



ALASKA RAILROAD CORPORATION
327 W. Ship Creek Avenue
Anchorage, AK 99501

April 30, 2019

INVITATION TO BID

#19-19-207302

ALASKA RAILROAD CORPORATION
GLENN HIGHWAY TRACK WORK AND CROSSING SUPPORT

Response Required: This page must be completed and returned ensuring receipt of future addenda or additional information. Please email this form to Goemerg@akrr.com. 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 Corporate and then Procurement / Solicitations. Bidders must acknowledge the receipt of all issued addendums in their proposal/bid submittal.

Company _____

Address _____

Contact _____

Phone _____ Fax _____

Email _____

www.AlaskaRailroad.com



ALASKA RAILROAD CORPORATION
327 W. Ship Creek Avenue
Anchorage, AK 99501
GOEMERG@AKRR.COM

April 30, 2019

INVITATION TO BID
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ALASKA RAILROAD CORPORATION
GLENN HIGHWAY TRACK WORK AND CROSSING SUPPORT

SEALED BIDS WILL BE RECEIVED AT: Alaska Railroad Corporation
327 W. Ship Creek Avenue,
Anchorage, Alaska 99501

Offers will be received until 3:00 pm local time on May 21, 2019.
At which time bids will be publicly opened.

IMPORTANT

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. Any questions the bidders have must be submitted in writing to the Contract Administrator. The Project Manager cannot and will not answer bidder's questions regarding the work to be performed under this ITB.

Federal Terms & Conditions: The services to be provided under this contract relate to a project funded in part by federal funds administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Federal funds may be used to pay for part or all of the services provided under this contract. Accordingly the contractor agrees to comply with the applicable Federal Terms and Conditions stated in Appendix E attached within.

Return your bid in a sealed envelope on which the Solicitation number and title appears. 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 before the scheduled time of bid opening.

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.

ARRC may award a contract resulting from this solicitation to the low responsive offeror whose offer conforming to this solicitation will be the most advantageous to the ARRC. ARRC may reject any or all offers if such action is in the best interest of ARRC. Any resulting contract from this solicitation shall incorporate the Standard Instructions, and General Terms and Conditions incorporated in this solicitation.

In compliance with this solicitation and subject to all conditions hereof, the undersigned bids and agrees to furnish any or all of the items upon which prices are quoted at the price opposite each item by the time specified hereon.

BIDDER/VENDOR TERMS AND CONDITIONS: PROSPECTIVE BIDDERS ARE CAUTIONED TO PAY PARTICULAR ATTENTION TO THIS CLAUSE. 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.

If a bidder attaches additional terms and conditions as part of the bid, such attachments must be accompanied by a disclaimer stating that in the event of conflict between the terms and conditions of this Invitation to Bid and the terms and conditions of the bidder/contractor, the terms and conditions of the Invitation to Bid will prevail.

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

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 of 3.0% in federal fiscal years 2019-2021 on contracts funded by agencies within the U.S. Department of Transportation. 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 (<http://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.

The envelope used in submitting your offer shall be plainly marked with the following information:

1. Offeror's Name -
2. Invitation To Bid Number 19-19-207302
3. Sealed Offer: Glenn Highway Track work and Crossing Support

Please direct all questions concerning this solicitation to Greg Goemer, Alaska Railroad Corporation, 327 W. Ship Creek Avenue, telephone number (907) 265-2593, or e-mail: Goemerq@akrr.com.

Sincerely,

Greg Goemer

**Greg Goemer
Sr. Contract Administrator
Alaska Railroad Corporation**

BID INDEX

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APPENDIX A REQUIRED DOCUMENTS

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

1. Construction Bid Form - [Form 395-0121]
2. Bid Bond - [Form 395-0120]
3. Cost Schedule - Appendix I
4. Contractor Responsibility Questionnaire - [Form 395-0138]
5. Required Contract Provisions for Federal-Aid Contracts: Appendix E
21. FHWA BUY AMERICA REQUIREMENTS-23 CFRs635.410
22. FTA BUY AMERICA REQUIREMENTS-49 USC 5323(j); 46 CFR 661
25. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING-31 USC 1352, 49 CFR Parts 19, 20

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER The apparent low bidder 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]
2. Contractor's QA/QC Plan
3. Contractor's Site Health & Safety Plan

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. Contract - [Form 395-0122] and Notice to Proceed, ARRC Generated
5. Contractors Business License and Contractors License
6. State of Alaska Department of Labor - Notice of Work

POST AWARD DOCUMENTATION

1. Weekly Certified Payrolls
2. All Required Submittals /QAQC Reports
3. State of Alaska, DOL Notice of Completion

APPENDIX B

SCOPE OF WORK

ARRC is requesting bids for labor and equipment as required for the construction of the following: Relocation of two at-grade railroad crossings at newly realigned roads, and reconstruction of one railroad crossing, located along the Palmer Branch Track in Palmer, AK, as listed below.

Prior to track & road closures:

1. Mobilize ARRC provided material from ARRC yard in Anchorage to job site(s)
2. Construct new track panel.

During allowed track closures (Scheduled work may not impact the Alaska State Fair or ARRC Gravel Operations):

3. Remove & discard existing rail, ties, and hardware materials (exceptions are noted in the location specific information below)
4. Excavate & Embank
 - a. Excavate 7' either side of track CL to 16" below tie & dispose of material offsite
 - b. Compact subgrade to 95% using 12 ton compactor
 - c. Install geotextile fabric, as specified.
 - d. Embank ballast to within 2" of finish grade & compact with 12 ton compactor
5. Install newly constructed track panel.
6. Dump ballast, surface and tamp using approved equipment with a 300' runoff and a minimum of 3 passes. Maximum raise of 1" allowed
7. Install panels by pre-drilling holes prior to installing concrete crossing screws (track must be regulated & free of ballast prior to installation of panels)
8. Install new Type 2 and Type 3 junction boxes, 4" conduit, coupling, and sweeps for future connection of signal cable from the signal house to the crossing signal junction boxes.
 - a. Reference provided plans for location and type of conduit and junction boxes
 - b. All conduit and cable to be buried minimum 36"
 - c. All excavations shall be backfilled and compacted
 - d. Reference Alaska Railroad Standard Specifications and Section 660 of the DOT&PF Standard Specifications for Highway Construction 2017 Edition.
9. Re-grade/repair any disturbed areas.

S. Inner Springer Loop – DOT Crossing #868513Y – ARRC MP A-3.7:

South Inner Springer Rd. is being realigned as part of State of Alaska DOT&PF Glenn HWY 34-42 Phase 1 Project. This location will required construction of new 80' crossing with a 120' track panel located approximately 50' from the existing crossing.

This work will need to be coordinated with the DOT&PF contractor for the Project and is tentatively scheduled for August 15, 2019 to accommodate track work. All coordination with DOT contractor will occur through the Engineer. No on site work will be allowed during the Alaska State Fair.

North Fairgrounds – DOT Crossing #868515M – ARRC MP A-4.32:

The North Fairgrounds crossing is being upgraded and expanded as part of the State of Alaska DOT&PF Glenn HWY 34-42 Phase 1 Project. This location will require removal of existing 32' crossing and reconstruction of a new 56' crossing with a 120' track panel.

This crossing will not be signalized and there will be no items related to No. 8 above.

This work will need to be coordinated with the DOT&PF contractor for the Project and is tentatively

scheduled for August 15, 2019 to accommodate track work. All coordination with DOT contractor will occur through the Engineer. No on site work will be allowed during the Alaska State Fair

E. Inner Springer Loop – DOT Crossing #868516U – ARRC MP A-4.94:

E. Inner Springer Rd. is being realigned as part of State of Alaska DOT&PF Glenn HWY 34-42 Phase 1 Project. In addition to construction of a new 80' crossing with a 120' track panel, this location requires the following:

Removal of the switch located approximately 100' RR South of the new crossing, and replacement of that 100' of existing track with new 115lb mainline track. Removal of approximately 280' of spur track to the limits of ARRC ROW. Contractor is to salvage existing switch and transport to ARRC Yard in Anchorage.

This work will need to be coordinated with the DOT&PF contractor for the Project and is tentatively scheduled for August 15, 2019 to accommodate track work. All coordination with DOT contractor will occur through the Engineer. No on site track work will be allowed during the Alaska State Fair.

REQUIREMENTS & CONSIDERATIONS:

- Price to include all labor, equipment, and any materials not supplied by ARRC.
- All workers must attend an onsite preconstruction meeting prior to start of work.
- All welds must be completed by ARRC approved Certified Thermite Welders.
- Work must occur within the allotted closure times.
- Contractor shall comply with the Alaska Digline policy.
- ALL WORK MUST BE COMPLETED IN ACCORDANCE WITH THE FOLLOWING PLANS AND SPECIFICATIONS:
 - Alaska Railroad Corporation's Standard Modular Crossing Drawing Number 2.78-06
 - Alaska Railroad Corporation's Standard Specifications for work on Railroad Property
 - American Railway Engineering and Maintenance-of-Way Association's manual for Railway Engineering
 - Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction 2017 Edition
- No more than 1" of raise allowed at each crossing. Contractor to be responsible for any additional costs associated with additional pavement, curb work, or utility adjustment required should there be more than 1" of track raise.
- Contractor shall exclude the following items:
 - New material to be provided by ARRC
 - Track Protection (provided by ARRC)
 - Traffic control (provided by Others)
 - Striping (provided by Others)
 - Paving (provided by Others)
 - Flatwork (provided by Others)
 - Sawcut & AC Removal (provided by Others)
 - Surveying (provided by Others)
- ARRC to provide the following material (FOB Anchorage unless otherwise noted):
 - 8.125' Industry Standard 115 lb Concrete Panels & End Ramps
 - Geotextile Fabric
 - New 115 lb rail in 80' and 40' sticks (FOB jobsite)
 - 10' hardwood ties
 - 8.5' hardwood ties
 - E-clips

- Bolts
- Nuts
- Washers
- Anchors
- Pandrol Plates
- Lag Screws
- Orgo Thermit Welding Kits (FOB jobsite)
- Angle Bars

Please note that the schedules are estimates and subject to change pending permitting requirements, train schedules, and field progress. WORK MAY BE REQUIRED ON WEEKENDS AND/OR NIGHTS. All work is to be completed by December 31, 2019.

APPENDIX C

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 of Site: Bidders should visit the Project Site(s) and take such other steps as may be reasonably necessary to ascertain the nature and location of the Work, and the general and local conditions which may affect the Work and the cost thereof.

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 solicitation 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, (SAFETY AND PROTECTION), Section 6.17 (WORK SAFETY ON RAILROAD PROPERTY), (EMERGENCIES), other sections of the contract GENERAL CONDITIONS.

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

To ensure that the federal requirement for the weekly submission of certified payrolls with social security numbers is met, the following instructions will be given to the prime contractor by listing them in the contract as follows:

This contract may include 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
P.O. Box 107500
Anchorage, AK 99510-7500

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 are 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.



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

CERTIFIED PAYROLL

Contractor Name Alaska Strong Steel, Inc		Contractor License No. 28888		SubContractor		Address 782 Northridge Avenue, Anchorage, AK 99503	
Phone 907-555-1212		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: 555-55-5555 316 Timber Lake Road Anchorage, AK 99515		Contracting Agency Project # 35014		Dept. Labor Project # 04/12-1500	
Week Ending 18-Dec-04		Specific Work Class Code Including Certificate # for Electrician, Plumber, Painter, Roadman, Asbestos Workers, Truck drivers include truck license number S0301		Payroll No. 1		Project Name and Location Gold Creek Bridge Repair	
Classification: Carpenter Certificate # Truck License # Classification Code:		Union Member- ship? If NONE put N/A		Date of the Month Day of the Week S M T W T F S		Contract Amount \$50,000.00	
Classification: Certificate # Truck License # Classification Code:		N/A		S M T W T F S		DEDUCTIONS FICA FED WH TAX ESD OTHER (EAP/ASH) Garden or Medical Insurance	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Total Hours Worked	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Hourly Rate Paid	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Gross Amount Earned	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Total Deductions	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Net Amount Paid	
Classification: Certificate # Truck License # Classification Code:				S M T W T F S		Check No. Issued	

"CONFIDENTIAL"

Figure 1. Sample Certified Payroll Form with Social Security Numbers

SSN MUST be listed for each employee on payroll

P. O. Box 21149
1111 W. 8th Street, Rm 302
Juneau, AK 99801
(907) 465-4342 Fax: (907) 465-3584

Rev. Aug. 2005

Jane Doe

Signature (original signature required)

Jane Doe, President

Name & Title (print or type)

APPENDIX D

FORMS

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 venturers 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.

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 #

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.

**ALASKA RAILROAD CORPORATION
CONSTRUCTION BID FORM of**

NAME _____

ADDRESS _____

To the CONTRACTING OFFICER, ALASKA RAILROAD CORPORATION:

In compliance with your Invitation for Bids No. _____, dated _____, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of _____ Located at or near _____, 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

ALASKA RAILROAD CORPORATION

BID BOND

				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)					
PENAL SUM OF BOND				DATE OF BID	
<p>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.</p> <p>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.</p> <p>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.</p> <p>If the Principal enters into the contract, then the foregoing obligation is null and void.</p>					
PRINCIPAL					
Signature(s)				Corporate Seal	
Name(s) & Titles [Typed]					
CORPORATE SURETY(IES)					
	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



SAMPLE CONTRACT

ALASKA RAILROAD CORPORATION CONSTRUCTION CONTRACT Contract Number: _____

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

an ☐ Individual, ☐ Partnership, ☐ Joint Venture, ☐ Sole Proprietorship, ☐ Corporation, incorporated under the laws of the State of _____, 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:

at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of: _____ Dollars \$_____), and such other items as are mentioned in the original Bid, which Bid and prices named, together with the Contract Documents are made a part of this Contract and accepted as such, the project being situated as follows:

It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not specifically herein provided for, will be allowed by 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, on or before:

_____, or within _____
Calendar Days.

It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of 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: _____ Dollars \$_____), per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages. The bonds given by the Contractor in the sum of: \$_____ Payment Bond, and \$_____ 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

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 BELOW]

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

[illegible]

ALASKA RAILROAD CORPORATION PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ of:

_____ 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 Bid Number: _____

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

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.

