Supplemental Conditions and the Contract Drawings, referred to in aggregate as the Contract Documents.

Progress payments will be based upon the percent completion of the itemized costs included in the Contractor's Schedule of Values. The percent completion must be accepted and approved by the Owner's Representative. No measurement or payment will be made for wasted materials, for work done for the convenience of the Contractor, or for work that is not in accordance with the Contract Documents. Payment will constitute full compensation for performing all work included within the Contract Documents and for all risk, loss, damage and expense arising out of the nature or prosecution of the work, subject to General Conditions 13.18.

SC-11 Quality Assurance and Control

1. Owner will accomplish project quality assurance testing using qualified technicians and a Professional Engineer registered in the State of Alaska. The Owner's quality assurance has final authority on passing or failing material and site work.
2. The Contractor shall be responsible for quality control. Quality control testing shall be part of the Contractor's Quality Control Program. Qualified technicians and a Professional Engineer registered in the State of Alaska shall conduct and oversee the quality control testing portion of the Contractor's Quality Control Program. The testing aspects of the Contractor's program would include concrete sampling, weld inspection, compaction and related quality control tests as needed, to ensure materials produced and grade constructed conform to the Contract Specifications. All of the Contractor's quality control test results shall be submitted to the Owner at the end of each day's work period or in a timely manner agreed upon between the Contractor and the Owner's Representative.
3. Contractor shall submit a Construction Quality Control (CQC) Plan for approval. The plan shall be approved prior to beginning work. The CQC Plan shall meet the minimum requirements in the Appendix Construction Quality Control (CQC) Plan.
4. Contractor shall comply with local noise ordinances and restrictions.

SC – 12 As-Built (Record) Drawings:

1. Throughout the project, as changes occur to the design shown in the plans and as new pay items are added to the contract and original items are deleted, the Contractor shall revise and update the designated set of plans marked up as-built drawings in the field office on a timely basis. One full-size set of plans is to be set aside in the Contractor's field office for recording all of the as-built changes made to the project during construction.
2. The contractor personnel associated with the change should enter all corrections, revisions, or additions to the work on the as-built drawings. New drawings or sketches should be added to the set as appropriate. The contractor personnel shall also date and initial each change or addition to the as-built. All changes or additions to the as-built drawings should be made in the color red.
3. Certain information on the drawings does not need to be updated, particularly information of no significance to the finished project like temporary construction features, staged construction schedules, or temporary traffic control measures.
4. Update the following information on the as-built drawings: changes in horizontal or vertical alignment; changes in typical sections or new typical sections; new or revised utility locations; changes to electrical wiring diagrams and installations; changes to automated traffic recorders; as-built location and dimensions of all structures; changes in survey control or right of way/property monuments; changes in drainage features; as-built data on materials sources including areas developed and waste areas (if included in the drawings); as-built location and dimensions of piles, foundation elevations and subsurface structural details; revisions/substitutions of materials or equipment; estimated quantities should be revised to final quantities; all change document work. In short, any change made during construction to a permanent feature of the project, should be correctly shown

on the final as-built drawings.

SC-13 **Permit Requirements**

1. Regulatory Permit Compliance: The contractor is required to comply with all applicable laws, federal, state and local, and the regulatory permits that govern the proposed project construction.
2. Owner-Submitted Permits: Copies of Owner-obtained permits are included in the Appendix. All work performed by the Contractor must conform to the various permit conditions contained therein.

SC-14 **Construction Area / Critical Areas**

1. As part of the environmental requirements for this project, the existing drainage systems shall be protected during construction. Drainage system protection encompasses the protection of all existing watersheds, springs, wetlands, and watercourses (e.g., streams). Wherever possible, a minimum of sixty-six (66) feet of undisturbed natural vegetation and stabilized banks will be retained adjacent to watercourses and wetlands as a buffer and sediment filter for runoff from adjacent disturbed areas. Buffers will be identified and flagged adjacent to streams, drainages, and wetlands prior to any clearing or restoration activities.
2. The existing drainage of watersheds, springs, wetlands and watercourses (e.g., streams) shall be maintained at all times. This is to include locations where drainage structures (i.e. culverts, bridges) are to be constructed as shown on the plans.
3. To the extent practicable, staging areas and temporary construction roads will be located in upland areas and must be approved by the Owner's Representative. If the Contractor believes it is necessary to place temporary fill in wetlands and/or cross streams a detailed comprehensive plan is required to be submitted to the Owner's Representative and approval granted by the Owner prior to beginning the work. The Contractor shall be responsible for obtaining required permits for temporary construction roads or staging areas. The following requirements must be met at a minimum:
 - a) The plan shall include a typical section showing fills being placed on geotextile mats or other suitable materials of sufficient thickness to facilitate the removal of the fill and the materials when they are no longer needed for construction.
 - b) No natural earthen material will be removed from under the geotextile mat when the temporary fill has been removed.
 - c) Contractor shall stabilize the wetlands against erosion once construction equipment and protective mats have been removed by reseeding and revegetating the disturbed areas as necessary. (Type and amount of seed need will be determined by the Owner's Representative)
 - d) The Contractor shall be required to prepare and follow a Storm Water Pollution Prevention Plan to minimize impacts to nearby wetlands.
 - e) The Contractor's belief of the necessity of such fill in wetlands and/or the submission

of a plan as outlined above does not grant or guarantee the Contractor's request.

