



# North Dakota Department of Transportation

Grant Levi, P.E.  
Director

Jack Dalrymple  
Governor

December 8, 2015

## ADDENDUM 1 – JOB 2

TO: All prospective bidders on project S-BRI-1-094(155)156, Job No. 2, scheduled for the December 16, 2015 bid opening.

The following plan and request for proposal revisions shall be made:

Plan Revisions:

**Remove and replace sheet 6-1 with the enclosed sheet revised 12/7/2015.**

Sheet 6-1:

Note 704-P01 TRAFFIC CONTROL has been revised.

Note 704-P03 TRAFFIC CONTROL DEVICES has been revised.

Request for Proposal Revisions:

**Remove and replace page 8 of 9 of the Proposal pages located at the beginning of the Request for Proposal, with the enclosed page revised 12/7/2015.**

Page 8 of 9:

The TIME FOR COMPLETION has been revised.

**Remove and replace SP 29(14) BRIDGE PAINT: LEAD PAINT REMOVAL, CONTAINMENT, AND NEW PAINT with the enclosed Special Provision revised 12/4/2015.**

SP 29(14):

Construction Requirements Section A.4. Treatment of Lead Waste has been revised.

Construction Requirements Section C.2. Paint System Application has been revised.

This addendum is to be incorporated into the bidder's proposal for this project.

For   
CAL J. GENDREAU – CONSTRUCTION SERVICES ENGINEER  
80:dch  
Enclosure

**PROPOSAL FORM**

North Dakota Department of Transportation

**BID OPENING: December 16, 2015**

**Job 002**

Page 8 of 9

Rev: 12/7/2015

**Project:** S-BRI-1-094(155)156 (PCN-19482)

**Type of Work:** STRUCTURAL STEEL PAINTING

**Counties:** BURLEIGH and MORTON

**Length:** 0.0000 Miles

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**TIME FOR COMPLETION:**

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

**WORKING DAY CONTRACT:** NA working days are provided. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

**CALENDAR DAY CONTRACT:** NA calendar days are provided. The completion date will be determined by adding NA calendar days to NA or the date work begins on the project site, whichever is earlier.

**COMPLETION DATE CONTRACT** The project completion date is 10/01/2016. The Department provides a minimum of NA working days. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**  
**SPECIAL PROVISION**

**BRIDGE PAINT: LEAD PAINT REMOVAL, CONTAINMENT, AND NEW PAINT**

**1-094(155)156 – PCN 19482**

**DESCRIPTION**

This work consists of removing paint from the structure and containing, storing, and transporting for disposal of all material obtained during the paint removal process. The steel's surface will be prepared and repainted with a three-coat paint system according to the requirements of this Special Provision.

The existing steel is painted with a lead based paint and may contain materials in concentrations high enough to produce hazardous waste after removal. During removal operations, high concentrations of airborne particulate will occur. Refer to OSHA regulations to determine the degree of worker protection required.

**Contractor Qualifications.**

The painting Contractor shall possess current SSPC QP1 and SSPC QP2 certification at the time of the bid, and shall maintain certified status throughout the duration of the paint removal and painting work under the contract. The Contractor shall be familiar with and comply with all applicable state and federal regulations pertaining to the handling of lead-based materials.

**MATERIALS**

Supply a paint system that meets the requirements of Section 852.02, "Three Coat Organic Zinc Rich Paint System".

**CONSTRUCTION REQUIREMENTS**

**A. Lead Paint Removal.**

**1. Submittals.**

Submit the following to the Engineer:

- A written Containment Plan detailing the methods to contain and collect debris generated during the paint removal;
- A sampling and testing plan describing the methods to determine if the waste generated is classified as hazardous or non-hazardous. (Guidelines for this plan can be found in SSPC Guide 7); and
- A Quality Control Plan identifying the following:
  - The instrumentation that will be used;
  - A schedule of required measurements and observations;
  - Procedures for correcting unacceptable work; and
  - Procedure for improving surface preparation and painting as a result of quality control findings.

The Engineer's review of the submittals does not relieve the Contractor from the responsibility for the plans' accuracy of feasibility. Such review does not expressly or impliedly warrant, acknowledge or admit the reasonableness of the logic, manpower, or equipment of the plans.

## 2. Containment System.

Contain all debris from the paint removal and surface preparation process.

Construct entryways with doorways capable of being repeatedly sealed or overlapping door tarpaulins to minimize dust escaping.

### a. Containment Material.

Provide a containment system that is impervious to water, dust, and air. Enclose the work area by draping all sides, top, and floor with tarpaulins. Use tarpaulins that are free of holes or openings, suitable for suppressing blast residue without rupturing, and that are impervious to blast residue.

### b. Treatment of Joints.

Seal all mating joints between the containment walls, top and floor. Sealing methods include:

- Overlapping seams and stitching seams when using flexible material;
- Taping;
- Caulking; or
- Other approved sealing measures.

### c. Ventilation.

Specific air velocities are not specified, but feasible engineering controls must be used as necessary to reduce airborne lead exposures according to OSHA regulations for lead in construction (29 CFR 1926.62).

### d. Support.

Provide a containment structure capable of supporting the blast debris, wind load, and personnel. Design the containment connection to the structure to fail in high winds before structural members experience failure. For the purpose of calculating wind-design loads, consider all containment materials as air impenetrable.

## 3. Inspection.

Provide the Engineer with appropriate protective clothing and breathing apparatus during the inspection of the project. The protective clothing and breathing apparatus shall meet the current OSHA regulations and be new or sterilized under the supervision of the Engineer. The protective clothing and breathing apparatus will remain the property of the Contractor.

Provide reasonable access to clean-up facilities and all areas of construction with ladders, scaffolding, hoists, or work platforms.

