

FABRICATION AND SUPPLY OF 26' I-BEAM BRIDGE SPAN

INVITATION TO BID NO. 23-31-210701

APRIL 20, 2023

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



April 20, 2023

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

Phone 907.265.2593
GOEMERG@AKRR.COM

Invitation to Bid #23-31-210701

Fabrication and Supply of 26' I-beam Bridge Span

Response Required: This page must be completed and returned to ensure receipt of future addenda or additional information. Please e-mail this form to GoemerG@akrr.com. All addenda will be forwarded to the contact name and number listed below.

Firms that have not returned the 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 Procurement and then Solicitations. Bidders must acknowledge the receipt of all issued addendums in their proposal/bid submittal.

Company	
Address	
Contact	
Phone	Fax
Email	

Website: www.alaskarailroad.com



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

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INVITATION TO BID NUMBER: #23-31-210701

Fabrication and Supply of 26' I-beam Bridge Span

SEALED BIDS WILL BE RECEIVED AT:

Alaska Railroad, Corporation Attn: Greg Goemer 327 West Ship Creek Avenue Anchorage, AK 99501

UNTIL 3:00 P.M. May 11, 2023 AT WHICH TIME BIDS WILL BE PUBLICLY OPENED

Return your bid in a sealed envelope on which the Solicitation number 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 prior to the scheduled time of bid opening.

Your bid must be complete. See instructions and conditions enclosed.

An Alaska Business license is not a prerequisite to bid. Bidders who possess an Alaska Business license and also meet the other criteria of an Alaska Bidder shall receive a preference per the "Alaska bidder preference".

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

ARRC reserves the right to reject any and all bids, or any part thereof, negotiate changes in bids, accept any bids or any part thereof, waive minor informalities or defects in any bids, and not to award the proposed contract if it is in the best interest of the ARRC.

ARRC may award a contract resulting from this solicitation to the 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, and waive informalities and minor irregularities in offers received. Any resulting contract from this solicitation shall incorporate the Standard Instructions, and General Terms and Conditions for Construction incorporated in this solicitation.

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

BIDDER/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 for 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 for Bid and the terms and conditions of the bidder/contractor, the terms and conditions of the Invitation for Bid will prevail.

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 4.0% in federal fiscal years 2022-2024 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. ITB # 23-31-210701
- 3. Date and Time Scheduled for Receipt of Offers.
- 4. Sealed Offer: Fabrication & Supply of 26' I-beam Bridge Span

Please direct all responses and/or questions concerning this invitation to bid **in writing** to Greg Goemer, Alaska Railroad Corporation, Supply Management, 327 W. Ship Creek Avenue, Anchorage, AK 99501, email address GoemerG@akrr.com.

Sincerely,

Greg Goemer Sr. Contract Administrator Alaska Railroad, Corporation

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ATTACHMENTS:

1. Bridge 148.3 N. Approach Replacement Plan Set

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. Supply Bid Form
- 2. <u>Bidders Responsibility Questionnaire</u>
- 3. <u>Cost Schedule Appendix-J</u>

POST AWARD DOCUMENTATION

- 1. Proof of current AISC Quality Certification(s).
- 2. Mill Certificates & Welding Certifications.
- 3. Shop detail drawings, welding procedure specifications, erection procedures and weld inspection reports will be required to be sent electronically.

APPENDIX B

MINIMUM QUALIFICATIONS

The items to be purchased through this bid are critical to the operation of the ARRC any vendor who responds to this bid must meet the following minimum qualifications in order to be considered responsive:

- 1.) Be the original manufacturer, be the distributor / dealer authorized by the manufacturer that routinely maintains an inventory of the requested product as part of its normal business and is authorized by the original manufacturer to serve this area (the State of Alaska). Be listed as a supplier of the requested items in the Supplier Quality System Register maintained by the National Association of Purchasing Management Rail Industry Group or other nationally published railroad periodical, or have at least five years of experience in the manufacture of the requested items.
- 2.) Have the authority and capacity to provide full support for all product warranties, including technical "trouble shooting" support.
- 3.) Be able to provide audited financial statements demonstrating the financial ability to meet the requirements of any order that may result from this solicitation.

The ARRC may conduct an inspection of the supplier's facility to include its offices and inventory of the items being solicited prior to contract award. All bids submitted in response to this invitation to bid must be signed by an individual with the legal authority to submit the offer on behalf of the company. Bids received from manufacturers/suppliers that do not meet these qualifications will not be considered

ALASKA BIDDERS PREFERENCE

- 1. ALASKA BIDDER PREFERENCE: Award will be made to the lowest responsive and responsible bidder after an Alaska bidder preference of five percent (5%) has been applied. The preference will be given to a person who: (1) holds a current Alaska business license at the time designated in the invitation to bid for bid opening; (2) submits a bid for goods or services under the name on the Alaska business license; (3) has maintained a place of business within the state staffed by the bidder, or an employee of the bidder, for a period of six months immediately preceding the date of the bid; (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship and the proprietor is a resident of the state, is a limited liability company organized under AS 10.50 and all members are residents of the state, or is a partnership under AS 32.06 or AS 32.11 and all partners are residents of the state; and, (5) if a joint venture, is composed entirely of ventures that qualify under (1) (4) of this subsection.
- 2. ALASKA VETERAN PREFERENCE: If a bidder qualifies for the Alaska bidder preference and is a qualifying entity as defined herein, they will be awarded an Alaska veteran preference of five percent (5%). The preference will be given to a (1) sole proprietorship owned by an Alaska veteran; (2) partnership under AS 32.06 or AS 32.11 if a majority of the partners are Alaska veterans; (3) limited liability company organized under AS 10.50 if a majority of the members are Alaska veterans; or (4) corporation that is wholly owned by individuals and a majority of the individuals are Alaska veterans, and may not exceed \$5,000. The bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies,

the bidder must have sold supplies of the general nature solicited to other state agencies, other governments, or the general public.

In order to receive the Alaska Bidder Preference and/or Alaskan Veteran Preference, the bid must also include a statement certifying that the bidder is eligible to receive said preferences. The application of preferences is for bid evaluation purposes only.

APPENDIX C

SPECIFIC TERMS AND CONDITIONS

Any contract resulting from this Invitation to Bid shall incorporate the following terms and conditions contained in this bid package.

Method of Bidding: Bids must be submitted in the spaces provided on the bid sheets of this invitation in accordance with the conditions of bid as stated herein. The bid will not be considered to be complete unless all spaces have been filled in. Consideration for award will be provided to complete bids only. If a bidder wishes to supply additional information, it may include same along with the bid in the sealed bid envelope.

Alaska Railroad Corporation Rights in Regards to Bid: The Alaska Railroad Corporation reserves the right to reject any of all bids, to waive any informality in bids, to accept in whole or in part such bid or bids as may be deemed in the best interest of the purchaser.

Bidder's 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.

Assignment: The agreement to be established as a result of this solicitation shall not be assigned by the contractor in whole or in part without the express written consent of the Alaska Railroad Corporation, nor shall the contractor have the right to authorize or permit the use of the Alaska Railroad Corporation's equipment or service facilities by third parties without the express written consent of the Alaska Railroad Corporation.

Hold Harmless: The contractor shall indemnify the Alaska Railroad Corporation against liability and hold it harmless from loss in respect to any and all claims and demands whatsoever rising out of the performance of this agreement, save and except the contractor shall not be liable for acts of negligence of Alaska Railroad Corporation employees acting within the scope of their employment. The Alaska Railroad Corporation shall not be liable for any costs incurred by the bidder in bid preparation.

F.O.B. Point: All prices quoted shall be F.O B. ARRC Warehouse, 485 Ocean Dock Rd, Anchorage, AK 99501.

Performance Assurances: Before final award of any contract as a result of this Invitation For Bid, awarded vendor will be required to make adequate assurance of performance in the form of verifiable information to the contract officer. Failure to make adequate assurance shall by signature of this bid render the vendor's bid non-responsive to this Invitation.

Addenda: The ARRC procurement officer will attempt to notify all who are known to have received the solicitation documents if any amendments are issued, but it shall be the bidder/offerors responsibility to ascertain prior to submitting a bid/proposal that he/she has received all addenda issued

Delivery Date: Your bid should indicate the earliest firm delivery date after receipt of award. ARRC shall fully expect the successful contractor to completely satisfy contract performance requirements in accordance with firm delivery dates offered in the Cost Schedule.

Aggrieved Bidder/Offeror: An aggrieved bidder/offeror may protest an ARRC procurement action by filing a written protest with the procurement officer in accordance with the procedures and time limits specified in ARRC Procurement Rules 1800.1-1800.11.

Incurred Costs: The issuance of a solicitation does not obligate ARRC to pay for any bid/proposal preparation costs incurred by bidders/offerors and does not obligate ARRC to award a contract for supplies/services. All costs incurred as a result of a solicitation or contract negotiations resulting from a solicitation, including travel and personal expenses, are the sole responsibility of the bidder/offeror.

Availability of Funds: ARRC's obligation under any contract is contingent upon the availability of funds to pay for contract purchases. No legal liability on the part of ARRC may arise until funds are made available for a contract and until the Contractor receives written notice of such availability from the procurement officer. Signature by an authorized ARRC representative on the contract award document constitutes written notice of availability of funds.

Public Information: All submitted bids/proposals will be considered confidential until notice of intent to award is issued. After notice of intent to award is issued, all bids/proposals will become public information.

Price: ARRC shall receive the benefit of any general reduction in bidder's/offerors price prior to the delivery of supplies or services and in no event shall ARRC be charged higher prices than bidder's/offerors similar customers who purchase substantially similar supplies or services under substantially similar circumstances. All prices bid shall be exclusive of any federal, state, or local taxes from which ARRC is exempt.

Note: Each bidder shall indicate compliance or exception to each specification item individually in the bid response. Mill Reports and welding certifications must be supplied before material is shipped as per project specifications. No material will be accepted without certified mill reports and certifications.