**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 Bid Number: _____

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

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.

APPENDIX E

**REQUIRED CONTRACT PROVISIONS
FOR
FEDERAL-AID CONTRACTS
[Revised February 2, 2018]**

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.

Distracted 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 Contractor 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. MONITORING AND REPORTING PROGRAM PERFORMANCE – 2 CFR § 200.328(c) *Construction Performance Reports* [Applicable to all Federal-aid construction contracts]

The Contractor shall provide written notice to ARRC as soon as the following types of conditions become known:

- (a) Problems, delays, or adverse conditions that will materially impair the ability to meet the objective of the Federal award. This notice shall include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
- (b) Favorable developments that enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

31. 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 F

GENERAL CONDITIONS **(CONSTRUCTION)** (Revised 01/08/16)

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 in 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.

Acceptance Tests - Quality Control tests taken by the CONTRACTOR, the results for which are used by the OWNER to determine whether the Work complies with the requirements of the Contract Documents.

Access Road - The right-of-way, the roadway, and all improvements constructed thereon connecting the Site to a public thoroughfare.

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.

Advertisement - The public announcement, as required by law, inviting bids or proposals for Work to be performed or Materials to be furnished.

Affiliate - Affiliate shall mean any subsidiary of Contractor, and any other entity in which Contractor has a financial interest or which has a financial interest in Contractor (including without limitation parent companies, related businesses under the same holding company, or any other business controlled by, under common control with, or which controls Contractor).

Allowances - Allowances shall mean the allowance amounts shown in the Schedule of Values, together with such further allowances as may be developed by the parties as the Project progresses. Any unused Allowance shall be retained by Owner.

Amendment - Amendment shall mean a written modification of the Contract (including without limitation any agreed change to the Contract Price), identified as an Amendment, and executed by the Contractor and the OWNER.

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.

Architect/Engineer (A/E): A person, firm, or corporation, other than the CONTRACTOR or those engaged by the CONTRACTOR, retained directly by the OWNER to prepare Drawings, Specifications and other Contract Documents, perform construction administration services, or other Project related services.

ARRC: Initials which stand for Alaska Railroad Corporation.

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.

Business Days: Business Days shall mean every day except Saturday, Sunday, and Holidays.

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 of the Contract Documents, issued under the provisions of Articles 9 and/or 10 in administering the Contract, including OWNER's written change Directives as well as changes reflected in a writing executed by the parties to this Contract and, if applicable, establishing a Contract Price or Contract Time adjustment for the changed Work.

Claim: A demand by CONTRACTOR pursuant to Article 15 for review of the denial of CONTRACTOR's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these General Conditions.

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.

Critical Path: The sequence of activities, events, and dependencies that determine the longest overall duration and the shortest time possible, to complete the Project. Any delay of an activity on the Critical Path directly affects the planned Project completion date (i.e., there is no float on the Critical Path).

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.

Design Team: The A&E's dedicated staff working on the design of the Project with responsibility for development of the Design Development Documents.

Design Development Documents: Means the Drawings and other documents that fix and describe the size and character of the entire Project, including architectural, structural, mechanical, and electrical systems, Materials, and such other elements as may be appropriate. These documents include the draft plans, progress plans, and Final PS&E.

Direct Cost: Means, unless otherwise provided in the Contract Documents, the cost of Materials, including sales tax, cost of delivery, cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; worker's compensation insurance; rental cost of Equipment, and machinery required for execution of the Work; and the additional costs of field personnel directly attributable to the Work.

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.

Equipment: All machinery together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the Work.

Final Acceptance: The OWNER's written acceptance of the Work following Final Completion and the performance of all Contract requirements by the CONTRACTOR.

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

Final Payment: The last payment to be made to the CONTRACTOR following the issuance of and Final Acceptance.

Final PS&E: The final, stamped, and sealed Plans, Specifications, and estimate used to construct the Project.

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 Year's 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.

Inspector: The OWNER's representative authorized to make determinations and inspections of Contract performance and materials.

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.

Laboratory: The official testing laboratories of the OWNER or such other laboratories as may be designated by the OWNER or identified in the Contract Documents.

Markup Fee: The maximum rates of cost markup as outlined in Article 10.6 to cover both the overhead and profit of CONTRACTOR, a Subcontractor or Supplier, to be used in Change Order price determination as described in Articles 10.3, 10.4 and 10.5.

Materials: Any natural or manmade substances specified for use in the construction of the Project.

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.

Offer: A bid in connection with an Invitation to Bid and a proposal in connection with a Request for Proposals.

Offeror: A bidder in connection with an Invitation to Bid and a proposer in connection with a Request for Proposals.

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.

Person: An entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, or any other entity possessing the legal capacity to contract.

Plans: The Drawings and other documents which show the location, type, dimensions, and details of the Work to be performed under the Contract.

Pre-construction Meeting: A preparatory meeting between the CONTRACTOR and the OWNER, and other parties affected by the construction, to discuss the Project before the CONTRACTOR begins work.

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.

Project Records: Means all information in any way relating to the Project or performance of the Contract, including but not limited to all:

- Financial and accounting records and information;
- Correspondence - including internal communications, E-mails, field notes, file notes, diary entries, and communications among the OWNER, CONTRACTOR, Subcontractors, and governmental authorities;
- Notices, orders, permits, and opinions;
- Survey data - including survey drawings, reports, maps, original computations, and other data;
- Materials testing records and Materials certifications;
- Work Products;
- All other documents and information whether generated by or for, or received by, the CONTRACTOR in performance of the Contract; whether any of such records are:
 - Paper-based;
 - In the form of electronic data;
 - In electronic/digital format capable of being reduced to paper-based or electronic/digital format;

- In audio format; or
- In a format that constitutes visual reproductions such as photos or videotape, in any way relating to the Project.

Proposal: Means the written Offer submitted by a Person in response to an Invitation to Bid or RFP, to do stated Work in the manner indicated and at the prices quoted.

Proposal Guaranty: The security furnished with a Proposal to guarantee that the Offeror will enter into a Contract if the OWNER accepts his Proposal.

Quality Assurance (QA): Tests and inspections performed by or on behalf of the OWNER to evaluate the methods, accuracy, precision, and reproducibility of Quality Control and material acceptance tests.

Quality Control (QC): Tests and inspections by the CONTRACTOR to insure that the Work conforms to the requirements of the Contract Documents and may determine its acceptability for payment.

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

Schedule of Values: The OWNER's document, submitted by the CONTRACTOR and reviewed and approved by the Project Manager, which shall serve as the basis for computing payment and for establishing the value of separate items of Work that comprise the Contract Price.

Scope Change: Scope Change shall mean only (i) changed site conditions not reasonably inferable from information available to the CONTRACTOR at the time of execution of the Fixed Price Amendment, and (ii) significant Work modifications (including additions, substitutions, and deletions), application of Allowances, and selection of alternates, all as approved by the OWNER under the Contract beyond that identified or inferable from the Fixed Price Supporting Documents (but in the case of Allowance items, the Contract Price will increase only if the cost to OWNER of the Allowance items exceeds the total amount of the Allowances).

Self-Performed Work: Work by the CONTRACTOR with its own forces in accordance with the terms and conditions of the Contract Documents and that is not performed by Subcontractors or Suppliers.

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.

Site: Means the geographical dimensions of the real property on which the Work is to be performed, including designated contiguous staging areas.

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. Specifications may include a description of any requirement for inspecting, testing or preparing a material, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on

occasion, describe the method and manner of doing the work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

Standards: References to standards, material specifications, test methods, or other publications of Alaska Department of Transportation and Public Facilities (DOT&PF), American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials (ASTM), other governmental agencies, or other recognized national organizations that have been officially adopted by those agencies and organizations. The applicable standard, test method, material specification, or other reference shall be that which is in effect on the date the activity governed by the standard, method, etc., is performed.

Standard Specifications: Means the Alaska Department of Transportation and Public Facilities Specifications for Construction, current published edition unless another organization is otherwise specified.

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.

Supplemental Drawings: Means detailed Drawings for Work or methods of construction furnished by the OWNER that are Project-specific, and are denoted by title in the Project title block.

Supplemental Conditions: The part of the Contract Documents that amends or supplements these General Conditions or other Contract Documents.

Supplier: A manufacturer, fabricator, distributor, material man or vendor of Materials or Equipment.

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

Traffic Control Plan (TCP): A Drawing of one or more specific plans that detail the routing of pedestrian, aircraft, and/or vehicular traffic through or around a construction area.

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

Utility or Utilities: The privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway or runway drainage, and other similar commodities, including publicly owned fire and police signal systems, street lighting systems, and railroads which directly or indirectly serve the public or any part thereof. The term "Utility" shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary.

Validate: When required by the Contract Documents to validate a dimension or condition, the CONTRACTOR will be responsible for substantiating or verifying that the dimension or condition as

represented in the Contract Documents meets the desired intent in sufficient time to allow correction prior to impacting the Work.

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.

Work Product: Means the Plans and Specifications, Drawings, Final PS&E and all other documents, analysis, computations, models, computer programs, and information obtained or developed for the Project or in performance of the Work, in or capable of being reduced to tangible paper-based, electronic, audio, or video format, whether or not designated as a deliverable under the Contract.

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, necessary equipment and manpower, supervision, quality control measures, 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 at least one electronic and one paper copy of the Contract Documents, and up to the number of additional copies specified in the Supplemental Conditions.
- 3.2.2 Additional copies will be furnished, upon request, at the cost of reproduction.

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 Work or 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 of reasonably have known 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 Contract Amendments and Change Orders
 - 3.6.1.2 Supplemental Conditions
 - 3.6.1.3 General Conditions
 - 3.6.1.4 Technical Specifications
 - 3.6.1.5 Drawings

3.6.1.6 AKDOT Standard Specifications

3.6.1.7 AKDOT Standard Drawings

In addition, the following shall apply:

Notes on a Drawing shall take precedence over drawing details.

Recorded dimensions will govern over scaled dimensions.

Large scale details will govern over small scale details.

Schedules (e.g. equipment schedules, finish schedules, door schedules, material schedules and all similar type schedules where identified) in Specifications or Plans will govern over plans.

- 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.

3.9 DOCUMENT CONTROL:

- 3.9.1 The CONTRACTOR shall manage and conduct its correspondence with OWNER as follows.
- 3.9.2 Correspondence Requirements – All notices and other communications concerning the Contract shall be in English. All correspondence shall be identified by OWNER's Contract number and shall reference the Contract section, if any, applicable to the subject of the correspondence.
- 3.9.3 Document Identification and Coding – CONTRACTOR shall assign a unique sequential identifying code or serial number to each item of correspondence transmitted to OWNER. OWNER will include the identifying code or serial number in its response. In responding to correspondence from OWNER, the CONTRACTOR shall reference OWNER's identifying code or serial number on the CONTRACTOR's return correspondence.

- 3.9.4 Use of Electronic Mail – Electronic mail (E-mail) may be used between the CONTRACTOR and OWNER with OWNER's prior written consent (which may be withdrawn at any time). Notwithstanding any written consent, E-mail shall not, under any circumstance, constitute formal notice under the Contract, and in particular, shall not constitute notice of a Claim for time or cost.
- 3.9.5 Retention of Project Records – Notwithstanding any other provision to the contrary, the CONTRACTOR shall maintain all Project Records (including copies of all original documents delivered to OWNER) for a minimum of three years from date of Final Payment or resolution of all disputes relating to the Contract, whichever is later (the "Record Retention Period"). CONTRACTOR shall notify OWNER where such Project Records are kept. Further, the CONTRACTOR shall require in each of its contracts with Subcontractors, Suppliers, and consultants that they shall keep and preserve all of their Project Records for the Record Retention Period and require that each of their lower-tier subcontractors, suppliers and consultants do likewise.
- 3.9.6 Maintenance of, Access to, and Audit of Project Records – For the duration of the Contract, CONTRACTOR shall maintain at its Project Manager's local Project office a complete set of all Project Records. CONTRACTOR shall afford OWNER access to such records for inspection and copying as OWNER may request in connection with the issuance of Change Orders, the resolution of disputes, audits and inspections, and such other matters as OWNER reasonably deems necessary for purposes of verifying compliance with the Contract and applicable Regulatory Requirements. CONTRACTOR shall make these records and documents available for audit and inspection to OWNER at CONTRACTOR's office within the Municipality of Anchorage, at all reasonable times, without charge, and shall allow such persons to make copies of such documents (at no expense to the CONTRACTOR). Further, the CONTRACTOR shall require in each of its contracts with Subcontractors, Suppliers, and consultants that they shall grant to OWNER access to such records for inspection and copying at any time during normal business hours upon reasonable notice and require that their lower-tier subcontractors, suppliers, and consultant do likewise.
- 3.9.6.1 Where the payment method for any Work is on a time and material basis, such examination and audit rights shall include all books, records, documents, and other evidence sufficient to identify all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of such Work. If the audit indicates the CONTRACTOR has been over-credited under a previous progress report or progress payment, that over-credit will be credited against current progress reports or payments.
- 3.9.6.2 For cost and pricing data submitted in connection with pricing Change Orders, unless such pricing is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the public, or prices set by law, OWNER and its representatives have the right to examine all books, records, documents, and other data of the CONTRACTOR related to the negotiation of or performance of Work under such Change Orders for the purpose of evaluating the accuracy, completeness, and currency of the cost or pricing data submitted. The right of examination shall extend to all documents deemed necessary by such OWNER to permit

adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

3.9.6.3 In every case in which the CONTRACTOR is required to retain for the benefit of OWNER or produce to OWNER information from CONTRACTOR's Subcontractors or Suppliers, CONTRACTOR shall include in each subcontract and purchase order a requirement that the Subcontractor or Supplier retain or produce such information to OWNER.

