

STRUCTURE SPECIAL PROVISIONSSUBMITTAL OF WORKING DRAWINGS:**General**

Submit working drawings in accordance with Article 105-2 of the *Standard Specifications* and this provision. For this provision, "submittals" refers to only those listed in this provision. The list of submittals contained herein does not represent a complete list of required submittals for the project. Make submittals that are not specifically noted in this provision directly to the Resident Engineer.

If a submittal contains variations from plan details or specifications or significantly affects project cost, field construction or operations, discuss the submittal with and submit all copies to the Resident Engineer. State the reason for the proposed variation in the submittal. To minimize review time, make sure all submittals are complete when initially submitted. Provide a contact name and information with each submittal. Direct any questions regarding submittal requirements to the Resident Engineer or State Bridge Management Unit.

In order to facilitate in-plant inspection by NCDOT and approval of working drawings, provide the name, address and telephone number of the facility where fabrication will actually be done if different than shown on the title block of the submitted working drawings. This includes, but is not limited to, precast concrete items, prestressed concrete items and fabricated steel or aluminum items.

Addresses and Contacts

Mail submittals to:

Mr. Rick Nelson, PE
 Asst. State Bridge Management Engineer
 NC Dept. of Transportation
 State Bridge Management Unit
 4809 Beryl Drive
 Raleigh, NC 27606
 Fax: 919.733.2348
 Ph: 919.733.4362
 Email: enelson@ncdot.gov

Furnish one complete copy of each submittal, including all attachments, to the Resident Engineer. At the same time, submit the number of hard copies shown below of the same complete submittal directly to the State Bridge Management Unit and/or the Structure Design Unit.

The table below covers "Structure Submittals". The Resident Engineer will receive review comments and drawing markups for these submittals from the State Bridge Management Unit.

Unless otherwise required, submit one set of supporting calculations to either the State Bridge Management Unit or Structure Design Unit unless both units require submittal copies in which case submit a set of supporting calculations to each unit. Provide additional copies of any submittal as directed by the Engineer.

STRUCTURE SUBMITTALS

Submittal	Copies Required by SBMU	Copies Required by Structure Design Unit	Contract Reference Requiring Submittal¹
Falsework & Forms ² (substructure)	5	0	Article 420-3 & "Falsework and Formwork"
Falsework & Forms (superstructure)	5	0	Article 420-3 & "Falsework and Formwork"
Placement of Equipment on Structures (cranes, blasting/painting equip., etc.)	5	0	Article 420-20
Painting Platforms and Containment	5	0	SP

ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS

(6-11-07)

General

Installation and Testing of Adhesively anchored anchor bolts and dowels shall be in accordance with Section 420-13, 420-21 and 1081-1 of the Standard Specifications except as modified in this provision.

Installation

Installation of the adhesive anchors shall be in accordance with manufacturer's recommendations and shall occur when the concrete is above 40 degrees Fahrenheit and has reached its 28 day strength.

The anchors shall be installed before the adhesive's initial set ('gel time').

Field Testing

Replace the third paragraph of Section 420-13 (C) with the following:

"In the presence of the Engineer, field test the anchor bolt or dowel in accordance with the test level shown on the plans and the following:

Level One Field testing: Test a minimum of 1 anchor but not less than 10% of all anchors to 50% of the yield load shown on the plans. If less than 60 anchors are to be installed, install and test the required number of anchors prior to installing the remaining anchors. If more than 60 anchors are to be installed, test the first 6 anchors prior to installing the remaining anchors, then test 10% of the number in excess of 60 anchors.

Level Two Field testing: Test a minimum of 2 anchors but not less than 10% of the all anchors to 80% of the yield load shown on the plans. If less than 60 anchors are to be installed, install and test the required number of anchors prior to installing the remaining anchors. If more than 60 anchors are to be installed, test the first 6 anchors prior to installing the remaining anchors, then test 10% of the number in excess of 60 anchors.

Testing should begin only after the Manufacturer's recommended cure time has been reached. For testing, apply and hold the test load for three minutes. If the jack experiences any drop in gage reading, the test must be restarted. For the anchor to be

deemed satisfactory, the test load must be held for three minutes with no movement or drop in gage reading.”