Explanation to Prospective Bidders/Offerors:

Bidders/Offerors shall promptly notify ARRC of any ambiguity, inconsistency, conflict, or error which they may discover upon examination of the solicitation documents. All inquiries regarding a solicitation shall be directed to the ARRC representative specified in the solicitation. Any prospective bidder/Offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders/Offerors before the submission of their bid/proposal.

Late Submissions, Modifications, and Withdrawals of Bids/Proposals:

Any bid/proposal received at the office designated in the solicitation after the exact time specified for receipt will not be considered unless the delay was due to an ARRC error. Incomplete bids/proposals may be rejected as nonresponsive.

APPENDIX D SCOPE OF WORK

The Scope of Work for this contract consists of the fabrication, supply, and delivery of various steel assemblies associated with the construction of a 26' I-beam bridge span as specified in the attached Alaska Railroad Corporation Bridge 148.3 N. Approach Span Replacement drawing set dated March 17, 2023.

An awarded Fabricator must possess a current American Institute of Steel Construction (AISC) Quality Certification for Major Steel Bridges and a Fracture Critical Endorsement. The bid award is contingent upon receiving proof of current AISC certifications.

A pre-fabrication tele-conference meeting shall occur before commencing any fabrication Work. The meeting shall include, at a minimum, the Fabricator's Project Manager, the Fabricator's Shop Supervisor, the Fabricator's Quality Assurance/Control Manager, the Owner's Quality Assurance representative, and the Owner to include it's designated representatives.

The Fabricator shall accommodate the Quality Assurance efforts of ARRC, or its designee, at the Fabricator's facilities and/or the facilities of any subcontractors utilized by the Fabricator.

APPENDIX E

GENERAL TERMS AND CONDITIONS

(Supply Contracts)

The following terms and conditions supersede the terms and conditions on the reverse side of ARRC's purchase order to the extent that they are inconsistent therewith and shall be deemed to have the same force and effect as though expressly stated in any such purchase order into which this document is incorporated.

1. Definitions.

"ARRC" shall mean the Alaska Railroad Corporation.

"Vendor" shall mean the person or entity entering into the contract to provide the supplies specified therein for ARRC.

"Contract" shall mean these General Terms and Conditions, the contract form to which they are annexed, and all other terms, conditions, schedules, appendices or other documents attached to the contract form or incorporated by reference therein.

"Supplies" shall mean the equipment, goods, materials or other items to be provided by Vendor to ARRC under the contract.

- 2. <u>Inspection and Reports</u>. ARRC may inspect all of the Vendor's facilities and activities under this contract in accordance with the provisions of ARRC Procurement Rule 1600.9. The Vendor shall make progress and other reports in the manner and at the times ARRC reasonably requires.
- 3. <u>Claims</u>. Any claim by Vendor for additional compensation or equitable adjustment arising under this contract which is not disposed of by mutual agreement must be made by Vendor in accordance with the time limits and procedures specified in sections 1800.12 <u>et seq</u>. of ARRC's Procurement Rules, which by this reference are hereby incorporated herein.

4. <u>Nondiscrimination</u>.

4.1 The Vendor may not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical or mental handicap, sex, marital status, change in marital status, pregnancy or parenthood when the reasonable demands of the positions do not require distinction on the basis of age, physical handicap, sex, marital status, changes in marital status, pregnancy, or parenthood. To the extent required by law, the Vendor shall take affirmative action to insure that the applicants are considered for employment and that employees are treated during employment without unlawful regard to their race, color, religion, national origin, ancestry, physical or mental handicap, age, sex, marital status, changes in marital status, pregnancy or parenthood. This action must include, but need not be limited to, the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Vendor shall post in conspicuous places, available to employees and applicants for employment, notices setting out the provisions of this paragraph.

- 4.2 The Vendor shall cooperate fully with ARRC efforts which seek to deal with the problem of unlawful discrimination, and with all other ARRC efforts to guarantee fair employment practices under this contract, and promptly comply with all requests and directions from the State Commission for Human Rights or any of its officers or agents relating to prevention of discriminatory employment practices.
- 4.3 Full cooperation in Paragraph 4.2 includes, but is not limited to, being a witness in any proceeding involving questions of unlawful discrimination if that is requested by any official or agency of the State of Alaska; permitting employees of the Vendor to be witnesses or complainants in any proceeding involving questions of unlawful discrimination, if that is requested by any official or agency of the State of Alaska; participating in meetings; submitting periodic reports on the equal employment aspects of present and future employment; assisting inspection of the Vendor's facilities; and promptly complying with all State directives considered essential by any office or agency of the State of Alaska to insure compliance with all federal and state laws, regulations, and policies pertaining to the prevention of discriminatory employment practices.
 - 4.4 Failure to perform under this section constitutes a material breach of the contract.

5. <u>Cancellation/Termination</u>.

- 5.1 ARRC may, for its sole convenience, cancel 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 cancellation, Vendor shall be entitled to receive payment in accordance with the payment provisions of this contract for supplies delivered to ARRC and, as to work in progress prior to receipt of notice, ARRC shall pay Vendor only for direct expenditures on work specifically identified to this contract. Vendor shall not be paid for any work done after receipt of a notice of cancellation or for any costs incurred by Vendor's suppliers or subcontractors which Vendor could reasonably have avoided. However, in no event shall ARRC be liable for incidental, consequential, or punitive damages, overhead or other direct or indirect costs, or lost profits. Payments made under this contract shall not exceed the aggregate price specified in this contract.
- 5.2 In addition to ARRC's right to cancel this contract for its convenience, ARRC may, by written notice of default to Vendor, terminate the contract in whole or in part in the following circumstances:
- (1) The Vendor 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 Vendor 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
- (2) Reasonable grounds for insecurity arise with respect to Vendor's expected performance and Vendor 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
- (3) Vendor 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.
- 5.3 Upon receipt of a notice of cancellation or termination, Vendor shall immediately discontinue all work and it shall immediately cause any of its suppliers or subcontractors to cease such work unless the notice directs otherwise. In the event of termination for default, Vendor shall be liable for any damage to ARRC resulting from the Vendor's nonperformance. 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.

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- 6. <u>No Assignment or Delegation</u>. The Vendor may not assign, subcontract or delegate this contract, or any part of it, or any right to any of the money to be paid under it, except with the prior written consent of ARRC. No such approval shall relieve Vendor from any of its obligations or liabilities under this contract.
- 7. <u>Independent Contractor</u>. The Vendor's relationship to ARRC in performing this contract is that of an independent contractor and nothing herein shall be construed as creating an employer/employee relationship, partnership, joint venture or other business group or concerted action.
- 8. <u>Payment of Taxes</u>. As a condition of performance of this contract, the Vendor shall pay all federal, state, and local taxes incurred by the Vendor and shall require their payment by any subcontractor or any other persons in the performance of this contract. Satisfactory performance of this paragraph is a condition precedent to payment by ARRC under this contract.
- 9. <u>Governing Law</u>. This contract, and all questions concerning the capacity of the parties, execution, validity (or invalidity) and performance of this contract, shall be interpreted, construed and enforced in all respects in accordance with the laws of the State of Alaska.
- 10. <u>Alaska Executive Branch Ethics Act Requirements</u>. No officer or employee of the State of Alaska or of the ARRC and no director of the ARRC or legislator of the state shall be admitted to any share or part of this contract or to any benefit that may arise therefrom. Vendor shall exercise reasonable care and diligence to prevent any actions or conditions which could be a violation of Alaska Statute 39.52 <u>et seq.</u> Vendor shall not make or receive any payments, gifts, favors, entertainment, trips, secret commissions, or hidden gratuities for the purpose of securing preferential treatment or action from or to any party. This obligation will apply to the activities of Vendor's employees and agents in their relations with ARRC employees, their families, vendors, subcontractors, and third parties arising from this contract and in accomplishing work hereunder. Certain gratuities may be given or accepted if:
 - (1) there is no violation of any law or generally accepted ethical standards;
- (2) the gratuity is given as a courtesy for a courtesy received and does not result in any preferential treatment or action;
- (3) the gratuity is of limited value (less than\$150) and could not be construed as a bribe, payoff or deal; and
 - (4) public disclosure would not embarrass ARRC.

ARRC may cancel this contract without penalty or obligation in the event Vendor or its employees violate the provisions of this section.

11. <u>Covenant Against Contingent Fees</u>. Vendor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for Vendor, to solicit or secure this contract, and that it has not paid or agreed to pay any person, company, individual, or firm any commission, gift, percentage, fee, contingent upon or resulting from the award or making of this contract. For the breach or violation of this warranty, ARRC may terminate this contract without liability and, at its discretion, deduct from the contract price or otherwise recover the full amount of the commission, percentage, gift, or fee.

12. <u>Warranty</u>. Vendor warrants that the equipment, goods, materials or other supplies sold to ARRC under this contract: (a) shall be of good quality and free from all defects and deficiencies in workmanship, material and design; (b) shall be fit, suitable and operate successfully for their intended purpose; (c) shall be new; (d) shall be free from all liens, claims, demands, encumbrances and other defects in title; and (e) shall conform to the specifications, if any, stated in the contract. Vendor shall honor all guarantees and warranties offered by the manufacturer of the equipment, goods, materials or other supplies provided under this contract.

The rights and remedies provided for in this section are in addition to any other remedies provided by law.

