Index 715-010 High Mast Lighting

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 715-010***, ***FDM 231***, ***FDM 261***, and ***Structures Manual (SM)***, Volume 3.

Design wind pressure is based on a maximum fill height of 25 feet.

Poles are designed for up to a 6 mil galvanization thickness.

Foundations are based upon the following conservative soil criteria (which covers the majority of soil types found in Florida)

Classification = Cohesionless (Fine Sand)

Friction Angle = 30 degrees

Unit Weight = 50 pcf (Submerged)

Only in cases where the Designer considers the soil types at the specific site location to be of lesser strength properties should an analysis be required. Auger borings, SPT borings or CPT soundings may be utilized as needed to verify the assumed soil properties, and at relatively uniform sites, a single boring or sounding may cover several foundations. Furthermore, borings in the area that were performed for other purposes may be used to confirm the assumed soil properties.

Use ***Index 715-010*** in conjunction with the ***High Mast-LRFD*** Mathcad 15 computer program located on the **Structures Design Programs Library** website.

Plan Content Requirements

See ***FDM 943***.

Payment

Item number	Item Description	Unit Measure
715-19-ABC	High Mast Light Pole, Complete	EA

See the ***BOE*** and ***Specification 715*** for additional information on payment, pay item use and compensation.