

# New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



January 18, 2017

## Document Change Announcement

### *2004 Standard Supplementary Specifications*

#### *Ground Mounted Signs*

*DCA2016SS-03*

#### **Subject: Revisions to**

Section 406 Sign Support Structures, Subsection 406.01 Description

Section 406 Sign Support Structures, Subsection 406.02 Materials

Section 406 Sign Support Structures, Subsection 406.04 Fabrication

Section 406 Sign Support Structures, Subsection 406.06 Sign Structure Foundations

Section 406 Sign Support Structures, Subsection 406.07 Measurement

Section 406 Sign Support Structures, Subsection 406.08 Payment

Section 910 Timber and Timber Preservatives, Subsection 910.12 Timber Posts for Ground Mounted Signs

#### **Description of Change:**

The ground mounted sign details have been updated to be in conformance with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

#### **Notice to NJTA 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 may be incorporated via addendum. Contact your NJTA Project Manager for instruction.

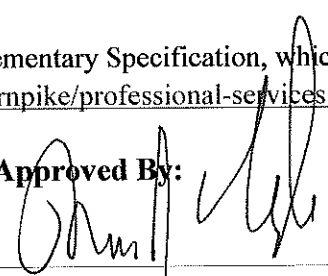
Designers may access these revisions in the Standard Supplementary Specification, which is available on the following Authority Web Page: <http://www.state.nj.us/turnpike/professional-services.htm>

#### **Recommended By:**

  
J. Lawrence Williams, P.E.

Deputy Chief Engineer - Construction

#### **Approved By:**

  
Robert J. Fischer, P.E.

Chief Engineer

*Distribution: Senior Staff Engineering, Law, Maintenance Operations Depts., UTCA, AGC, CIAP, All Prequalified Consultant Firms, File*

# *New Jersey Turnpike Authority*

## DOCUMENT UPDATE REQUEST

Forward to Assistant Chief Engineer, Design

Initiator	Russell Saputo, PE	Submittal Date	6/21/16
Firm	Stantec Consulting Services Inc.	Telephone	201-587-9040

### Document (check one)

- ☐ Procedures Manual
- ☐ Design Manual
- ☐ Sample Plans
- ☐ Standard Drawings
- ☒ Standard Specifications

### Description of Change

Supplementary Specifications - Sections 406.01, 406.02, and 406.04 through 406.08 have been modified. Section 910.12 has been added.

### Reason for Change

The ground mounted sign details have been updated to be in conformance with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

NOTE TO REVIEWER: *Highlighted, italicized text* indicates REVISIONS to the version of the NJTA 2004 Standard Supplementary Specifications which existed prior to the issuance of this DCA.

## SECTION 406 - SIGN SUPPORT STRUCTURES

### 406.01 DESCRIPTION

The following is added:

This work shall also consist of the picking up, transporting to the site, and erecting the sign support truss assemblies and end frames that will be provided by the Authority. This work shall also consist of the removal and salvaging of existing overhead sign structures.

*[Include for Authority furnished ground mounted sign structures.]*

*The following is added:*

*This work shall also consist of the picking up, transporting to the site, and erecting the ground mounted sign support posts or poles and signs that will be provided by the Authority. This work shall also consist of the removal and salvaging of existing ground mounted sign.*

*[Include for Authority furnished ground mounted sign structures.]*

### 406.02 MATERIALS

*The following is added:*

Dense Graded Aggregate Base.....	902.07
Joint Sealer.....	907.02(B)
Treated Timber Posts.....	910.12

### 406.04 FABRICATION

The following is added:

Fabricating and furnishing of the overhead sign support truss assemblies and end frames will be by others. The sign support structures will be stored at the Authority's storage yard located at **[insert location]**.

*[Include for Authority furnished ground mounted sign structures.]*

*The following is added:*

*Fabricating and furnishing of the ground mounted sign support posts or poles and signs will be by others. The sign support structures will be stored at the Authority's storage yard located at **[insert location]**.*

*[Include for all contracts with timber supported ground mounted sign structures.]*

**(C) Supports For Ground Mounted Signs**

*The following is added:*

*Timber posts and poles for ground mounted signs shall be fabricated from lumber of the sizes and lengths called for on the plans or as determined from field conditions.*

**(D) Sign Support Truss, Hangers, Walkway and Railway**

The following is added:

The Authority will provide the sign support truss assemblies and end frames and the Contractor shall furnish, fabricate and install all other materials, such as sign hangers, horizontal support arms for walkways and luminaire support channels, walkway gratings, luminaire support channels, handrails, maintenance ladders and any other miscellaneous hardware necessary to make a complete installation at each location.

*[Include for Authority furnished ground mounted sign structures.]*

**(D) Sign Support Truss, Hangers, Walkway and Railway**

*The following is added:*

*The Authority will provide the ground mounted sign support posts or poles and signs and the Contractor shall furnish, fabricate and install all other materials, such as sign hangers, and any other miscellaneous hardware necessary to make a complete installation at each location.*

**406.05 ERECTION OF SIGN SUPPORT SYSTEMS**

The following is added after the first paragraph:

Prior to removing an existing sign structure or installing a new one, the Contractor shall submit details of the operation to the Engineer for approval at least 72 hours in advance.