- 13. <u>Indemnification</u>. The Vendor shall indemnify, save harmless and defend ARRC, its officers, agents and employees from all liability of any nature or kind, including costs and expenses, for all actions or claims resulting from injuries or damages sustained by any person or property arising directly or indirectly as a result of any error, omission, product defect, negligent or wrongful acts of the Vendor, its subcontractors or anyone directly or indirectly employed by them in the performance of this contract, provided that Vendor's aforesaid indemnity and hold harmless agreement shall not be applicable to any liability based upon the sole negligence of ARRC.
- 14. <u>ARRC's Rights Not Waived by Payment</u>. No payment made by ARRC shall be considered as acceptance of satisfactory performance of Vendor's obligations under this contract. Nor shall any payment be construed as acceptance of substandard or defective work or as relieving Vendor from its full responsibility under the contract.
- 15. <u>Nonwaiver</u>. A party's failure or delay to insist upon strict performance of any of the provisions of this contract, to exercise any rights or remedies provided by this contract or by law, or to notify the other party of any breach of or default under this contract shall not release or relieve the breaching or defaulting party from any of its obligations or warranties under this contract and shall not be deemed a waiver of any right to insist upon strict performance of this contract or any of the rights or remedies as to any subject matter contained herein; nor shall any purported oral modification or rescission of this contract operate as a waiver of any of the provisions of this contract. The rights and remedies set forth in any provision of this Agreement are in addition to any other rights or remedies afforded the nonbreaching or nondefaulting party by any other provisions of this contract, or by law.
- 16. <u>Savings Clause</u>. If any one or more of the provisions contained in the contract shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this contract, but this contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.
- 17. <u>Headings</u>. The headings of sections and paragraphs of this contract are for convenience of reference only and are not intended to restrict, affect, or be of any weight in the interpretation or construction of the provisions of such sections or paragraphs.
- 18. <u>Forum Selection</u>. The parties shall not commence or prosecute any suit, proceeding or claim to enforce the provisions of the contract, to recover damages for breach or default under the contract, or otherwise arising under or by reason of the contract, other than in the courts of the State of Alaska for the Third Judicial District at Anchorage. The parties hereby irrevocably consent to the jurisdiction of said courts.
- 19. <u>Conflict of Interest</u>. Vendor shall act to prevent any actions or conditions which could result in a conflict with ARRC's best interests. This obligation shall apply to the activities of Vendor's employees and agents in their relationships with ARRC's employees, their families, vendors, subcontractors and third parties accomplishing work under this contract.

- 20. <u>Publicity</u>. Vendor shall not release any information for publication or advertising purposes relative to this contract or to the material, equipment and other supplies furnished under this contract without the prior written consent of the ARRC.
- 21. <u>Audit</u>. ARRC has the right to audit at reasonable times the accounts and books of the Vendor in accordance with the provisions of ARRC Procurement Rule 1600.10.
- 22. <u>Internal Controls and Record Keeping</u>. Vendor shall keep full and accurate records and accounts of all of its activities in connection with this contract, including, without limitation, reasonable substantiation of all expenses incurred and all property acquired hereunder.
- 23. <u>Force Majeure</u>. Neither ARRC nor Vendor shall be responsible for failure to perform the terms of this contract when performance is prevented by force majeure, provided that: (1) notice and reasonably detailed particulars are given to the other party and (2) the cause of such failure or omission is remedied so far as possible with reasonable dispatch. The term "force majeure" shall mean acts of God, earthquakes, fire, flood, war, civil disturbances, governmentally imposed rules, regulations or other causes whatsoever, whether equal or disequal to the causes herein enumerated, which is not within the reasonable control of either party and which through the exercise of due diligence, a party is unable to foresee or overcome. In no event shall force majeure include normal or reasonably foreseeable or reasonably avoidable operational delays.
- 24. <u>Set Off.</u> If ARRC has any claim against the Vendor related or unrelated to this contract, it may set off the amount of such claim against any amount due or becoming due under this contract.
- 25. <u>Observance of Rules</u>. The Vendor's personnel performing work hereunder on ARRC's premises shall observe all fire prevention, security, and safety rules in force at the site of the work.
- 26. <u>No Third-Party Beneficiary Rights</u>. No provision of this contract shall in any way inure to the benefit of any third parties (including the public at large) so as to constitute any such person a third-party beneficiary of the contract or of any one or more of the terms hereof, or otherwise give rise to any cause of action in any person not a party hereto.
- 27. <u>Entire Agreement</u>. This contract represents the entire and integrated agreement between ARRC and the Vendor and supersedes all prior negotiations, representations, or agreements, either written or oral. This contract may be amended only by a written instrument signed by both ARRC and the Vendor.
- 28. <u>Invalid Provision</u>. The invalidity or unenforceability of any provision of this contract shall not affect the other provisions hereof, and this contract shall be construed in all respects as if such invalid or enforceable provisions were omitted.
- 29. Packing, Marking and Shipping All supplies shall be properly packaged to prevent damage or deterioration and to obtain the lowest transportation rates. ARRC will pay no charge for preparation, crating, dunnage or other materials unless separately stated in this contract. Each packing slip, bill of lading, invoice, container, tag and correspondence shall bear the applicable contract number and the location to which the supplies are to be shipped. A waterproof Master Packing Slip shall accompany each shipment and shall be included in one of the packages marked "Packing Slip Inside" or in the case of a carload shipment, be conspicuously displayed on the inside of the freight car. The original Bill of Lading shall be mailed to the attention of ARRC Supply Management Department on date of shipment.

- 30. <u>Improper Delivery</u>. If for any reason the Contractor fails to make timely delivery, ARRC may, at its option, approve a revised delivery schedule, request shipment via air or expedited routing (at Contractor's expense) or terminate this contract without any liability. Contractor will not, however, be liable for damages resulting from delays in delivery due to causes beyond Contractor's reasonable control, provided Contractor promptly notifies ARRC in writing of any such delay or expected delay as soon as such delay or expected delay becomes or should have become apparent. The remedies provided in this paragraph shall be cumulative and in addition to any other or further remedies ARRC may have.
- 31. <u>Shipping Release</u>. The Contractor shall not ship any of the supplies covered by this contract, unless specific delivery dates or written instructions are furnished to Contractor by ARRC. ARRC shall have no responsibility for supplies for which delivery dates or other written instructions have not been provided. Shipments in excess of those authorized may be returned to Contractor and Contractor shall pay ARRC for all expenses incurred in connection with such shipments. ARRC may change or temporarily suspend shipping schedules specified in this contract or written instructions.
- 32. <u>Inspection/Rejection</u>. Notwithstanding prior shipment, all supplies are subject to inspection and acceptance by ARRC within a reasonable time after they arrive at destination. ARRC shall notify Contractor if any supplies are rejected for any reason or if there are shortages. At ARRC's election, rejected supplies may be held for Contractor's account or returned to Contractor at Contractor's risk and expense. No replacement or correction of defective or nonconforming supplies shall be made by Contractor without written authorization from ARRC. Contractor shall promptly ship any shortages after notification of the same by ARRC.
- 33. <u>Compliance with Laws and Regulations</u>. Contractor agrees that in the performance of this contract it will comply with the requirements of all applicable Federal, State and local statutes, regulations and orders and will indemnify and save ARRC harmless from any claim, loss or damage arising from Contractor's violation or alleged violation of them.
- 34. Reduction in Contractor's Cost Any reduction in Contractor's costs resulting from a reduction in freight rates, custom duties, import taxes, excise taxes and/or sales taxes from those in force on the date of the contract is to be paid to ARRC by Contractor in reduction of the price of the ordered supplies.
- 35. <u>Payments</u>. Payments for supplies furnished under this contract will be due thirty (30) days after the later of (1) receipt of the supplies established in the contract, (2) receipt of proper billing for such supplies, and (3) receipt of all documents required by this contract. ARRC shall not be liable for interest charges on late payments.

APPENDIX F

SPECIAL CONDITIONS

Work shall be completed in accordance with the General Conditions, Supplemental Conditions, Special Conditions, and the suggested installation procedures provided by the manufacturers of items not being fabricated under this Contract.

All construction and fabrication shall meet the current industry standards for the work being performed. The Fabricator will help the Owner or its representative perform observation and oversight as required to complete the project and provide quality assurance for the project. All work shall meet all the stipulations stated herein.

ARRC Coordination: The Fabricator must coordinate with the Project Manager to coordinate onsite visits by the Owner or its designated representative. Furthermore, the Fabricator shall keep the Project Manager apprised of the status of the member's or structures shipping status so that the ARRC can coordinate shipping from the designated location stated herein to their final destination.

Quality Control: The Fabricator shall be responsible for controlling the quality of the fabrication of the work herein. The work noted herein requires documentation of conformance with material and installation specifications. Material documentation shall be furnished to the Owner prior to fabrication. Fabricator is to supply quality control procedures for approval fifteen (15) days prior to commencing fabrication that is in compliance with the ARRC's installation requirements noted in the Contract Documents.

<u>Welding</u>: All welding performed under this Contract is to comply with all applicable provisions of the most current version of the American Welding Society (AWS) D1.5 Bridge Welding Code. Prior to commencing welding activities, the Fabricator is to submit all welding procedures, in accordance with AWS D1.5 that it intends to use for the work specified within the Contract Documents. Additionally, submit welder certificates that include a statement that specifically certifies that each proposed welder has been qualified as specified in the applicable AWS for the particular process or processes that said welder will perform under this Contract. With each proposed welder's certificate(s), the Fabricator shall also specifically certify that said welder's qualifications remain in effect in accordance with AWS and provide evidence that the proposed individual has satisfactorily passed the AWS qualification tests for the welding processes submitted and, if pertinent, has undergone recertification.

Removal of unacceptable weld or base metal shall be performed using mechanical means or mechanically controlled methods.

<u>Liquidated Damages</u>: Extensions for late deliveries reasons will be reviewed on a case-by-case basis. If the Owner and the Fabricator cannot agree on amenable terms of an extension in accordance with Supplemental Condition <u>SC-03 – Contract Time</u>, <u>Extension of Contract Time and Suspension of Work</u> then liquidated damages will be deducted from the Fabricator as outlined in Supplemental Condition <u>SC-04 – Failure to Complete on Time</u>

Material completion and delivery to ARRC shall be on or before <u>October 1, 2023</u>, 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 delivered to the location designated herein.

BASE BID ITEMS:

Item No. 1 – 26' I-beam Bridge Span

Work includes all equipment, materials, testing, QA/QC documentation, supervision, and labor required to fabricate the 26' I-beam bridge span with all associated accessories in accordance with the Plans, and the current edition of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering – Chapter 15 Steel Structures.