Removal and Replacement of Failed Test specimens:

Remove all anchors and dowels that fail the field test without damage to the surrounding concrete. Redrill holes to remove adhesive bonding material residue and clean the hole in accordance with specifications. For reinstalling replacement anchors or dowels, follow the same procedures as new installations. Do not reuse failed anchors or dowels unless approved by the Engineer.

Usage

The use of adhesive anchors for overhead installments is not permitted without written permission from the Engineer.

Basis of Payment

No separate measurement or payment will be made for furnishing, installing, and testing anchor bolts/dowels. Payment at the contract unit prices for the various pay items will be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

CLEANING AND PAINTING EXISTING STRUCTURE

SPECIAL

SCOPE OF WORK

This work shall consist of furnishing all labor, equipment, and materials to clean and paint the structural steel of the existing bridges. Work includes: removing, containment and disposal of the existing paint system; preparation of the surface to be painted and applying the new paint system; traffic control, portable lighting; seeding and mulching all grassed areas disturbed; and all incidental items necessary to complete the project as specified and shown on the plans.

The contractor shall be responsible for fulfilling all requirements of the NCDOT Standard Specifications for Roads and Structures dated July 2006, except as otherwise specified herein.

SPECIALTY ITEMS:

Work Schedule – Prior to beginning work, the Contractor shall submit his work schedule to the Engineer. Schedule shall be kept up to date, with a copy of the revised schedule being provided to the Engineer in a timely manner.

SSPC QP-2 Certification - The existing paint systems include toxic substances such as red lead oxide, which are considered hazardous if improperly removed. Only contractors who are currently SSPC QP-2, Category A certified, and have successfully¹ completed lead paint removal on similar structures within 18 months prior to this bid, may bid on and perform this work. **The Contractor must complete and submit a “Lead Abatement Affidavit” prior to being awarded the contract. This form may be downloaded from:**

http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

¹ Successfully: Lead abatement work completed in accordance with contract specifications, free of citation from safety or environmental agencies. Lead abatement work shall include but not be limited to: abrasive blasting; waste handling, storage and disposal; worker safety during lead abatement activities (fall protection, PPE, etc.); and containment. This requirement is in addition to the contractor pre-qualification requirements covered by NCDOT Std. Specification, Section 102-2.

Twelve-month Observation Period - The Contractor maintains responsibility for the coating system for a twelve (12) month observation period beginning upon the satisfactory completion of all the work required in the plans or as directed by the Engineer. The Contractor must guarantee the coating system under the payment and performance bond (refer to Article 109-10). To successfully complete the observation period, the coating system must meet the following requirements after twelve (12) months service:

- No visible rust, contamination or application defect is observed in any coated area.
- Painted surfaces have a uniform color and gloss.
- Painted surfaces have an adhesion that meets an ASTM D-3359, 3A rating.

Final acceptance is made only after the paint system meets the above requirements.

Containment Plan - No work begins until the Contractor furnishes the Engineer with a containment plan for surface preparation and coating operations and the Engineer reviews and responds in writing about the acceptability of said plan. Such plan must meet or exceed the requirements of a Class 2A containment in accordance with SSPC Guide 6. Enclosure drawings and loads supported by the structure must be prepared, signed and sealed by a Registered North Carolina Professional Engineer.

In the containment plan describe how debris are contained and collected. Describe the type of tarpaulin and bracing materials and the maximum designed wind load. Describe the dust collection system and how a negative pressure of 0.03 inches of water column is maintained inside the enclosure while blasting operations are being conducted. Describe how the airflow inside the containment structure is designed to meet all applicable OSHA Standards. Describe how water run-off from rain will be routed by or through the enclosure. Describe how wash water will be contained and paint chips separated. Describe what physical containment will be provided during painting application to protect vehicles and areas not to be painted.

Wash water Sampling and Disposal Plan - No work begins until the Contractor furnishes the Engineer with a containment plan for surface preparation and coating operations and the Engineer reviews and approves in writing said plan. All wash water shall be collected and sampled prior to disposal. Representative sampling and testing methodology shall conform to 15A NCAC 02B.0103, "Analytical Procedures". Wash water shall be tested for pollutants listed in 15A NCAC 02B.0211 (3), 15A NCAC 02T.0505 (b)(1) and 15A NCAC 2T.0905 (h) (See NCDOT Guidelines for Managing Bridge Wash Water). Depending on the test results, wash water disposal methods shall be described in the disposal plan. Wash water shall be disposed of in accordance with all current state and federal regulations.