3.9.7 Audit Rights – All Claims filed against OWNER shall be subject to audit. The audit may be performed by employees of OWNER or by an auditor under contract with OWNER. No notice is required before commencing any audit. CONTRACTOR, its Subcontractors, and their agents shall provide adequate facilities, acceptable to OWNER, for the audit during normal business hours. CONTRACTOR, its Subcontractors, and their agents shall cooperate with the auditors. Failure of the CONTRACTOR, its Subcontractors, and their agents to maintain and retain sufficient Project Records to allow the auditors to verify all or a portion of the Claim, or to permit the auditor reasonable and timely access to the Project Records, shall constitute a waiver of the Claim and shall bar any recovery thereunder.

3.9.7.1 CONTRACTOR shall make available to OWNER and its auditors all Project Records, including but not limited to:

- a. Daily time sheets and supervisor's daily reports;
- b. Union agreements;
- c. Insurance, welfare, and benefits records;
- d. Payroll registers;
- e. Earnings records;
- f. Payroll tax forms;
- g. Material invoices and requisitions;
- h. Material cost distribution work sheets;
- i. Equipment records (list of company Equipment and rates);
- j. Subcontractors' (including Suppliers) invoices;
- k. Subcontractors' and agents' payment certificates;
- l. Canceled checks (payroll and Suppliers);
- m. Job cost report;
- n. Job payroll ledger;
- o. General ledger;
- p. Cash disbursements journal;
- q. All documents that relate to each and every claim, together with all documents that support the amount of damages as to each claim; and
- r. Work sheets used to prepare the claim establishing the cost components for items of the claim, including labor, benefits and insurance, Materials, Equipment, Subcontractors, all documents that establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals.

3.9.7.2 Full compliance by the CONTRACTOR with the provisions of this Article 3.8 is a contractual condition precedent to CONTRACTOR's right to seek judicial relief.

3.9.8 Audits – OWNER, its authorized representatives, any firm of auditors appointed by OWNER and other authorized governmental authorities shall have access at all reasonable times to all Project Records maintained by the CONTRACTOR and its Subcontractors and Suppliers and their respective agents and employees for the purpose of auditing and verifying the CONTRACTOR's costs claimed to be due and payable hereunder. OWNER shall also have the right to reproduce any such records. CONTRACTOR shall make said evidence (or, to the extent accepted by OWNER, authentic reproductions thereof) available to OWNER at the CONTRACTOR's offices at all reasonable times and without charge.

3.9.8.1 The operations of the CONTRACTOR and its Subcontractors and Suppliers shall be subject at any time to audits by OWNER and other authorized governmental authorities to verify compliance with all Contract requirements relative to practices, methods, procedures, and documentation required under generally accepted accounting practices and principles.

3.9.8.2 With respect to changes in the Work, the following shall apply:

- a. If the CONTRACTOR has submitted cost or pricing data in connection with the pricing of any change to the Work, OWNER and other authorized governmental authorities shall have the right to examine, copy, and audit Project Records, including computations and projections; related to negotiating, pricing, or performing the modification in order to evaluate the accuracy, completeness, and currency of the cost or pricing data.
- b. Unless the agreed-upon method of payment for any change in the Work is to be on a time and material basis, the CONTRACTOR shall maintain and segregate relevant Project Records, including cost and pricing data, books, documents, and any other accounting evidence sufficient to properly reflect all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred.
- c. At any time during the term of the Contract and for a period of three years from the date of Final Payment under the Contract, OWNER shall have the right to examine all Project Records, including but not limited to books, documents, and other data that relate to the negotiation and/or performance of any Work, for the purpose of evaluating the accuracy and completeness of the cost or pricing data submitted by the CONTRACTOR.
- d. To the extent that the examination reveals inaccurate, incomplete, or non-current data, the data shall be considered defective. If the audit indicates the CONTRACTOR has been overpaid under a previous payment application such overpayment will be credited against current progress payment applications, and the Change Order price shall be adjusted.
- e. OWNER or its authorized representatives may require that the CONTRACTOR supply appropriate documentation to support the prices proposed for changes in the Work and may refuse to complete negotiations until satisfactory documentation is submitted. CONTRACTOR's Project Records pertaining to such Change Order pricing shall be subject to audit and inspection.

- f. Also subject to audit review by OWNER, or its authorized representatives, shall be the CONTRACTOR's Project Records relating to those items on a progress payment application that relate to the following:
- g. Work performed on a time and materials basis;
- h. Materials not yet incorporated into the Project; and
- i. Work performed under a Change Order negotiated on a time and materials, unit price, or lump sum basis.
- j. If the audit indicates that the CONTRACTOR has been overpaid under a previous payment application, that overpayment shall be deducted from current progress payment applications.

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 may be made in the Contract Documents 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.
- 4.4.7 No Work shall be undertaken within the project limits until the Contractor has provided to the Owner a locate confirmation number from Alaska Digline and identified in the field, utility locates prior to any ground disturbance activities deeper than 6 inches. The Contractor will be required to maintain a record of the utility locates and remark any locates that are lost or destroyed.

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.
- 4.5.2.6 When the Contractor has failed to have the utilities located or maintained the locate location marks.

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 what he or she deem sufficient horizontal and vertical control data to enable the Contractor to survey and layout the Work.
- 4.7.2 If the Contractor deems that additional control is need to complete the work it shall be the Contractor's responsibility to place the additional control. The Contractor will be required to provide copies of the survey info and data of the additional control to the Owner.
- 4.7.3 All survey control work shall be performed under the direct supervision of a registered Land Surveyor.
- 4.7.4 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.
- 4.7.5 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 Contractors' 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 there under 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.

a. Other Coverages: As specified in Supplemental Conditions.

b. In addition to providing the above coverages the CONTRACTOR shall, in any contract or agreement with Subcontractors performing work, require that all indemnities and waivers of subrogation it obtains, and that any stipulation to be named as an additional insured it obtains, also be extended to waive rights of subrogation against the OWNER and to add the OWNER as an additional named indemnitee and as an additional insured.

5.4.16 CONTRACTOR shall furnish evidence of insurance to the OWNER before award of the Contract. All other coverage, including required subcontractor furnished insurance shall be evidenced prior to commencement of Work. Acceptance by the OWNER of deficient evidence does not constitute a waiver of Contract requirements as provided for by the Contract Documents.

The evidence shall be issued to the OWNER and shall be either a certificate of insurance or the policy declaration page with all required endorsements attached and must:

Denote the type, amount, and class of operations covered;

Show the effective (and retroactive) dates of the policy;

Show the expiration date of the policy;

Include all required endorsements;

Be executed by the carrier's representative; and

If a certificate of insurance, include the following statement:

"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Project Name and Number). The insurance carrier agrees that it shall notify the Contracting Officer, in writing, at least 30 days before cancellation of any coverage or reduction in any limits of liability."

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.
- 6.1.7 Any Contractor's supervisor's, manager's or personnel that the Owner deems uncooperative, disruptive, combative or lacking sufficient knowledge, the Owner, in writing, will demand that person be replaced. The replacement of said person will be at the sole discretion of the Owner and the Contractor will have 7 days to comply and the Contractor will do so without affecting any of the Contractor's obligations to the Owner under this Contract.

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. The contractor shall submit a baseline schedule narrative and progress narratives including:

6.5.1.1 Describe the construction philosophy supporting the approach to the work outlined in the baseline schedule.

6.5.1.2 Describe any limited resources, potential conflicts, or other salient items that may affect the schedule and how they may be resolved.

6.5.1.3 Describe the critical path and identify challenges that may arise associated with the critical path.

6.5.1.4 Provide list of applicable activities and justification for usage of: Activities with durations exceeding 15 days, Constraints, Unusual calendars Assumptions and calculations for non-work weather days added to calendars, and Lags.

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 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. Clearly show the critical path using the longest path schedule option setting to define the critical activities.

- 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 a MS Project 2010 format. Other formats maybe use with the Owner's approval. 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 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. Total project float is defined as the cumulative length of time activities can be delayed before they affect the finish date of the project or a contractual milestone. Float is a shared commodity between the contractor and the owner and not for the exclusive use or financial benefit of either party. Either party has full use of the project float until it is depleted. 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. Do not sequester project total float through manipulating calendars, extending activities duration, or any other such methodology. 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 time needed to evaluate the Contractors proposal will be dependent on the nature of the proposal; the Owner will be allowed a minimum of 21 days for review. 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 there from.
- 6.13.4 The Contractor shall provide the Owner with written and graphical plan of where laydown/staging areas are to be located, temporary facilities, fueling & maintenance areas and access roads whether or not they are located on the Owner's property.
 - 6.13.4.1 The Owner may approve or disapprove any areas that are within the Project Limits or Owner's Property for any reason they deem prudent.
 - 6.13.4.2 The Contractor will be required to provide a copy of an agreement for use of lands outside the project limits signed by the Contractor and legal Landowner. The agreement shall not bind the Owner or its Representatives in anyway and shall hold harmless the Owner and its Representatives.
 - 6.13.4.3 The Owner or its Representatives shall have the right to enter any area or property the Contractor is utilizing for the prosecution of the work in order to verify that the Contractor is following all local, state and federal requirements.

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.
- 6.14.2 Keep concrete culverts and bridges closed to traffic until permission to open them is received in writing from the Owner's Representative. No load is allowed on any span until the all concrete has attained a compressive strength of at least 80% of the ultimate strength ($f'c$) as shown in the Contract Documents and a minimum of 7 days of curing. The Engineer will determine the compressive strength from informational test cylinders cured on the site under temperature and moisture conditions similar to the concrete in the structure.

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.
- 6.15.5 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.
- 6.15.6 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.
- 6.15.7 Update the following information on the as-built drawings:
 - 6.15.7.1 Changes in horizontal or vertical alignment
 - 6.15.7.2 Changes in typical sections or new typical Sections
 - 6.15.7.3 New or revised utility locations
 - 6.15.7.4 Changes to electrical wiring diagrams and installations
 - 6.15.7.5 Changes to automated traffic recorders
 - 6.15.7.6 As built location and dimensions of all structures
 - 6.15.7.7 Changes in survey control or right of way/property monuments
 - 6.15.7.8 Changes in drainage features
 - 6.15.7.9 as-built data on materials sources including areas developed and waste areas (if included in the drawings)
 - 6.15.7.10 as-built location and dimensions of piles, foundation elevations and subsurface structural details
 - 6.15.7.11 revisions/substitutions of materials or equipment

6.15.7.12 estimated quantities should be revised to final quantities

6.15.7.13 all change document work.

6.15.7.14 any change made during construction to a permanent feature of the project should be correctly shown on the final as-built drawings.

6.15.8 Record As-Built Changes shall be submitted for review with each pay request. The pay request will not be processed until the Record As-Built Drawings are up to date.

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.
- 6.16.8 The Contractor shall allow the Owner or the Owner's Representative to safely access the Work 24 hours of the day.

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 907-265-2265.
- 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 SAFETY REPRESENTATIVE

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 Project Manager.

6.19 EMERGENCIES:

- 6.19.1 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.
- 6.19.2 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.

6.20 SHOP DRAWINGS AND SAMPLES:

- 6.20.1 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.
- 6.20.2 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.
- 6.20.3 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.
- 6.20.4 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.
- 6.20.5 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.
- 6.20.6 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.
- 6.20.7 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.
- 6.20.8 The Owner may require the Contractor to furnish at the Contractor's expense additional data about the proposed variation.
- 6.20.9 The Owner may reject any variation request which the Owner determines is not in the best interest of the Owner.

6.21 SHOP DRAWING AND SAMPLE REVIEW:

- 6.21.1 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.
- 6.21.2 The time needed to evaluate the Contractors submittal will be dependent on the nature of the proposal; the Owner will be allowed a minimum of 14 days for review.
- 6.21.3 The review of a separate item as such will not indicate acceptance of the assembly in which the item functions.
- 6.21.4 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.
- 6.21.5 The Contractor shall direct specific attention in writing to revisions other than the corrections called for by the Owner on previous submittals.
- 6.21.6 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.
- 6.21.7 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.
- 6.21.8 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.
- 6.21.9 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.

6.22 MAINTENANCE DURING CONSTRUCTION:

- 6.22.1 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.

6.23 CONTINUING THE WORK:

- 6.23.1 The Contractor shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the Owner.

6.23.2 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.

6.24 CONSENT TO ASSIGNMENT:

6.24.1 The Contractor shall obtain the prior written consent of the Owner to any proposed assignment of any interest in, or part of this Contract.

6.24.2 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.

6.24.3 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.

6.25 USE OF EXPLOSIVES:

6.25.1 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.

6.25.2 The Contractor shall be responsible for all damage resulting from the use of explosives.

6.25.3 All explosives shall be stored in a secure manner in compliance with all Regulatory Requirements, and all such storage places shall be clearly marked.

6.25.4 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.

6.25.5 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.

6.25.6 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.

6.26 CONTRACTOR'S RECORDS:

6.26.1 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.

6.26.2 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.

6.26.3 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.

6.26.4 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.

6.26.5 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.

6.26.6 The Owner or its assigned representative may perform an audit of these records during normal work hours after written notice to the Contractor.

6.27 CONSTRUCTION QUALITY CONTROL PLAN:

6.27.1 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 30 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.

6.28 LOAD RESTRICTIONS

The CONTRACTOR shall comply with all load restrictions as set forth in the "Administrative Permit Manual", and Title 17, Chapter 25, of the Alaska Administrative Code in the hauling of Materials on public roads, beyond the limits of the Project, and on all public roads within the Project limits that are scheduled to remain in use upon completion of the Project.

Overload permits may, at the discretion of the State of Alaska, be issued for travel beyond the Project limits for purposes of mobilization and/or demobilization. Issuance of such a permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

The operation of equipment of such weight or so loaded as to cause damage to any type of construction will not be permitted. No overloads will be permitted on the base course or surface course under construction. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his equipment.

