

APPENDIX - C

JOB SPECIFICATIONS

SPECIFICATIONS - JOB SPECIFIC
INDEX

<u>CODE</u>	<u>TITLE</u>	<u>Page</u>
106.01.1	BUY AMERICA JOB SPECIFICATION (BABA)	JS-1
810.99	GALVANIC ANODE SPECIFICATION	JS-4
824.901	SUPPLEMENTAL STEEL SUPPORTS OF SELECT STRUCTURAL MEMBERS	JS-6
922.03.1	RHODEWORKS SIGNS	JS-9

Remove Section 106.01.1 from the RIDOT Standard Specifications for Road & Bridge Construction, August 2025 in its entirety and replace with:

106.01.1 Buy America Job Specification (BABA)

Introduction:

While existing Buy America requirements previously applied to iron, steel, and certain manufactured goods, the Infrastructure Investment and Jobs Act (IIJA) expands requirements to include all manufactured products and construction materials in construction contracts that include Federal Aid funding in the construction phase. Additional information available in 23 CFR 635.410 Buy America and it's Q&A at [FHWA's Buy America Q and A for Federal-aid Program - Buy America - Contract Administration - Construction - Federal Highway Administration \(dot.gov\) \[fhwa.dot.gov\]](#)

Purpose:

Provide materials from domestic sources when products are permanently incorporated into the work.

Ensure all manufacturing processes, including applications of coatings, occur in the United States. A coating includes all processes required to apply the coating to a product to protect or enhance the value of the product. The requirements of this JS are not applicable to equipment, tools, and temporary items, including materials left in place at the Contractor's convenience.

Certifications:

All certifications are submitted by the prime Contractor. When submitting certifications for materials that are subject to the requirements of this specification, the certification shall be on Form provided by the Department.

Determination of Material Category:

- Foreign or Uncertified Products.
Buy America does not apply to minimal use of steel/iron materials provided that the total cost of all foreign source items used in the contract, as delivered to the project site, is less than \$2500 or one-tenth-of-one percent of the total contract amount, whichever is greater.

The total value is that shown to be the cost of the steel and iron products as delivered to the project site. Contractor to keep a log of foreign source items to ensure that the minimal use threshold is not exceeded during the life of the contract

- Manufactured Products
Provide manufactured products produced in the United States.
A manufactured product is acceptable under this provision if:

The manufactured product was manufactured in the United States; and
The cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

- Construction Materials

The category of construction materials excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

Construction materials are materials that consist primarily of:

- Non-ferrous metals.
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

Waivers:

The Contractor may submit a waiver request to the department using RIDOT procedures and form provided in the PMP document management folder. The form must reflect a detailed justification for the use of goods, products, or materials mined, produced, or manufactured outside the United States and including copies of all documentation verifying the unavailability of the material or product.

The Department will submit approved waiver requests to FHWA for review. The Contractor shall investigate and respond to any public comments made to the FHWA Office of Program Administration, indicating that a domestic supplier cannot provide the material for which a waiver has been requested. Final approval of the Buy America Waiver request will be made by the Administrator, Federal Highway Administration. The waiver will be effective the date following publication in the Federal Register.

Contractor fully understands there is no guarantee a waiver request will be approved. Any contract delays caused by this waiver process will be the sole responsibility of the contractor.

The contractor shall be responsible for all cost associated with any of the construction materials that are permanently incorporated into the project that does not meet the requirements of this Special Provision without prior written approval from the Department, up to and including removal and replacement.

The Contractor may submit a waiver request to the department during construction:

1. Determine which type of the three waivers applies.
 - Public Interest Waiver: applying the domestic content procurement preference would be inconsistent with the public interest. A waiver in the public interest may be appropriate where the approving federal agency determines that other important policy goals cannot be achieved consistent with the IIJA requirements, and the proposed waiver would not meet the requirements for a nonavailability or unreasonable cost waiver.
 - Nonavailability Waiver: for types of iron, steel, manufactured products, or construction materials that are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality.
 - Unreasonable cost waiver: the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent. Provide documentation that no domestic alternatives are available within this cost parameter. Document in the waiver a comparison of the cost of the domestic product to the cost of the foreign product or a comparison of the overall cost of the project with domestic products to the overall cost of the project with foreign-origin products.
2. Contractor shall prepare waiver documentation including waiver form provided by RIDOT; located in the PMP portal and submit to the Department's Project Manager with a cc: to the Construction Manager (RE)
3. RIDOT/Project Manager to Submit waiver to Federal Highway Division.
4. Federal Highway Division submits the waiver to the Made in America Office. All waivers have to be submitted by Federal agencies to the Made in America Office. Project specific waivers require a minimum of 15 calendar day public comment period. General applicability waivers are subject to a minimum 30 calendar day public comment period. Federal agencies are responsible for performing due diligence and approving or rejecting waivers.

CODE 810.99 EMBEDDED GALVANIC ANODES

DESCRIPTION: Work under this item shall consist of furnishing and installing alkali-activated, galvanic anodes within concrete repairs at locations noted within the plans and/or as directed by the Engineer.