Waste Handling of Paint and Abrasives – Use a company from the below list of approved waste management companies. Immediately after award of the contract, the Contractor arranges for waste containers, transportation and disposal of all waste. No work begins until the Contractor furnishes the Engineer with a written waste disposal plan. Any alternative method for handling waste must be pre-approved by the Engineer.

Southern Logistics, Inc. – 312 Orvil Wright Blvd, Greensboro, NC 27409 (Ph. 336-662-0292)
A&D Environmental – PO Box 484, High Point, NC 27261 (Ph. 336-434-7750)

All removed paint shall be considered a hazardous waste. The Contractor has the option of furnishing the Engineer certified test reports showing Toxicity Characteristic Leaching Procedure (TCLP) results of the paint chips stored on site, with disposal being in accordance with "Flowchart on Lead Waste Identification and Disposal"

(www.wastenotnc.org/hwhome/guidance/guidance.htm).

If the Contractor elects to have TCLP testing done, samples shall be taken from at least 10% of the barrels to be disposed of, with at least one sample being from each bridge.

Once the waste has been collected and the quantity determined, the Contractor prepares the appropriate shipping documents and manifests and presents them to the Engineer for waste shipment and disposal. The Engineer will verify the type and quantity of waste and obtain a Temporary Waste Disposal Identification Number (TWDIN) from the NC Hazardous Waste Section.

North Carolina Department of Environmental & Natural Resources
1646 Mail Service Center
Raleigh, NC 27699
Phone (919) 508-5400
Fax (919) 715-4061

At the time of shipping the Engineer will sign, date and add the TWDIN in the appropriate section on the manifest. The cost for waste disposal (including any lab fees) is included in the bid price for this contract. Note NC Hazardous Waste Management Rules (15A NCAC 13A) for more information.

Equipment Mobilization - The equipment used in any travel lanes and paved shoulder must be mobile equipment on wheels that has the ability to be moved on/off the roadway in less than 30 minutes. All work conducted in travel lanes must be from truck or trailer supported platforms and all equipment must be self propelled or attached to a tow vehicle at all times.

SUBLETTING OF CONTRACT:

Only contractors certified to meet SSPC QP-2, Category A, and have successfully completed lead paint removal on similar structures within 18 months prior to this bid are qualified for this work. Work is only sublet by approval of the Engineer.

SPECIFICATIONS:

The North Carolina Department of Transportation (NCDOT) Standard Specifications for Roads and Structures dated July 2006, together with these Special Provisions apply to this project. Surface preparation and painting are performed in accordance with Section 442 except where otherwise noted in these Special Provisions. The Paint materials must meet the applicable materials specifications under Section 1080. Materials approvals are in accordance with 3.0 Materials of this Special Provision.

1.0 PREPARATION OF SURFACES:

- 1.1 Power washing with low pressure water – Before any other surface preparation are conducted, all surfaces shall be power washed to remove dust, salts, and other contaminants.
- 1.2 Blasting is done with recyclable steel grit meeting the requirements of Section 1080-15. The profile must be between 1.0 and 3.0 mils when measured on a smooth steel surface.
- 1.3 Before the contractor departs from the work site at the end of the work day, all debris generated during surface preparation are collected in approved containers.
- 1.4 The Contractor cleans a two square foot area at each structure to demonstrate the specified finish and the inspector preserves this area by covering it with tape, plastic or some other suitable means so that it can be retained as a site standard.
- 1.5 Any area of corroded steel (steel which has lost more than 50% of its original thickness) must not be painted until the Engineer observes its condition.
- 1.6 All parts of the bridges not to be painted, and the travelling public, shall be protected from overspray.
- 1.7 Surface chloride levels for painting are 7 PPM or below.

2.0 PAINTING OF STEEL:

Paint System 1, as specified in these special provisions and Section 442 of NCDOT's Standard Specifications, is to be used for this work. System 1 is an inorganic zinc primer and acrylic topcoats used over blast cleaned surfaces in accordance with SSPC-SP-10 (Near White Blast).

Any area where newly applied paint fails to meet the specifications must be repaired or replaced by the Contractor. The Engineer approves all repair processes before the repair is made. Repaired areas must meet the specifications. The Contractor applies an additional finish coat of paint to areas where the tape adhesion test is conducted.