6.29 DRUG AND ALCOHOL FREE WORKPLACE

Safety is paramount at ARRC. For that reason, OWNER maintains an alcohol and drug-free workplace and requires that the CONTRACTOR do the same. At all times during the performance of the Work, 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 OWNER employee reports to the CONTRACTOR that an employee of the CONTRACTOR or its Subcontractor is showing signs and/or symptoms of drug/alcohol influence on duty, the CONTRACTOR shall remove the employee from OWNER'S 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.

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 there.

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 COVENANTS 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.

7.19 FEDERALLY ASSISTED PROJECTS

When the United States Government pays all or any portion of the cost of a project, the Federal laws and the rules and regulations made pursuant to such laws must be observed by the CONTRACTOR, and the Work shall be subject to the inspection of the appropriate Federal agency. Such inspection shall in no sense make the Federal Government a party to this Contract and will in no way interfere with the rights of either party hereunder.

7.20 GRATUITY AND CONFLICT OF INTEREST

The CONTRACTOR agrees that he will not extend any loan, gratuity or gift of money of any form whatsoever to any employee or agent of the OWNER nor will he rent or purchase any equipment or materials from any employee of the OWNER or to the best of his knowledge from any agent of any employee of the OWNER. Before payment of the Final Payment, the CONTRACTOR shall execute and furnish the OWNER an affidavit certifying that he has complied with the above provisions of the Contract.

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.

9.9.1.3 Failure of the Contractor to notify the Owner in writing of conditions described in 9.9.1.1 and 9.9.1.2 before disturbing such conditions shall render any claim by the Contractor null and void.

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 detailed 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 Work and keeping of such records throughout the entire duration of the Work.

9.10 INTERIM WORK AUTHORIZATION

An Interim Work Authorization may be used to establish a change within the scope of the Work; however, only a Change Order shall establish associated changes in Contract Time and Contract Price. Work authorized by Interim Work Authorization shall be converted to a Change Order. The basis of payment shall be as stated in the Interim Work Authorization, unless it states that the basis of payment has not been established and is to be negotiated, in which case the basis of payment shall be Cost of the Work pursuant to Article 10.5.

9.11 VALUE ENGINEERING PROPOSALS BY THE CONTRACTOR:

9.11.1 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 9.15. 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.

9.12 SUBMITTAL & REVIEW OF VEP CONCEPT OR IDEA:

- 9.12.1 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.
- 9.12.2 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.
- 9.12.3 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 non-compensable 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.

9.13 FORMAL SUBMITTAL OF THE VEP:

- 9.13.1 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:

- 9.13.1.1 A statement that the Proposal is submitted as a VEP.
- 9.13.1.2 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.
- 9.13.1.3 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.
- 9.13.1.4 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.
- 9.13.1.5 A statement specifying the date by which a Change Order adopting the VEP must be executed to obtain the maximum cost reduction.
- 9.13.1.6 A statement detailing the effect the VEP will have on the time for completing the Contract.
- 9.13.1.7 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.
- 9.13.1.8 A detailed statement indicating the costs for developing the changes, along with the costs for preparing the value engineering joint proposal.

9.14 VEP CONDITIONS:

- 9.14.1 Value Engineering Proposals will be considered only when all of the following conditions are met:
 - 9.14.1.1 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.
 - 9.14.1.2 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.
 - 9.14.1.3 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.

- 9.14.1.4 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.
- 9.14.1.5 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.
- 9.14.1.6 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.
- 9.14.1.7 VEPs will not be considered if equivalent options are already provided in the Contract.
- 9.14.1.8 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.
- 9.14.1.9 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.
- 9.14.1.10 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.
- 9.14.1.11 The Contractor shall ensure the VEP is sealed by an Alaska Registered Engineer.
- 9.14.1.12 All costs to for developing the changes, along with the costs for preparing the value engineering proposal shall be the Contractor's responsibility.

9.15 VEP ACCEPTANCE, REJECTION & PAYMENT:

- 9.15.1 Within 30 days of the Contractor's formal submission of the VEP, Owner will accept or reject the VEP.
- 9.15.2 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.

- 9.15.3 If the VEP is rejected, all costs for developing and presenting the value engineering proposal shall be the Contractor's responsibility.
- 9.15.4 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.
- 9.15.5 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.
- 9.15.6 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.
- 9.15.7 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.
- 9.15.8 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.
- 9.15.9 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 CLAIMS 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).
- 10.3.5 Before a Change Order is approved, the CONTRACTOR shall submit cost or pricing data in accordance with Articles 6.26 and 10.7 regarding the changed or extra Work. The CONTRACTOR shall certify that the data submitted is, to his best knowledge and belief, accurate, complete and current as of a mutually determined specified date and that such data will continue to be accurate and complete during the performance of the changed or extra Work.

10.4 LUMP SUM PRICE CHANGE METHOD

The CONTRACTOR shall prepare a lump sum proposal in the following format:

10.4.1 Direct Costs

a. Material (itemize)

1. The cost to the CONTRACTOR for the Material directly required for the performance of the changed Work. Such cost of Material may include the cost of transportation. Only the applicable portion of a delivery charge will be allowed if the delivery is not specifically for the changed Work,
2. Trade discounts offered by the supplier to the CONTRACTOR shall be credited to the OWNER. If the Material is obtained from a source owned wholly or in part by the CONTRACTOR, payment thereof will not exceed the current wholesale price for the material. The term "trade discount" includes the concept of cash discounting.
3. The OWNER reserves the right to furnish such Material as it deems advisable and the CONTRACTOR shall have no Claims for cost or profit on Material furnished by the OWNER.

b. Labor (man-hours, rates by crafts)

1. Payroll costs shall include, but not be limited to, salaries and wages, and fringe benefits including social security contributions, unemployment,

excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. The costs for all supervision, including general superintendents and foremen, shall be included in the markups established by this Contract. The only exception to this shall be working foremen who perform manual labor. No labor charges will be accepted for engineering or proposal preparation. These costs shall be included in the markups established by this Contract.

2. Reasonable indirect expenses and time related overhead subject to a time-impact analysis to determine the amount and reasonableness of the indirect expenses and time related overhead expenses.

c. Equipment (type, size, attachments, hours, rate)

1. The cost to the CONTRACTOR for the use of Equipment directly required in the performance of the changed Work. No mobilization or demobilization cost will be allowed for equipment already on Site.
2. For Equipment owned, furnished, or rented by the CONTRACTOR, costs allowed shall be the actual usage costs incurred as supported by the CONTRACTOR's published standard equipment rates or rental invoices. Rates charged shall not exceed the rates established by the Rental Rate Blue Book.
3. The amount to be paid to the CONTRACTOR for the use of Equipment as set forth above will constitute full compensation for the cost of fuel, power, oil, lubricants, supplies, small tools, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for equipment operators) and any and all costs incidental to the use of the Equipment.

d. Consultants

1. Cost of outside consultants and professional personnel (including but not limited to engineers, architects, testing laboratories, and surveyors) employed for services necessary for the completion of the Work as may be required by the CONTRACTOR. The CONTRACTOR shall obtain the consent of the OWNER prior to engaging such outside consultants if the consultant's services are not specifically identified in the Contract Documents and qualifications are not previously provided therefore.

e. Other direct costs as the parties may agree

f. Direct costs shall not include:

1. Payroll costs and other compensation of the CONTRACTOR's offsite officers, executives, principals of partnerships and sole proprietorships, general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, superintendents and non-working foremen, and similar administrative personnel. These costs shall be considered administrative costs covered by the CONTRACTOR's Markup Fee.

2. Expense of the CONTRACTOR's principal and branch offices other than that portion of the CONTRACTOR's office at the Site devoted to the Work.
3. Any part of the CONTRACTOR's capital expenses. Interest on the CONTRACTOR's capital employed for the Work. Charges against the CONTRACTOR for delinquent payments.
4. Costs due to 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. Negligence costs include correction of defective Work, disposal of material wrongly supplied, and making good any damage to property.
5. Other overhead or general expense costs of any kind.
6. Cost of supplies not incorporated into the Work.
7. Cost of warranty work.

10.4.2 Subcontract Costs

- a. If required by OWNER, CONTRACTOR shall obtain competitive quotes from Subcontractors or Suppliers and shall select and award subcontracts in accordance with the CONTRACTOR's subcontracting solicitation plan approved by the OWNER.
- b. Direct Costs shall be as outlined in Article 10.4.1.
- c. Subcontractors' (at any tier) markups for overhead and profit shall not exceed ten percent (10%) of the Direct Costs.

10.4.3 Overhead and Profit

- a. The CONTRACTOR's Markup Fee for overhead and profit shall not exceed the amounts provided in Article 10.6.1.

10.5 COST OF THE WORK:

- 10.5.1 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.
- 10.5.2 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:
 - 10.5.2.1 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.
 - 10.5.2.2 Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work.

- 10.5.2.3 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.
- 10.5.2.4 Such employees shall include superintendents and foremen at the site.
- 10.5.2.5 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.
- 10.5.2.6 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.
- 10.5.2.7 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.
- 10.5.2.8 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.
- 10.5.2.9 Supplemental costs including the following:
- 10.5.2.9.1 The proportion of necessary transportation, travel and subsistence expenses of the Contractor's employees incurred in discharge of duties connected with the Work.
 - 10.5.2.9.2 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.
 - 10.5.2.9.3 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.

- 10.5.2.9.4 Sales, consumer, use or similar taxes related to the Work, and for which the Contractor is liable, imposed by Regulatory Requirements.
- 10.5.2.9.5 Fees for permits and licenses.
- 10.5.2.9.6 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.
- 10.5.2.9.7 The cost of utilities, fuel and sanitary facilities at the site.
- 10.5.2.9.8 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.
- 10.5.2.9.9 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.

10.6 EXCLUDED COSTS:

10.6.1 The term Cost of the Work shall not include any of the following:

- 10.6.1.1 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 10.5.2.1 - all of which are to be considered administrative costs covered by the Contractor's Fee.
- 10.6.1.2 Expenses of Contractor's principal and branch offices other than Contractor's office at the site.

10.6.1.3 Any part of Contractor's capital expenses including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

10.6.1.4 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).

10.6.1.5 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.

10.6.1.6 Costs for the use of small tools having a value of five hundred dollars (\$500) or less.

10.6.1.7 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.5.

10.7 CONTRACTOR'S FEE:

10.7.1 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:

10.7.1.1 For costs incurred under subparagraphs 10.4.2.1 through 10.4.2.6, the Contractor's Fee shall be 15%;

10.7.1.2 For costs incurred under subparagraphs 10.5.2.7, 10.5.2.8 and 10.5.2.9, 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%;

10.7.2 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

10.7.4 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.

10.8 COST BREAKDOWN:

10.8.1 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.

10.9 CASH ALLOWANCES:

10.9.1 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:

10.9.1.1 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

10.9.1.2 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.

10.10 UNIT PRICE WORK:

10.10.1 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.

10.10.2 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.

10.10.3 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.

10.10.4 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.

10.10.5 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.

10.10.6 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.

10.10.7 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 of Work and materials furnished, completed and accepted, except as provided below:

10.10.7.1 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 Original Contract Amount not to include Change Order costs, is increased 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 unit price adjustment on the portion of the Work above 125% of the quantity stated in the bid schedule.

10.10.7.2 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 Original Contract Amount not to include Change Order costs, 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.

10.10.7.3 The Contractor will be required to provide detailed and accurate records showing that an equitable price adjustment is warranted.

10.11 DETERMINATIONS FOR UNIT PRICES:

10.11.1 The Owner will determine the actual quantities and classifications of Unit Price Work performed by the Contractor.

10.11.2 The Owner will review with the Contractor preliminary determinations on such matters before certifying the prices on the Bid Schedule.

10.11.3 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 72 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. Permitting the CONTRACTOR to continue and finish the Work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the OWNER of any of its rights under the Contract.

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 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 Owner's representatives, 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 24 hours' 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 or sufficient notice to 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 or 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. The Contractor will only be allowed to recover 50 percent of his actual costs.

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.

12.6.2 If the Work overseen by the Contractor's supervisory personnel repeatedly doesn't meet the requirements of the Contract Documents then at the request of the Owner the Contractor shall be required to remove from the project and replace the supervisory personnel.

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.

13.3.3 The Owner will not be obligated to pay the Contractor for any overruns if;

13.3.3.1 The Contractor fails to notify the Owner of an overrun prior to placement.

13.3.3.2 The Contractor doesn't have written authorization from the Owner to exceed the quantity stated in the Bid Schedule or Change Document.

13.3.3.3 The Contractor records submitted for payment are in error, to include any supporting documentation submitted.

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.

13.4.3 The Owner has up to 45 days to pay the Progress Payment from the date that Owner accepts the submitted 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 The Owner shall have no responsibility to in the Contractors failure to properly store the materials or for the length of time the material is stored.

13.5.4 The Contractor shall replace any materials damaged during storage, by damage due to prolonged exposure and/or improper storage.

13.5.5 No progress payment will be made for living plant materials until planted.

13.5.6 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.

13.5.7 Payment for Materials Stored will not be more than 80% of the invoiced amount paid by the Contractor.

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 stopped 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, notwithstanding 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 to re-coup his direct costs 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 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, loss of potential work 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 that day but no later than by noon the preceding day.

15.1.2 If the matter cannot be resolved by agreement within 7 days, the Contractor shall, within the next 14 days, submit Intent to Claim in writing to the Project Manager. The Intent to Claim shall be presented as outlined in 15.2 Presenting Claim.

15.1.3 The Claim, if not resolved, shall be presented to the Owner's 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 Owner's 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.

15.1.5 If the Claim or dispute is not resolved by the OWNER, then the CONTRACTOR shall submit a written Claim to the Contracting Officer within 90 days after the CONTRACTOR becomes aware of the basis of the Claim or should have known the basis of the Claim, whichever is earlier. The Contracting Officer will issue written acknowledge of the receipt of the Claim.