MATERIALS: Use of one of the qualified galvanic anode products and manufactures listed below will not require written approval; an equivalent system may be used with written approval of the Engineer.

<u>Product Name</u>	<u>Manufacturer/Supplier</u>	<u>Telephone Number</u>
Galvashield	Vector Corrosion Technologies	(319) 364-5355
Sentinel	Euclid Chemical Company	(800) 321-7628
Emaco CP Tntact	BASF Building Systems	(262) 227-4045

Anodes shall consist of a minimum 5.6 oz (160 grams) of zinc in compliance with ASTM B418 Type TT (213000) and ASTM B6 Special High Grade (213001) with iron content of 15 ppm or less cast around a pair of heat treated, uncoated steel tie wires and encased in a highly alkaline cementitious shell with a pH of 14 or greater. The anode shall contain no added sulfate nor shall it contain chloride, bromide or other constituents that are corrosive to reinforcing steel. Anode units shall be supplied with integral unspliced wires with loop ties for directly tying to the reinforcing steel. Each anode unit shall have a volume no less than 12.5 in³. Repair mortars, concrete and bonding agents shall be Portland cement-based materials.

CONSTRUCTION METHODS: A technical representative of the manufacturer/supplier shall be notified of the scheduled installation of the anodes and shall be present to provide direction and assistance for the initial installations of anodes in concrete repairs and succeeding anode installations until the Contractor becomes proficient in the work and to the satisfaction of the Engineer.

The work for this item shall be performed in accordance with the manufacturer's product specification and installed per the project details and as recommended by the technical representative of the manufacturer/supplier. Removal of additional concrete may be required for the fitment of the anodes and must be kept to a minimum. Tools, equipment, and techniques used to prepare the repair locations for installation of the anodes shall be approved by the Engineer and the manufacturer's technical representative prior to the start of construction. Reinforcing steel shall be prepared or treated as necessary to provide good electrical conductivity, and then securely fastened together with tie wire. The Contractor shall supply the tools required to test the connections between anodes and reinforcing steel, or electrical continuity between crossing steel bars, as directed by the technical representative. The Contractor shall place additional tie wires or re-tie connections as directed to provide continuity.

Care shall be taken when handling anodes to prevent damage to the anodes and to the wire connections.

When Embedded Galvanic Anodes are installed in concrete demonstrating an electrical resistivity exceeding 15,000 ohm-cm, they shall be installed on a mortar bed as directed by the technical representative.

METHOD OF MEASUREMENT:

This Item will not be measurement for payment.

BASIS OF PAYMENT:

No separate payment will be made for this Item. Payment for this item shall be included within the Lump Sum price for this Task Order.

**CODE 824.9901 SUPPLEMENTAL SUPPORT FOR PRECAST FLOORBEAM CANTILEVER BRACKETS -
BRIDGE NO. 027501**

**CODE 824.9902 SUPPLEMENTAL SUPPORT FOR PRECAST CONCRETE SPANDREL ARCH BEAMS -
BRIDGE NO. 027501**

DESCRIPTION: The work under this item will consist of supplementing and/or stabilizing structurally deficient portions of the existing precast concrete, cantilevered floor beam brackets and spandrel arch beams, in their current positions at Bridge No. 027501 with additional new structural steel elements as indicated on the Contract Drawings and as specified in this Job Specific Specification. Contractor designed temporary support of existing spandrel arch beams during field survey measurements and installation of proposed supplemental supports is also included. Conducting field measurements, accessing the repair locations and locating existing reinforcing steel in concrete elements designated for repair will also be included in this work. Tree trimming as necessary for access will also be included. The Contractor will also be responsible for contacting, coordinating and notifying the G&W Railroad, procuring and obtaining Railroad Permits and Flagger Protection.

The types of structural supplemental supports that are anticipated are as follows:

- Installation of stabilizing supports at the ends of precast concrete spandrel arch beams at select deteriorated locations as identified from the latest Bridge Inspection Reports, are indicated and detailed on the Contract Plans. Confirmation of existing field measurements and reinforcing steel, following award of contract and prior to preparation of shop drawings is required.
- Installation of supplemental steel supports at the ends of precast concrete cantilevered floor beam brackets at select deteriorated locations, as identified from the latest Bridge Inspection Reports, are indicated and detailed on the Contract Plans. Confirmation of existing field measurements and reinforcing steel, following award of contract and prior to preparation of shop drawings is required.

The work associated with this item consists of, but is not limited to, the fabrication and installation of structural steel shapes, threaded rods fasteners and adhesive anchors by coring, preparing and roughing core holes for adhesive application in accordance with the manufacturer's recommendations, as required, and any other work that may be necessary to complete the repairs as shown on the plans in accordance with the Contract Documents, as required by this Job-Specific Specification, and the satisfaction of the Engineer.

All new steel components provided under this item shall be hot dipped galvanized in accordance with Sections 825 & 843 of the February 2025 Edition of the Rhode Island Standard Specifications for Road and Bridge Construction (Standard Specifications).

