



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

THOMAS F. BARRY, JR.
SECRETARY

MEMORANDUM

DATE: November 25, 2002

TO: Specification Review Distribution List

FROM: Duane F. Brautigam, P.E., State Specifications Engineer

SUBJECT: **Proposed Specifications Change – D6300311.D01 - Conduit-Installation Requirements**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change to Section 630.

This change was proposed by Bob Dion to include installation requirements for conduit used for fiber optic cable.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965DB or duane.brautigam@dot.state.fl.us. Comments received after December 23, 2002 may not be considered. Your input is encouraged.

DFB/jf

Attachment

COMMENTS:

Submitted by:

Phone #:

**CONDUIT-INSTALLATION REQUIREMENTS.
(REV 10-18-02)**

Subarticle 630-3.1 (Pages 724-725) is expanded by the following:

~~630-3.1.1 Conduit For Fiber Optic Cable: Prevent the ingress of water, dirt, sand, and other foreign materials into the conduit before, during and after construction. Run an AWG #14 locate wire with the fiber cable in the conduit when installed underground. Do not run the locate wire into the cabinet. Terminate it at the nearest pull box.~~

~~To minimize cable tension during installation the conduit fill ratio (outer cable diameter to inner conduit/duct diameter) should not exceed 50%. The minimum inner diameter (ID) of the conduit must be 1 1/4 inches [32 mm] and include all required fittings and incidentals necessary to construct a complete installation. Ensure that the conduit system allows the fiber optic cable to maintain the minimum bend radius after installation. Run an AWG #14 locate wire with the fiber optic cable in the conduit when installed underground. Do not run the locate wire into the cabinet. Terminate at the nearest pull box.~~

Exclude water and debris from the top conduit and top riser assembly of above ground conduit through by use of a foam-sealing material, rubber plug, or other device, designed for this type of application and approved by the Engineer. Use a flexible conduit UV rated to protect the cable from the top of the conduit riser to the span messenger where the cable is to be lashed.

Subarticle 630-4.2 (Page 727) is expanded by the following:

~~Payment for conduit used for Fiber Optic Cable includes the cost of furnishing and installing the locate wire.~~Furnishing and installing the locate wire is included in the cost of the conduit.