3.0 MATERIALS:

Only paint suppliers that have a NCDOT qualified inorganic zinc primer may furnish paints for this project. All paints applied to a structure must be from the same supplier. Before any paints are applied the Contractor provides the Engineer a manufacturer's certification that each batch of paint meets the requirements of the applicable Section 1080 of the *Standard Specifications*.

The inspector randomly collects a one quart sample of each paint product used on the project. Additional samples may be collected as needed to verify compliance to the specifications.

4.0 INSPECTION:

Quality Assurance Inspection - The Contractor furnishes all necessary apparatus such as ladders, scaffolds and platforms as required for the inspector to have reasonable and safe access to all parts of the work. The contractor illuminates the surfaces to be inspected to a minimum of 50-foot candles of light.

Contractor must insure that chloride levels on the surfaces are 7 PPM or lower using an acceptable sample method in accordance with SSPC Guide 15. The frequency of testing shall be 2 tests per span after all surface preparation has been completed and immediately prior to painting.

NCDOT reserves the right for ongoing QA (Quality Assurance) inspection to include but not limited to surface contamination testing, adhesion pull testing and DFT readings as necessary to assure quality.

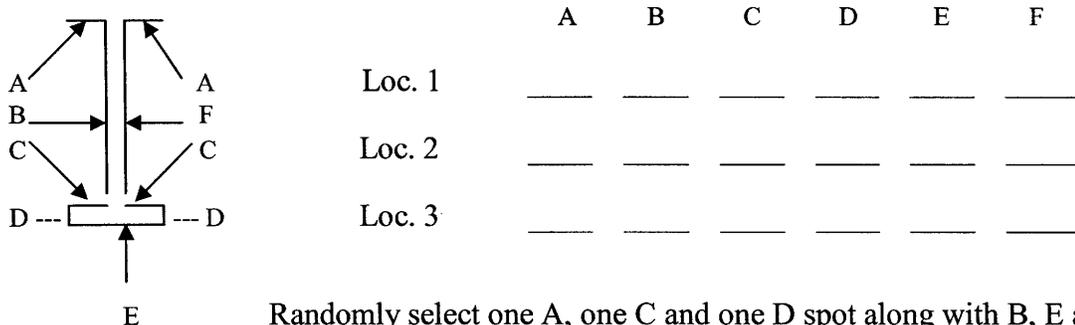
The contractor informs the Engineer of all scheduled and unannounced inspections from SSPC, OSHA, EPA and/or others that come on site.

Inspection Instruments - The Contractor furnishes at least the following calibrated instruments at site and conducts the quality control testing:

- Sling Psychrometer - ASTM E-337 – bulb type
- Surface Temperature Thermometer
- Wind Speed Indicator
- Tape Profile Tester – ASTM D-4417 Method C
- Surface Condition Standards – SSPC VIS-1 and VIS-3
- Wet Film Thickness Gage – ASTM D-4414
- Dry Film Thickness Gage – SSPC-PA2 Modified
- Solvent Rub Test Kit – ASTM D-4752
- Adhesion Test Kit – ASTM D-3359
- Elcometer and dollies
- Surface Contamination Analysis Kit or (Chloride Level Test Kit)

The contractor maintains a daily quality control record in accordance with Section 442-12 and such records must be available at the job site for review by the inspector and be submitted to the Engineer as directed. In addition to the information required on M&T-610, the Contractor shall submit all DFT readings as required on M&T611.

- A. The dry film thickness is measured at each spot as indicated on the attached diagram at no less than three random locations along each girder in each span. Also dry film thickness is measured at no less than six random spots per span on diaphragms/“K” frames. Each spot is an average of three to five readings in accordance with SSPC PA-2.



Randomly select one A, one C and one D spot along with B, E and F.

- B. Two random adhesion tests per span are conducted on interior surfaces after the paint has been properly cured, and will be touched up by the Contractor. One random Cut Tape adhesion test per span is conducted on interior surface after the finish coat is cured, and will be touched up by the Contractor.

5.0 SAFETY AND ENVIRONMENTAL COMPLIANCE PLANS:

Personnel access boundaries are delineated for each work site using signs, tape, cones or other approved means. Submit copies of safety and environmental compliance plans that comply with SSPC QP-2 Certification requirements.

6.0 ENVIRONMENTAL MONITORING:

Comply with Section 442-13(B) of NCDOT's Standard Specifications.

