

ITEM 646

ROADSIDE TRAFFIC SIGN SUPPORTS

- 646.1 Description. This Item shall govern for furnishing and installing supports of steel tubing which are used for traffic signs normally erected to a minimum height of 7 feet from top of pavement edge to the bottom of the lowest sign on the support, in accordance with the Latest Edition of the "Texas Manual on Uniform Traffic Control Device" (TMUTCD). Placement of roadside traffic sign supports shall also provide appropriate lateral clearance to signs in accordance with the TMUTCD.
- 646.2 Materials. High visibility yellow coated galvanized sign posts shall be as shown in Table 1:

TABLE 1

	Pipe	Square Tubing
Nominal Size:	2"	<u>1-3/4" x 1-3/4"</u>
Outside Diameter:	2.375" (2-3/8")	<u>1-3/4" x 1-3/4"</u>
Wall Thickness:	0.065"	<u>0.083"</u>
Weight Per Foot:	1.604 lbs.	<u>1.75 lbs.</u>
Length:	10 or 11 feet, as specified	<u>10 or 11 feet, as specified</u>
Holes:	3/8 inch holes punched as required	<u>3/8 inch holes punched as required</u>
<u>Hardware:</u>	<u>5/16" hex bolt with nut, lock washer, 2 flat washers per ASTM A307 galvanized per ASTM A153</u>	<u>5/16" hex bolt with nut, lock washer, 2 flat washers per ASTM A307 galvanized per ASTM A153</u>

Tubing shall be manufactured from steel sheeting conforming to ASTM A513. The tubing shall be hot dipped galvanized per ASTM A653 to obtain a zinc weight of 1.8 ounces per square foot inside and outside of the tube. Galvanizing shall be done after fabrication and punching or drilling of any holes.

Coating color shall be high visibility traffic yellow. Yellow coating shall be applied over the galvanized post to an average minimum dry mil thickness of 2.0. The tubing shall be properly cleaned and pre-treated to achieve the coating properties below as shown in Table 2.

TABLE 2

Coating Properties

Damage Resistance:	Coating flexibility shall conform to ASTM D522, 1/8 inch mandrel, with no cracking.
Corrosion Resistance:	<u>Salt</u> spray tested, scribed to meet ASTM B117, 500 hours, salt spray 1/8 inch creepage.
Humidity Cabinet:	Coating shall meet the requirements of ASTM D 1735, 500 hours - no blisters.
Weathering Resistance:	QUV weathering, 50% gloss at 60% after 500 hours.

There shall be no loss of integrity of adhesion. Color retainage shall be with a minimum of chalking. There shall be no effect on the coating for the following substances:

- A. Gasoline
- B. Motor Oil
- C. Alcohol
- D. Thirty-percent Sodium Hydroxide
- E. Thirty-percent Hydrochloric Acid
- F. Thirty-percent Nitric Acid
- G. Thirty-percent Sulfuric Acid

646.3 Measurement and Payment. Roadside traffic sign supports shall not be paid for directly, but shall be incidental to Item 624 "Aluminum Signs".

There are no line code(s), description(s), or unit(s) for this Item.

NOTE: This Item requires a Standard Civil Drawing that shall be incorporated into the contract documents.

NOTE: This Item requires other Standard Specifications.

Item 624 "Aluminum Signs"

END OF ITEM 646