## 4. Treatment of Lead Waste.

Remove the debris from the containment system daily. Place debris in leak proof containers at a temporary storage area. Secure and sign the temporary storage area in accordance with federal guidelines.

Collect a 500 gram sample from each storage container, in the presence of the Engineer. Select an independent certified laboratory to test samples in accordance with EPA requirements for determining hazardous waste. The Engineer will send the samples to the selected laboratory and will have the results sent to the Engineer and the Contractor.

Haul debris to an approved disposal facility within 7 days after the following conditions have been met:

- All required EPA tests have been completed;
- All tests results have been received by the Engineer and Contractor; and
- The transportation paperwork has been completed.

Provide the Engineer with documentation of proper disposal of the waste material.

## **B. Surface Preparation.**

Remove rust and paint for the surface by abrasive blast cleaning. Do not use chemical stripping or water jetting.

Use a thoroughly mixed abrasive blasting media with Blastox (or other approved product) added at a rate that yields non-hazardous waste by-products.

Clean the metal to a commercial condition as specified in SSPC SP-6, "Commercial Blast Cleaning."

Before the application of the prime coat, prepare the bare steel to a surface profile in compliance with the paint manufacturer's recommendations. The prepared surface will be verified by ASTM D4417 Method A, B, or C.

Do not clean a larger area than can be prepared and primed within a 24 hour period. If the prepared area is not primed within 24 hours, the area will be blasted and cleaned again.

## **C. Painting.**

### **1. Mixing and Thinning Paint**

Thoroughly mix all paint system components so the pigment is completely in suspension and the consistency is uniform. Strain the zinc primer over a sieve having openings no larger than a No. 50 sieve and continuously agitate until application is completed.

Thinners may be used if they are part of the paint manufacturer's instructions. Follow the manufacturer's instructions regarding the quantity and type of thinner used.

### **2. Paint System Application.**

Apply paint according to SSPC PA 1 and the manufacturer's recommendations.

Apply a stripe coat of the Organic Zinc Rich Primer and Epoxy Intermediate Coat prior to application of a full coat.

Apply coating in a uniform, even manner working into all corners and crevices. On surfaces inaccessible to spray, the coating may be applied with a brush.

Do not apply subsequent layers of the paint system until the Engineer has approved the previous application.

Apply each layer of the paint system with a DFT that meets the manufacturer's recommendations when measured as specified in SSPC PA 2. If a layer of the system does not meet the manufacturer's recommendations perform the following corrective action:

- Blast clean the surface according to SSPC SP-6;
- Clean the surface and keep the surface dry;
- Apply prime coat within 24 hours of cleaning; and
- Reapply the paint system.

Submit quality control records that include the following for each coating layer:

- Date and Time of Application;
- Ambient Air Temperature;
- Humidity;
- Dew Point;
- Surface Profile Measurements; and
- DFT Readings.

**METHOD OF MEASUREMENT**

The Engineer will measure as specified in Section 109.01, "Measurement of Quantities."

**BASIS OF PAYMENT**

<b>Spec</b>	<b>Code</b>	<b>Pay Item</b>	<b>Pay Unit</b>
630	0100	Sand Blasting and Painting	Lump Sum
630	9000	Containment System	Lump Sum

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

## NOTES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	S-BRI-1-094(155)156	6	1

704-P01 TRAFFIC CONTROL: The Work Zone Traffic Control Plan was developed to allow temporary one-lane closures on I-94 for installing and removing the containment system during off-peak hours only. Do not perform work that will restrict or interfere with traffic outside the off-peak hours listed below. Remove and/or cover traffic control devices required for the lane closure during peak hours.

Provide access to the containment system from beneath the bridge.

The Engineer will apply a contract price reduction of \$500 per hour for each hour or any portion of an hour for lane closures outside of the off-peak hours.

Off-peak hours are defined as the following:

Saturday 5:00 AM to Monday 6:00 AM  
Monday 6:00 PM to Tuesday 6:00 AM  
Tuesday 6:00 PM to Wednesday 6:00 AM  
Wednesday 6:00 PM to Thursday 6:00 AM  
Thursday 6:00 PM to Friday 6:00 AM

No lane closures will be permitted during the dates/times listed below:

Friday, July 1<sup>st</sup> 6:00 AM to Tuesday, July 5<sup>th</sup> 6:00 PM

704-P02 TRAFFIC CONTROL: The one lane closure on River Road will only be allowed when workers are present. Return traffic to two lanes when workers are not present.

704-P03 TRAFFIC CONTROL DEVICES: The traffic control devices list has been developed using the following layouts on the Standard Drawing for traffic control.

D-704-7 and D-704-8: Breakaway Systems for Construction Zone Signs  
D-704-9, D-704-10, D-704-11 and D-704-12: Construction Sign Details  
D-704-13: Barricade Details and Channelizing Devices  
D-704-14: Construction Sign Punching and Mounting Details  
D-704-15: Layout Type A: To be used for one lane closures for River Road when placing and removing the containment system for the bridge painting.  
D-704-35: Sign Layout for One-Lane Closure on I-94 for placing and removing the containment system for the bridge painting.  
D-704-50: Portable Sign Support Assembly

The required traffic control signs and devices are included in the "Traffic Control Devices List" and will be measured and paid for at the Contract Unit price for each device. Additional devices required to accommodate the Contractor's operation shall be the Contractor's responsibility.

752-P01 TEMPORARY SAFETY FENCE: Install temporary safety fence where the potential for a hazardous situation exists for pedestrians or as directed by the Engineer.

This document was originally issued and sealed by Jeffrey R. Rensch, Registration Number PE-8211, on 12/07/15 and the original document is stored at the North Dakota Department of Transportation.