New Jersey Department of Transportation 1035 Parkway Avenue, PO Box 600, Trenton, New Jersey 08625-0600 Baseline Document Change Announcement		
ANNOUNCEMENT:	BDC228-16	
DATE:	July 17, 2023	
SUBJECT:	 Steel Square Tube Posts Revision to the 2019 Standard Specifications for Road and Bridge Construction, Subsection 612.02, Subpart 612.03.01, Subsection 612.04, Table 911.01.01-2, and Subparts 911.01.02 and 911.02.01. 	
REFERENCES:	 Steel Square Tube Posts Revision to "Section 13 – Ground Mounted Sign Supports" of the Roadway Design Manual, 2015 BDC22MR-02 dated July 17, 2023 Steel Square Tube Posts Addition of CD-612-4A to the Standard Construction Details 2016, Roadway BDC22D-02 dated July 17, 2023 	

Subsection 612.02, Subpart 612.03.01, Subsection 612.04, Table 911.01.01-2, and Subparts 911.01.02 and 911.02.01 of the 2019 Standard Specifications for Road and Bridge Construction have been revised. The introduction of steel square tube posts will increase the number of options to orient traffic signs properly during installation, shorten the sign installation process by using a lesser number of adapters than U-channel posts, and will increase the lifetime of each installation that currently requires adapters, as each adapter may lessen the rigidity of the post/sign assembly. Square tube posts are also more readily available than U-posts.

This revision must be read in conjunction with the referenced BDC announcements.

The following revisions have been incorporated into the 2019 Standard Specifications via the Standard Inputs, SI2019:

612.02 MATERIALS THE FOLLOWING MATERIAL IS CHANGED TO:

612.03 CONSTRUCTION

THE FOLLOWING SUBPART HEADING AND SECOND PARAGRAPH ARE CHANGED TO:

612.03.01 Regulatory and Warning Signs, and Guide Sign, Type GA Steel "U" and Square Tube Post Supports

If sign placement conflicts with existing conditions, obtain RE approval to adjust the sign location. Determine the sign post lengths based on the final grade.

Mount sign panels on breakaway steel "U" or square tube post sign supports. For signs located behind guide rails or other roadside barriers, mount sign panels on steel "U" or square tube post sign supports without the breakaway assembly.

612.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS CHANGED TO:

Item GUIDE SIGN, TYPE GA, STEEL "U" OR SQUARE TUBE POST SUPPORTS Pay Unit SQUARE FOOT

911.01.01 Materials

THE SECOND SIGN TYPE IN TABLE 911.01.01-2 IS CHANGED TO:

Table 911.01.01-2 Allowable Sign Sheeting Types			
Sign Type	Test Method	Туре	
Regulatory and Warning Signs	ASTM D 4956	Type III, Type VIII, Type IX or Type XI ¹	
Guide Signs Mounted on Steel "U" or Square Tube Posts	ASTM D 4956	Type III, Type VIII, Type IX or Type XI	
Guide Signs Mounted on Overhead Sign Structures, Breakaway Sign Supports, or Non-breakaway Sign Supports	ASTM D 4956	Type VIII, Type IX or Type XI ²	
1. Ground-mounted signs with white background shall be ASTM Type IX.			

2. Do not use ASTM Type XI sheeting with any existing sign lighting improvement or signs that are lit.

911.01.02 Fabrication

THE THIRD PARAGRAPH OF PART A IS CHANGED TO:

For multiple panel signs, use 1 foot wide extruded sections bolted together. Join sign panel sections together at the flanges with 3/8 inch bolts. Attach the sign panels to vertical supports, ensuring that the span between vertical supports is a maximum of 18 feet. Do not use extruded sign panels with steel "U" or square tube post sign supports. Use the same material and color for trim molding that is used for the sign face.

911.02 SIGN SUPPORTS

THE FOLLOWING SUBPART HEADING IS CHANGED TO, AND THIRD AND FOURTH PARAGRAPHS ADDED:

911.02.01 Steel "U" and Square Tube Post Sign Supports

Use steel "U" post sign supports conforming to ASTM A 499, Grade 50 or 60, with the length of post and minimum pounds per foot as shown on the Plans. Provide 18-8 stainless steel $5/16 \times 18$ UNC hexagonal headed bolts and nuts conforming to ASTM A 320, Grade B8, Class 1, for securing the signs to the steel "U" post. Provide sign mounting bolts that are sized to extend beyond the end of each nut by no more than 3/4 inches when fully tightened.

Submit a certification of compliance, as specified in <u>106.07</u>, for "U" posts.

Use square steel tube post sign supports conforming to ASTM A 1011, Grade 50, with the length of post and minimum pounds per foot as shown on the Plans. Provide 18-8 stainless steel $5/16 \times 18$ UNC hexagonal headed bolts and nuts conforming to ASTM A 320, Grade B8, Class 1, for securing the signs to the square steel tube post. Provide sign mounting bolts that are sized to extend beyond the end of each nut by no more than 3/4 inches when fully tightened. Submit a certification of compliance, as specified in 106.07, for square steel tube posts.

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:

Approved By:

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PS: NE: MS