4. When constructing culverts and bridges in designated wetland areas the Contractor shall be required to provide a detailed, comprehensive plan to be submitted to the Owner's Representative and approval granted by the Owner. The plan is to thoroughly describe the work and all work must meet the requirements of the Owner obtained permits and all Local, State and Federal Laws and Regulatory requirements.
5. Impacts to wetlands resulting from construction activities, temporary staging or access areas shall be the responsibility of the Contractor to restore following construction.
6. The area of disturbance has been outlined in the attached permits, and the Contractor shall keep all work within those areas. Permit modifications or additional areas of impact resulting from work conducted outside of the permitted area shall be the responsibility of the Contractor. No Work will be allowed outside the Grading Limits.
7. All staging, fueling, and equipment-servicing operations will be located at least 100 feet away from all streams, wetlands and ordinary high-water line.
8. All earth working equipment shall be thoroughly cleaned prior entering the project limits to mitigate and control the spread of nonnative invasive plants.
9. Spill response equipment will be readily available and construction personnel should be trained in spill response to contain accidental leaks of oil or fuel from construction equipment.
10. Failure to respond to this or any other special condition in a timely and diligent fashion will result in corrective action by the Owner. The Owner reserves the right to hire another contractor to do corrective action, and to reduce the contract amount by this cost plus the cost to the Owner of implementing another contract.

SC-15 Safety

1. Roadway Worker Protection: Safety is of the utmost importance for the Alaska Railroad Corporation (ARRC); refer to ARRC General Conditions Section 6.17-Work Safety on Railroad Property. Note that a Railroad Safety Plan will be required. Contractor's project supervisors/foremen will be required to complete an ARRC approved Roadway Worker Protection (RWP) course. All Contractor employees expected to be working on or near the tracks are encouraged to complete an RWP course. An approved on-line version of this course is offered at www.contractororientation.com.

SC – 16 Lead and/or Other Airborne Hazards

1. The Contractor shall abide by all applicable AKOSH, OSHA and FRA safety requirements for any and all activities performed.
2. The Contractor shall ensure, through engineering controls and/or Personal Protective Equipment, that worker and/or bystander exposures to lead or any other airborne hazard(s) will be kept below the AKOSH or OSHA Permissible Exposure Limits (whichever is more stringent).
3. The Contractor shall also ensure all ADEC and EPA regulations are followed for the capture, accumulation and disposal of any and all waste products (i.e. paint) associated

with this project.

4. Prior to the commencement of operations a detailed site safety plan will be submitted the ARRC for review.
5. A copy of the sampling results from 2010 are attached in the Appendix as information only. The Contractor may need to do additional sampling in order to create a complete safety plan.

SC-17 ARRC General Construction Requirements

1. General Requirements:
 - a) All construction, reconstruction, operation and maintenance on Railroad property shall be performed in compliance with these specifications. For the purposes of this contract, the project limits within the existing or new rights-of-way shall be considered Railroad property.
 - b) Whenever in the opinion of the Owner's Representative, the construction may cause a hazard to the safe operation of the Railroad, they may place at the site of the work the required number of qualified employees to protect the Railroad's operations. The providing of such employees and such other precautions as may be taken shall not relieve the Contractor, nor subcontractors from liability for the payment of damages caused by their operations. ARRC shall be the sole judge of the necessity for, and as to the number and classification of employees required. All ARRC cost and expense for providing such additional employees shall be collected from the Contractor, except for flagging which shall be paid for as described in the ARRC General Conditions 6.17.
2. Protection of Railroad Traffic and Property
 - a) The Contractor shall make provisions satisfactory to the Owner's Representative against disturbing, in any manner, the embankment, structures and tracks during construction. If the work to be performed by the Contractor shall, as determined by the Owner's Representative, weaken or undermine the Railroad's embankment, structures or tracks, then said work shall be stopped, upon notice to do so. Should any damage occur to ARRC property as a result of the Contractor's unauthorized or negligent operations, the Owner may repair such damages and/or perform any work for protection of its property it may deem necessary and the actual cost thereof shall be borne by the Contractor.
 - b) The Contractor shall furnish, install, maintain and subsequently remove temporary protective fencing, barricades, warning lights, and such additional protection as may be required at excavations, acceptable to the Owner's Representative.
 - c) The following temporary clearances are the minimum, even with flag protection, which must be established and maintained at all times, prior to train passage, during the construction operations:
 - i. Vertical: Twenty-three (23) feet above top of highest rail unless otherwise noted on the Plans.
 - ii. Horizontal: Nine (9) feet from centerline of the nearest track to the edge of obstruction, measured at right angles, thereto, unless otherwise indicated on the Plans.