*[Include in contracts involving removal of existing overhead sign structures.]*

The following existing overhead sign structures shall be removed as a part of this Contract:

Span Sign Structure No. **[insert number]**, located at **[insert location]**.  
Cantilever Sign Structure No. **[insert number]**, located at **[insert location]**.  
Butterfly Sign Structure No. **[insert number]**, located at **[insert location]**.

These existing sign structures shall not be removed until they are no longer necessary. Any existing sign panels that conflict with a new traffic pattern shall immediately be removed from the sign structure and the sign illumination shall also be disconnected.

All sign panels, truss frames, arms, walkways, lighting, hardware, etc. that is deemed salvageable by the Engineer shall be loaded, transported and off-loaded by the

Contractor to the Authority's storage yard located at [insert location]. Any non-salvageable items shall be disposed of in a satisfactory manner off Turnpike property by the Contractor.

Sign structure footings shall be removed to a depth two (2) feet below finished grade and backfilled. Removal of the sign structures and footings shall be performed with extreme care so as to avoid damage to the facilities of the NJ Turnpike and to prevent any needless interference or delays to Turnpike patron traffic.

[Include for Authority furnished sign structure.]

The following overhead sign structures shall be erected as part of this Contract:

Span Sign Structure No. [insert number], located at [insert location].

Cantilever Sign Structure No. [insert number], located at [insert location].

Butterfly Sign Structure No. [insert number], located at [insert location].

The Authority shall furnish the sign support truss assemblies and end frames and the Contractor is responsible for furnishing all labor equipment necessary for delivering these items to the job site, erecting them on new pedestals, furnishing and installing all other required materials, such as sign hangers, horizontal support arms for walkways and luminaire support channels, walkway gratings, luminaire support channels, handrails, maintenance ladders and miscellaneous hardware resulting in a completed overhead sign structure in accordance with the plans, specifications and as directed by the Engineer.

Removal and salvaging of electronic sign systems from overhead sign structures that are to be removed shall be as specified in Division 600.

## 406.06 SIGN STRUCTURE FOUNDATIONS

---

[Include for Authority furnished ground mounted sign structures.]

### (C) Foundations For Ground Mounted Signs

---

*The following is added:*

*Install stainless steel bolt, lock washer and nut in the bottom of the sleeve. Place timber post, with shim plates attached, in the sleeve in the excavated foundation. Carefully set the sleeve, using the temporary framing to ensure proper location. Seal the opening between the post and concrete with silicone joint sealer to prevent water infiltration into the sleeve.*

*Limit field cutting of posts or poles to a minimum. Field treat the cut area with the original post or pole preservative.*

## 406.07 MEASUREMENT

---

[Include for contracts involving removal of existing sign structures.]

The following is added:

Removal of overhead sign structures will be measured on a lump sum basis for each span, cantilever or butterfly type sign structure, and shall also include the removal of the existing footings and the delivery of all salvageable components as described in Section 406.05.

[Include for Authority furnished ground mounted sign panels.]

*Timber posts and poles for all Ground Mounted Signs will be measured in Linear Feet.*

*Excavation, formwork, concrete, steel post sleeves and fasteners for timber posts for Ground Mounted Signs will not be measured for payment, but the cost thereof shall be included in the bid price for the Timber Posts and Timber Poles.*

[Include for Authority furnished sign structures.]

Installation of new overhead sign structures will be measured on a lump sum basis for each span, cantilever or butterfly type sign structure, and shall include the pickup, delivery and complete installation as described in Section 406.05.

#### **406.08 PAYMENT**

The following is added:

<b>PAY ITEM</b>	<b>PAY UNIT</b>
Remove Existing Span Sign Structure No. _____	Lump Sum
Remove Existing Cantilever Sign Structure No. _____	Lump Sum
Remove Existing Butterfly Sign Structure No. _____	Lump Sum
Install Overhead Span Sign Structure No. _____	Lump Sum
Install Overhead Cantilever Sign Structure No. _____	Lump Sum
Install Overhead Butterfly Sign Structure No. _____	Lump Sum

[Include for Authority furnished ground mounted sign panels.]

<b>PAY ITEM</b>	<b>PAY UNIT</b>
Timber Posts, ___" x ___"	Linear Feet
Timber Poles, Class ___	Linear Feet

Removal and salvaging of electronic sign systems from overhead sign structures that are to be removed shall be paid for separately under Division 600.

NOTE TO REVIEWER: The following language is ADDED to the version of the NJTA 2004 Standard Supplementary Specifications which existed prior to the issuance of this DCA.

## SECTION 910 - TIMBER AND TIMBER PRESERVATIVES

[Include for all contracts with timber supported ground mounted sign structures.]

The following is added:

### 910.12 TIMBER POSTS FOR GROUND MOUNTED SIGNS

Timber posts for breakaway ground mounted signs shall be S4S Grade No. 2 Southern Pine, and for non-breakaway ground mounted signs S4S Dense Select Structural Southern Pine in accordance with Southern Pine Inspection Bureau and shall be sound, square-edge, saw-finished, with no heartwood requirements, conforming to AASHTO M168. All timber shall receive preservative treatment conforming to the requirements of AASHTO M133 and AWPA Standard C2 or C14 as specified below.

Timber Posts/Usage	AWPA Standards	Wood Species/ Treatment Process Minimum Retention (Lb/Cu Ft)	
		Southern Pine	
		Creosote	CCA/Penta
Posts sawn on four sides	C2 or C14	12	0.60