American Institute of Steel Construction (AISC) Certification for IBR: Certified Bridge Fabricator – Intermediate (Major) level with a Fracture Critical Endorsement shall be provided to the Owner for review and approval prior to award. Fabrication and procurement of the ancillary items shown on the Plans that are required to install the steel plate girder in the field (e.g.: beam supports, diaphragms, grillage, shim plates [if required], sole plates, fasteners), are subsidiary to this Work. Testing of fracture critical members shall also be considered subsidiary to this Work. Furnish the Certification Reports for all materials in accordance Supplemental Condition SC-05 – Steel Structures.

Provide detailed shop drawings to the Owner for approval. Fabrication prior to the Owner's approval or acceptance of the shop drawings shall be at the Fabricator's own risk.

All welds required to assemble the structure shall be completed in accordance with the Plans. Tolerance requirements are included in AREMA Chapter 15, Section 3.1.7 and AWS D1.5, Section 3.5; the more restrictive criteria shall control. Prior to welding, the Fabricator shall submit a welding plan stamped by a Certified Welding Inspector (CWI) for Owner review and approval. The Fabricator shall be responsible for obtaining inspection services from an independent third-party inspection firm to perform Nondestructive Examination (NDE) as specified on the Plans. Inspections shall be completed by AWS inspectors, certified per AWS D1.5, and results provided to the Owner on a weekly basis:

- 1. All groove welds shall be 100% visually inspected and 25% Radiographic Testing (RT) inspected.
- 2. Groove welds on bottom of Pier Cap shall be 100% RT inspected.
- 3. All fillet welds shall be 100% visually inspected and 25% Magnetic Particle Testing (MP) inspected.
- 4. Ultrasonic Testing (UT) inspection on 25% of all other welds. If any defects are found, then 100% of the welds in this category shall undergo MP or UT inspection.

Notify the Owner a minimum of fourteen (14) days to when the fully-assembled structure is available for inspection. The Fabricator shall accommodate the Quality Assurance efforts of the Owner or its designee at the Fabricator's facilities and those of any subcontractors within their plant. After the Owner has inspected, or waived its right to inspect the structure, dissemble the structure and match-mark the members as required.

Ship all structural hardware and structural steel components as indicated in the "MATERIAL LIST" & "FIELD BOLT LIST" shown on DWG No. 2 of the Plans. Provide the Owner with a bill of materials for all components provided, to include quantities and weights, as noted in the Plans. The Fabricator shall be responsible for preparing all materials for shipment.

Deliver all fabricated items, and the required ancillary items, FOB Warehouse 1 485 Ocean Dock Rd Anchorage, Alaska 99501. Subsidiary to this work shall be all temporary false work required to transport the components fabricated under this Contract. Upon receiving the items, said false work shall become the property of the Owner.

Compensation will be made per the agreed upon lump sum price; as accepted by the Owner, or its designated representative; upon inspection on-site, prior to shipment; in accordance with Supplemental Conditions SC-01 – Basis of Payment and SC-02 – Payment for Material On Hand.

Item No. 2 Elastomeric Bearing Pads

Work includes all equipment, materials, testing, QA/QC documentation, supervision, and labor required to fabricate eight (8) each elastomeric bearing pads, as shown on DWG No. 8 of the Plans, in accordance with Section 720 and AREMA Chapter 15, Part 5.

Elastomer materials shall conform to Supplemental Condition SC-06 – Bearings (1.4.1) and AREMA Chapter 15, Part 5. Fabricate bearing pads in accordance with Supplemental Condition SC-06 – Bearings (1.5) and AREMA Chapter 15, Part 5. Provide Grade 36 steel laminates conforming to ASTM A1011 and in accordance with Supplemental Condition SC-06 – Bearings and AREMA Chapter 15, Part 5. Pads shall be fabricated to the dimensions shown on the Plans and shall be within the tolerances established in Supplemental Condition SC-06 – Bearings (Table 2) and AREMA Chapter 15, Part 5. Provide certifications for the bearing pads in accordance with Supplemental Condition SC-06 – Bearings (2) and AREMA Chapter 15, Part 5.

Compensation will be made for the elastomeric bearing pads at the agreed upon lump sum price; accepted by the Owner, or its designated representative; upon inspection on-site, prior to shipment; in accordance with Supplemental Conditions <u>SC-01 – Basis of Payment</u> and <u>SC-02 – Payment for Material On Hand</u>.

APPENDIX G SUPPLEMENTAL CONDITIONS

SC-01 – Basis of Payment

Payment will be made for work performed in accordance with project drawings and these specifications. Payment shall be made only for the actual quantity of work completed. Fabricator shall provide invoices with sufficient detail to support progress payments and include ARRC assigned Contract number. Final payment will be made upon final acceptance of the work by ARRC, and receipt of warranties.

Monthly progress payments to the Fabricator based on estimate of the value of work performed and materials on hand under Supplemental Condition SC-02 – Payment for Material On Hand. At the Owner's discretion, a progress payment may be made twice monthly if the value of the estimate exceeds \$10,000.00. Request for payments must be made to the Owner via an approved format and bi-monthly payment requests must be made in writing on, or before, the pre-construction meeting.

SC-02 - Payment for Material On Hand

- 1. <u>Partial Payment</u>. The Owner will make partial payment for materials designated for incorporation into the work. The material shall:
 - a. Meet Contract requirements;
 - b. Be delivered and stockpiled at the project or other approved location;
 - c. Be supported by invoices, freight bills, and other required information; and
 - d. Not be living or perishable.
- 2. Payment Requests. The Fabricator shall make each payment request in writing and:
 - a. List stockpiled items, quantities of each, and stockpile location(s);
 - b. Certify that materials meet the applicable Contract specifications;
 - c. For purchased materials, attach copies of invoices, freight bills, and manufacturer's published storage recommendations;
 - d. For Fabricator-produced materials, attach production statements showing quantities and dates produced and copies of process quality control test results; and
 - e. Include other information requested by the Engineer.
- 3. <u>Storage Conditions</u>. The Fabricator shall protect material from damage or loss while in storage. The Fabricator shall:
 - a. Physically separate stockpiled materials from other materials at the storage location;
 - b. Clearly label materials with the project name and number; and
 - c. Store materials per the manufacturer's recommendations.

If storage conditions become unsatisfactory, liens are filed on any materials, or the storage location is changed without approval, the Owner will deduct any previous payments made for such materials.

- 4. <u>Method of Payment</u>. The Owner will include payments for acceptably stockpiled materials in the progress estimate following receipt of the Fabricator's written request and all required documentation. The Owner will:
 - a. Pay for materials purchased by the Fabricator at the delivered cost but not to exceed 85 percent of the Contract amount for those items;
 - b. Pay for materials produced by the Fabricator at up to 50 percent of the Contract amount for those items;
 - c. Deduct the Department's cost to inspect materials stored off the limits of the project; and,
 - d. Deduct partial payment quantities as they are incorporated into the project.

The Fabricator shall release and discharge ARRC from any liability for damages or delays related to the storage or transport of, and to the payment for, material on hand.

The Owner's payment for material on hand will not constitute final acceptance by the Owner.

SC-03 - Contract Time, Extension of Contract Time and Suspension of Work

Contract time will be specified in calendar days, by completion date, or both.

 <u>Calendar Days</u>. 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. If no starting day is specified in the Contract, the count of Contract time begins on the day following receipt of the Notice to Proceed by the Fabricator.

Calendar days shall continue to be counted against Contract time until and including the date of project completion.

- 2. <u>Completion Date</u>. When the contract time is specified on a completion date basis, all work under the Contract shall be completed by the specified completion date.
- 3. Reasons for Suspension of Work and Extension of Contract Time. The Owner may order a suspension of work for any reason listed in this subparagraph 3, items a through o.

The Owner shall not pay additional compensation, but may extend Contract time only, if there are delays in the completion of controlling items of work from unforeseeable causes that are beyond the Fabricator's control and are not the result of the Fabricator's fault or negligence, including:

- a. Acts of God:
- b. Acts of the public enemy;
- c. Fires;
- d. Floods;
- e. Epidemics;
- f. Quarantine restrictions;
- g. Strikes;
- h. Freight embargoes:
- i. Unusually severe weather;
- j. Delays of subcontractors, suppliers and fabricators from unforeseeable causes beyond the control of the subcontractors, suppliers or fabricators and that are not the fault of the subcontractors, suppliers or fabricators, including those causes listed in this Subparagraph 3, Items a through i.

No additional Contract time or additional compensation will be allowed due to delays caused by or suspensions ordered due to:

- k. Failure to correct conditions that create risk of imminent harm for the traveling public, violations of the Contract or any applicable federal, state, and local laws, rules, regulations, and ordinances:
- I. Adverse weather that is not unusually severe;
- m. Failure to carry out Contract provisions;
- n. Failure to carry out orders given by the Engineer; or
- o. Failure to timely obtain materials, equipment, or services.

The Fabricator shall notify the Owner as soon as the Fabricator becomes aware of any act or occurrence that may form the basis of a request for a time extension under this Supplemental Condition. The Fabricator shall submit a request for a time extension to the Owner within 10 days of the act or occurrence, and if an agreement is not reached, the Fabricator may submit a Claim in accordance with the ARRC General Conditions.

The time allowed in the Contract, as awarded, is based on performing the original estimated quantities of work set out in the bid schedule. An assertion that insufficient time was originally specified shall not constitute a valid reason for extension of contract time.