- d) In the event that lesser clearances than the above are required for any part of the work, the Contractor must secure written authorization from the Owner's Representative for such lesser clearances in advance of the start of the work on that portion of the project along, on, over or across the property or tracks of the ARRC.
- e) The Contractor shall follow Federal, State and local governmental guidelines and suggestions for notification and location of utility locations before proceeding with work.
- f) The Contractor shall, before entering onto the property of the ARRC or project limits for the performance of any construction work or work preparatory thereto, secure permission from the Owner's Representative for the occupancy and use of the ARRC property and shall confer with the Owner's Representative relative to the requirements for Railroad clearances, operation, Contractor's temporary construction crossing and general safety regulations.
- g) The Contractor shall, upon the completion of the work, remove from the property of the ARRC, all machinery, equipment, surplus materials, falsework, rubbish and temporary buildings made necessary by the contract operations, and to leave said property in a neat condition satisfactory to the Owner's Representative.

3. Protection of Roadway Traffic

- a) The Contractor shall be exclusively responsible for all roadway-related activity.
- b) All costs involved in the development and implementation of traffic control plans, including flagging, signs, roadway maintenance, approval by the agency responsible for the roadway, etc. shall be borne by the Contractor, and no payment will be made for this by the Owner.

4. Access Roads and Construction Roads

- a) No payment will be made to the Contractor by the Owner for any work done in constructing, improving, repairing or maintaining any road or structure for use in the performance of the work. The Owner assumes no responsibility for the condition or maintenance of any road or structure that may be used by the Contractor in performing the work or in traveling to and from the site of the work.
- b) All haul routes and access roads within the Railroad property shall be reviewed and approved by the Owner's Representative.
- c) Where it is necessary to place a portion of the haul or service road or occupy an area off the Railroad's right-of-way, the Contractor shall obtain written release from the landowner and tenant for the land involved. At the completion of the project, the area used by the Contractor shall be returned to a condition satisfactory to the landowner and duly constituted environmental agencies.

Barricades:

Erect and maintain temporary barricades to limit public access to hazardous areas or to enter the haul roads. Whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic barricades will be required. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

Fencing:

Fencing shall be established in areas where crews and equipment have the potential to foul the ARRC tracks, or where directed by the ARRC. This will be required, at a minimum, on the necked portion of the haul road directly to the north of the parking lot. Fencing will provide positive separation between rail and road traffic and improved safety.

5. Utility Facilities.

- a) Utility Locates: The Contractor or its Subcontractor shall be required to provide a locate confirmation number from Alaska Digline and identify in the field, utility locates prior to any ground disturbance activities deeper than 6 inches.
- b) All work on ARRC Property shall be conducted in such a manner as to protect ARRC's communication facilities and utilities at all times from damages, outages resulting directly or indirectly from the Contractor's or its subcontractor's operations. The Contractor shall bear the costs of all damages or outages caused by their actions or the actions of their subcontractor.
- c) Should any of the Contractor or its subcontractor's operations cause outages to said communications facilities, the agreed amount of liquidated damages shall be at the following rates and shall be collected from the Contractor:
 - 1. Open wire communication circuits: \$1.00 per minute per circuit
 - 2. Communication cable: \$1.00 per minute per cable
- d) The outage time shall be that as established by ARRC's Test Board, Anchorage.
- e) Fiber optic cable systems are buried on ARRC's ROW Property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on ARRC's Property Installation and repair of all underground utilities, including culverts, pipelines, and underground power and communication lines, on ARRC Property shall conform to the current American Railroad Engineering and Maintenance-of-way Association (AREMA) Specifications.
- f) There shall be no equipment operated or excavation made within fifteen (15) feet of any ARRC communication pole guy, anchor, or other communications apparatus unless authorized in advance by the Telecommunications Supervisor.

6. Excavations.

- a) No water shall be allowed to stand in open excavations in the track area.
- b) Bridging and shoring shall be adequate to safely carry Railroad traffic.
- c) All open excavations shall be continuously protected by flags, barricades, or watchmen as directed by the Owner's Representative.
- d) No open trenches shall be left open more than three (3) days, unless authorized by the Owner's Representative.

