

HIGHWAY SIGNING.

(REV 12-16-24) (FY 2025-26)

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.

The work to be performed for roadway sign maintenance includes routine maintenance activities and responding to and performing emergency sign maintenance activities when work needs are critical to the safety of the traveling public. Routine sign maintenance includes sign repair, sign panel overlay, sign support foundation repair, and sign panel cleaning. Responding to and performing emergency sign maintenance includes but is not limited to immediate replacement of damaged or missing regulatory signs, installation of temporary signs, and installation of temporary barricades or other temporary traffic control devices until permanent repairs can be made. Perform the work in accordance with the details in the Standard Plans.

700-1.1 Sign Repairs: Perform repairs on existing roadway signs, including straightening of panels and supports, tightening or replacement of bolts, nuts, washers, and fasteners.

700-1.2 Sign Panel Overlays: Furnish and install sign panel overlays. Use sign panel overlay with the same type and color of sheeting as the sheeting on the existing sign. If applicable, remove existing sign panel overlay(s) prior to installation of new overlay sign panel.

700-1.3 Sign Structure Foundation Repairs and Removal: Perform repairs including installation of sign support foundation, removal of sign support foundation, and repair of existing sign support assembly.

700-1.4 Cleaning Sign Panels: Perform cleaning of sign panels.

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:

700-3.4.1 Measurement: Prior to fabricating sign panel overlay, field measure the length, height, and radius of the existing panels and the area of the panel where the overlay is required.

700-3.4.2 Fabrication: Fabricate overlay sign blanks in accordance with 994-3.4, with sign blanks at appropriate dimensions so the overlay panel and overlay panel hardware will not conflict with information to remain on the existing sign panel and will not extend beyond the dimension of the original sign panel.

700-3.4.3 Hardware: Replace hex head bolts on the original sign surface with flat head sign panel mounting hardware meeting the requirements of 700-2.2.2. Install overlay

sign panels with sign panel mounting hardware that is no less than 1/4 inch in diameter and meets the requirements of 700-2.2.2. Use sign sheeting nylon washers as required.

700-3.4.4 Installation Method: Install partial message overlays in such a way as to match the existing information and alignment. When multiple panels are required to fabricate the overlay, butt panels together snugly and in proper alignment. Securely fasten each overlay sign panel to the existing sign as described below.

Install fasteners at a maximum spacing of 8 inches around the perimeter of each overlay panel, 1 inch from each edge. Install vertical columns of fasteners in the field of each overlay panel, evenly spaced between edge fasteners, at a maximum spacing of 18 inches between vertical columns. Install fasteners in each vertical column in the field of an overlay panel with a maximum spacing of 12 inches. Install all hardware in a sequence to prevent buckling of the sign panel overlay.

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 for the square feet measurement of each sign panel overlay includes the overlay panel(s), hardware, labor, and equipment necessary for a complete and accepted installation, and includes removal of previously installed sign panel overlay if present.

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.