TECHNICAL SPECIFICATIONS BUS STOP SIGN POSTS AND HARDWARE

GENERAL

This specification covers minimum material and performance requirements for the production of an F-DOT and FHWA- approved bus stop sign post and post anchor support system for the Miami Dade Transit. The 12-guage power-coated square post shall have custom sign-hole locations, and shall have no visible holes once the appropriate sign panels have been installed. The sign post is to be installed in outdoor locations.

a. POST MATERIAL

The sign post shall be a hollow 1-3/4" x 1-3/4" x 12-gauge, powder-coated square steel tube complying with F-DOT and FHWA regulations for highway post break-away construction standards and installation requirements and with ASTM specification A653.. The post shall contain various custom 3/8" pre-drilled holes, as per specification drawings. The post power-coating shall be a minimum of 2-mil thickness conforming to coating designation G-140 for excellent corrosion prevention. Power coating shall be applied after all fabrication, cutting and hole-punching have been completed. The power-coating shall be Green in color equivalent to Pantone Matching System (PMS) #355 Green. The post shall be manufactured using high-quality, weather and vandal resistant sign post support hardware.

b. POST TYPES / LENGTHS

- 1. Post type 1P shall measure 10'-6" in length x 1-3/4" x 1-3/4" square, with ten 3/8" pre-drilled holes located as specified in 3.3 Drawings. All pre-drilled holes except the corner bolt hole shall be on the face of the pole, not drilled all the way through the pole. The cornet bolt holes shall have one hole pre-drilled in the face of the pole and one pre-drilled hole in the side of the pole.
- 2. Post type 2P shall measure 11'-0" in length x 1-3/4" x 1-3/4" square, with nine 3/8" pre-drilled holes as specified in 3.3 Drawings. All pre-drilled holes except the corner bolt hole shall be on the face of the pole, not drilled all the way through the pole. The cornet bolt holes shall have one hole pre-drilled in the face of the pole and one pre-drilled hole in the side of the of the pole.
- 3. Post type 3P shall measure 12'-0" in length x 1-3/4" x 1-3/4" square, with a total of ten (10) 3/8" pre-drilled holes located as specified in 3.3 Drawings. All pre-drilled holes except the corner bolt hole shall be on the face of the pole, not drilled all the way through the pole. There shall be two pre-drilled holes in the center of the post for the installation of one display unit, plus an additional two holes provided on the back of the post for a possible two-sided display installation. The corner-bolt holes shall have one hole pre-drilled in the face of the pole and one pre-drilled hole in the side of the pole.

c. POST ANCHOR MATERIAL

The post anchor shall be a hollow 2" x 2" x 12-gauge square steel tube complying with F-DOT and FHWA regulations for highway post break-away construction standards and installation requirements. The post anchor shall have custom 3/8" pre-drilled corner bolthole locations for proper post installation to the anchor. The anchor shall not be power-coated.

d. POST ANCHOR TYPES/LENGTHS

- 1. Post anchor type 1A shall be a square tube measuring 2'-2" in length x 2" x 2" square. The anchor shall have 2 pre-drilled 3/8" holes, one on the face of the anchor and one on the side of the anchor, located 1" from top.
- 2. Post anchor type 2A shall be a square tube with inverted winged soil stabilizer blades for installation in sandy soil conditions and shall measure 2'-2" in length x 2" x 2" square. The anchor shall have 2 pre-drilled 3/8" holes, one on the face of the anchor and one on the side of the anchor, located 1" from top.

e. RAIN CAP

The post rain cap shall be pyramid-shaped, and manufactured in 12-gauge, powder-coated steel, for easy installation onto the top end of the post. The rain cap shall have a ¼" overhang beyond the outer post walls. The post rain cap shall be power-coated in Green equivalent in color to PMS # 355 green. Power-coating shall be applied after all forming has taken place. See 3.3 b for drawing.