- e) The Railroad embankment and cut slopes shall not be disturbed any more than necessary to accommodate the construction and shall be left in a stabilized condition.
 - f) Railroad ditches, culverts and roadways shall be kept clean and free of rock, gravel, construction debris and equipment at all times.
 - g) The Contractor shall obtain any appropriate permits required from the State and have the concurrence of the Owner's Representative prior to any dewatering activities.
7. Snow Removal.
- a) Snow removal operations shall be conducted in such a manner as to not place snow (1) upon the tracks of the Railroad, (2) where it impairs the visibility of either highway or rail traffic at the crossings, or (3) where it inhibits drainage.
8. Personal Injury Reporting
- a) ARRC is required to report certain injuries as a part of compliance with Federal reporting requirements.
 - b) Any personal injury sustained by a Contractor employee while on ARRC property must be reported immediately (by email if unable to contact in person) to the Owner's Representative in charge of the project. The injury report form provided by the Railroad is to be completed and given to the Owner's Representative, no later than the close of shift on the date of injury.
 - c) The Contractor shall submit a one page typed report to Owner's Representative within seventy-two (72) hours of incident. The report shall be a brief narrative describing details of the incident, root cause as developed during injury investigation and corrective measures recommended to prevent re-occurrences.
 - d) Non-Injury Incident Reporting. Any non-injury incident involving a Contractor employee or equipment while on ARRC or MSB property must be reported immediately (by fax or email if unable to contact in person) to the Owner's Representative in charge of the project. The incident report form provided by the Railroad is to be completed and given to the Owner's Representative, no later than the close of shift on the date of the incident.

SC-18 Staging and Access

The contractor may make use of the Railroad right-of-way in upland areas at with written permission of the ARRC. Materials and equipment must be stored in a neat, workmanlike manner. All materials, equipment, and debris must be removed at the completion of the project. Disturbed areas must be restored.

SC-19 Rail Operations Coordination

General Background:

The proposed project will be constructed during active rail operations. This project is located in part of a critical freight transportation system. Railcars, containers and break bulk cargo are transferred from barge to rail at either the Whittier Terminal or Seward Terminal for transportation

to the Anchorage Terminal and interior Alaska. The freight activities between rail and barge are closely coordinated and interdependent. The proposed embankment construction must be planned, scheduled and undertaken to avoid disruption to the rail freight operation.

The proposed project may be constructed outside of the peak passenger train season which typically ends around the middle of September. This will allow for less of an impact to construction activities when working around the tracks.

Operational schedules are adjusted and influenced by weather, tides, freight make-up, loading and off-loading quantities, and equipment reliability.

Other, infrequent barge freight operations also use the Whittier Terminal and Seward Terminal. In the past, these have included both Northland and Spenard Builders Supply. Generally, this additional barge traffic is due to unfavorable ice conditions in Cook Inlet.

Alaska Railroad train operations are scheduled to service the barge arrivals. The barge arrival schedules become firmer as the vessel progresses towards Whittier. Generally, the greatest schedule uncertainty is associated with the leg of the voyage that crosses the Gulf of Alaska. Inbound tows will sometimes choose to remain in Icy Strait awaiting fairer marine conditions to cross the Gulf. Occasionally, barges will stack-up in Icy Strait and later arrive nearly together at the Whittier Terminal.

Occasional barge double-tows require more off-loading time and longer periods of train activity before the final loaded train departs the terminals.

ARRC Flagging

Situational Requirements:

Railroad flag protection (flagging) is required whenever people, vehicles, or equipment are within 20' of the tracks.

Flagging is also required if equipment can reach within 20' of the tracks. Some examples of other situations which may require flagging:

- Surveying within 20' of the tracks
- Boring under the tracks
- Working over the tracks (on a bridge or with overhead utility lines)
- Working within 20' of any railroad facilities, including signal facilities.
- Movement of off-road or oversized/overweight loads over at-grade crossings
- Operating tracked equipment over at-grade crossings
- Using a sweeper truck on at-grade crossings
- Crossing tracks on foot with limited sight distance

Railroad flagging personnel are provided to protect ARRC personnel, equipment, passengers, and facilities from the work being performed, and to provide protection to contractors working within ARRC ROW from ARRC operations. They are NOT inspectors of the work being performed. ARRC reserves the right to require construction observation for work within ARRC ROW. Flaggers will provide daily job briefings and ensure at each briefing that all contractor activities planned for that day will comply with the most current version of the Alaska Railroad Safety Policies. All personnel entering the project limits are required to have a job briefing with the Flagger prior to work.

A single flagger may cover a limited length of track, depending on track curves, sight lines, radio contact, and other factors. The ARRC will determine in its discretion flagging limits per location and how many flaggers are necessary to cover the required work area.

The minimum flag protection time for which the contractor shall be responsible is 8 hours per day, per flagger, regardless of the actual time during each day that flagging is required. No single flagger may work more than 12 hours in a given day, 60 hours in a given week, or 6 days in a row.

Flagging hours will typically exceed the contractor's onsite work hours. Additional time is required for flaggers to travel to and from the work site, to obtain track authority, and to set up and tear down equipment, each of which are included in the time allotted for flag protection. On average, a flagger will work 2-3 hours per day in addition to the onsite flagging time.

Flagging required for near track work will be billed to the contractor at the Flag Projection Cost. This includes additional flagger(s) required to be called out so as not to exceed the times stated above.