If satisfactory fulfillment of the Contract requires extra work, the Owner may extend Contract time according in accordance with the

- 4. <u>Suspension of Work.</u> The Owner will suspend work on the project, in whole or in part, for such periods and for such reasons as the Owner determines to be reasonable, necessary, in the public interest, or for the convenience of the Owner.
 - a. The Owner will issue a written order to suspend, delay, or interrupt all or any part of the work. The Fabricator shall not be compensated for the suspension, delay, or interruption if it is imposed for a reasonable time under the circumstances.
 - b. Unless another Contract section specifically provides otherwise, the Fabricator will be compensated by equitable adjustment for a suspension, delay, or interruption of the work only if:
 - (1) The period of suspension, delay, or interruption is for an unreasonable time under the circumstances and another Contract section allows compensation in the event of a suspension, delay, or interruption of the work under the circumstances that actually caused the suspension, delay, or interruption; or
 - (2) The delay, suspension, or interruption results from the Owner's failure to fulfill a contractual obligation to the Fabricator within the time period specified in the Contract or, if no time period is specified, within a reasonable time.
 - b. No equitable adjustment will be made under this Supplemental Condition for any suspension, delay, or interruption of the work if the Fabricator's performance would have been suspended, delayed, or interrupted by any other cause for which:
 - (1) The Owner is not responsible under the Contract, including the Fabricator's fault or negligence; or
 - (2) An equitable adjustment is either provided for or excluded under any other section of this Contract.
 - c. Claims for equitable adjustments under this Supplemental Condition shall be filed in accordance with the ARRC General Conditions except that:
 - (1) The Fabricator must give written notice of intent to claim no later than 20 days after the event giving rise to the delay, suspension, or interruption;

- (2) The claim may not include any costs incurred more than 20 days before the Fabricator files the Fabricator's written notice of intent to claim;
- (3) The Fabricator must submit a written request for adjustment within 7 calendar days of receipt of the notice to resume work;
- (4) No profit will be allowed on an increase in cost necessarily caused by the suspension, delay, or interruption.

SC-04 - Failure to Complete on Time

For each calendar day that the work is not substantially complete after the expiration of the Contract time or the completion date has passed, the Owner shall deduct the full daily charge corresponding to the original Contract amount shown in Table SC04.1 – Daily Charge for Liquidated Damages for Each Calendar Day of Delay below from progress payments.

Original Contract Amount	Daily Charge	
From More Than	To and Including	
\$ 0	\$ 100,000	\$ 300
100,000	500,000	550
500,000	1,000,000	750
1,000,000	2,000,000	1,000
2,000,000	5,000,000	1,500
5,000,000	10,000,000	2,500
10,000,000		3,000

Table SC04.1 – Daily Charge for Liquidated Damages for Each Calendar Day of Delay

Permitting the Fabricator to continue work after the Contract time has elapsed or the completion date has passed does not waive the Owner's rights to collect liquidated damages under this Supplemental Condition.

SC-05 - Steel Structures

DESCRIPTION. Fabricate steel structures and the structural metal portions of composite structures according to the Plans.

Furnish, fabricate, shop assemble, and coat structural metals shown on the Plans, including structural steel of all grades, bolts and fasteners, stud shear connectors, welding, special and alloy steels, and metallic electrodes. Furnish, fabricate, and install incidental metal construction and elastomeric material not otherwise provided for, according to the Contract.

MATERIALS. Use materials that conform to the following:

Structural Steel	Supplemental Condition SC-07 – Structural Steel
Arc Welding Electrodes	Supplemental Condition SC-07 – Structural Steel Fasteners
-	Supplemental Condition SC-07 – Structural Steel Grid
Floors	Supplemental Condition SC-07 - Structural Steel Steel
Pipe	Supplemental Condition SC-07 - Structural Steel
Galvanizing	Supplemental Condition SC-07 – Structural Steel

With written approval, substitute a grade of steel, for that specified, for a particular application where it is desired. Substituted steel must be equal or superior in both physical and chemical properties.

FABRICATION.

2. <u>Shop Inspection</u>. Furnish 30 days' notice of when work will begin at the fabrication shop to allow for an inspection.

Furnish 4 signed copies of mill reports covering all steel used on the project.

3. <u>General</u>. Fabricate steel bridge members, except for rolled shapes, at a plant certified under the American Institute of Steel Construction (AISC) Quality Certification for Major Steel Bridges and a Fracture Critical Endorsement.

Protect structural steel from corrosion, dirt, grease, or other foreign matter. Store structural steel at least 12 inches above the ground.

Ensure that rolled material is straight before being laid off or worked. If straightening is necessary, use methods that will not injure the metal. Do not use material with sharp kinks or bends.

Steel or wrought iron may be flame cut provided a mechanical guide is used to secure a smooth surface. Flame cut by hand only where approved, and smooth the surface by planning, chipping, or grinding. Manipulate the cutting flame to avoid cutting beyond the prescribed lines. Fillet re-entrant cuts to a radius of at least 3/4 inch.

Ensure that finished members are true to line and free from twists, bends, and open joints.

Plane sheared edges of plates more than 5/8 inch thick and carrying calculated stresses to a depth of 1/4 inch deep. Fillet re-entrant cuts before cutting.

Make sure the surface finish of bearing and base plates and other bearing surfaces that will contact each other or concrete meets the surface roughness requirements as defined in ANSI/ASME B-46.1, surface roughness, waviness and lay, Part I:

Masonry Bearing Plates (*surface in contact with rubber*): **500** Heavy plates in contact to be welded or bolted: **250** Rocking surfaces of rocker plates: **250**

Face and bring to an even bearing abutting joints in compression members and girder flanges, and in tension members where specified on the drawings. Where joints are not faced, keep the opening at 1/4 inch or less.

Build floor beams, stringers, and girders with end construction angles to the exact length shown on the Plans, as measured between the heels of the connection angles. The permissible tolerance is plus 0 inch to minus 1/16 inch. Where continuity is required, face end connections.

Cold bend load-carrying rolled-steel plates as follows:

Take the rolled-steel plates from the stock plates so that the bend line is at right angles to the direction of rolling. Before bending, round the edges of the plate to a radius of 1/16 inch throughout the portion of the plate to be bent.

Bend until the radius of the bends, measured to the concave face of the metal, is not less, and preferably more, than shown in the following table, where T is the thickness of the plate.

Angle Through Which Plate is Bent	Minimum Radius
61-90 degrees	1.0 T
91-120 degrees	1.5 T
121-150 degrees	2.0 T

If a shorter radius is essential, bend the plates when hot, but not shorter than a radius of 1.0 T.

Fit up and attach end and intermediate stiffeners as shown on the Plans. Do not weld ends of stiffeners and other attachments to flanges unless shown on the Plans.

Submit shop drawings in one complete submittal package. Partial or incomplete submittals will not be reviewed or considered. Partial or incomplete submittals will be rejected. No additional contract time will be permitted due to partial, incomplete, or inadequate submittals.

4. <u>Shop Splices</u>. In addition to those shown on the Plans, girder webs and flanges may contain a maximum of 2 shop splices per plate per span. Indicate all splices on the shop drawings. These splices are subject to approval and are subject to the following limitations:

Make splices complete penetration butt welds. Grind flange splices flush. Grind web splices flush on the outside face of exterior girders only. Grind parallel to the longitudinal axis of the girder.

Do not place a bottom flange splice within the middle third of any span. Use tension flange splices only as shown on the Plans or as approved.

Completely weld each element of a girder, such as flange or web, before attaching it to another element.

Make all splices at least 6 inches from the nearest stiffener plate. Offset web and flange splices at least 6 inches.

5. <u>Bolt Holes</u>. Either drill or punch bolt holes. Make finished bolt holes 1/16 inch larger than the nominal diameter of the bolt. Ensure holes are clean cut and without burrs or ragged edges. Material with poorly matched holes will be rejected.

When material forming parts of a member is composed of not more than 5 thicknesses of metal, and whenever the thickness of the metal is not greater than 3/4 inch for structural carbon steel or 5/8 inch for alloy steel, either punch or drill the holes to full size.

When there are more than 5 thicknesses or when any of the main material is thicker than 3/4 inch in carbon steel, or 5/8 inch in alloy steel, or when required under paragraph 7 below, subpunch or subdrill the holes 3/16 inch smaller. After assembling, ream them to size or drill them from the solid to full size.

For punched holes, the diameter of the die must not exceed the diameter of the punch by more than 1/16 inch. Ream any holes that must be enlarged to admit bolts.

Ream holes cylindrical and perpendicular to the member. Direct reamers mechanically, where practicable.

Ream and drill using twist drills. Assemble connecting parts requiring reamed or drilled holes and securely hold them while reaming or drilling them. Match mark them before disassembling.

Subpunch (or subdrill if required) holes for field connections and field splices of arch members, continuous beams, towers (each face), bents, plate girders, and rigid frames while assembled in the shop. Obtain approval of the assembly, including camber, alignment, and accuracy of holes and milled joints before beginning reaming.

Subpunch and ream holes for floor beam and stringer field end connections to a steel template, or ream them while assembled. When partial assembly is permitted ream holes for web member connections with steel templates.

When using templates to ream field connections of web members of an arch, bent or tower, mill or scribe at least one end of each web member normal to the long axis of the member. Accurately set the templates at both ends from this milled or scribed end.

Ream or drill the full size of the field connection through templates after carefully locating the templates as to position and angle and firmly bolting them. Use exact duplicate templates used to ream matching members or the opposite faces of one member. Accurately locate templates for connections that duplicate so that like members are duplicates and require no matchmarking.

Accurately punch holes full-size, subpunch them, or subdrill them so that after assembling (before reaming), a cylindrical pin 1/8 inch smaller in diameter than the nominal size of the punched hole may be entered perpendicular to the face of the member, without drifting, in at least 75 percent of the contiguous holes in the same plane. If the requirement is not fulfilled, the badly punched pieces will be rejected. If any hole will not pass a pin 3/16 inch smaller in diameter than the nominal size of the punched hole, the material will be rejected.

Ream or drill holes so that 85 percent of the holes in any contiguous group after being reamed or drilled show no offset greater than 1/32 inch between adjacent thicknesses of metal.

Provide in steel templates hardened steel bushings in holes accurately dimensioned from the center lines of the connection as inscribed on the template. Use the center lines to locate accurately the template from the milled or scribed ends of the members.

6. <u>Shop Assembling</u>. Completely shop assemble the entire structure, including the floor system. When the Contract Documents indicate "partial assembly," assemble continuous beams and plate girders in lengths of 3 or more abutting panels. The assembled length must be at least 125 feet.

Clean metal surfaces in contact before assembling them. Assemble, pin well, and firmly draw together the parts of a member with bolts before beginning reaming. Make milled ends of compression members in full bearing before starting reaming. Take apart assembled pieces, if necessary, to remove burrs and shavings produced by reaming. Keep the members free of twists, bends, and other deformities.

