Amend **Section 621 - Traffic Control Signs** to read as follows:

"SECTION 621 - TRAFFIC CONTROL SIGNS

621.01 Description. This work includes furnishing and installing sign posts and foundations, reflector markers, object markers, signs, sign panels, route markers, construction signs, milepost markers, removing sign supports; and sign supports; and incidental work necessary to complete the work.

621.02 Materials. Concrete for sign structures shall be of the class specified in the contract and shall conform to Section 601 - Structural Concrete. Other materials shall conform to the following:

Zinc Paints	708.02
Dark Green Enamel Paint	708.03
Paint Thinner	708.04
Signs	712.20
Reflector Marker	712.21
Flexible Delineator Post	712.51
Sign Posts	713.11
Fasteners for Signs	713.12
Ground Mounted Destination and Expressway Sign Supports	713.13

Retroreflective sheeting type shall conform to ASTM Designation D 4956-89 or as amended according to Subsection 712.20.

621.03 Construction Requirements.

(A) Destination and Expressway Sign Supports. Submit shop drawings for acceptance before assembling according to Section 501 - Steel Structures.

Welding shall be continuous and shall conform to Section 501 - Steel Structures.

The weld metal at transverse joints shall extend to the sleeve, making the sleeve an integral part of the joint. Make the longitudinal welds by the submerged arc process. Ground flush the welds except fillet welds with the base material.

Hot-dip zinc-coat the exposed surfaces including the inner portion of the tubular posts and arms after fabrication. Hot-dip zinc-coat the upper 10 inches of anchor bolts. Zinc-coating shall be according to Section 501 - Steel Structures.

Paint the ground mounted destination and expressway sign supports and overhead expressway sign posts, crossarms and panel frames at the work site after proper preparation of the zinc-coated surfaces according to Section 501 - Steel Structures. The exception is that painting shall include one prime coat of zinc-dust zinc-oxide primer followed by two coats of dark green enamel paint as specified.

The aluminum sign supports shall conform to Section 713.14(B) - Aluminum Supports.

(B) Sign Supports. Install permanent signs on posts as specified in the contract. Set the posts plumb at the required locations.

(1) Sign Posts. Use flange channel posts or 12or 14gauge square tube posts of the size specified in the plans for:

(a) Regulatory, warning, and construction signs,

(b) Route marker assemblies,

(2) Reflector Marker, Milepost Marker, And Type II Object Marker Posts. Reflector marker, milepost marker, and Type II object marker posts shall be either metal posts or flexible delineator posts as specified in the contract. Zinc-coat the metal posts. The metal post shall be 1.12 pounds per foot flanged channel posts or one and a half inch, 12 or 14 gauge square tube posts.

(3) Destination Sign Posts. Destination sign posts shall be zinc-coated steel posts, flanged channel posts, or 12 or 14 gauge square tube posts of the size specified in the contract.

(C) Destination And Expressway Signs. The Contractor shall be responsible for submitting shop drawings pertinent to the fabrication of destination and expressway signs.

Assemble and check the panels in the shop for straightness, alignment, and dimensions. Correct the variations according to the contract.

Install the sign panels carefully and securely according to the contract. Replace chipped or bent signs at no cost to the State.

(D) Reflector Marker. Make the reflector marker according to the dimensions and notes shown in the contract:

(1) Reflector markers RM-1, RM-2, and RM-3 shall be either:

(a) Type III or IV retroreflective sheeting markers,

(b) Glass sphere reflector markers with four inch by five inch reflector units, or

(c) Plastic prismatic reflector markers with three inch diameter reflector units.

(E) Type II Object Marker. Make Type II object markers according to the dimensions and notes shown in the contract. Reflective sheeting material shall conform to Subsection 712.20(C)(4) - Type III or IV Retroreflective Sheeting.

(F) Splicing of Sheet Reflecting Material. When using reflecting material as a background or signs with sheet aluminum backing, the Engineer will not allow splicing on legends. The reflecting material shall be of one piece whenever the sign dimensions are four feet by six feet or less.

