

HIGHWAY SIGNING.

(REV 2-15-24) (FY 2024-25)

ARTICLE 700-1 is deleted and the following substituted:

700-1 Description.

Furnish and install roadway signs in accordance with the details in the Standard Plans and as shown in the Plans.

Erect ground traffic signs as signs on the shoulders, slopes, or medians. Signs are classified as single column(post), multi-column, or In-Street signs.

Erect overhead traffic signs partially or completely over the traveled roadway or mounted on bridges. Overhead traffic signs are classified as span wire mounted, mast arm mounted, overhead cantilever structure, or overhead span structure traffic signs.

The sign face(s) may be a single or combination of static sign panels, illuminated sign panels, dynamic message signs, or electronic display signs.

Fabricate standard sign panel messages in accordance with details included in the Standard Highway Signs (SHS) manual published by the U.S. Department of Transportation, the Plans, or Standard Plans. Submit shop drawings to the Department for approval, as specified in Section 5.

All Traffic Control Signals and Devices must meet the requirements of Section 603.

700-1.1 Sign Maintenance: The work to be performed for roadway sign maintenance includes removal and replacement or repair of signs, and miscellaneous maintenance of roadway signs as directed in the Work Document issued by the Engineer. Perform the work in accordance with the details in the Standard Plans.

700-1.1.1 Sign Replacement: Replace roadway sign assemblies, including sign panel(s), post(s), and foundation, by furnishing and installing roadway signs in accordance with the details in the Standard Plans and as shown in the Contract Documents.

700-1.1.2 Sign Repairs: Perform repairs on existing signs, including installation of sign panel overlay, repair, or replacement of existing sign panel.

700-1.1.3 Foundation Repairs: Perform repairs including installation of sign support foundation, removal of sign support foundation, and repair of existing sign support assembly.

700-1.1.4 Miscellaneous Sign Maintenance: Perform minor repairs of roadway signs, including straightening of panels and supports, tightening or replacement of bolts, nuts, washers, and fasteners.

700-1.1.5 Cleaning Sign Panels: Perform cleaning of sign panels.

700-1.1.6 Minimum Inventory: Maintain an inventory of certified regulatory roadway signs and sign supports for timely response to unanticipated roadway sign replacements.

SUBARTICLE 700-2.2 is deleted and the following substituted:

700-2.2 Static Sign Assembly Requirements:

700-2.2.1 Static Sign Panels: Provide aluminum sheets for sign panels meeting the requirements of Section 965 and Section 994. Meet the minimum thickness requirements of Table 700-1.

For flip signs, use continuous hinges constructed of ANSI grade 316 stainless steel.

For In-Street signs, see 700-7.

Table 700-1 Static Sign Panel Requirements	
Type	Minimum Thickness
Overlay Existing Sign Panels	0.040
Single column ground sign	0.08 inch
All other sign panels	0.125 inch

700-2.2.2 Sign Panel Mounting Hardware: Provide aluminum materials (plates, bars, shapes, bolts, nuts, and washers) in accordance with Section 965. Stainless steel mounting hardware meeting Table 962-6 (ASTM F593 for bolts and ASTM F594 for nuts) may be substituted. Steel plates, shapes and hardware must meet Section 962.

700-2.2.3 Retroreflective Sign Sheeting: Sign sheeting must meet the requirements of Section 994 and Table 700-2.

Table 700-2 Retroreflective Sign Sheeting*		
Application	Sheeting System Type	Notes
All signs and retroreflective strips, except as otherwise noted below	Type XI	
School: S1-1, S3-1, S3-2, S4-5, S4-5a, S5-1 (SCHOOL portion) Bicycle: W11-1 Pedestrian: R1 6, R1 6a, R1 6b, R1 6c, R1 9, R1 9a, R10 15, W11 2 Shared Use Path (trail): W11 15, W11 15a	Type XI fluorescent yellow green sheeting**	Includes supplemental panels
* All digitally printed signs and red silkscreen inks require a clear overlay for UV protection. **Do not mix signs having fluorescent yellow green sheeting with signs having yellow retroreflective sheeting.		

SUBARTICLE 700-3.3 is expanded by the following Subarticles:

700-3.4 Overlay Sign Panels: Prior to fabricating, field measure the length, height, and radius of all existing panels where overlay will be required. Install overlay sign panels by replacing hex head bolts on the sign surface using stainless steel flat head machine screws with nuts and lock washers to give a flat surface for the overlay panel. Install the overlay panels starting at the edge away from traffic. Place each panel against the sign using a clamp at the top to hold the panel in place. Drill 1/8-inch holes one inch inside all the panel edges every 6 to 8 inches and install 1/4-to-3/8-inch length pop rivets. Place the remaining panels using the same

procedure with the overlap in the direction away from the traffic and with rivets along the overlap on 12-inch centers.

700-3.5 Static Sign Panel Cleaning: Clean static ground and overhead signs to remove dirt, residue, stains, and other markings. Use environmentally safe cleaning solutions. Apply products in accordance with the manufacturer's written recommendations.

ARTICLE 700-9 is expanded by the following Subarticles:

700-9.14 Single Column Ground Sign Panel Overlay: Measurement for each sign panel overlay will be the area, in square feet of sign panel sheeting area.

700-9.15 Multi-Column Ground Sign Panel Overlay: Measurement for each sign panel overlay will be the area, in square feet of sign panel sheeting area.

700-9.16 Overhead Ground Sign Panel Overlay: Measurement for each sign panel overlay will be the area, in square feet of the sheeting area.

700-9.17 Sign Panel Repair: Measurement for repairs to single column, multi-column, overhead truss, and overhead cantilever signs will be made per each assembly.

700-9.18 Sign Support Foundation: Measurement for Sign Support Foundation will be made per each.

700-9.19 Sign Support Foundation Removal: Measurement for removal of Sign Support Foundation will be made per each.

700-9.20 Sign Support Structure Repair: Measurement for aluminum and steel sign support repairs will be made per pound of material for the repair.

700-9.21 Sign Panel Cleaning: Measurement for cleaning of single column, multi-column, and overhead sign panels will be the area, in square feet of sign panels cleaned.

SUBARTICLE 700-10.14 is deleted and the following substituted:

700-10.14 Sign Panel Overlay: The Contract unit price per each sign panel overlay will include the overlay panel, hardware, and labor necessary for a complete and accepted installation.

ARTICLE 700-10 is expanded by the following Subarticles:

700-10.15 Sign Repair: The Contract unit price for repairing existing signs includes panels, support assemblies, and all hardware and labor necessary to complete the operation.

700-10.16 Sign Support Foundation: The Contract unit price for each sign support structure will include posts and supports, foundation, excavation, site grounding, painting, and incidentals necessary for a complete and accepted installation.

700-10.17 Sign Support Repair: The Contract unit price for sign support repairs will be full compensation for all labor, equipment, materials, and incidentals necessary to repair sign supports as specified including any breakaway or frangible devices necessary. The weight in pounds will be the actual length of replaced material, measured in place, times the pounds per foot shown in the section designation in the Base Connection Data Table provided in Standard

Plans, Index No. 700-020, as amended. Industry standard weights may be used for items not included in the Standard Plans, as determined by the Engineer.

700-10.18 Sign Panel Cleaning: The Contract unit price for sign panel cleaning will be full compensation to furnish all equipment, labor, materials, and incidentals necessary to clean signs.

Payment will be made in accordance with the pay items listed in the Bid Price Proposal.