To prepare to shop bolt material punched full-size, spear-ream the bolt holes, if necessary, to admit the bolts. Make the reamed holes no more than 1/16 inch larger than the nominal diameter of the bolts.

Secure end connection angles, stiffeners, and similar parts using shipping bolts to prevent damage in shipment and handling.

Furnish a camber diagram showing the camber at each panel for each truss. Take the camber from actual measurement while the truss is assembled, or base it on calculated values when full assembly is not required.

Allow holes to drift during assembly only as needed to position the parts, and not enough to enlarge the holes or distort the metal. To enlarge holes to admit the bolts, ream them.

Match mark connecting parts assembled in the shop to allow for reaming holes in field connections. Furnish a diagram showing the marks.

7. <u>Bolted Connections, High-Strength Bolts</u>. Determine bolt lengths by adding the values given in Table SC04.2 – Bolt Length Determination to the total thickness of connected material. These values compensate for thickness of nut, bolt point, and washers. Add 5/32 inch to the grip length per each additional flat washer. Adjust the total length to the next longer 1/4 inch increment up to a 5 inch length and to the next longer 1/2 inch increment for lengths over 5 inches.

Fit bolted parts solidly together when assembling them and do not separate them by gaskets or other interposed compressible material. Place hardened washers under the turned element.

Table SC04.2 – Bolt Length Determination

Bolt Diameter (inches)	Added Length (inches)
1/2	11/16
5/8	7/8
3/4	1
7/8	1-1/8
1	1-1/4
1-1/8	1-1/2
1-1/4	1-5/8

Keep assembled joint surfaces, including those adjacent to washers, free of scale except tight mill scale. Clean off dirt, loose rust, burrs, and other defects that would prevent the parts from seating. Keep contact surfaces free of oil, paint, or lacquer.

When the outer face of the bolted parts has a slope of more than 1:20, use a smooth beveled washer in contact with the sloped surface.

Snug tightening: All bolt holes shall be aligned to permit insertion of the bolts without undue damage to the threads. Bolts shall be placed in all holes with washers provided as required in AREMA Chapter 15 Part 3.2.2.c and the nuts installed to complete the assembly. Compacting the joint to the snug-tight condition shall progress systematically from the most rigid part of the joint in a manner that will minimize relaxation of previously snugged bolts. The snug-tight condition is the tightness that is attained with a few impacts of an impact wrench or full effort of an ironworker using an ordinary spud wrench to bring the connected plies into full contact.

After compacting the joint to the snug-tight condition, bolts shall be tensioned so as to obtain, when all the bolts in the joint are tight, at least the minimum tension per bolt shown in Table SC04.3 – Required Bolt Tension using the turn-of-nut method, or the calibrated wrench method as described in AREMA Chapter 15 Part 3.2.2.d or 3.2.2.g. Tightening shall progress systematically from the most rigid part of the joint in a manner that will minimize relaxation of previously tensioned bolts.

Table SC04.3 – Required Bolt Tension

Bolt Size (inches)	Required Minimum Tension (pounds)
7/8	39,000

Demonstrate the suitability of the device by testing a representative sample of at least three devices for each diameter and grade of fastener used in the structure. Test with a calibration device capable of indicating bolt tension. Include in the test assembly flat, hardened washers, if required in the actual connection, arranged as those in the actual connection to be tensioned. Demonstrate with the

calibration test that the device indicates a tension at least 5 percent greater than that required by Table 504-2. Follow manufacturer's installation procedures when installing bolts in the calibration device and in all connections.

Do not reuse high-strength bolts. Remove previously fully tightened bolts that were loosened by tightening adjacent bolts. Replace them with new bolts and nuts.

8. Welding. Perform all welding and Nondestructive Examination (NDE) as specified or shown on the Plans. Conform to ANSI/AASHTO/AWS *Bridge Welding Code* D1.5 when welding new steel bridge girders, beams, and stringers. Conform to the *Structural Welding Code* AWS D1.1 when welding all other steel structures.

At least 30 days prior to welding, submit for approval a welding plan stamped and signed by an American Welding Society Certified Welding Inspector per QC1 (CWI) responsible for the Quality Control (QC) and consisting of the following documents.

- a. Quality control personnel qualifications including CWI number
- b. Welding Procedure Specifications (WPS) using forms in AWS D1.1, Sample Welding Forms
- c. Procedure Qualification Records (PQR) when applicable, using forms in AWS D1.1, Sample Welding Forms
- d. Welder Performance Qualification Records (WPQR) using forms in AWS D1.1, Sample Welding Forms with documentation of current welder certification
- e. Type and extent of NDE to be conducted, as required in the specifications

Using a CWI, perform all quality control inspection necessary to ensure the materials and workmanship meet the requirements of the contract documents.

Correct all deficiencies in materials and workmanship revealed by Quality Control and Quality Assurance inspections without additional compensation.

Furnish all completed quality control inspection documents.

Do not weld or tack brackets, clips, shipping devices or other material not required by the Contract documents to the permanent structure, unless shown on the working drawings and approved by the Engineer.

ERECTION.

- General. Provide the falsework and all tools, machinery, and appliances, including driftpins and fittingup bolts, needed to perform the work efficiently. Erect the structural steel, remove the temporary construction, and do the work to complete the structure, as required by the Contract Documents. Make temporary field welds to structural steel according to the procedures required by these Specifications. Steel with sharp kinks or bends will be rejected.
- 2. <u>Handling and Storing Materials</u>. Store material on skids above the ground. Keep it clean and properly drained. Place girders and beams upright and shore them. Adequately support long members, such as columns and chords, on skids to prevent injury from deflection.
- 3. <u>Assembling Steel</u>. Accurately assemble the parts as shown on the Plans and follow match-marks. Handle the material carefully to avoid bending, breaking, or otherwise damaging the parts. Do not hammer if doing so will injure or distort the members. Clean bearing surfaces and surfaces to be in permanent contact before assembling the members.

4. <u>Attachment of Formwork</u>. When approved, use 1-inch maximum diameter holes in steel girder webs for attaching formwork. Place holes 6 inches minimum clear distance from all horizontal or vertical welds and space them at least 4 feet center to center. Drill or subpunch and ream holes. Do not provide empty bolt holes. Fill empty holes with tensioned high-strength bolts.

Include in the request enough detail of the formwork for determining the stresses that will be imposed on the girder.

SC-06 - Bearings

ELASTOMERIC BEARING PADS. Elastomeric bearing pads include plain pads, consisting of elastomer only, and laminated pads with steel laminates.

1. <u>General</u>. Meet AASHTO M 251, with the following revisions:

4.1 Properties of the Elastomer

<u>Delete the first sentence and replace with the following</u>: Use elastomeric compound in the construction of the bearings containing only virgin natural polyisoprene (natural rubber) as the raw polymer. Do not use neoprene. Properties and requirements elsewhere in AASHTO M 251 pertaining solely to polychloroprene (neoprene) do not apply.

Add the following:

Use elastomer compound classified as low temperature Grade 5 and meeting the requirements of paragraph 8.9.1.

5. Fabrication

Add the following paragraph:

5.5. Fabricate pads over 3/4 inch thick with alternating laminations of elastomer and metal or fabric reinforcements. The outside laminations must be metal or fabric with a minimum elastomer cover as shown on the Plans.

Table 2 - Tolerances.

Delete Item 6 and replace with the following:

- 6. Top, bottom, and edge cover of embedded laminates or connection members -0, +1/8 inch.
- Certification. Furnish a Certified Test Report from the manufacturer or an independent testing laboratory containing a list of dimensional, chemical, metallurgical, electrical, physical, and other required test results of the specified material certifying that the product or assembly has passed all specified tests. Include the following:
 - a. the project name and number;
 - b. the manufacturer's name;
 - c. the name of the product or assembly;
 - d. a complete description of the material;
 - e. country of origin;
 - f. the lot, heat, or batch number that identifies the material;
 - g. all required test results for the specified material from the same lot, heat, or batch defined herein; and

h. a statement, signed by a person having legal authority to act for the manufacturer or the independent testing laboratory, that the test results show that the product or assembly to be incorporated into the project has been sampled and tested and the samples have passed all specified tests.

Tag, stencil, stamp, or otherwise mark all materials or assemblies furnished under certification to the project with the lot number, heat number, batch number, or other appropriate identification, which can be readily recognized and legible, and is identical to the accompanying Certified Test Report.

EPOXY ADHESIVE FOR ELASTOMERIC BEARING PADS. Meet AASHTO M 235, Type IV, Grade 3.

POLYTETRAFLUOROETHYLENE (PTFE) BEARINGS. PTFE bearing assemblies consist of elastomeric bearing pads, polytetrafluoroethylene surfacing, and stainless steel and steel plates.

1. Materials.

Elastomeric Bearing Pads As specified herein
Stainless Steel Plates ASTM A 240, Type 304
Steel Plates ASTM A 1011, Grade 36

Use PTFE from virgin material (not reprocessed) meeting the requirements of ASTM D 4894 or D 4895, and Table SC06.4 – Polytetrafluoroethylene (PTFE).

2. <u>Fabrication</u>. Fabricate the PTFE sliding surface with lubricant dimples having a maximum diameter of 0.32 inch, a minimum depth of 0.08 inch and a maximum depth of one half of the PTFE sheet thickness. Distribute the dimples uniformly within the area ¼ inch from the edges of the PTFE sheet and occupying between 20 percent and 30 percent of the PTFE sheet area.

For welding of structural steel, conform to the requirements of Supplemental Condition <u>SC-05 – Steel Structures</u>.

Test	Requirements	ASTM Method
Specific Gravity	2.13 - 2.19	D792
Peak Melting Temperature	623°F (±2°F)	D4894, D4895, or D5977
Tensile strength (Minimum)	2800 psi	D638 or D2256
Elongation (Minimum)	200%	D638 or D2256

Table SC06.4 – Polytetrafluoroethylene (PTFE)

Bond the PTFE to steel substrate under controlled conditions according to the written instructions of the manufacturer of the adhesive system. Use adhesive material meeting the requirements of the PTFE manufacturer.