Scheduling:

Flagging requests must be submitted 10 business days prior to the start of work. ARRC will make a reasonable effort to provide flagging to accommodate contractors' schedules. However, staffing is limited during certain times of the year and personnel may not be available at specific times.

To avoid flagging charges, cancellations of flagging requests must be made at least 72 hours prior to the scheduled start of flagging operations. Any cancellations received with less than 72 hours' notice are subject to payment of the minimum daily rate, as determined by ARRC, for the number of flaggers assigned to the project.

Flag Protection Cost:

Flagging will be billed out at a daily rate of \$1,200.00 per flagger, per 12 hour shift. The rate will not be prorated for partial shifts. Anything over 12 hours will be billed an additional day at the daily rate stated.

Other On-Track Railroad Activities:

Other Railroad on-track activities that will pass the proposed project site include snow plowing and track inspection. The track is inspected, in accordance with federal regulations, twice a week by hyrail.

ARRC Work Train At The Contractors Expense:

1. If Work trains are elected to be used by the Contractor, they shall provide a minimum of 21 days' notice for ARRC work train coordination and use for mobilization, demobilization, loading/unloading materials.
2. Loading / Unloading and any other operation or procedure resulting from the use of a work train shall not, in any way, inhibit Rail traffic or any scheduled train.
3. Work Plans for any work train use shall be submitted to the ARRC and approved accordingly, prior to scheduling the work train.
4. The contractor may utilize a Work Train to move equipment and materials to and from the project site. Expenditures for train moves will be the responsibility of the contractor and pricing for such should be subsidiary to the applicable bid line items.

5. ARRC work trains may mobilize and demobilize jobsite facilities and equipment and materials at ARRC's convenience.
6. Contractor shall provide at least 4 people to remove load securements, 2 operator and 1 supervisor at the site during unloading of equipment and materials for mobilization and demobilization.
7. Marshalling area is available at the ARRC Anchorage Yard for moving contractor's equipment. ARRC may consider alternate marshalling areas proposed by the Contractor.
8. Materials will be loaded at ARRC's Birchwood Yard. ARRC may consider alternate areas proposed by the Contractor.
9. Overtime, stand-by time, or delays caused by work train schedules are the Contractor's responsibility.
10. ARRC Work Trains hours of service may and will not exceed 12 hours. Hours of service are set by Federal Regulations. Delays to the work train will be as outlined in these Contract Documents.

SC-20 Train Delays

1. All work on ARRC Property shall be conducted in such a manner as to prevent delays to trains or other rail traffic operated by ARRC.
2. Should any of the Permittee/Contractor's or its subcontractor's actions or activities cause delays to trains or other rail or water traffic, the agreed amount of liquidated damages shall be at the following rates and shall be collected from the Permittee/Contractor by ARRC.
 - a) Passenger trains each: \$50 per minute of delay, 60-minute minimum charge.
 - b) All other rail traffic: \$50 per minute for each delay over five minutes, 30-minute minimum charge.
 - c) Rail barges or other Connecting Carrier Vessels: No charge for delays of one hour or less; \$1,000 per hour for each hour or any part of an hour thereafter with a minimum charge of \$6,000.
 - d) Work Train delays: \$10,070.00 per day for each calendar day for delays.

Delay time will be taken from the train sheet in ARRC's Dispatcher's Office, Anchorage for all delays and such train sheet shall be the official document by which the length of time a train is delayed will be determined. If another crew is needed to relieve the original crew, the charge shall also apply to the second crew. If such delay causes a water carrier to miss a sailing, the liquidated damage computation of time covering the period of time to the next possible sailing time shall be in addition to the length of time determined by said train sheet.

END OF SUPPLEMENTAL CONDITIONS

APPENDIX I

CONSTRUCTION QUALITY CONTROL (CQC) PLAN

1. SUBMITTAL AND GENERAL REQUIREMENTS

- 1.1. Section 6.26 of the General Conditions requires a CQC Plan. This section provides further information about CQC Plan requirements.
- 1.2. The Contractor shall establish and maintain an effective quality management system. The quality management system shall consist of plans, procedures, and the organization necessary to provide material, equipment, and workmanship that comply with the requirements of the contract documents. The system shall cover operations both onsite and offsite, and shall be keyed to the proposed sequence of the work.
- 1.3. The Contractor shall prepare a Construction Quality Control (CQC) plan in conformance with the requirements of this appendix and all other contract documents. A complete detailed CQC plan shall be submitted to the Project Manager within 10 days of intent to award and shall be approved in writing by the Project Manager prior to proceeding with the work.