15.1.7 The CONTRACTOR waives any right to Claim if the OWNER was not notified properly or afforded the opportunity to inspect conditions or monitor actual costs or if the Claim is not filed on the date required.

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.

15.2.1.5 All figures, computations, data, records and any other information that shows the basis of the Contractors claim and specifically how it was calculated. The information must be presented in a clear and logical presentation and only factual information will be allowed. Speculation, conjecture and assumptions will not be considered.

15.2.1.6 It is solely the Contractor's burden to clearly and accurately present the Claim. Failure to do so will null and void the Claim.

15.2.1.7 Contractor to provide a statement certifying that the Claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of the CONTRACTOR'S knowledge and belief, and that the amount requested accurately reflects the Contract adjustment which the CONTRACTOR believes is due.

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. Also, in order for the Claim to be valid the Contractor must be able to clearly show specifically how he was damaged and all items in 15.2.1.5 must equal and clearly show the additional compensation or the extension of time for performance the Contractor is requesting.

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 14 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the Claim. If the Contractor requires additional time to furnish the information then a formal written request must be submitted asking for an extension in time.

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.

15.3.5 Failure of the Contractor to actively seek resolution with the Owner, involve, notify or provide timely information to the Owner shall render the Contractor's right to claim null and void.

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.

15.7 FRAUD AND MISREPRESENTATION IN MAKING CLAIMS

Criminal and Civil penalties authorized under AS 36.30.687 (including, but not limited to, forfeiture of all claimed amounts) may be imposed on the CONTRACTOR if the CONTRACTOR makes or uses a misrepresentation in support of a Claim or defrauds or attempt to defraud the OWNER at any stage of prosecuting a Claim under this Contract.

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 G

SUPPLEMENTAL CONDITIONS

SC-01 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, and vehicle operators will be required to complete an ARRC safety presentation. All Contractor employees expected to be working on or near the track are encouraged to complete an RWP course. An approved on-line version of this course is offered at www.contractororientation.com.
2. Personal Protective Equipment (PPE): All Contractor employees working on ARRC property in a field environment are required to wear hard hats, safety glasses, safety boots and other protection as necessary per State and Federal regulations. PPE shall meet applicable American National Standards Institute (ANSI), and American Society for Testing and Materials (ASTM), standards.
3. Passing Trains: Equipment working within 20 feet of the nearest rail, or performing any work at any distance from the rail that may inadvertently foul the track, must stop all operations when a train is approaching or as otherwise directed by the flagman. Ground personnel must move to a safe distance away from the track. All personnel must be aware of loose cargo, straps and banding that may pose a danger while working near the track. At no time shall any work occur within 20 feet of the tracks without an ARRC flagman present at the work site.
4. Injury Reporting: Any personal injury sustained by the Contractor's employees or subcontractors while on ARRC property must be immediately reported to the Owner's Representative. The injury report form provided by ARRC is to be completed and sent by fax to the address indicated on the form no later than the close of shift on the date of the injury.

SC-02 Contract Time

1. Notice to Proceed: It is anticipated that the awarded Contractor will receive the Notice to Proceed (NTP) within Seven days of the bid opening.
2. Substantial Completion: Substantial Completion shall be on or before **September 28 2019**, unless accepted and agreed upon otherwise by the Owner. This completion scope includes all work items contained within the contract documents, properly completed, approved by the Owner and fully serviceable for the intended use.
3. Final Completion: Final Completion of all work shall be on or before **November 1, 2019**.

SC-03 Construction Scheduling

1. All work is to be scheduled in coordination with the Owner's Representative and other ARRC onsite work. Flexibility and accommodation is key as each location should be impacted for a minimal amount of time.

SC-04 Unit Price Bid

1. The project is to be bid by the unit price for all labor, supervision, materials, equipment, transportation, disposal, administration and all other incidentals necessary to undertake and complete the work in accordance with 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-05 Minimum Work to be performed by Contractor

1. The Contractor shall perform with their own organization not less than 51% of the original contract base amount.

SC-06 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.
 - c. No substances shall be discharged onto ARRC property. Should a discharge occur, it must be reported by the quickest means possible to the Owner's Representative. All spills and discharges must be reported to ARRC Environmental Operations, Matt Kelzenberg (748-2470) or Eric White (748-2196). If unable to contact Environmental Operations, the Contractor must notify the Chief Dispatcher at 265-2421.
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 follow Federal, State and local governmental guidelines and

- suggestions for notification and location of utility locations before proceeding with work.
- c. 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.
 - d. The Contractor shall, upon the completion of the work, remove from the property of the ARRC, all machinery, equipment, surplus materials, false work, 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. 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 fax or 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 the 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 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.

4. Delay Damages

- a. Whether or not the Contractor's right to proceed with the Work is terminated, he and his sureties shall be liable for the 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 for each Calendar Day past the agreed upon Interim Percentage Completion dates, as well as the for each Calendar Day past the Completion Date. 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.

5. Clean-up

- a. At the end of each day's work, the job site shall be cleaned up and left in a neat and workman-like condition. Before calling for final inspection the entire premises shall be cleaned up to the satisfaction of the Engineer.

SC-07 Rail Operations Coordination

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. ARRC will provide a weekly forecast of train traffic and the ARRC flag persons will provide daily updates of anticipated train traffic. Under no circumstances, however, will the ARRC be liable in any way for delays to the Contractor's work created by any changes or deviations from anticipated train schedules.

1. Railroad Flagging

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 three (3) business days' notice is required for ARRC flag protection. Whenever an ARRC flag person is required for performance of the work, he or she will work for no more than Twelve (12) hours in a Twenty-four (24) hour period.

SC-08 Contractors Special Instructions for Submitting Certified Payroll

The Contractor shall submit State of Alaska, DOL Certified Payroll broken down by location. Each location's Certified Payroll will have the same ARRC contract number followed by a dash and a single digit number per the order of locations as stated in the Cost Schedule.

SC-09 Contacts

Please direct all responses and/or questions concerning this ITB to Greg Goemer, Alaska Railroad Corporation 327 Ship Creek Avenue, Anchorage, AK 99501, telephone number 907-265-2593, fax number 907-265-2439 or at email address Goemerg@akrr.com.

ARRC Procurement Officer – Greg Goemer: 265-2593

ARRC Project Manager – Peter Flint: 265-2409

END OF SUPPLEMENTAL

APPENDIX H TECHNICAL SPECIFICATIONS

REFERENCED STANDARD SPECIFICATIONS.

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.

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.

Additionally, the Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition with Revision Numbers 1 & 2 dated May 2012 are incorporated into these Specifications as though physically contained herein.

All standards listed in each section of these specifications but referenced thereafter by a basic designation only (e.g., MUTCD) form a part of the specifications to the extent indicated by the reference. The most recent edition of the standard at the time of advertising shall apply.

REFERENCED DRAWINGS.

- a. MUTCD Railroad/ Roadway at-Grade Crossing Drawing Figure 8B-6 & 8B-7
- b. MUTCD Railroad/ Pathway at-Grade Crossing Drawing Figure 8D-1

MODIFICATIONS TO THE REFERENCED STANDARD SPECIFICATIONS.

The following pages contain modifications to the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway construction, 2017 edition.

Insert the following section

SECTION 240

RAILROAD

240-1.01 DESCRIPTION. The Contractor shall be responsible for all railroad trackwork and construction items associated with this project to the limits shown. All work on ARRC property shall be conducted in strict accordance with the requirements contained in the Standard Specifications for Work on Railroad Property. Unless otherwise specified, all track materials and work methods shall comply with the applicable standards contained herein.

240-1.02 SUMMARY OF WORK. The work involved in this project consists of, but is not necessarily limited to, the following activities:

1. Construction of a new 80' Railroad Crossing at the new alignment of S. Inner Springer Rd. and the Glenn HWY, ARRC MP A-3.76 on the Palmer Branch located in Palmer, Alaska.
2. Demo of 32' Railroad Crossing and Reconstruction of a 56' Crossing located at the North Fairgrounds Railroad Crossing, ARRC MP A-4.33 on the Palmer Branch located in Palmer, Alaska.
3. Construction of a new 80' Railroad Crossing at the new alignment of E. Inner Springer Rd. and the Glenn HWY, ARRC MP A-4.96 on the Palmer Branch located in Palmer, Alaska.
4. Removal of a switch and approximately 280' of spur track and reconstruction of approximately 100' of mainline track near ARRC MP A-4.95 along the Palmer Branch located in Palmer, Alaska.

240-1.03 DEFINITIONS.

1. ARRC. Alaska Railroad Corporation.
2. AREMA. American Railway Engineering and Maintenance-of-Way Association.
3. W.C.L.I.B. West Coast Lumberman's Inspection Bureau.
4. FRA. Federal Railroad Administration.
5. DOT&PF. Department of Transportation and Public Facilities

240-1.04 REFERENCED STANDARDS.

1. ARRC Standard Plans.
2. AREMA Manual for Railway Engineering
3. AREMA Portfolio of Trackwork Plans
4. Alaska DOT&PF Standard Specifications for Highway Construction 2017 Edition

5. All standards listed in each section of these specifications but referenced thereafter by a basic designation only (e.g., AREMA), form a part of the specifications to the extent indicated by the reference. The most recent edition of the standard at the time of advertising shall apply.

240-1.05 REFERENCED DRAWINGS. The following Alaska Railroad Standard Plan Drawings are incorporated by reference herein and made a part of these specifications:

- 1.22-03 Main Track Construction Wood Tie Spacing and Rail Anchoring for 39' and 78' Rail Lengths,
- 2.78-06 Modular Crossing
- Typical Section New Siding Construction

240-1.06 STORAGE. Storage facilities shall be in areas designated by the Engineer or Owner's Representative.

240-1.07 CLEAN-UP. At the end of each day's work, the job site shall be cleaned up and left in a neat and workman-like condition.

Before calling for a final inspection the entire premises shall be cleaned up to the satisfaction of the Engineer.

All track materials that become the property of the contractor shall be removed immediately unless otherwise approved by the Engineer.

240-1.08 SURVEYING. All surveying work necessary for the performance of this project shall be furnished by others.

240-1.09 OWNERSHIP. All track materials and crossing materials replaced by new materials will become the property of the Contractor, except as noted on the plans or in the specifications.

Insert the following section

SECTION 241

RAILROAD BALLAST

241-1.01 DESCRIPTION. This work shall consist of furnishing, placing, tamping, and shaping railroad ballast and surfacing and lining new and existing track and turnouts, in conformance with the lines, grades and thickness' shown on the Plans.

241-2.01 MATERIALS. Prepared ballast shall be crushed shot rock or crushed pit-run rock, composed of hard, strong and durable particles, free from injurious amounts of deleterious substances and conforming to the following requirements:

AREMA mainline ballast Type 4A

Size	2-1/2"	2"	1-1/2"	1"	3/4"	3/8"	No. 200
Passing (%)	100	90-100	60-90	10-35	0-10	0-3	0-0.4

Manufacturing, Handling, Delivery, and Stockpiling of Material:

The ballast shall be manufactured, handled, delivered, stockpiled, and placed in such a manner that it is kept clean and free from segregation. Stockpiling of ballast will only be allowed over firm stable base areas. In order to minimize segregation ballast shall be stockpiled in more or less horizontal layers with no dumping over the sides of the stockpile allowed. Travel of construction machinery and other vehicles over the top of the stockpiles shall be kept at a minimum. Contractor will be responsible for the control of dust when hauling to and from stockpile.

CONSTRUCTION REQUIREMENTS

241-3.01 GENERAL. Ballast dumped on subgrade prior to track or crossing construction shall be kept free from material tracked in by construction equipment. Ballast dumped on skeleton track and turnouts shall be distributed uniformly during the dumping operation to minimize the carrying or regulating required to provide the designed ballast section.

Contractor shall submit his plan for handling and placing ballast. This plan shall include source, type of equipment to be used (e.g., HyRail dump truck), location of stockpiles, and method of distribution.

241-3.02 BALLAST PLACEMENT.

1. Ballast shall be placed to the lines and grades indicated. The average thickness shall be within one-quarter inch of the thickness shown on the drawings. Ballast shall not be placed on soft, muddy, or frozen areas. Where the prepared subgrade (roadbed) is soft, muddy, rutted, exhibits severe depressions, or is otherwise damaged, the ballast shall not be

placed until the damaged subgrade has been repaired and the Engineer has approved the area.

2. Forming of ruts that would impair proper drainage shall be prevented when distributing ballast from trucks and off track equipment. Any ruts formed greater than one (1) inch shall be leveled and graded to drain.
3. Ballast shall be unloaded as close as possible to the point of use so that unnecessary handling is prevented. Excess ballast shall be picked up and redistributed at the Contractor's expense. Ballast shall be handled in such a manner as to ensure it remains clean of deleterious materials and within specifications.
4. Minimum Ballast Depth: The minimum depth of ballast below the bottom of the tie shall be 12 inches.

241-3.03 TRACK TAMPING, SURFACING AND FINAL DRESSING.