A "Competent Person²" is on site during all surface preparation activities and monitors the effectiveness of containment and dust collection systems. Any visible emissions outside the containment enclosure or pump monitoring results exceeding the level of 30 µg/m³ TWA is justification to suspend the work. Before any work begins the Contractor provides a written summary of the responsible person's safety training.

7.0 HEALTH AND SAFETY RESPONSIBILITY:

Comply with Section 442-13(C) of NCDOT's Standard Specifications. Insure employee blood sampling test results are less than 50 micrograms per deciliter. Remove employees with a blood sampling test of 50 or more micrograms per deciliter from work activities involving any lead exposure.

An employee who has been removed with a blood level of 50 micrograms per deciliter or more shall have two consecutive blood sampling tests indicating that the employee's blood lead level is at or below 40 micrograms per deciliter before returning to work activities involving any lead exposure.

8.0 STORAGE OF PAINT AND EQUIPMENT:

The Prime Contractor provides a location for materials, equipment and waste storage. Tarpaulins are spread over all pavements and surfaces underneath equipment utilized for abrasive recycling and other lead handling equipment or containers.

9.0 UTILITIES:

The Contractor protects all utility lines or mains which may be supported on, under, or adjacent to bridge work sites from damage and paint over-spray.

² **Competent Person** as defined in OSHA 29 CFR 1926.62 is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who have authorization to take prompt corrective measures to eliminate them.

10.0 PAYMENT:

The cost of inspection, surface preparation and repainting the existing structure is included in the lump sum price bid for *Cleaning and Repainting Bridge #___*. This price is full compensation for furnishing all inspection equipment, all paint, cleaning abrasives, cleaning solvents and all other materials; preparing and cleaning surfaces to be painted; applying paint in the field; protecting work, traffic and property; seeding and mulching; and furnishing blast cleaning equipment, paint spraying equipment, brushes, rollers and any other hand or power tools and any other equipment; containment, handling and disposal of debris and wash water, all personal protective equipment, and all personal hygiene requirements.

This price shall be full compensation for all inspection equipment, all materials and labor necessary to fully contain the blast debris; daily collection of the blast debris into the specified containers; and any measures necessary to ensure conformance to all safety and environmental regulations as directed by the Engineer.

MANAGING BRIDGE WASH WATER**Description**

Collect and properly dispose of Bridge Wash Water from bridge decks.

Construction Methods

- (A) Prepare a written Bridge Wash Water management plan in accordance with the Guidelines for Managing Bridge Wash Water available at <http://www.ncdot.org/doh/preconstruct/ps/contracts/letting.html>. Submit plan and obtain approval from the Engineer prior to beginning of the bridge cleaning operation.
- (B) Prior to final payment, submit a paper copy of all completed records pertaining to disposal of Bridge Wash Water.

Measurement and Payment

Payment for collecting, sampling, testing, pH adjustment, monitoring, handling, discharging, hauling, disposing of the bridge wash water, documentation, record keeping, and obtaining permits if applicable, shall be included in the payment for other items.

DESCRIPTION OF BRIDGES:

Bridge #19 Mecklenburg County: The bridge was built in 1976 and carries US21 over I-77. The superstructure consists of 3 spans of 12 lines of W27 I-Beams and 69" plate girders @ 7'-3" spacing. The bridge is 220' in length with a concrete deck and a 80'-0" clear deck width. The minimum roadway under clearance is 15'-10". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 50,707 sq. ft.

Bridge #153 Mecklenburg County: The bridge was built in 1971 and carries La Salle St. over I-77. The superstructure consists of 4 spans of 10 lines of W30 and W36 I-Beams @ 7'-9" spacing. The bridge is 262' in length with a concrete deck and a 65'-4" clear deck width. The

minimum roadway under clearance is 16'-1". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 48,820 sq. ft.

Bridge #202 Mecklenburg County: The bridge was built in 1970 and carries Clanton Rd. over I-77. The superstructure consists of 4 spans of 10 lines of W30 and W33 I-Beams @ 7'-6" spacing. The bridge is 203' in length with a concrete deck and a 68'-0" clear deck width. The minimum roadway under clearance is 15'-11". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 20,533 sq. ft.

Bridge #205 Mecklenburg County: The bridge was built in 1970 and carries Remount Rd. over I-77. The superstructure consists of 4 spans of 10 lines of W33 I-Beams and 48" plate girders @ 8'-5" spacing. The bridge is 312' in length with a concrete deck and a 68'-0" clear deck width. The minimum roadway under clearance is 16'-3". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 41,796 sq. ft.