The Contractor's CQC plan shall include. The CQC plan shall include detailed description of how manufactured materials will be stockpiled and protected prior to incorporation into the project.
- 1.4. The CQC plan shall be capable of ensuring that the procurement, shipping, handling, fabrication, installation, cleaning, inspection, construction, testing, storage, examination, repair maintenance, and required modifications of all materials, equipment, and elements of the work comply with the requirements of the contract documents and that all materials incorporated in the work will perform satisfactorily for the purpose intended.
- 1.5. If Contractor does not provide an acceptable CQC plan, ARRC may, at its sole discretion, elect to award the contract to others.

2. AUTHORITY AND RESPONSIBILITY

- 2.1. Authority: The persons and organizations performing quality control and quality assurance functions shall have sufficient authority and organizational freedom to identify quality problems and to initiate, recommend, provide, and verify implementation of the solution.
- 2.2. Changes in Plan or Personnel: The Contractor shall not revise the CQC or the quality staffing levels or replace any of the key personnel specified herein without prior written approval from the Project Manager.
- 2.3. Contractor's Responsibility: The Contractor is solely responsible for achieving project quality and shall have overall responsibility for the quality of all construction work. The contractor shall conduct quality management

activities, which include inspection, materials testing, and other activities specifically developed and/or chosen by the Contractor.

- 2.4. Owner's Responsibility: ARRC reserves the right to, and will, conduct inspections, testing, sampling, and evaluation associated with quality assurance and independent quality assurance. ARRC's role in construction is to provide the following.
 - 2.4.1. Quality assurance and independent assurance of construction activities, inspection, and materials testing. ARRC will do this with either its staff or a consultant acting as the Project Manager.
 - 2.4.2. Oversight of the Contractor's quality management activities to ensure adherence to the CQC plan and compliance with the contract documents.
 - 2.4.3. Notifying the Contractor promptly of irregularities or deficiencies observed in the work.
 - 2.4.4. Oversight of the Contractor's construction management, including but not limited to scheduling, invoicing, shop drawing review, submittal review and processing, document control, measurement of pay item quantities, and SWPPP implementation and maintenance and etc.

3. CONSTRUCTION QUALITY CONTROL (CQC) PLAN

- 3.1. Objectives: Quality in the construction phase is the program of policies, procedures, and responsibilities required to provide confidence that the desired characteristics have been obtained to help ensure the project will perform its intended function for its design life. Quality control in the construction phase shall consist of those actions necessary to assess production and construction processes so as to control the level of quality being produced in the end project. The Contractor's quality control actions shall include examining, checking, and inspecting in-process and completed work, and materials sampling and testing during production and construction, as a means of controlling and measuring the characteristics and conformity of an item, process, or feature to contract requirements.
- 3.2. The Contractor's CQC plan shall be capable of:
 - 3.2.1. Ensuring that the design, procurement, shipping, handling, fabrication, installation, cleaning, inspection, construction, testing, storage, examination, repair, maintenance, and required modifications of all materials, equipment, and elements of the work comply with the requirements of the contract documents.
 - 3.2.2. Ensuring that all materials incorporated in the work, all equipment, and all elements of the work will perform satisfactorily for the purpose intended.

- 3.3. Contents of the CQC Plan: The CQC plan shall delineate the type and frequency of inspection, sampling, and testing deemed necessary to measure and control the various properties of material and workmanship of all construction processes within the tolerances governed by the drawings and specifications, applicable codes and regulations, permit conditions, and other contract requirements as contained herein. The CQC plan shall include the following, at a minimum.
- 3.3.1. Construction activity and item inspection plans.
 - 3.3.2. Schedule of materials control including materials to be tested, test methods, and frequency of testing. The CQC Plan shall reference and match any test methods or frequencies described in the Contract Documents.
 - 3.3.3. Sampling techniques, and methodology, such as the use of random number tables, for selecting representative testing and or sampling locations.
 - 3.3.4. Control of workmanship.
 - 3.3.5. Identification and qualifications of key quality control personnel, including the quality control manager, inspectors, and technicians. Include an organization chart with reporting lines.
 - 3.3.6. Name and location of testing laboratories.
 - 3.3.7. Documentation procedures, including inspection and test records; accuracy and calibration checks; nature, number, and type of deficiencies found; nature of corrective actions; and quantities of work tested and sampled.
 - 3.3.8. Inventory of the field and laboratory equipment (along with calibration certifications) that will be used to perform the testing.
 - 3.3.9. Mandatory inspection points.
 - 3.3.10. Description of the quality control process that will be employed to ensure that any items manufactured off-site, including but not limited to multi-plate pipes, piles, bridge girders and structural steel meet contract requirements. If quality control is performed by subcontractors, manufacturers, or suppliers, provide their item-specific quality control processes as part of the CQC plan.
 - 3.3.11. Description of the quality control processes that will be employed to ensure installation of all structural items, including but not limited to utility crossings, culverts, multi-plate pipes, piles, structural concrete, and steel erection results in a product that conforms to contract requirements.
 - 3.3.12. Description of how and where manufactured materials will be stockpiled and protected prior to incorporation into the project.

