

New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



August 24, 2022

Document Change Announcement

***2016 Standard Supplementary Specifications
Pre-stained Guide Rail Update
DCA2022SS-04***

Subject: Revisions to

**Section 510 Guide Rail, Subsection 510.01 Description
Section 915 Beam Guide Rail, Subsection 915.01 Rail Elements**

Description of Change:

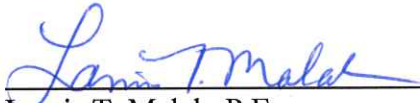
This DCA revises the Standard Specifications previously updated by DCA2021SS-05 to add requirements for the manufacturers' certificates of compliance pertaining to guide rail metal components, and to clarify toxicity restrictions for reactive color treatment materials used for pre-stained guide rail on the Garden State Parkway.

Notice to New Jersey Turnpike Authority Staff and Design Consultants

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <https://www.njta.com/doing-business/professional-services>

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Distribution: Senior Staff Engineering, Law, Maintenance & Operations Depts., All Prequalified Consultant Firms, File

NOTE: All text herein are REVISIONS to the latest version of the 2016 Standard Supplementary Specifications as indicated by tracked changes.

SECTION 510 – GUIDE RAIL

Delete this Section in its entirety and replace with the following:

510.01 Description.

Guide Rail shall consist of steel rail elements mounted on steel posts and recycled/synthetic blockouts, with anchorages, connections, terminals, and other guide rail appurtenances in accordance with the Plans. Work shall include removal, furnishing and installing, salvaging existing single-faced and dual-faced beam guide rail, and resetting guide rail with salvaged material. Work shall also include furnishing and installing side mounted delineators along the beam guide rail element.

When applicable, this work shall also include the installation of end terminals in accordance with manufacturer's recommendations. The Contractor and Subcontractor (if applicable) will be required to have their foremen and superintendents (at a minimum) attend a mandatory training session presented by the manufacturer, prior to the start of construction.

Refer to Section 524 when terminating single-faced or dual-faced beam guide rail with a re-directive impact attenuator.

510.02 Materials.

Materials shall conform to the following Subsections:

RAIL ELEMENT	915.01
POSTS AND RECYCLED/SYNTHETIC BLOCKOUTS	915.02
RUB RAIL	915.05
MISCELLANEOUS HARDWARE	915.03
GUIDE RAIL DELINEATORS	915.06
TERMINALS AND ANCHORAGES	915.07

Portland cement concrete for anchorages and post foundations shall conform to Section 905, Class B.

All metal components along the New Jersey Turnpike and Garden State Parkway shall be galvanized in accordance with Subsection 909.11. All galvanized metal components along the Garden State Parkway shall be pre-stained with a reactive color treatment in accordance with Paragraph 915.01(A)Section 915.04. Treated rail elements shall be stored and transported to the installation site in accordance with the product manufacturer's recommendations. Treated beam guide rail that is damaged, as determined by the Engineer, shall be replaced or repaired in accordance with the reactive color treatment product manufacturer's recommendations.

The Contractor shall submit the manufacturer's certificates of compliance in accordance with Subsection 105.04 and shall include the following information specific to all metal components within Section 915:

- (A) Material test reports for all steel used
- (B) Certificate of compliance for hot dip galvanizing
- (C) Certificate of compliance for reactive color treatment product applied to hot dipped galvanized guide rail. The reactive color treatment certification shall include:
 - (1) Product Trade Name
 - (2) Chemical composition of the product

- (3) Batch or production run identification and date
- (4) Product concentration, application rates, and number of coats
- (5) Ambient conditions during product application and intermittent or final curing
- (6) Duration of time from product application to intermittent or final cure

SECTION 915 – BEAM GUIDE RAIL

Delete this Section in its entirety and replace with the following:

915.01 Rail Element.

Rail elements shall be 12-gauge galvanized steel unless noted on the Plans.

Galvanized beam guide rail elements, including transition sections, connections, end treatments, rounded end sections and buffer end sections, shall be fabricated according to AASHTO M 180, Class A, Type I in Table 1. Ensure that the weight of the zinc coating conforms to AASHTO M 180, Type I in Table 2.

~~Galvanized beam guide rail on the Garden State Parkway shall be pre-stained with a reactive color treatment prior to installation to create a uniform, rustic brown matte finish. The stain product shall be non-toxic and non-hazardous and shall be applied according to the product manufacturer's specifications. The stain product shall penetrate the surface of the steel elements without harming the protective galvanized layer. The stain product finish shall be long lasting and resistant to fading, cracking, or peeling from the sun. The stain product finish shall also be resistant to degradation from exposure to roadway salt and weather elements. Treated rail elements shall be stored and transported to the installation site in accordance with the product manufacturer's recommendations. Treated beam guide rail that is damaged, as determined by the Engineer, shall be replaced or repaired in accordance with the reactive color treatment product manufacturer's recommendations.~~

(A) Pre-Stained Reactive Color Treatment

Galvanized beam guide rail on the Garden State Parkway shall be pre-stained with a reactive color treatment prior to installation to create a uniform, rustic brown matte finish. The stain product shall penetrate the surface of the steel elements without harming the protective galvanized layer. The stain product finish shall be long lasting and resistant to fading, cracking, or peeling from the sun. The stain product finish shall be non-toxic and non-hazardous in its final cured state and shall be resistant to degradation from exposure to roadway salt and weather elements.