Uniformly roughen the contact surfaces of PTFE sheet and steel plate to be bonded to a minimum roughness height value of 250 micro-inches.

Factory treat the side of the PTFE sheet to be bonded by the sodium naphthalene or sodium ammonia process, after the contact surface is roughened.

Fully bond the PTFE sheet in the recess. Ensure the PTFE surface is smooth and free from bubbles after completion of the bonding operation. PTFE sheets that are delaminated will be rejected.

Perimeter seal weld the stainless steel plate to the steel sole plate. Use stainless steel electrodes in accordance with the requirements of the electrode manufacturer. After the completion of the weld operation, ensure the stainless steel plate is smooth and free from waves.

Control the flatness of the bearing elements such that upon completion of the bearing assembly the PTFE/stainless steel sliding interface is in full bearing.

Provide a mating surface of the stainless steel plate with the PTFE surfacing with a surface finish of less than 8 micro-inches root-mean-square (rms), determined according to ASME B46.1. Do not exceed a first movement static coefficient of friction of 0.05 for the sliding element of the production bearings, when tested without the coating of silicone grease.

Fully vulcanize elastomeric bearing pads to the steel plates under factory controlled conditions. Provide a bond with a peel-strength of at least 30 pounds per inch as determined by AASHTO M 251, Appendix X2.

Prepare and paint metal surfaces, except stainless steel surfaces, of bearings exposed to the atmosphere in the completed work. Prepare and paint the surfaces according Supplemental Condition SC-05 – Steel Structures.

After installation of the bottom portion of the bearing assembly, apply a 1/16 inch thick coating of silicone grease to the entire PTFE surface and reassemble the bearing without damage to the mating sliding surfaces. Use silicone grease conforming to SAE AS8660.

At your expense and without contract extension time return damaged bearings and bearings with scratched mating surfaces to the factory for replacement or resurfacing.

Prior to proof testing, permanent die stamp all individual components on 2 of 4 sides with markings consisting of bearing number and contract number. Provide each bearing with a unique bearing number and match marks on plate edges to insure correct assembly at the job site.

3. <u>Testing.</u> Proof test and evaluate full sized PTFE bearings for compression and coefficient of friction in the presence of the Engineer, unless otherwise directed. Perform proof tests on samples randomly selected by the Engineer from the production bearings to be used in the work. Perform proof tests at an approved independent laboratory. If proof tests are not performed at the specified load, perform additional physical tests in the presence of the Engineer, unless otherwise directed, to demonstrate that the requirements for proof testing at the specified load are satisfied. Give the Engineer at least seven (7) working days' notice before beginning proof testing.

Proof test one bearing per lot of production PTFE bearings. A lot is defined as 25 PTFE bearings or fraction thereof of the number of PTFE bearings shown on the Project Plans.

Clean the bearing surfaces prior to testing.

Proof test bearings after conditioning specimen for 12 hours at 750 ±5oF.

Perform the tests with the dead load as specified in the Contract for the bearing with the test load applied for 12 hours prior to friction measurement and the following:

Arrange the tests to allow measurement of the static coefficient of friction on the first movement of the bearing.

Measure the first movement static and dynamic coefficients of friction at a sliding speed not exceeding one inch per minute and do not exceed the specified coefficient of initial static friction.

Subject the test bearings to a minimum of 100 movements of at least one inch of relative movement at a sliding speed not exceeding 12 inches per minute. After cycling, measure again the first movement static and dynamic coefficients of friction at a sliding speed not exceeding one inch per minute and do not exceed the specified coefficient of initial static friction.

The proof tested bearings are to show no visible sign of: (1) bond failure of bearing surfaces, (2) separation or lift-off of plates from each other or from PTFE surfaces, (3) other defects. When a proof tested bearing fails to comply with the Contract Documents, test each bearing in that lot for acceptance.

Proof test results are to be certified correct and signed by the testing laboratory personnel who conducted the test and interpreted the test results. Include the bearing numbers of the bearings tested on the proof test results.

Test a minimum of one pad per lot for bond strength per AASHTO M 251. Test specimens are to show no indication of deterioration of elastomer or loss of bond between the elastomer and steel laminates.

Protect all PTFE and stainless steel surfaces from contamination and weather damage.

- 4. <u>Certification.</u> Furnish a Certified Test Report from the manufacturer or an independent testing laboratory containing a list of dimensional, chemical, metallurgical, electrical, physical, and other required test results of the specified material certifying that the product or assembly has passed all specified tests. Include the following:
 - a. the project name and number;
 - b. the manufacturer's name;
 - c. the name of the product or assembly;
 - d. a complete description of the material;
 - e. country of origin;
 - f. the lot, heat, or batch number that identifies the material;
 - g. all required test results for the specified material from the same lot, heat, or batch defined herein; and,
 - h.a statement, signed by a person having legal authority to act for the manufacturer or the independent testing laboratory, that the test results show that the product or assembly to be incorporated into the project has been sampled and tested and the samples have passed all specified tests.

Tag, stencil, stamp, or otherwise mark all materials or assemblies furnished under certification to the project with the lot number, heat number, batch number, or other appropriate identification, which can be readily recognized and legible, and is identical to the accompanying Certified Test Report.

SC-07 - Structural Steel

SCOPE. Structural steel for railroad bridges and other structural purposes.

GENERAL REQUIREMENTS. Meet the following:

 General requirements for delivery of rolled steel plates, shapes, and bars for structural ASTM A6

2. Structural Weathering Steel ASTM A709, Grade 50W

3. Structural Steel, Span Assembly, Bent Cap ASTM A709, Grade 50W T3

4. Structural Steel; Pier Cap (F.C. member) ASTM A709, Grade 50W F3

5. Structural Steel, deck materials, handrails ASTM A36

6. Filler Metal for Applicable Arc-Welding Electrodes AWS Specifications

7. Stud Shear Connectors ASTM A108 Gr. 1015, or 1020

8. <u>Raised Pattern Plate</u>. Where raised pattern plate is shown on the Plans, use plates with a raised pattern surface meeting the following requirements:

- a. Use diagonal type pattern, with the intersecting diagonals at right angles to one another. Use the same material for the raised portions of the pattern as the base metal of the plate. The raised pattern must be an inherent part of the plate. The pattern must be continuous throughout the surface of the plate and the projections along any diagonal must be spaced alternately with the projections along the normal diagonals.
- b. Use plate with projections that are self-draining and self-cleaning and provide a skid-resistant surface from all angles of approach. The projections must have flat tops and be designed not to chip, crack, split, or buckle at their intersection with the base metal.
- 9. <u>Impact Test Requirements</u>. Use structural steel and filler metal for applicable arc-welding electrodes meeting the following requirements:
 - a. For structural steel, meet the impact testing requirements and marking requirements of ASTM A709 for the specified grade, type of component, and impact testing temperature zone. If the grade is not specified, use Grade 36 steel. If the type of component is not specified, use steel grades marked with suffix T. If the impact testing temperature zone is not specified, use steel marked for Zone 3.
 - b. For filler metal for applicable arc-welding electrodes, meet the minimum average energy values of the base metals to be joined when tested at or below the temperature corresponding to the specified impact testing temperature zone of the base metal. Perform impact tests according to ASTM A370.

FASTENERS. Meet the following:

1. High Strength Bolts ASTM F3125, Grade A325 Type 3

Nuts
 ASTM A563, Type 3
 Hardened Steel Washers
 Zinc Coated Load Indicating Washers
 ASTM F436, Type 3
 ASTM F959 Type 325

STEEL GRID FLOORS. Meet ASTM A709, Grade 36. If the material is not galvanized, ensure the steel has a copper content of 0.2 percent minimum.

Unless painting of floors is specified in the Special Provisions, open type floors must be galvanized.

MACHINE BOLTS. Meet ASTM A307.

STEEL PIPE. Meet ASTM A53 Grade B.

GALVANIZING. Hot-dip galvanize structural steel shapes, plates, bars and their products according to AASHTO M 111. Galvanize tubes and piles on inside and outside surfaces.

Hot-dip galvanize steel poles, mast arms, pedestals, and posts, according to AASHTO M 111. Submerge each component in the galvanizing kettle in one dip. Use only the dry kettle method of fluxing for high tower poles.

Hot-dip galvanize all anchor bolts, nuts, washers, tie-rods, clamps, and other miscellaneous ferrous parts in conformance with AASHTO M 232. After galvanizing, ensure that the bolt threads accept galvanized standard nuts without requiring tools or causing removal of protective coatings.

Galvanize rigid metal conduit in conformance with AASHTO M 232.

For steel bridge members, apply 10 mils zinc galvanizing by spray-metalizing process according to Steel Structures Painting Council's coating system guide SSPC-CS 23.00. Prepare surfaces before galvanizing according to Steel Structures Painting Council's surface preparation guide SSPC-SP 5, White Metal Blast Cleaning.

Repair damaged coatings according to ASTM A780 Annex A1 or Annex A3, except as described herein. Clean the damaged area according to SSPC-SP 3, Power Tool Cleaning for repairs meeting Annex A1 and SSPC-SP 5/NACE No. 1, White Metal Blast Cleaning for repairs meeting Annex A3.. Extend the cleaned area 1/2 inch to 3/4 inch into the undamaged section of the coating. Keep the cleaned area dry and free of rust and soiling. Within 24 hours of cleaning, coat the cleaned section with zinc to a thickness of not less than 10 mils when using the method in Annex A3 and not less than 3 mils when using the method in Annex A1. Taper the thickness of the repair coating to match the original coating thickness at the edges of the cleaned section. Where zinc coating is to be metallized in accordance with Annex A3, use zinc wire containing not less than 99.98 percent zinc.

CERTIFICATION. Furnish a Certified Test Report from the manufacturer or an independent testing laboratory containing a list of dimensional, chemical, metallurgical, electrical, physical, and other required test results of the specified material certifying that the product or assembly has passed all specified tests. Include the following:

- 1. the project name and number;
- 2. the manufacturer's name;
- 3. the name of the product or assembly:
- 4. a complete description of the material;
- 5. country of origin;
- 6. the lot, heat, or batch number that identifies the material;
- 7. all required test results for the specified material from the same lot, heat, or batch defined herein; and.
- 8. an affidavit, signed by a person having legal authority to act for the manufacturer or the independent testing laboratory, that the test results show that the product or assembly to be incorporated into the project has been sampled and tested and the samples have passed all specified tests.