1. This work shall consist of shaping, tamping, surfacing and dressing of the ballast section on all new track and runoffs except that which is included in other work items.
2. PRELIMINARY SURFACING: The preliminary alignment and surfacing gangs shall follow the unloading of the ballast. Rail and tie installation, spiking, bolt tightening, and ballast placement shall be complete prior to commencement of surfacing and alignment work.
3. LIFTS: The track, after being aligned, shall be brought to grade, surfaced in lifts not to exceed 4 inches each and tamped. When using jacks, they shall be placed close enough together to prevent undue bending of rail or stress of rail and joint. Both rails shall be raised at one time and as uniformly as possible, except where superelevation is required. The track shall be lifted so that after a period of not less than 5 train operations after the last lift, it will be necessary to give the track a final lift of between 1 and 2 inches to bring it to grade.
4. Raising and tamping of track shall be performed with an automatic, vibratory, squeeze type power tamper with 16 tamping heads, capable of raising both rails simultaneously and maintaining cross level. The tamper shall be a Jackson 6300 Series, or approved equal, truss type tamper with lift, line and surface capability. The compacting equipment selected by the Contractor shall be subject to inspection and acceptance by the Engineer. Every tie in the track shall receive two or more full insertions of the tamping heads. Ballast shall be power-tamped under both sides of ties from each end to a point fifteen (15) inches inside each rail for 8 foot-6 inch ties and eighteen (18) inches for 10 foot ties. The center shall be filled with ballast, but tamping shall not be permitted in the center of the tie between the above stated limits. Both ends of the ties shall be tamped simultaneously and tamping inside and outside of the rail shall be done at the same time. Tamping tools shall be worked opposite each other on the same tie. Ballast under switch ties and road crossing ties shall be tamped the entire length of each tie but care must be taken not to "center bind ties". All ties shall be tamped to provide solid bearing against the base of the rail after the track or turnout is raised to grade at final surfacing. All down ties shall be brought up to the base of rail and shall be machine tamped. The resultant track surface and alignment shall be uniform and smooth. Tamping of track in snow or frozen ballast conditions shall not be permitted.

5. Contractor shall prepare for the Engineer's review and approval a detailed tamping procedure covering tamping equipment and methods. The specification shall include a complete description of equipment to be used and variables that can be adjusted such as:
 - a. Number of insertions of tamping tools per tie.
 - b. Number of passes of tamping machine.
 - c. Depth of penetration.
 - d. Lifting capacity.
 - e. Lining capacity.
 - f. Year, make and model of tamping machine.
6. **SUPERELEVATION:** Curves shall be superelevated as shown on the Plans. Superelevation shall be obtained by raising the outside rail of the curve. The inside rail shall be maintained at grade. Full superelevation shall be carried throughout each curve, unless otherwise directed or shown on the drawings. Superelevation runoff to tangent shall be at a uniform rate, and shall extend at least the full length of the spirals.
7. **REPLACEMENT OF TIES:** After tamping has been completed and the jacks removed, any damaged ties shall be removed and replaced. All ties pulled loose or replaced shall be restored to their proper position, re-spiked and re-tamped to provide full bearing against the rail, at no cost to the owner.
8. **RUNOFF OF TRACK RAISES:** The runoff at the end of a raise shall not exceed one quarter (1/4) inch in sixty two (62) feet per CFR 49 part 213 Subpart C Track Geometry of track unless otherwise noted on the plan or approved by the Engineer. The track shall be surfaced 300' either side of the end of the crossing.
9. **FINAL SURFACING:** After preliminary surfacing has been completed, grade and line stakes shall be checked and the track brought to final grade and alignment.
10. **FINAL TAMPING:** Track shall be brought to grade and the ballast re-tamped in the manner described for preliminary surfacing, except that the tamping distance inside the rail shall be decreased from 12 to 10 inches for eight (8) foot ties, fifteen (15) to thirteen (13) inches for eight (8) foot-six (6) inch ties, and eighteen (18) to sixteen (16) inches for nine (9) foot and ten (10) foot ties.
11. After final tamping is complete, ballast shall be dressed to the section indicated with a Fairmont C154BR ballast regulator, or approved equal, and all ballast removed from the top of crossties, tie plates and base of rail by the ballast regulator broom.
12. Surplus ballast remaining after final surfacing and dressing of the ballast section shall be distributed or otherwise disposed of as directed by the Engineer.
13. Upon completion of the work, the Contractor shall remove all rubbish, waste, and discarded materials generated by the work from the project area and dispose of in an approved manner as directed by the Engineer. Areas where the Contractor has worked, including but not limited to, project areas, material storage sites, and borrow or disposal areas shall be left in a clean, well-graded, and well-drained condition.

14. One hundred–eighty (180) calendar days after the track has been accepted and put into operation, the Contractor shall perform, at no additional cost, necessary resurfacing adjustments to leave the track in alignment and on grade.
15. Completed track shall meet the following tolerances. Track not meeting the tolerances specified below shall be repaired to meet these requirements, at no additional cost.
 - a. **Gage:** Track gage shall be within plus or minus 1/8 inch of standard gage.
 - b. **Alignment:** Alignment shall be measured as the deviation of the mid-offset of a 62 ft line, with the ends of the line at points on the gauge side of the line rail, 5/8 inch below the top of the railhead. Either rail may be used as the line rail on tangent track; however, the same rail shall be used for the entire length of the tangent. The outside rail in a curve is always the line rail. Alignment on tangents shall not deviate from uniformity more than 1/2 inch. Alignment on curves shall not deviate from uniformity more than 3/8 inches.
 - c. **Track Surface:** Track surface shall meet the following requirements:
 - (1) The runoff at the end of a raise shall not exceed 1/4 inch for any sixty two (62) feet per CFR 49 part 213 Subpart C Track of rail.
 - (2) The deviation from design profile on either rail at the mid-ordinate of a 62 ft chord shall not exceed 1/4 inch.
 - (3) Deviation from design elevations on spirals shall not exceed 1/2 inch.
 - (4) Deviation from zero cross level at any point on tangent or from designated superelevation on curves or spirals shall not exceed 1/8 inch.
 - (5) The difference in cross level between any two points less than 62 ft apart on tangents, and on curves between spirals shall not exceed 1/8 inch.

241-4.01 METHOD OF MEASUREMENT. The work will not be measured for payment under this pay item.

241-5.01 BASIS OF PAYMENT. Subsidiary to Section 242, Trackwork

Insert the following section

SECTION 242 TRACKWORK

242-1.01 DESCRIPTION. This work consists of furnishing and constructing skeleton Palmer Branch track to the alignment and limits shown on the Plans. This work will also include removal of existing track and crossing materials at the proposed railroad crossings.

242-2.01 MATERIALS. ARRC shall provide and deliver all track material to the Anchorage Yard, unless otherwise noted. The material shall conform to the current AREMA "Manual for Railway Engineering" and as detailed in this specification.

1. ARRC shall provide new premium/high strength rail: rail shall be 115 RE rail section, ends blank, in 80 & 40 foot in lengths, delivered to the jobsite. Rail shall either be head hardened or fully heat treated. Rail conforms to the latest revision of the AREMA Manual for Railway Engineering, Volume 1, Chapter 4, Rail, Specification for Steel Rail with the clarifications listed below.
2. Angle Joint Bars: ARRC shall provide angle joint bars shall be new 36 in. headfree, standard toeless, 6 holes for use with 115 RE rail with hole spacing to fit rail drilling per AREMA Volume 1, Chapter 4, Section 2.8. Joint bars shall be quenched or medium carbon steel, rolled steel only, heat #16. Hole diameter shall be 1-1/8 in.
3. Rail Anchors: ARRC shall provide rail anchors for installation in wood tie areas only. Use new rail anchors sized to conform to the rail and "Specifications for Rail Anchors" in Chapter 5, Part 7 of the AREMA Manual. Use Unit V, drive-on type rail anchors for 115 RE, NO SUBSTITUTE. For 115 RE, width 1-3/32 in. x thickness 21/32 in. and weight 1.8 lb. Application shall be by a standard sledgehammer without the use of special tool or an anchor applicator to drive on. Packaging shall be in 50# bags containing 28 each with 75 bags per pallet, banded.
4. Tie plates for 5-1/2 in. rail base: ARRC shall provide PANDROL TPL-P26M, 5.5 x 7-3/4 in. x 15 in. with four 1 in. round holes and two 11/16 in. square holes. 1:40 cant.
5. Tie plates for 5-1/2 in. rail base for 115 RE Rail: ARRC shall provide 7-3/4 in. x 14 in. x 5-1/2 in. with A-8 punching, 3/4 in. square holes, 1:40 cant.
6. eClips: ARRC shall provide PANDROL Part Number ECL-2055 (right hand) for use with 141 RE or 115 RE rail and Pandrol tie plates. Shall be PANDROL Part Number E-2063 for concrete tie applications with angle joint bars.
7. J-Clips: ARRC shall provide j clips for use on wood ties with angle joint bars. Shall be PANDROL Part Number J-clip.
8. Screw spikes: ARRC shall provide new, PANDROL, 15/16 in. x 6 in. SQ HD, Washer Type Part No. 6619, 1.1 pound each. For use with 13/16-in. socket. Packaged 50 to bag. Requires 3/4-in. diameter x 6-in. deep pre-bore in hardwood ties.
9. Track Bolts, Nuts & Washers: ARRC shall provide bolts and nuts shall be new and manufactured in accordance with AREMA Volume 1, Chapter 4, Section 1.4 and 2.9. Bolts shall be 1-1/16 in. diameter x 6 inches long for a full nut, lockwasher and 2 threads exposed after tightening, but not to exceed a 1 in. exposure after tightening.

10. Nutlock, (a.k.a. Spring Washer) ARRC shall provide new, to fit 115 RE rail with thread diameter of 1-1/16 in. Product must conform to current AREMA Specifications Volume 1, Chapter 4, Section 2.10 for Spring Washers and ARRC Standard Plan #7.0. Packaging shall be in 50# pails containing 125 each, 36 pails per pallet.
11. Wooden Cross Ties: ARRC shall provide new cross ties treated, 7-in. x 9-in. x 8.5 ft, & 7-in. x 9-in. x 10 ft. Cross ties shall be manufactured in accordance with the current AREMA Manual for Railway Engineering, Chapter 3; W.C.L.I.B. Grading Rules #17, paragraph 192b; and this specification. Hardwood ties shall be used.
 - a. Timber: Cross ties shall be sawn from sound, straight live timber, free from any defect that might impair durability and/or strength. Multiples or combinations will not be accepted. Cross ties shall be cut square at the ends and have all bark that impairs treatability entirely removed.
 - b. Stump Pull: Stump pulls will be graded the same as holes or splits in the end of a tie. Cross ties with a stump pull that goes into the interior more than 5 in. will be rejected.
 - c. Wane: Cross ties shall have a minimum 8 in. face. Minimum face specifications apply to the entire length of the cross tie. All wane shall be free of bark.
 - d. Knots: A knot exceeding in diameter 1/4 of the width of the surface on which it appears will be rejected if it occurs in the rail bearing area. Outside the rail bearing area, knots will be accepted up to a diameter of 1/3 of the surface on which they appear. A cluster of knots will be judged as being a large knot in damaging effect. Rail bearing area shall be defined as 20 in. to 40 in. from center of tie.
 - e. Cross Grain: Any cross tie with cross grain exceeding one in fifteen will be rejected.
 - f. Straightness: A cross tie will be considered straight when (1) a straight line along the top from middle of one end to middle of the other end is not closer than 3 in. from either side of tie, and (2) when a straight line along a side from middle on one end to the middle of the other end is everywhere more than 2 1/2 in. from top or bottom of the tie.
 - g. Bark: Any cross tie containing more than a minimal amount of ingrown bark will be rejected.
 - h. Saw Kerf: A saw kerf is not required.
 - i. Mill of Manufacture Certification: A mill certification is required indicating that inspections have been performed and that the product is in conformance with specifications. The mill certification must also indicate the species of wood. All ties that pass the inspection will be clearly marked and identified as ARRC ties; unmarked ties will not be accepted.
 - j. Treatment: All treatment shall meet the specifications of the American Wood Preservers Association Standards Book C6 and the following guidelines. A treatment report shall be accurately completed for all charges and at a minimum shall contain the following:
 - (1) Charge number
 - (2) Date

- (3) Wood species and size
- (4) Total retort time in hours
- (5) Conditioning time in hours
- (6) Pressing time in hours
- (7) Retention in pounds per cubic meter
- (8) Average penetration to be shown for oak
- (9) Initial air time, if applicable
- (10) Gauge readings and times
- (11) Treating operator's signature
- (12) Seasoned condition (dry or green), if green show moisture content.
- (13) Final Vacuum
- (14) Wright of solution at 100 °F
- (15) Work tank number and cylinder number

The preservative shall consist of a mixture of 50 percent by volume of creosote oil and 50 percent by volume of residuum oil; 50/50 coal tar solution may also be used. Final readings shall be entered on the treating report. Treating reports and charts shall become a permanent record maintained by the treating company with open access to ARRC personnel.

- k. Care of Treated Wood: Extreme care shall be used in handling treated cross ties to avoid damage to the edges of the timbers or breaking through the treated portions and exposing untreated wood. The use of peavies, cant hooks, pickaroons, long hooks or pointed tools shall be such as not to break through the treated portion of the wood. If damage during handling which could potentially impair the longevity of material service life, this material shall then be retreated at the vendor's expense. All cost associated with retreatment, including oil, shall be the responsibility of the vendor.
- l. Boring: All cross ties shall be bored and adzed in conformance to the ARRC Standard Tie Boring and Adzing Plan 1.13. Adzing may be deleted if vendor will certify that ties furnished will be flat and provide a uniform bearing surface for the tie plates.
- m. Anti-splitting Devices: All hardwood cross ties shall have steel multi-nail anti-splitting end plates in accordance with the current AREMA Manual of Railway Engineering, Chapter 3, Section 1.8 titled "Ties and Wood Preservation", Section 1.9.2.3 titled "Nail Plates", and Section 1.10.3 titled "Nail Plates".
- n. Species: Acceptable hardwood species are Red Oak, White Oak, Hickory, Black Walnut, Gum, Beech, Ash, White Heart Sycamore, Hackberry and Hard Maple.

242-3.01 CONSTRUCTION REQUIREMENTS. Track construction shall be performed in accordance with the current ARRC Standards, AREMA Manual for Railway Engineering and as specified in this document. Scope of construction includes but is not limited to, unloading and distribution of track material, distribution and spacing of cross ties, laying, bolting and spiking rail, field welding of jointed rail, placing rail anchors, raising, aligning and tamping track, and shaping ballast to the design section. The rail for the crossing panels shall be box anchored to the ties prior to moving the panels.