f. CORNER BOLT

The corner bolt shall consist of one 3/8" Stainless Steel corner bolt (appropriate in length to join a 1 3/4" x 1 3/4" x 12 gauge square steel post inserted within its break-away post anchor) and shall include one 5/16" Teflon or Zinc coated hex lock nut; and one 3/8" Nylon Washer. The corner bolt shall not be power-coated. See 3.3 d for drawing.

g. DRIVE RIVET

3/8" Aluminum Drive Rivet; Grip .140/.330. See 3.3 b for drawing.

h. WORKMANSHIP

The bus stop sign post shall exhibit good workmanship and shall be free of burrs, discoloration, cracks or other objectionable marks which would adversely affect the unit's performance and serviceability.

i. PROPERTIES

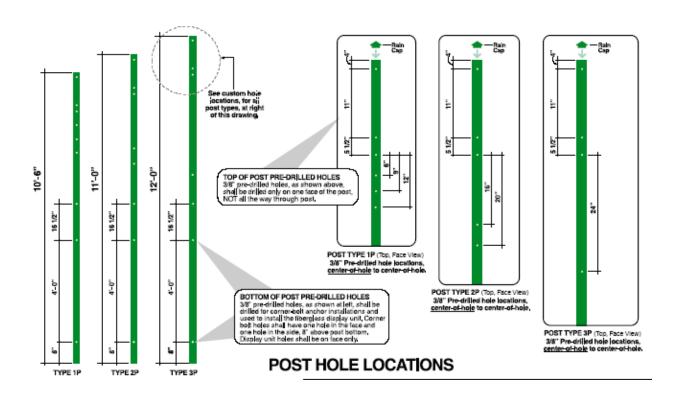
The bus stop sign post shall have the properties listed in Table-1 as shown below.

TABLE-1 PROPERTIES

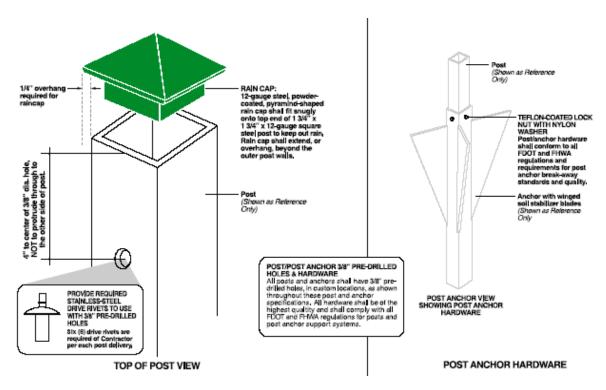
The bus stop sign post and post anchor system shall have physical and mechanical properties which comply with all Federal and State of Florida regulations with regard to highway post and break-away post anchor construction requirements. Contractor shall be responsible for compliance to FDOT and FHWA regulations for proper post and post anchor construction.

3.1 **DRAWINGS**

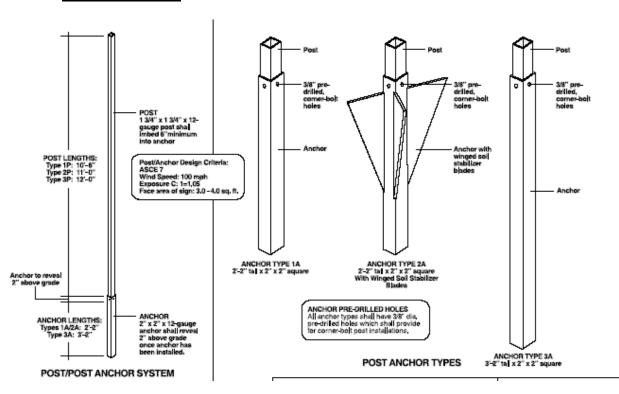
a. Post custom-hole location drawings



b. Rain Cap and Rivet drawings



c. Anchor drawings



j. <u>U-bolt drawing</u>



The corner bolt shall consist of one 3/8" stainless steel corner bolt, length 1-3/4" x 1-3/4" x 12 gauge square steel post inserted within its break-away post anchor and shall include one 5/16" Teflon or Zinc coated hex lock nut: and one 3/8" Nylon Washer. The corner bolt shall not be power-coated.