

Chapter 29

Miscellaneous Highway Related Structures

The following are changes, additions or deletions to the January 2003, Topic #625-000-007, Plans Preparation Manual (PPM) - English, for use on Turnpike projects only:

29.1 Design of Overhead Sign Structures and Foundations

Add the following paragraph

All overhead sign structures shall be designed to accommodate 25% extra sign area than what is called for in the plans and shall use a sign panel weight of 5 lbs/sf. In addition, all overhead signs shall be designed with a luminaire to roadway vertical clearance of 18' – 0" minimum.

29.1.2 Overhead Signs in Rural Locations

Replace this section with the following

Overhead signs in rural locations shall be designed according to the criteria in Section 29.1.1: Overhead Signs in Urban Locations.

29.1.4 Space Frame Gantry Structure

Add this section

The following Design Criteria should be used on all Space Frame Gantry Structures:

1. Gantry shall be designed per AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2001 Edition.
2. All gantries shall be designed for South Florida wind Loads.
3. All gantry members must be able to carry a 250 lb. concentrated load with a 100% impact.
4. On single lane roadways, the gantry shall be designed for 125% area of sign panel specified in the plans and/or for a DMS load of 1500 lbs. Weight and 5.5 ft. x 14.33 ft x 14 inch size located centrally on the structure.
5. On dual lane roadways, the gantry shall be designed to carry either 2 signs with 125% area of current signs specified, or 1 DMS and one 125% area sign panel, each centered over the lane. The DMS specifications are the same as in #4.
6. Gantry submittal shall include Maintenance/Inspection Manual or Guidelines.
7. All welds on the structure shall require a mandatory shop inspection performed by designated Turnpike Inspection personnel.