4. CONSTRUCTION QUALITY ORGANIZATION

- 4.1. The construction CQC shall describe the Contractor's quality management organization for all of the project construction processes. At a minimum, the CQC shall identify the following positions.
 - 4.1.1. Construction Manager or Superintendent: The Construction Manager shall be the individual responsible for the overall project construction, quality management, and contract administration for this project.
 - 4.1.2. Construction Quality Manager: The Construction Quality Manager may work directly for the Contractor or may be contracted from an independent firm or organization. The Construction Quality Manager shall work under the direct supervision of the Construction Manager. The Construction Quality Manager and the Construction Manager or Superintendent shall not be the same person. It shall be the responsibility of the Construction Quality Manager to perform workmanship inspections, implement quality planning, oversee quality control testing, and coordinate with Owner's QA testing and independent assurance testing. The Construction Quality Manager shall also cooperate with the Project Manager in compiling a statistical correlation of materials and workmanship data. The Construction Quality Manager shall be responsible for submitting requested inspection, testing, and other data to the Project Manager on a daily basis or as determined by the Construction Quality Manager and ARRC's field representative.. The Construction Quality Manager shall have at least two years (within the last five years) of experience in inspection and materials testing for similar projects.
 - 4.1.3. Construction Testing Technicians: The construction testing technicians may work directly for the Contractor or may be contracted from an independent firm or organization. They shall work under the direct supervision of the Construction Quality Manager and perform testing and inspections as indicated in the CQC plan. Each Construction Testing Technician shall have training and/or technical certification, as appropriate, for the specific type and level of work that they will be testing, including sampling methods appropriate to the type of material being tested. Appropriately trained Construction Testing Technicians shall perform all contract required tests for excavation and embankment materials, selected embankment materials, subbase and base materials, asphalt pavement, concrete, welding, structural steel bolting, painting and coating, and any other materials or work for which the Contractor is responsible under the Contractor's quality management system.

5. **PRECONSTRUCTION MEETING:** Before the start of construction, the Contractor shall meet with ARRC or its authorized representative in a pre-construction meeting. A topic of the pre-construction meeting shall be the Contractor's proposed quality

management system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the Contractor's quality control operations, control activities, testing, administration of the system for both onsite and offsite work, and the Contractor's quality control program. Minutes of the meeting shall be prepared and signed by both the Construction Manager and the Project Manager. The minutes shall become a part of the contract file. Additional conferences may be called at any time to reconfirm mutual understandings.

6. INSPECTIONS AND TESTS

- 6.1. Except where they are specifically indicated to be the Owner's responsibility, or are provided by another identified entity, the Contractor shall provide inspections, tests, and similar quality control services in accordance with the approved CQC plan. Costs for these services shall be included in the contract price, whether performed by the Contractor's personnel or an independent firm.
- 6.2. Associated Services: The Contractor shall cooperate with organizations performing required inspections, tests, and similar services and shall provide reasonable auxiliary services as requested. Auxiliary services required include, but are not limited to:
 - 6.2.1. Providing access to the work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
 - 6.2.2. Taking adequate quantities of representative samples of materials that require testing or assisting the Owner in taking samples.
 - 6.2.3. Providing facilities for storage or curing of test samples, and delivery of samples to testing laboratories.
 - 6.2.4. Providing the Owner with a proposed mix design for use for each materials mix that requires control. The mix design shall be for the current year, and shall be accompanied by current year test results from a materials testing laboratory with current AASHTO accreditation in the test methods required for the respective mix design. All source materials used for preparing the mix design shall be the same as those materials that will be used for the project.
 - 6.2.5. Security and protection of samples and test equipment at the project site.
- 6.3. Coordination: The Contractor, the Project Manager, and any independent testing agencies shall coordinate the sequence of activities to accommodate required inspection and testing services with a minimum of delay. In addition, the Contractor and ARRC shall coordinate activities so that removing and replacing construction to accommodate inspections and tests will not be required.
- 6.4. The Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities.

- 6.5. Mandatory Inspection Documentation Points: Documentation points are mandatory verification and inspection points that shall be identified in the CQC plan and the project schedule, and specifically approved by the ARRC. Documentation points should be points at which critical characteristics are to be measured and documented by the Construction Quality Manager. It will be the responsibility of the Construction Quality Manager to certify that the construction has met the requirements of the plans and specifications and to sign all inspection documentation. Inspection documentation shall be submitted to ARRC or its representative when requested. It shall be the responsibility of the Contractor to determine inspection documentation point criteria and required documentation.
- 6.6. ARRC shall be notified a minimum of 48 hours prior to any mandatory inspection.
 - 6.6.1. The mandatory inspection points for this project shall be established through coordination between the contractor and the Project Manager.
- 6.7. Completion Inspection: At the completion of all work or any increment thereof established by a completion time stated in the schedule or in the CQC plan, the Construction Quality Manager shall conduct a completion inspection of the work and develop a punch list of items that do not conform to the contract documents. Such a list of deficiencies shall be included in the QC documentation as required herein, and shall include the estimated date by which the deficiencies will be corrected. The Construction Quality Manager shall make a second completion inspection to make certain that all deficiencies noted on the punch list have been corrected and so notify ARRC. The completion inspections and any deficiency corrections required by this paragraph shall be accomplished within the time stated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

