



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

December 1, 2010

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

Re: Office of Design, Specifications
Section 715
Proposed Specification: 7150100 Highway Lighting Systems

Dear Ms. Gourdine:

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

These changes are proposed by Andre Pavlov of the State Structures Design Office to:

1. Add a requirement that the fabricator is to be listed on the Department's list of metal producers with an accepted quality control program.
2. Remove the Qualified Products List requirements for standard roadway lighting and high mast lighting because the Design Standards can be used for fabrication.
3. Remove alternate foundations. Alternate foundations may be proposed for consideration on a project specific basis.

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

Sincerely,

Signature on File

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

RP/ft

Monica Gourdine
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Attachment

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

HIGHWAY LIGHTING SYSTEMS.
(REV 8-17-10)

ARTICLE 715-1 (Page 808) is deleted and the following substituted:

715-1 Description.

Install a highway lighting system in accordance with the details shown in the plans. Include in the system the light poles, bases, luminaires, ballasts, pull boxes, cable, conduit, substations, expansion joints, protective devices, transformers and control devices; all as specified or required for the complete facility.

Obtain aluminum pole and high mast light pole assemblies from a fabrication facility that is listed on the Department's list of metal producers with an accepted quality control program, meeting the requirements of 105-3. Use pole assemblies listed on the Department's Qualified Products List (QPL) when standard aluminum pole assemblies or standard high mast light assemblies are required by the Contract Documents.

Provide metal lighting poles, excluding high mast lighting, with internal vibration damping devices in accordance with Design Standard 17515 in all installations on bridges, walls and concrete median barriers.

SUBARTICLE 715-6.4 (Pages 809 – 810) is deleted.

~~———— **715-6.4 Alternate Foundation:** The Contractor may use screw type foundations which are listed on the Qualified Products List, as an alternate foundation. Screw type foundations must be in accordance with the following requirements:~~

~~———— (a) Design: For steel screw type foundations, meet the latest edition of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and the requirements herein. Provide steel equaling or exceeding the requirements of ASTM A 53, Type E, Grade B for the pipe and ASTM A 36 for the plates and bars. Design the screw type foundation with the soil properties listed on Design Standards, Index No. 17515 or the actual properties of the in-situ soil, accounting for the presence of the water table. Take into account the variability of the soil strata above and below the water table which may result in deeper foundations, larger diameter pipe, or both.~~

~~———— Design screw type foundations to be installed by auguring into the ground using a right hand turning movement with a working installation torque of up to 20,000 ft lb. Provide a minimum base plate thickness of 1 3/8 inches. Provide base plates with holes to match the number and location of the light pole anchor bolts. Make the holes 1/16 inch larger in diameter than the light pole anchor bolts. Use base plates of sufficient size to provide the required bolt edge distances. Notch the base plates to indicate the orientation of the shaft cableways. Provide pipes for these screw type foundations having a minimum of 10.75 inches outside diameter and a minimum wall thickness of 0.365 inch. Provide an opening at the bottom of the pipe for drainage purposes. Hot dip galvanize the whole foundation after fabrication in accordance to ASTM A 123.~~

~~_____ (b) Installation: Prior to installation, submit pole reaction, screw foundation shop drawings and soil property data to the Engineer for approval.~~

~~_____ Install by auguring into undisturbed ground. Use only sufficient downward pressure to ensure engagement of the augers. The Engineer will not allow installation into pre-excavated hole. Ensure that the pole manufacturer provides bolts for connecting the pole to the foundation, and install bolts complete with nuts and lockwashers. Do not allow the top of the installed base plate to protrude more than 2 inches above the ground surface.~~

HIGHWAY LIGHTING SYSTEMS.**(REV 8-17-10)**

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Obtain aluminum pole and high mast light pole assemblies from a fabrication facility that is listed on the Department's list of metal producers with an accepted quality control program, meeting the requirements of 105-3.

Provide metal lighting poles, excluding high mast lighting, with internal vibration damping devices in accordance with Design Standard 17515 in all installations on bridges, walls and concrete median barriers.

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