Index 700-020 Multi-Column Ground Sign

Design Criteria

AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (LRFDLTS-1); ***Structures Manual (SM)***, Volume 3, FDOT Modifications to LRFDLTS-1; ***Structures Manual (SM)*** Introduction, I.6 References; ***FDOT Design Manual (FDM)***

Design Assumptions and Limitations

See notes on ***Index 700-020*** and ***Structures Manual (SM)***, Volume 3.

The breakaway capabilities of a multi-column ground sign are unidirectional (i.e., the fuse and hinge plate assembly is designed to activate from impacts in one direction). Systems with columns within a 7-foot span must use posts with a mass of 18 lb/ft or less. Larger posts with masses up to 45 lb/ft may also be used but the columns must be more than 7 feet apart. The total mass of the sign assembly above the slip-plane and below the hinge must be less than or equal to 600 pounds.

Foundation designs are based on the following conservative soil criteria which cover the majority of soil types found in Florida:

Classification = Cohesionless (Fine Sand)

Friction Angle = 30 degrees

Unit Weight = 50 pcf (assumed submerged)

Use ***Index 700-020*** in conjunction with the ***Multi-Post Sign-LRFD v1.1*** located on the **Structures Design Programs Library** website.

Plan Content Requirements

Column size must be shown in the Plans. See the ***FDM 325.8*** for additional information.

Payment

Item number	Item Description	Unit Measure
700-2-AB	Multi-Post Sign	AS

See the ***BOE*** and ***Specification 700*** for additional information on payment, pay item use and compensation.