7. DOCUMENTATION

- 7.1. The Contractor shall maintain daily records of quality control operations, activities, and tests performed, including the work of suppliers and subcontractors. These records shall be on an acceptable form and shall include factual evidence that required activities or tests have been performed, including, but not limited to, the following.
 - 7.1.1. Type and number of control activities and tests involved.
 - 7.1.2. Results of control activities or tests.
 - 7.1.3. Nature of nonconformance's, defects, and/or causes for rejection.
 - 7.1.4. Proposed corrective action.
 - 7.1.5. Corrective actions taken.

- 7.1.6. List of trades and subcontractors working on the project, and the number of personnel working.
- 7.1.7. Description and inventory of materials delivered by suppliers for future incorporation into the work, including identification of supplier.
- 7.1.8. Description of weather and site conditions encountered any delays, and acknowledgement of any instructions given by ARRC.
- 7.2. The daily quality control report records shall cover both conforming and non-conforming work and shall include a statement that supplies and materials incorporated in the work and workmanship comply with the contract. The Construction Quality Manager shall sign the daily quality control report and furnish legible copies to ARRC by the end of the following workday.
- 7.3. Monthly quality control reports that summarize project status, work completed related to funds expended, any nonconformance, and subsequent corrective actions shall be provided.

APPENDIX J

COST SCHEDULE Potter Hill Earthquake Damage Repair & Restoration ITB No. 19-36-207551

COST SCHEDULE: A Bidder's Failure to provide the information requested in this Appendix may be cause for rejection of the bid on the basis on non-responsiveness. Cost shall be bid in accordance to all specifications in Appendix D, and any Technical Specifications incorporated herein.

AWARD CRITERIA: A contract award resulting from this solicitation shall be made to the low, responsive, responsible bidder who meets the requirements as set forth in the plans and specifications and compliance thereof. The contract may be awarded to the responsive and responsible bidder who's Lump Sum Base Bid is deemed by the Contact Administrator to be in best interest of the ARRC. The successful bidder shall hold unit prices of all additives firm for a period of thirty (30) days from the date of bid opening. Award is contingent on the availability of ARRC funds.

BASE BID ITEMS					
Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid
640	Mobilization	LS	1		
201	Clearing and Grubbing	LS	1		
301 304 203	Unclassified Excavation	CY	14443		
301 304 203	Muck	CY	400		
301 304 203	Borrow / Fill	CY	11365		
605	Install Blanket Drains	LF	600		
611	Place Angular Rock	CY	10400		
603, 611	Drainage Systems Restoration 12" & Flume	LF	400		
603, 611	Drainage Systems Restoration 18" & Flume	LF	80		

603, 611	Drainage Systems Restoration 24" & Flume	LF	80		
618	Seeding and Stabilization	Acre	7		
642	Survey:	LS	1		
Total Base Bid ²:					

ADDITIVE ALTERNATE BID ITEMS ¹					
Item No.	Item Description	Unit	Quantity ³	Unit Bid Price	Amount Bid
A-1.1	Adjust Upslope Trench For Upslope Inlets	LF	2000		
A-1.2	Clean Upslope Inlets	EA	2		
A-2	Secure Exposed Drainage Piping (Up Eastern, Non-Disturbed Slope)	EA	1		
A-3.1	Adjust Trackside Trench, Grade for Manholes & Inlets	LF	2300		
A-3.2	Clean Trackside Manholes & Inlets	EA	7		
A-4	Drain Impounded Water at Toe of Embankment	LS	2		
Total Additive Alternate Bid:					

Notes:

¹ Award of Additive Alternate Bid items is dependent on Owner finances. The successful bidder will be notified of the Owner's intent to award additional work prior to receiving a Purchase Order or Notice to Proceed (NTP).

² Award of this proposal is to be made on total derived from the sum of the Base Bid items.

³ Bid quantities are approximate. Contractor is responsible for their own quantity take-offs using the information within the Contract Documents to verify the quantities in the Cost Schedule.

NON-COLLUSION AFFIDAVIT: The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he/she nor the firm, association, or corporation of which he/she is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this Bid.

The Undersigned has read the foregoing proposal and hereby agrees to the conditions stated therein by affixing his/her signature below:

BIDDERS NAME AND ADDRESS

COMPANY NAME

SIGNATURE BY AND FOR THE BIDDER

COMPANY MAILING ADDRESS

PRINTED NAME OF ABOVE BIDDER

CITY, STATE ZIP CODE

DATE OF BID

CONTACT PHONE NUMBER

CONTACT E-MAIL