MATERIALS: All structural steel components shall be in accordance with Section 824 of the Standard Specifications and the following:

- All structural steel shall be AASHTO M270, Grade 50.
- All threaded rods shall be ASTM F3125 Grade 105 hot dipped galvanized.

SUBMITTALS: The Contractor shall submit shop drawings for the supplemental structural steel supports prior to the commencement of work. Detailed shop drawings of steel support brackets, shim plates, if needed, and any modifications to the proposed repair details due to the field measurements, will be submitted for approval by the Engineer for both the precast cantilever floor beam and spandrel arch supports. Review and approval of said shop drawing will not relinquish the Contractor of their responsibility to coordinate and implement the work. Shop drawings must depict the existing reinforcing steel layout and proposed shim plate dimensions, if needed, as determined from the Contractor's field measurements.

In addition, prior to the commencement of work, the Contractor shall submit a detailed sequence of construction including, erection, equipment, and procedures for performing the work as well as proposed method of temporary member supports during field survey and installation of supplemental supports for review and approval by the Engineer. Access methods other than an underbridge access truck (snooper) must be submitted to the Engineer for review and approval. Alternate access methods that require new permits or permit modifications that would delay the contract schedule will not be allowed. The Contractor will be responsible for all permits necessary, or re-applications, resulting from alternate access methods. Modifications to the construction schedule due to alternate methods will not be allowed.

CONSTRUCTION METHODS: All work shall be done as directed by and to the satisfaction of the Engineer in accordance with the details and submittals approved by the Engineer and the following.

The Maintenance and Protection of Traffic Plans depict suggested temporary traffic control layouts to perform the repairs.

Temporary support of the existing members slated to be repaired shall be installed prior to commencement of field survey to obtain measurements and reinforcement layouts/locations and installation of the repairs. The installation of the new structural steel elements shall be accomplished such that the structural integrity of the existing structure shall be maintained at all times. Additional holes or anchors, besides those indicated on the Plans, will not be allowed without the written approval of the Engineer.

Existing dimensions, material types, and member sizes, were obtained from the original Contract Drawings. The Contractor shall determine and establish all existing dimensions necessary for the preparation and detailing of the shop drawings and completion of work by field measurement and/or survey to ensure the accurate detailing and fabrication of the new materials to be provided under these items. The Contractor shall be responsible for the adequacy and accuracy thereof, and any materials ordered prior to approval shall be at the Contractor's own risk. This work is considered incidental to this Item and no separate payment will be made. The Contractor shall submit detailed shop drawings in sufficient time to allow for review and approval by the Engineer prior to fabrication. The Department will not be responsible for any additional time or cost to the Contractor as a result of the Contractor's errors or delays in taking field measurements.

Suitable protective cover and/or shielding shall be provided by the Contractor to prevent any materials, equipment, tools, welding, sparks, debris (liquid or solid) or other material from falling into areas below the work zones in use by the public, or the Department. Where necessary to protect the public and/or Department employees against spattering or blowing debris, paint, grit or dust or other loose material created by the work, the Contractor shall erect vertical shields or screens, as may be required to completely enclose the work area. Any required temporary shielding shall be incidental.

Should any debris fall to the ground or river despite this assurance, all work shall stop until such time as the debris has been recovered to the satisfaction of the Engineer, and a revised procedure of operation has been submitted by the Contractor to the Engineer for review and approval. Debris removal from within the Railroad Right of Way will require coordination and right of entry from the Railroad, including any railroad protection requirements. Any damage or injury resulting from falling debris shall be the sole responsibility of the Contractor. Any delay caused as a result of cessation of work and approval of the revised procedure of operation shall not relieve the Contractor of any of his responsibilities under this Contract, including the timely completion of work. Any additional costs incurred as a result of debris falling shall be borne solely by the Contractor.

The existing surfaces receiving supplemental supports shall be cleaned of all debris and other loosely adherent foreign matter that would impede the installation.

In the event that the existing bridge elements are damaged during any of the Contractor's operations, the Contractor shall replace, repair, or reinforce the damaged bridge elements as may be necessary to restore the damage to pre-existing conditions. This work shall be performed by the Contractor as ordered by the Engineer at no additional cost to the Department, including the design necessary to restore the element to its original structural integrity. The design must be submitted to the State for review and approval and shall be stamped by a Rhode Island registered Professional Engineer.

METHOD OF MEASUREMENT:

These items will not be measured for payment.

BASIS OF PAYMENT:

No separate payment will be made for these Items. The work so stated shall include all labor, materials, tools and equipment, and all incidentals required to complete the repairs, including all Railroad applications, permits and Flagger Protection, as described above and elsewhere in the Contract Documents, complete in place and accepted by the Engineer. Payment for this work will be included within the Lump Sum price for this Task Order.

The following shall be added to Section 922.03.1 from the RIDOT Standard Specifications for Road & Bridge Construction, August 2024:

922.03.1 RhodeWorks Signs

Install, maintain and modify RhodeWorks signs at the direction of the Engineer. RhodeWorks signs are to be installed within 30 calendar days and modified within seven calendar days of receiving the data from the Department.