

**SECTION 633  
PERMANENT TRAFFIC CONTROL**

**633.01**      **DESCRIPTION** - Delete the text of this subsection and substitute the following:

- a. This work consists of constructing permanent traffic control signs, supports, delineators, and object markers, and removing and resetting permanent traffic control devices, where indicated on the plans.
- b. Sign panels are designated as aluminum.
- c. Sign retroreflective sheeting shall conform with The Latest Manual on Uniform Traffic Control Devices, MUTCD-2009 Edition.
- d. Posts are designated as steel and shall conform with The Latest Manual on Uniform Traffic Control Devices, MUTCD-2009 Edition, and The Latest Edition of AASHTO's "Specifications for Structural Support for Highway Signs, Luminaires, and Traffic Signals".
- e. Type 1 Sign. Defined as a single post mounted sign, regardless of the number of sign panels.
- f. Type 2 Sign. Defined as a two post mounted sign, regardless of the number of sign panels.

**633.02**      **MATERIALS** – Delete the text and substitute the following:

- a. Sign Panels. Aluminum per ASTM B209, alloy 6061-T6 or 5052-H38. Size and shape of panel shall be as indicated on the plans. Sign to be provided by the manufacturer shall be of Federal Highway Administration (FHWA) Standards, approved for use as permanent traffic control signs.
- b. Concrete. Concrete and materials for concrete work shall conform with section 601.
- c. Sign Post. Sign post to be hot dip galvanized per ASTM A123 with minimum zinc coating of 2.0 oz. /ft<sup>2</sup>. Post provided by the manufacturer to be also FHWA approved for use as a sign support.
- d. Hardware. Lag screws, washers, clip angles, shear plates, bolts, clamps, nuts and other fasteners shall be of galvanized steel per ASTM A153.
- e. Retroreflective Sheeting. Type III, high intensity sheeting with encapsulated glass beads or prismatic material, as approved by FHWA for use in signs.
- f. Letters, Numbers, Arrows, Symbols, and Borders. Letters, numerals, borders, arrow, symbols, and other markings shall conform to The Latest Manual on Uniform Traffic Control Devices, MUTCD-2009 Edition, for the type of sign indicated on the plans. Colors for the signs shall conform with the MUTCD-2009 Manual unless otherwise noted on the plans.

## CONSTRUCTION REQUIREMENTS

**633.03**      **GENERAL** – Revise the paragraph to read as follows:

Furnish traffic control devices according to the MUTCD and Standard Highway Signs published by FHWA. Manufacturers of the materials for permanent traffic control devices to provide certification that their materials are FHWA approved for use as a sign and sign support. Submit the sign list for Contracting Officer's approval before ordering.

**633.04**      **SUPPORTS** – Add the following:

Construct sign post with break-away capability at its base as indicated on the plans.

**633.05**      **PANELS** – Amend the first sentence to read as follows:

Use Type III retro-reflective sheeting.

**633.07**      **REMOVING AND RESETTING PERMANENT TRAFFIC CONTROL DEVICES** – Add the following text to this subsection:

- a. Where indicated on the plans, carefully remove existing signs, and store in a manner to prevent further injury or harm to the sign. Reset signs with its existing footing intact if possible.

**633.09**      **MEASUREMENT** - Revise this subsection to read as follows:

- a. Measure new sign installations by the each as follows:
  - i. Measure each installation as one sign unit for Type 1 or Type 2 signs regardless of the number of sign panels in the installation unit;
  - ii. Measure of each installation to also include post support and hardware for a complete installation; and
  - iii. Measure of each installation to also include excavation, backfill, and concrete work.

**633.10**      **PAYMENT** – Revise this subsection to read as follows:

The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the pay item listed below that is shown on the Bid Schedule. Payment will be full compensation for the work prescribed in this section. See subsection 109.05.

Pay Item No.	Pay Item	Pay Unit
63301	Traffic Sign, Type 1, complete-in-place	Each

## END OF SECTION 633