



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

July 9, 2009

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 993
Proposed Specification: 9930104 Object Markers and Delineators

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

These changes were proposed by Chester Henson to remove references to Section 700, which contained the requirements for U-Channel posts and include those requirements in Section 993. U-Channel posts are no longer allowed for permanent sign installations and Section 700 is being revised to reflect this change.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/dt

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

OBJECT MARKERS AND DELINEATORS.**(REV ~~7-95-21-09~~)**

SUBARTICLE 993-1.4(Page 975) is deleted and the following substituted:

993-1.4 Posts: The marker posts shall be of steel or aluminum as shown in the Design Standards or plans. Steel posts shall be 2.5 ~~lb/#~~^{lb/ft.} flanged U-Channel ~~meeting the requirements of 700-2.3.~~ *The U-channel posts shall meet the mechanical requirements of ASTM A 499, Grade 60 and meet the chemical requirements of ASTM A-1. Provide U-channel posts that have been galvanized after fabrication in accordance with ASTM A 123 and have a smooth uniform finish free from defects affecting strength, durability and appearance. For each U-channel, punch or drill 3/8 inch diameter holes on 1 inch centers through the center of the post, starting approximately 1 inch from the top and extending the full length of the post. Punching or drilling operations shall be completed prior to galvanization. The weight per foot of a manufacturer's U-channel size shall not vary more than plus or minus 3.5-1/2 % of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4 % of the length. U-channel posts shall ~~be~~ *are* listed on the QPL.* Round aluminum posts shall meet the requirements of Index 11860.

Use attachment hardware (nuts, bolts, clamps, brackets, braces, etc.) of a non-corrosive metal, aluminum or galvanized steel, meeting the vendor requirements specified on the QPL drawings.

SUBARTICLE 993-2.3.1 (Page 975) is deleted and the following substituted:

993-2.3.1 Posts: *The posts shall meet the requirements of 993-1.4, except the steel delineator post shall be 1.1 lb/ft*~~The post shall be 1.1 #/ft. steel U-Channel posts meeting the requirements of 700-2.3~~*993-1.4.*

OBJECT MARKERS AND DELINEATORS.**(REV 7-9-09)**

SUBARTICLE 993-1.4(Page 975) is deleted and the following substituted:

993-1.4 Posts: The marker posts shall be of steel or aluminum as shown in the Design Standards or plans. Steel posts shall be 2.5 lb/ft. flanged U-Channel . The U-channel posts shall meet the mechanical requirements of ASTM A 499, Grade 60. Provide U-channel posts that have been galvanized after fabrication in accordance with ASTM A 123 and have a smooth uniform finish free from defects affecting strength, durability and appearance. For each U-channel, punch or drill 3/8 inch diameter holes on 1 inch centers through the center of the post, starting approximately 1 inch from the top and extending the full length of the post. Punching or drilling operations shall be completed prior to galvanization. The weight per foot of a manufacturer's U-channel size shall not vary more than plus or minus 3.5 % of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4 % of the length. U-channel posts shall be listed on the QPL. Round aluminum posts shall meet the requirements of Index 11860.

Use attachment hardware (nuts, bolts, clamps, brackets, braces, etc.) of aluminum or galvanized steel.

SUBARTICLE 993-2.3.1 (Page 975) is deleted and the following substituted:

993-2.3.1 Posts: The posts shall meet the requirements of 993-1.4, except the steel delineator post shall be 1.1 lb/ft.