(G) Labeling of Signs. Label the back of each new sign installed with the following information:

(1) Route Number,

(2) Mile Post (same as the existing sign), and

(3) Date (date the Contractor installs the sign).

The labeling shall be one inch high numbers using a black permanent felt-tipped marker.

(H) Construction Signs. Erect construction signs at the beginning of project and at the end of project at the location indicated by the Engineer. These signs shall remain for the duration of the highway project. Maintain these signs. Place these signs besides the required traffic control signs called for in Section 645 - Traffic Control.

The construction signs shall be new and become the property of the Contractor.

(I) Overlay Panels. Refurbish specific signs designated on the plans with overlay panels. The messages, shields, arrows, and borders shall conform to requirements set in the latest edition and amendments of the 'Manual on the Uniform Traffic Control Devices' (MUTCD), and as specified herein.

The overlay panels shall consist of aluminum sheets reflectorized according to Subsection 712.20. Reflectorize the messages, arrows, and border with Type III or IV retroreflective sheeting or acrylic plastic reflex reflectors. Reflectorize the shield symbol with Type III or IV retroreflective sheeting. The aluminum sheet shall conform to ASTM B 209, alloy 6061-T6 flat sheet, and shall be a minimum 0.100-inch thick.

Verify the sizes of sign panels affected and the sizes, shape and format of letters, numerals, symbols and borders before fabrication. Inform the Engineer immediately of discrepancies. Correct the discrepancies. Submit for acceptance the final design of the sign before fabrication.

Fabricate and install the overlay panels according to the manufacturer's instructions and as specified by the Engineer. Submit for acceptance splices before fabrication.

Remove existing letters, numerals, symbols and borders. Clean the existing sign panel before installation of the overlay. Clean and prepare the sign panel for overlaying as recommended by the panel manufacturer and as specified by the Engineer.

Installation of prefabricated overlay panels may be done with the existing sign panel remaining in place, subject to Engineer's acceptance of its methods. Engineer's acceptance will contingent upon safety, its traffic control provisions, provisions for the protection of the public and equipment. The Contractor shall be responsible for damages to public property including vehicles, as specified in Subsection 107.16 - Protection and Restoration of Property and Landscape, including all vehicles.

(J) Relocation of Existing Signs. Remove, clean, and fasten existing regulatory or warning signs to be relocated to new posts or supports according to the Standard Plans. Materials such as posts, nuts, bolts, washers, base support, brackets, and necessary hardware to install the existing sign shall be new. Submit the relocated sign location for acceptance.

621.04 Method of Measurement. The Engineer will measure for the following per each:

(1) signs, reflectorized delineator, and markers per each.

(2) destination ('D' designation) or expressway ('E' designation) sign posts .

The Engineer will measure for the following per square foot of sign face:

(1) destination, expressway, directional, and exit number sign panels

621.05 Basis of Payment. The Engineer will pay for the accepted regulatory and warning signs and markers at the contract unit price per each complete in place. The price includes full compensation for excavating and backfilling, furnishing and installing materials, labeling, and furnishing equipment, tools, labor and incidentals necessary to complete the work.

The Engineer will pay for the accepted construction signs at the contract unit price per each complete in place. The price includes full compensation for sign panels, posts, nuts, bolts, washers, base support, brackets and necessary hardware, labor, tools, equipment and incidentals necessary for the installation, maintenance, removal, cleaning, delivering, and storing of the signs with posts.

The Engineer will pay for the accepted destination sign posts ('D' designation) at the contract unit price per each complete in place.

The Engineer will pay for the overlay panels per square foot of sign face.

The Engineer will make payment under:

Pay Item	**Pay Unit**
Regulatory and Warning Sign _____	Each
Construction Sign _____	Each
Reflector Marker _____	Each
Type II Object Marker	Each
Breakaway Steel Post _____ and Foundation for Ground Mounted Destination Sign	Each
Panel for _____	Square Foot

END OF SECTION