Construction procedures and methods shall be employed that keep the railroad sub-ballast and ballast sections from becoming rutted or disturbed and any operation that causes damage shall be stopped immediately. Alternate construction methods shall be instituted.

All existing track and crossing material removed will become the property of the Contractor, unless stated otherwise in these documents. These materials shall be removed from the ARRC right-of way.

242-3.02 TRACK ALIGNMENT AND GEOMETRY. The track shall be constructed to the alignment and profile indicated, or as adjusted by the Engineer, within the tolerances specified. Contractor shall designate right or left rail, while facing in the direction of increasing stationing, to control the grade of all tangent tracks on a contract-wide basis. Low rail on curves shall be the profile grade rail. High rail on curves shall be the line rail.

242-3.03 TOLERANCES. Deviations from indicated gage, cross level, horizontal line, profile grade, and tie spacing shall conform to the following requirements:

1. Gage: Shall be 4 ft-8 ½ in. plus or minus 1/8 in.
2. Cross Level and Superelevation: Shall be plus or minus 1/8 in. from level on tangent or design superelevation on curve.
3. Deviation from Horizontal Alignment: Plus or minus ¼ in. in a 62 ft chord. Plus or minus ½ in. total except in road crossings where total deviation shall be plus or minus ¼ in.
4. Deviation from Profile Grade: Shall not exceed plus or minus ¼ in. in 62 ft chord or a total of plus or minus ½ in.
5. Tie Spacing: Distance between centerline on adjacent ties shall be 19 ½ in. for wooden cross ties and 24 in. for concrete ties and not vary more than plus or minus 1 in. from the indicated spacing, with the additional requirements that 48 wooden ties shall be installed per 78 ft of track or 39 concrete ties per 78 ft of track.
6. Acceptance: Final track alignment will be accepted only after ARRC traffic has used the new track and alignment for 3 weeks.

242-3.04 CROSS TIE DISTRIBUTION. Contractor shall receive cross ties from ARRC's Anchorage Yard and transport them to the work area in accordance with the AREMA "Handling of Ties from the Tree into the Track" for wooden ties and "Recommended Practices for Shipping, Handling, Application and Use" for concrete ties. Ties shall be placed on a smooth, compacted surface as specified herein, spaced as shown within specified tolerances, and laid normal to the centerline of track with heartwood face down. Line ends of ties in trackage shall be aligned uniformly on the right side of track when facing increased stationing.

242-3.05 TIE PLATES AND SCREWS. Tie plates shall be attached to the cross ties with line and hold-down screws to the indicated patterns. Contractor may pre-plate cross ties prior to distribution. If Contractor chooses to pre-plate the cross ties, he shall furnish any additional material required at no added cost to Owner. Contractor shall use a jig to compensate for fabrication tolerances to achieve track gage tolerances.

242-3.06 RAIL LAYING. Rail shall be laid in accordance with the details and procedures that follow:

1. Rail Distribution: Rails shall be distributed along the roadbed with the head of the rail up and in such a manner and using equipment that will prevent damage to them. Dropping rails from the sides of railcars or trucks will not be permitted. Where continuous welded rail is to be used, the use of the rollers is recommended to facilitate its unloading and reduce the risk of

dislocating ties and tie pads. Rail shall not be brought into contact with the tie ends during installation. Where rail heaters are used, care should be taken to prevent damage to pads and insulators.

2. Rail Laying: The base of the rail and surface of the tie and tie plate shall be cleaned prior to laying. Rails shall be laid one at a time without bumping or striking. Rail ends shall be brought squarely together against the expansion shims and completely bolted before spiking. Rails shall be laid so that the joints in opposite rails are staggered not less than 20 ft apart, plus or minus 24 in., except closer joints may be required at turnouts or roadway crossings. Rails of less than standard length shall be used to space the joints on curves. Rails shorter than 15 ft shall not be used. Rail shall be laid or welded so that no joints are in grade crossings.
3. Rail Cutting and Drilling: Rails shall be cut square and clean by means of rail saws. Holes for complete bolting of cut rail shall be precisely marked, center punched, and drilled using an exact template for alignment. In no instance shall marking through or drilling through joint bars be allowed. Holes shall be deburred. New holes shall not be drilled between two holes already drilled. Burning or cutting of rails or bolt holes by means of an acetylene torch will not be permitted. All cut rail ends shall be beveled at the head and be hardened to conform to AREMA "Manual Specifications for Steel Rails", Supplementary Requirement S1.
4. Rail Joints: The fishing surface of the rails and joint-bars shall be wire-brushed to remove rust before assembly. Allowance for rail expansion shall be made at all joints by the use of expansion shims placed between the ends of adjacent rails. The proper expansion allowance shall be determined by the use of the following table. Refer to AREMA chapter 5, paragraph 5.3.1 for shim thickness to use for 39 ft rail.

Rail Temperature °F	Shim Thickness in inches for 78 ft- 80 ft rail
Below 35	5/16
35-47	1/4
48-60	3/16
61-73	1/8
74-85	1/16
Over 85	None

For shorter lengths of rail, proportionate shim thickness shall be used. The temperature of the rails shall be determined by the use of an AREMA standard rail thermometer, placed on the base of the rails close to the web on the side shaded from the sun. Sufficient time shall be allowed to accurately record the temperature. Care shall be taken to assure that shims are not squeezed or damaged during installation of shims or rails. Shims shall be removed from between rail ends as soon as the bolts have been tightened and the rail anchors applied. All track bolts shall be installed when the rail is laid and tightened before spiking.

Final bolt tension shall be between 20,000 and 30,000 lbs. Bolts shall be tightened once, at the time of rail installation. Final tension shall be checked and adjusted as necessary just prior to final acceptance per AREMA chapter 5, paragraph 5.5.2.

5. Rail Anchoring: Rail anchors shall be located 300' each side of the crossing Pandrol plated ties as indicated on ARRC standard plan No. 1.22-03. Under CWR on wood ties every other tie shall be box anchored. The rail anchors shall be placed uniformly along the rail length. Rail anchors shall be installed to the gage side of the rail against the same tie face

on the opposite rail. Rail anchors shall grip the base of the rail firmly and shall have full bearing against the face of the tie. Rail anchors shall not be moved by driving them along the rail. Where PANDROL Clips are used rail anchors are not required except in crossings.

6. On CWR the timing and method of applying anchors to the rail shall be described as required in paragraph 242-3.13 CWR Construction.
7. Mainline tie-in points: When tying into jointed rail on wood ties, every tie in the jointed rail for a minimum distance of 300 feet beyond the tie-in point shall be box anchored. When tying into CWR on wood ties every tie for a minimum distance of 100 feet beyond the tie-in point shall be box anchored. Field welds for rail on wood ties shall be box anchored for 100 feet on either side of the weld. Contractor shall provide 10 each 7-in. x 9-in. x 10 ft hardwood ties with PANDROL plates and lag screws suited for the rail size, left and right transition rail, and e-Clips for the transition from CWR to jointed rail or concrete ties to wood ties.

242-3.07 THERMITE WELDING.

1. Rails shall be cut square and clean by means of rail saws and cleaned a minimum distance of six (6) inches from the end with a torch (take care not to overheat the rail) and wire brush to free the area of grease, rust, and other foreign materials, along with any other recommendations of the welding kit manufacturer.
2. No holes shall be permitted in the rail.
3. All welds giving fault indication by ultrasonic inspection, magnetic particle inspection or visible inspection shall be replaced at no expense to ARRC. This includes the addition of a rail plug and the additional welds.
4. Any additional work associated with attempting and failing to make a successful weld, resulting in a rail plug and two welds shall be at Contractor's expense.
5. Contractor shall inform the Owner's Representative daily of the location of completed welds to facilitate the testing and inspection by the Owner's Representative. All thermite welds performed under this contract shall be listed on a Daily Thermite Welding Report.
6. See attached CWR Form for reporting thermite welds.
7. Contractor and Owner's Representative will visually inspect all welds for surface cracks. Welds with surface cracks visible to the eye shall not be acceptable.
8. Contractor shall furnish all equipment and material required in the production of thermite welds. Note: ARRC shall furnish Orgo Thermite welding kits and materials required to perform the thermite welds.
9. **Contractor shall have a current thermite welding certificates for performing Orgo Thermite welds. Contractor must present certificates prior to starting work.**
10. **Welding shall be done in accordance with Chapter 4, Part 2 of AREMA Manual, articles "Thermite Welding Rail Joints and Specifications for Fabrication of Continuous Welded Rail", except as modified by these specifications.**

- a. The faces of the rail ends shall be arranged at right angles by cutting or grinding and shall be further cleaned to remove all scale and rust.
 - b. The ends of the rails to be welded shall be properly gapped and aligned to produce a weld, which shall conform to the specified alignment tolerances. No dip in the rails shall be allowed. Refer to Section 242-3.08 for "Detail of Max. Vertical Offset" and "Tolerances for Thermite Welds".
 - c. Before preheating check the rail temperature with a rail thermometer if the rail temperature is below thirty five (35) degrees Fahrenheit, the following procedures shall be followed to ensure that a proper preheat is made.
 - i. Both rails must have supplemental heat applied to raise the rail temperature to provide for controlled cooling.
 - ii. The length of rail to be supplementally heated shall be between thirty (30) and thirty six (36) inches for rail temperatures from thirty five (35) down to fifteen (15) degrees Fahrenheit.
 - iii. A rail puller shall be placed on the rail to maintain the correct gap and crown unless temperature conditions are such that the possibility of rail movement is eliminated.
 - iv. If a change in rail temperature is anticipated while the weld is being poured or while it is cooling, the rail expander should be adjusted to compensate for any stresses, which would occur at the weld due to a change in temperature.
 - v. Depending upon the type of change expected, one of the following procedures will assist in preventing temperature induced stresses from affecting the quality of the weld:
 - 1. Rail temperature is low and a raise in temperatures is anticipated the rail expander should be set to expand the gap and enough pressure built up to cause a slight increase in the gap. This should prevent any subsequent decrease in gap width.
 - 2. Rail temperature is high and a drop in temperature is anticipated the rail expander should be set up to pull and enough pressure built up to cause a slight subsequent decrease in width.
 - 3. Whenever either of the above procedures is required, the final gap width shall be as stated in the manufacturer's instructions for the rail weight being welded.
11. The rail puller shall remain on the rail until the weld is complete and has cooled to seven hundred (700) degrees Fahrenheit. This is verified when the center of the weld around its entire periphery will not melt a 700 degree Fahrenheit temperature stick.
12. When the rail puller is removed it shall be released in a gradual manner.
13. Rail ends shall be preheated prior to welding to a sufficient temperature and for a sufficient time to ensure full fusion of the weld metal to the rail ends without cracking of the rail or weld, per manufacturer's instructions.

14. The mold shall be left in place after tapping for a sufficient time to permit complete solidification of the molten metal and proper slow cooling to prevent cracking and provide a complete weld with the proper hardness and ductility.
15. The completed weld shall be finished by mechanically controlled grinding to conform to the same requirements specified for shop welding including grinding under the base.
16. Wearing protective clothing and safety equipment is required during welding operations.
17. Never dump hot slag on wet soil, wet ballast or into water.
18. On curves where the slag basin is placed on the low side, the plug portion of the mold shall be filled so that it is horizontal when placed in the mold and will cause the molten metal to flow equally to both sides of the mold.
19. Thermite welds shall not be made within three (3) feet of another thermite weld or within twelve (12) inches of a plant weld or within two and one half (2-1/2) feet from the end of a bonded joint without written approval by the Owner's Representative.
20. Contractor shall re-space cross ties as necessary to prevent a weld from sitting on a tie. The cost incurred by Contractor to re-space the crossties will be considered incidental to the cost of completing a thermite weld. It is acceptable to cut the rail in order to prevent a weld from sitting on a tie.
21. Contractor shall tamp and dress track, as necessary, to provide firm support at the weld.
22. Contractor shall plug and re-drive all necessary spikes.
23. Contractor shall properly re-apply and adjust anchors as necessary to conform to anchor pattern.
24. Contractor shall clean up all waste from the field welding process and shall dispose of all superfluous materials.
25. If Contractor chooses to weld joints prior to the rail being laid, de-stressed and anchored, then joints will need to be spaced approximately every fourteen hundred (1,400) feet to provide for the thermal adjustment that will occur before it is anchored. Any variance from this shall have the written approval of the Owner's Representative. If approval has not been given and Contractor has welded the rail then Contractor shall, at its cost, cut and re-weld the rail at approximately fourteen hundred (1,400) foot intervals.
26. No payment will be made for additional welds created by avoidable plugging, without written authority of the Owner's Representative.

242-3.08 WELD FINISHING AND TOLERANCES.

1. Welded joints in the finished track shall be brought to a true surface and alignment by means of a proper grinding or planing machine (shear). Finish grinding shall be performed with an approved profile grinder operated by a skilled workman grinding evenly and leaving the joints in a smooth and satisfactory condition. Finishing shall eliminate all cracks. Mechanically controlled grinding in conformance with the following requirements shall finish the completed weld:

- a. Maximum vertical offset: The maximum vertical offset in the vertical plane shall be no greater than 0.060 inches measured 1 inch from the weld fusion line.
- b. Combined vertical offset and crown: The maximum combined vertical offset and crown shall be no greater than 0.060 inches.
- c. Dip camber: No dip camber is allowed. Contractor shall remove and replace any sections of rail with dip camber at his own expense.
- d. Horizontal offset: The maximum horizontal alignment offset shall be no greater than 0.030 inches.
- e. Horizontal offset and kink (to gage side of rail): The maximum horizontal alignment offset and kink shall be no greater than 0.030 inches.
- f. Horizontal offset and kink (to field side of rail): The maximum horizontal alignment offset and kink shall be no greater than 0.015 inches.
- g. Measurements shall be made with an approved 36-inch straight edge and taper gauge.

242-3.09 WELD QUALITY. Each completed weld shall have full penetration and complete fusion and be entirely free of cracks or fissures. Welds shall meet the acceptance criteria given in AWS D1.1.

