

**DERRY-LONDONDERRY
13065**

April 16, 2020

SPECIAL PROVISION

AMENDMENT TO SECTION 550 – STRUCTURAL STEEL

This special provision amends Section 550 and applies to the coating of new structural steel as shown on the plans or otherwise specified. This special provision specifies a duplex metallizing/sealer coating as described in the NHDOT Standard Specifications for Road and Bridge Construction, Section 708, Appendix C, Duplex Coatings – Metallizing and Sealer, and as modified herein or as directed.

Amend 550.3.13.1.1 to read:

3.13.1.1 Furnishing and applying shop coatings shall conform to the requirements of NHDOT Standard Specifications for Road and Bridge Construction, Section 708, Appendix C, Duplex Coatings – Metallizing and Sealer, as modified herein or as directed.

Add to Section 708, Appendix C:

I.93.1 DESCRIPTION OF BRIDGE(S)

I.93.1.1 The description of bridges and newly fabricated structural steel to be coated is stated herein. All descriptions regarding the bridge(s) and surface area(s) are intended to be generally, but not guaranteed to be precisely, accurate.

DESCRIPTION OF BRIDGES – SUMMARY TABLE 1.1.1				
City/Town	Br. No.	Route	over	structure type
Londonderry	130/129	Connector Road	I-93 NB, SB	steel I-beam
Derry	053/110	Connector Road	Shields Brook	steel I-beam

Add to Section 708, Appendix C:

1.3.1 SCOPE OF WORK

SCOPE OF WORK - SUMMARY TABLE 1.3.1				
Item. No.	Surfaces to be coated	Surface Preparation	Required Coating System	Final Color
550.1	All structural steel surfaces, including beams, diaphragms, stiffeners, and bearings	SSPC-SP5 & SC 2	Metallizing plus clear sealer coat	Metallizing Gray
550.2	All structural steel surfaces, including beams, diaphragms, stiffeners, and bearings	SSPC-SP5 & SC 2	Metallizing plus clear sealer coat	Metallizing Gray

1.3.1.1 Surfaces to be painted. All new steel surfaces, including beams, stiffeners and connection plates, diaphragms, cross frames, appurtenances, and bearings as described in Table 1.3.1, shall be cleaned and coated, including (if applicable) portions encased in concrete. See Table 1.3.1.

1.3.1.1.1 Finished bearing surfaces. When bearings are to be coated, the surface preparation and coating shall include the machined finish for rolling (but not for sliding) surfaces. All surfaces, including the bottom surface of masonry plates, shall receive the full coating system.

1.3.1.1.2 Field welded surfaces. Mask areas to be field welded as specified and coat with an approved light rust-preventative coat of zinc-rich paint primer of 1.0-2.0 mils. Painted areas to be field welded shall be ground to bare metal immediately prior to welding. After field welding, surfaces of welds and damaged coatings shall be cleaned and prepared with a MBX® Bristle Blaster® power tool, and then recoated with an approved zinc-rich paint primer or galvanizing touch-up according to Section 550.2.9.1, Galvanizing touch-up and repair, to a thickness equal to the surrounding coating.

1.3.1.1.3 Top of top flange. The top of the top flange shall be coated with the full thickness of the duplex metallizing/sealer coating, except that a 3-inch (+/-) longitudinal strip for each line of shear connectors, starting with the first and ending with the last stud, shall be masked and coated with an approved zinc-rich paint primer of 3 mils minimum. Spot areas of primer shall be ground to bare metal in the field immediately before stud welding. Bare steel remaining after welding shall be touched up with zinc-rich paint primer or galvanizing touch-up materials.

Add to Section 708, Appendix C, 2.2.3, Low-lead wire:

- a. Submit a written certificate of conformance to the Department for the coatings supplied stating that the metallizing wire is “lead-free”, i.e. having lead content less than 100 ppm.

Amend Section 708, Appendix C, 2.3.1 first line to read:

Primer:	Thermal Spray Coating (metallizing) Note: See Section 3.6.1, Bolted Connections	10 mils minimum thickness (DFT) (10 mils maximum on faying surfaces)
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Add to Section 708, Appendix C, 3.1.2(1), TSC Applicator Facility:

3.2.3.1 Shop coating contractor- certification of qualification. Fabricators supplying shop applied metallized steel products shall be certified with the American Institute of Steel Construction (AISC) Sophisticated Paint Endorsement (SPE), or with the Society for Protective Coatings (SSPC) Quality Procedure 3 “Standard Procedure for Evaluating Qualifications of Shop Painting Contractors (QP3).

3.2.3.2 Field coating contractor- certification of qualification. Coating contractors and subcontractors shall be certified by the Society for Protective Coatings (SSPC) Painting Contractor Certification Program (PCCP) to the requirements of SSPC-QP1 for all field coating work, including touch-up and repairs to shop-applied coatings, and to the requirements of SSPC-QP2 for work involving the removal or overcoating of lead-bearing paint.