Bridge #286 Mecklenburg County: The bridge was built in 1971 and carries Oaklawn Ave. over I-77 and Irwin Creek. The superstructure consists of 3 spans of 9 lines of W33 and W36 I-Beams @ 7'-2" spacing and 2 spans of 8 lines of 50" and 57" plate girders @ 8'-3" spacing. The bridge is 382' in length with a concrete deck and a 52'-0" clear deck width. The minimum roadway under clearance is 15'-11". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 47,179 sq. ft.

Bridge #312 Mecklenburg County: The bridge was built in 1971 and carries Cindy Lane over I-77. The superstructure consists of 4 spans of 6 lines of W30 I-Beams and 60" plate girders @ 8'-0" spacing. The bridge is 329' in length with a concrete deck and a 44'-0" clear deck width. The minimum roadway under clearance is 15'-11". The existing paint system is green alkyd over red lead, and the estimated area to be cleaned and painted is 28,403 sq. ft.

Bridge #323 Mecklenburg County: The bridge was built in 1975 and carries US21 over I-77. The superstructure consists of 4 spans of 14 lines of W27 I-Beams and 51" plate girders @ 7'-6" spacing. The bridge is 298' in length with a concrete deck and a 100'-0" clear deck width. The minimum roadway under clearance is 16'-7". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 59,166 sq. ft.

Bridge #334 Mecklenburg County: The bridge was built in 1975 and carries SR2112 over I-77. The superstructure consists of 4 spans of 5 lines of W24 I-Beams and 51" plate girders @ 8'-3" spacing. The bridge is 273' in length with a concrete deck and a 36'-0" clear deck width. The minimum roadway under clearance is 16'-4". The existing paint system is green alkyd over red lead, and the estimated area to be cleaned and painted is 18,959 sq. ft.

Bridge #349 Mecklenburg County: The bridge was built in 1975 and carries SR2113 over I-77. The superstructure consists of 2 spans of 13 lines of W27 I-Beams and 37" tapered plate girders and 3 continuous spans of 36" and 40" plate girders @ approximately 7'-6" and 8'-6" spacing. The bridge is 356' in length with a concrete deck, 78'-8" clear deck width and 92'-3" total deck width. The minimum roadway under clearance is 16'-4". The existing paint system is green alkyd over red lead, and the estimated area to be cleaned and painted is 53,178 sq. ft.

Bridge #355 Mecklenburg County: The bridge was built in 1975 and carries SR2004 over I-77. The superstructure consists of 2 spans of 6 lines of W33 haunched I-Beams and 2 continuous spans of 6 lines of 60" plate girders @ 7'-6" spacing. The bridge is 356' in length with a concrete deck and a 40'-0" clear deck width. The minimum roadway under clearance is 16'-2". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 35,598 sq. ft.

Bridge #356 Mecklenburg County: The bridge was built in 1975 and carries SR2136 over I-77. The superstructure consists of 5 spans of 9 lines of W27 I-Beams and 51" plate girders @ 7'-8" spacing. The bridge is 351' in length with a concrete deck and a 64'-5" clear deck width. The minimum roadway under clearance is 15'-10". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 44,775 sq. ft.

Bridge #357 Mecklenburg County: The bridge was built in 1975 and carries SR2140 over I-77. The superstructure consists of 5 spans of 5 lines of W24 I-Beams and 51" plate girders @ 8'-1" spacing. The bridge is 343' in length with a concrete deck and a 36'-0" clear deck width. The minimum roadway under clearance is 16'-2". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 26,641 sq. ft.

Bridge #362 Mecklenburg County: The bridge was built in 1976 and carries SR2147 over I-77. The superstructure consists of 4 spans of 5 lines of W27 I-Beams and 61" plate girders @ 8'-0" spacing. The bridge is 302' in length with a concrete deck and a 36'-0" clear deck width. The minimum roadway under clearance is 16'-0". The existing paint system is aluminum over red lead, and the estimated area to be cleaned and painted is 24,422 sq. ft.

Paints on all bridges (regardless of color), contain red lead and other hazardous constituents. All cleaning and surface preparation activities must prevent dispersion of debris into the environment.

Surface area shown is approximate and may vary from the actual quantity to be painted. The Contractor is responsible for determining the actual area to be painted.