Quality control testing is required on all welds. The contractor shall supply the ARRC with certified ultrasonic weld test results prior to the demolition of the existing crossing and prior to the installation of the crossing into the mainline.

Contractor shall guarantee welds for a period of 12 months after final acceptance date.

242-3.10 WELD NUMBERING. The Contractor shall semi-permanently mark a sequential weld number on the rail immediately adjacent to the weld, using a quality lead paint marker at the time the weld is made. Welds shall be numbered sequentially in the order in which they are made. The Owner will provide the Contractor with the initial weld number. Defective welds, which are replaced, shall be assigned a new sequential number by adding a letter to the defective weld number (e.g., defective weld 347 would be replaced by 347A).

242-3.11 WELDING SUPERVISION. A certified welder shall perform welding under the direct supervision of an experienced welding supervisor or foreman and be certified by the manufacturer of the welding equipment.

242-3.12 WEATHER CONDITIONS. Welding shall not be performed in rain, snow, or other inclement weather without adequate protection of the welding from the elements. If using field welds, welding shall not be performed below minimum ambient temperature recommended by the manufacturer.

242-3.13 NOT USED.

242-3.14 TRACK CONSTRUCTION SUBMITTALS.

1. **Thermite Welding Procedures:** A detailed statement covering the step-by-step procedures to be employed in making the welds, including a complete description of each of the following

items, as applicable, and any other essential characteristics included in the welding procedures.

- a. The manufacturer's trade name for the welding process.
 - b. The method used for cutting and cleaning the rail ends. Flame cutting of rail ends shall not be allowed.
 - c. The minimum and maximum spacing between rail ends.
 - d. The method used for maintaining the rails in alignment during welding.
 - e. The method used for preheating, including time and temperature.
 - f. The tapping procedure, including the minimum time required to cool the weld under the mold insulation.
 - g. The method used, including a description of special tools and equipment, for removing the upset metal and finishing the weld to the final contour.
 - h. Quality control procedures to be followed.
 - i. The contractual agreements with any subcontractor employed by the Contractor in doing the work.
2. **Record of Field Weld:** A welding record of each field weld on forms provided by the ARRC. The original copies of the form bearing the signatures and initials of personnel involved shall be submitted as part of the Project Record Documents.

242-4.01 MAINLINE TRACK OUTAGE: This work shall consist of providing all necessary equipment and labor to:

1. Construct a new Railroad Crossing at South Inner Springer Loop, ARRC MP A-3.7 on the Palmer Branch located in Palmer, Alaska. The South Inner Spring Loop Crossing will be 160' of track panel with 72' of concrete crossing panels.
2. Demo and Reconstruction of the North Fairgrounds Railroad Crossing, ARRC MP A-4.32 on the Palmer Branch located in Palmer, Alaska. The North Fairgrounds Crossing will be 80' of track panel with 56' of concrete crossing panels.
3. Construct a new Railroad Crossing at East Inner Springer Loop, ARRC MP A-4.94 on the Palmer Branch located in Palmer, Alaska. 240' of track removal and replacement, removal of a switch approximately 90' RR South of the edge of new crossing panel, and removal of approximately 450' of spur track to the limits of ARRC ROW. Remove and Replace 8.5' ties from the limits of the switch stand removal to the limits of the new crossing panel.

The crossings shall be constructed with new 115 lb rail; 80 foot rails that shall be thermite welded and installed on new 10 ft long hardwood ties with PANDROL plates and four each PANDROL lag screws per plate, PANDROL eClips and unit type 5 anchors. Thermite welds shall be offset at least 2 cribs.

The ARRC will provide a 12 hour window to perform the crossing construction and an eight hour (8) window after that date if necessary.

The Contractor shall coordinate with the Engineer to schedule track outages. The track outage will be for 12 hours. The track outage will be limited to days of the week when the ARRC's Gravel operations on the Palmer Branch will not be affected.

Prior to track outages, the contractor will submit a closure plan to the ARRC. The plan will establish the work to be accomplished, the equipment, manpower and other resources required, and the schedule. Once agreed to by the ARRC, the Contractor will follow the plan. The ARRC reserves the right to assume control of the work to reestablish rail service if the schedule is not met. Contractor will bear all cost and damages that may result from failure to meet the closure schedule, in addition to the train delay charges provided for in the Standard Specifications for Work on Railroad Property, Section 7.2.

242-4.01 METHOD OF MEASUREMENT. Railroad trackwork will be measured by the foot along the centerline of track beginning at the centerline of the first cross tie and ending at the centerline of the last cross tie and includes all other track materials (OTM) such as joint bars, spikes, tie plates and miscellaneous materials not identified by a separate unit price elsewhere in these specifications.

Welds and Ultrasonic testing and certification of the welds are incidental to trackwork and no separate pay item will be made.

242-6.01 BASIS OF PAYMENT. The accepted quantity of trackwork will be paid for at the contract unit price, per track foot for the pay item shown in the bid schedule, complete in place.

Pay Item	Pay Unit
242(1) Railroad Mainline Track	Track Foot

Insert the following section

**SECTION 244
TRACKWORK REMOVAL**

244-1.01 DESCRIPTION. This work consists of dismantling and removing track and crossings from the existing roadbed. This work also includes grading and reshaping the existing railroad embankment to natural contours. All removed trackwork materials, unless otherwise specified on the plans or in these specifications, shall become the property of the contractor.

244-2.01. NOT USED

CONSTRUCTION REQUIREMENTS

244-3.01 GENERAL. Remove all trackwork and grade crossings that are retired from service as a result of the new track construction.

244-3.02 ROADBED CLEANUP AND SHAPING. After all track material has been removed and debris and tie remnants removed, the remaining ballast shall be excavated and removed in preparation of the subgrade.

244-3.03 MISCELLANEOUS MATERIALS. Spikes, bolts, nuts, and washers and other miscellaneous track parts such as gauge rods shall become the property of the contractor.

244-4.01 METHOD OF MEASUREMENT. Trackwork removal shall be measured by the track-foot along the centerline of track beginning at the centerline of the first crosstie and ending at the centerline of the last cross tie for each track removed. Removal of crossings, pavement, and miscellaneous railroad materials shall be incidental to this work and will not be measured for payment.

244-5.01 BASIS OF PAYMENT. The accepted quantity of work will be paid for at the contract unit price, per track foot from the center of the first cross tie to the center of the last. All required grading and shaping of existing track embankment and removal of existing crossings shall be subsidiary to Item 244 (1) Trackwork Removal.

Payment will be made under:

Pay Item	Pay Unit
244(1) Trackwork Removal	Track Foot

SECTION 617 RAILROAD CROSSINGS

617-1.01 DESCRIPTION. (replace with the following)

MODULAR CROSSING. This work consists of installing a permanent concrete, modular crossing to the alignment and location shown on the plans and per ARRC Standard Plan 2.78-06. All trackwork shall be in accordance with Section 242 of the specifications and shall be scheduled with the ARRC through the Engineer in accordance with the Standard Specifications for Work on Railroad Property. No portion of the existing track shall be removed without the approval of the Engineer. Approval must be requested in advance of the work.

617-1.03 SCOPE OF WORK. (add the following section) The trackwork involved in this section consists of, but is not necessarily limited to, the following activities:

- a. Remove existing crossing where applicable, together with paved approaches within 10 feet left and right of centerline of tracks unless shown otherwise in the drawings.
- b. Remove existing tracks to the excavation limits shown on the plans.
- c. Excavate and dispose of existing crushed stone ballast at the modular crossing.
- d. Install new track as specified on the plans for the trackwork area at the modular crossing.
- e. Resurface the track each side of the newly constructed track panel and raise to design line and grade at the modular crossing.
- f. Install modular crossing with 115 RE Rail.

The Contractor shall be responsible for any contract scheduling changes resulting in the conditions of this specification not being met. The contractor shall provide updated progress schedules.

617-2.01 MATERIALS. (replace with the following)

The ARRC will provide all track material to construct skeleton track. The material conforms to the current AREMA "Manual for Railway Engineering" and as detailed in Section 242 Trackwork.

The ARRC will furnish all special trackwork material required to construct the modular crossings. The materials shall conform to the current AREMA specifications and as detailed in this specification. All standard track material shall conform to Section 242 of these specifications.

Modular Crossing Panels: ARRC provided crossing panels are modular reinforced concrete panels specifically designed for railroad crossing applications designed for the rail sizes specified and the degree of curvature and in accordance with ARRC standard plan 2.78-06.

Cross Ties: ARRC provided cross ties are new, 7-in. x 9-in. x 10 ft, hardwood as specified in Section 242.

617-3.01 CONSTRUCTION REQUIREMENTS.

4. Railroad Crossing. (replace with the following)

Grade crossing construction shall be performed in accordance with ARRC standards, AREMA Manual Part 8 and as specified in Section 242, Trackwork. Scope of construction includes, but is not limited to, unloading and distribution of crossing materials and installation on prepared subgrade and sub-ballast sections. Rail within the road crossing and for at least 19.5 feet on either side of the crossing shall be new, non-jointed 115 RE, as specified in Section 242-2.01.

- a. Construction work on or in the vicinity of the ARRC main line track will require the Contractor to schedule the work so that conflicts with ARRC traffic are kept to a minimum
- b. Track closures are at the discretion of the ARRC and will be evaluated on a case-by-case basis. All work affecting the Railroad must fall within the time constraints set by the ARRC.
- c. All work on, or within 20 feet of the active track, shall require flag protection. ARRC will provide a railroad flagman to the contractor for the duration of the crossing projects based on an approved contractor provided schedule.
- d. At the close of each work day, inform the Engineer or his representative of the location and nature of the work to be performed the following day. Secure prior approval from ARRC for any item of work resulting in delay to traffic.

Railroad Crossing. Construct crossings according to ARRC Standards and construct all modular crossings with PANDROL Plates, PANDROL Clips and approved screws or equal.

617-4.01 METHOD OF MEASUREMENT. (add the following)

3. Railroad Crossing. Modular crossings paid for as a lump sum item will not be measured for payment

617-5.01 BASIS OF PAYMENT.

Pay Item	Pay Unit
617(1) Railroad Crossing	Lump Sum

SECTION 660
SIGNALS AND LIGHTING

660-1.01 DESCRIPTION (add the following)

Furnish and Install all conduit and junction boxes as shown on the plans for future installation of railroad signal system by others.

- a. Furnish and install 4" schedule 80 PVC conduit as shown on plans.
- b. Furnish and install Type II and III junction boxes as shown on the plans.
- c. Provide as built drawings of utility work to the ARRC.
- d. Obtain approval from Engineer and ARRC for any changes to signal plans.

660-3.01 CONSTRUCTION REQUIREMENTS (add the following)

9. Railroad Signal Construction. Construction shall be performed in accordance with ARRC Standards, this Section and Section 617, Railroad Crossings.

660-4.01 METHOD OF MEASUREMENT. (add the following)

Item 660(14), Type 2 Junction Box. By each complete unit installed.

Item 660(15) Type 3 Junction Box. By each complete unit installed.

Item 660(16) 4" Schedule 80 PVC Conduit with pull wire. By Linear Foot installed.

660-5.01 BASIS OF PAYMENT. (add the following)

Pay Item	Pay Unit
660(14) Type 2 Junction Box	Each
660(15) Type 3 Junction Box	Each
660(16) 4" Schedule 80 PVC Conduit with pull wire	Linear Foot

APPENDIX I

Cost Schedule

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 term, conditions, specifications and drawings.

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.

An award shall be made in the aggregate of Base Bid and or any combination of Base Bid and Add Alternates, whichever is deemed by the Contract Administrator to be in the best interest of the ARRC. The project is bid as a sum of the unit prices for the estimated quantities. The Award is contingent on the availability of ARRC and State of Alaska funds.

Description

2019 Glenn HWY 34-42
Upgrade Support

\$_____ Total Base Bid

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

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.

BIDDERS NAME AND ADDRESS

COMPANY NAME

SIGNATURE BY AND FOR THE BIDDER

COMPANY ADDRESS

PRINTED NAME OF ABOVE BIDDER

DATE OF BID

CONTACT PHONE NUMBER

CONTACT E-Mail

Contractor hereby offers to perform construction as described in this ITB and any addenda for the following lump sum prices

Item	Item Description	Qty	Unit	Unit Bid Price	Item Total
1	S. Inner Springer Loop A-3.7	80	LF		
1-617(10)	Modular Crossing for 115 RE Rail	1	LS		\$
1-244(1)	Trackwork Removal	0	LF		\$
1-242(1)	Railroad Mainline Track	0	LF		\$
1-660(14)	Type 2 Junction Box	3	EA		\$
1-660(15)	Type 3 Junction Box	2	EA		\$
1-660(16)	4" Schedule 80 PVC Conduit with pull wire	250	LF		\$
S. Inner Srpinge Loop Total:					
2	North Fairgrounds A-4.32	56	LF	-	\$
2-617(10)	Modular Crossing for 115 RE Rail	1	LS		\$
2-244(1)	Trackwork Removal	0	LF		\$
2-242(1)	Railroad Mainline Track	0	LF		\$
2-660(14)	Type 2 Junction Box	0	LF		\$
2-660(15)	Type 3 Junction Box	0	EA		\$
2-660(16)	4" Schedule 80 PVC Conduit with pull wire	0	LF		\$
North Fairgrounds Total:					
3	E. Inner Springer Loop A-4.94	80	LF	-	\$
3-617(10)	Modular Crossing for 115 RE Rail	1	LS		\$
3-244(1)	Trackwork Removal	380	LF		\$
3-242(1)	Railroad Mainline Track	100	LF		\$
3-660(14)	Type 2 Junction Box	3	EA		\$
3-660(15)	Type 3 Junction Box	2	EA		\$
3-660(16)	4" Schedule 80 PVC Conduit with pull wire	250	LF		\$
E. Inner Springer Loop Total:					