Tag, stencil, stamp, or otherwise mark all materials or assemblies furnished under certification to the project with the lot number, heat number, batch number, or other appropriate identification, which can be readily recognized and legible, and is identical to the accompanying Certified Test Report.

APPENDIX H

ALASKA RAILROAD CORPORATION SUPPLY BID FORM

NAME			
To the CONTRACTING OF	FICER, ALASKA R	AILROAD CORPORATION:	
required in said Invitation accordance prices named herein as income and prices named herein as income as the Undersigned hereby agrees such further time as may be all acceptance of this Bid, and it is accompanying bid guarantee, if and said Contracting Officer matter. The Undersigned agrees to contract in the Undersigned agrees agree in the Undersigned agrees agree in the Undersigned agrees agree in the Undersigned agree in the Undersig	ding to the specification licated on the Cost Solution set to execute the said towed in writing by the hereby mutually under any, shall be forfeited any proceed to award towers.	e within Ten (10) Calendar Days after the e	Calendar Days, or tion of the signed does not, the uidated damages,
the Contracting Officer.	s receipt of the follow	ving addenda to the requirements and/or sp	
Addendum Number/Dated	Addendum Numb	per/Dated Addendum Number/Dated	_
firm, association, or corporation	ler penalty of perjury of which he/she is a	under the laws of the United States, that ne member, has, either directly or indirectly, e e taken any action in restraint of free comp	ntered into any
The Undersigned has read the his/her signature below:	foregoing proposal ar	nd hereby agrees to the conditions stated th	nerein by affixing
Name and Title of Person Sign	ng	Signature	
Telephone Number		Email Address	

APPENDIX I

Bidder 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

Proposor's Full Logal Name:

١.	1 101	boser's Full Legal Name.
2.	The	Proposer represents that it operates as the following form of legal entity: (Check whichever
appl	lies and	fill in any appropriate blanks.)
		an individual or sole proprietorship
		a general partnership
		a limited partnership
		a joint venture consisting of: and (List all joint ventures on a separate sheet if this space is inadequate.)
		a non-profit organization
		a corporation organized or incorporated under the laws of the following state or country: on the following date:
		a limited liability company organized under the laws of the following state or country: on the following date:
3.	Prop	ooser's federal taxpayer identification number:
4.	Prop	oser'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. Alask	Number of employees: including employee a.	s in the State of
	PART III - Contracting History	
solicit with the the co period the aq	Has the Proposer been awarded any contracts within the last five years by AR (a, or any other public entity for the same or reasonably similar goods or service tation? If none, answer "No". If yes, on a separate sheet of paper describe those contract recent. State the name of the contracting entity; give a brief description of contract number, the dollar amount at award and at completion, date completed; so d, the status of the contract, and the name, address, and telephone number of a contract if award was made to Proposer as prime contractor or joint venture rovide more than three such descriptions. YES NO	es sought by this ontracts beginning f the contract and state the contract contact person at
separ the do and to	Has the Proposer been awarded any private sector contracts within the last five y asonably similar goods or services sought by this solicitation? If none, answer "I rate sheet of paper provide the name and address of the contracting entity, a brief de ollar amount at award and at completion, date completed, status of the contract an elephone number of contact person as to each, beginning with the most recent. Including the provide more than three solutions are prime contractor or joint venture. Proposers need not provide more than three solutions.	No." If yes, on a escription of work, id name, address dicate if Proposer

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 p	past five years has the	Proposer beer	n the subject of any of the following actions?
	A.	Been suspended, deb	oarred, disquali YES □	fied, or otherwise declared ineligible to bid? NO □
	B.	Failed to complete a	contract for a p YES □	ublic or private entity? NO □
	C.	Been denied a low-bio	d contract in sp YES □	ite of being the low bidder? NO □
	D.	Had a contract termin	ated for any re YES □	ason, including default? NO □
	E.	Had liquidated damag	ges assessed a YES □	gainst it during or after completion of a contract? NO □
	F.	Been a defaulter, as p	orincipal, surety	or otherwise?
			YES 🗆	NO 🗆
your co	G. ompany	Been denied an awar was not a responsible	•	contract based upon a finding by a public agency that NO \square
agreen	H. nent on			red enforcement of any of its rights under a surety or in lieu of declaring your company in default? NO □
	I.	Been denied a perform	mance or paym YES □	nent bond by a surety company? NO □
J. prevail		required to pay back se or overtime laws?	•	penalties for failure to comply with state or federal
			YES	NO 🗆
sheet	esource of paper	es necessary to supply	the goods or s	ial, organizational, technical, equipment, facilities, and ervices sought by this solicitation? If no, on a separate e resources necessary to supply the goods or services
Sought	. by tills	Solioitation.	YES □	NO 🗆
yes, require	impact i on a ements/	ts ability to meet the r separate sheet of	equired deliver paper desc solicitation with	ated commitments and/or contractual obligations that ry or performance requirements of this solicitation? If cribe any apparent conflicts as between the respect to the use of Proposer's resources, such as es, equipment, etc. 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!

		ect of an investigation		rs has Proposer, any of its principals, officers or partners violation of a civil antitrust law, or other federal, state or
			YES □	NO 🗆
	its princ		ners been a pla	sent time is, or during the past five years has Proposer, aintiff or defendant in any lawsuit or arbitration regarding
3.			ast five years, h	nas the Proposer filed for bankruptcy or reorganization
unaer	tne ban	kruptcy laws?	YES 🗆	NO 🗆
4. judgm				e past five years, has the Proposer been the subject of a ubcontractor or supplier? NO □
5. state c			t five years, has YES □	s the Proposer been the subject of a tax lien by federal, NO \square
		PART V – C	Compliance wit	th Laws and Other Regulations
1. convic	_	<u>al</u> : In the past five y urrently charged with		roposer, any of its principals, officers, or partners been owing:
agreer	A. nent or	Fraud in connection transaction?	n with obtaining YES □	, attempting to obtain, or performing a public contract, NO $\hfill\Box$
	B.	Federal or state ant	itrust statutes, i YES □	ncluding price fixing collusion and bid rigging? NO □
inform	C. ation, re			oribery, making false statements, submitting false alse claims to any public agency? NO
of its s	D. subcontr	Misrepresenting mir actors?	nority or disadva	antaged business entity status with regard to itself or one

of anv	E. other st		the prevailing v	vage requirements of the State of Alaska or similar laws	
-			YES □	NO 🗆	
a gove	F. rnment	Violation of any law, r funded procurement?	egulation or ag	reement relating to a conflict of interest with respect to	
J		·	YES □	NO 🗆	
agreen	G. Falsification, concealment or transaction?		ment, withhold	ing and/or destruction of records relating to a public	
Ü			YES □	NO 🗆	
private	H. agreen	Violation of a statuto ment or transaction?	ory or regulato	ry provision or requirement applicable to a public or	
•	J		YES □	NO 🗆	
pendin	I. g again			ers in Proposer's company have any felony charges during, or after their employment with the Proposer? NO □	
2. partne		atory Compliance. In	the past five y	ears, has Proposer or any of its principals, officers or	
	Been cited for a violation of any labor law or regulation, including, but not limited to, child lab plations, failure to pay correct wages, failure to pay into a trust account, failure to remit or pay withheres to tax authorities or unemployment insurance tax delinquencies? $YES \ \square \qquad NO \ \square$				
	B.	Been cited and asses	ssed penalties f YES □	or an OSHA or Alaska/OSHA "serious violation"? NO □	
	C.	Been cited for a viola	tion of federal, YES □	state or local environmental laws or regulations? NO □	
	D.		th Alaska cor	porate registration, federal, state or local licensing	
require	ments?	•	YES 🗆	NO 🗆	
susper	E. nded, re	•		s entity's license or any professional certification, ited from doing business in the State of Alaska? NO \Box	

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 may be requested:
 - 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 **may be requested.**

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 Acknowledgement

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 attac	ched Questionnaire, and that t	to the best of my knowledge
and belief all information contained herein and	submitted concurrently or in su	upplemental documents with
this Questionnaire is complete, current, and	true. I further acknowledge t	hat any false, deceptive or
fraudulent statements on the Questionnaire will	result in denial or termination	of a contract.
purpose of verifying information provided in the 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.

APPENDIX J COST SCHEDULE

A bidder's failure to provide the information requested in this appendix will be cause for rejection of the offer on the basis of non-responsiveness. All prices quoted shall be FOB ARRC Warehouse 485 Ocean Dock Rd Anchorage, Alaska 99501.

Award Criteria: An award will be made to the low, responsive, responsible bidder that meets the requirements as set forth in the specifications and compliance thereof.

The Alaska Railroad Corporation reserves the right to determine that all offered materials will serve the application intended. An award may be made in the aggregate of Base Bid. The successful bidder shall hold unit prices of all additives firm for a period of thirty (30) days from the date of bid opening. The bid award is contingent upon the availability of funds from Alaska Railroad Corporation.

BASE BID ITEMS							
Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid		
1	26' I-beam Bridge Span	Lump Sum	All Req'd				
2	Elastomeric Bearing Pads	Lump Sum	All Req'd				
Total Base Bid :							

Delivery Date:

Your bid should indicate the earliest firm delivery date after receipt of award. ARRC shall fully expect the successful Fabricator to completely satisfy contract performance requirements in accordance with firm delivery date offered in the Cost Schedule and required specifications.

Delivery Date: Please indicate the earliest	possible delivery date after receipt of order (ARO):
ARO	
COMPANY NAME	SIGNATURE BY AND FOR THE BIDDER
COMPANY ADDRESS	PRINTED NAME OF ABOVE BIDDER
CITY, STATE, ZIP	DATE OF BID
CONTACT PHONE NUMBER	CONTACT E-MAIL