Florida Department of Transportation

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GOVERNOR

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ANANTH PRASAD, P.E.
SECRETARY

July 16, 2013

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

Re: State Specifications and Estimates Office
Section **635**
Proposed Specification: **6350202 Pull, Splice, and Junction Boxes.**

Dear Ms. Gourdine:

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

These changes were proposed by Jeff Morgan, of the State Traffic Engineering and Operations Office, to not require that material coupons used for environmental testing be obtained from full-size production samples. The industry standard governing testing (ANSI/SCTE 77 2010) is silent regarding how coupons are obtained and there is no reason to be more stringent. The text was also modified to provide latitude to designers to deviate from the default of requiring separate boxes for power and communications when conditions exist as long as the deviation is in compliance with the NEC and other local codes.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965DS or daniel.scheer@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Daniel Scheer, P.E.
State Specifications Engineer

DS/cah
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

PULL, SPLICE, AND JUNCTION BOXES.
(REV *5*~~4~~-*2*~~11~~-13)

SUBARTICLE 635-2.2.5 (of the Supplemental Specification) is deleted and the following substituted:

635-2.2.5 Testing Requirements: Ensure pull and splice boxes meet the American National Standards Institute/Society of Cable Telecommunications Engineers (ANSI/SCTE) 77 2010 Specification for Underground Enclosure Integrity for TIER 15 loading with the following additional clarifications and requirements:

1. Apply all environmental tests to the box and its cover.

~~2. Obtain all material coupons for environmental tests from full size production samples.~~

2~~3~~. All flexural testing must be conducted in accordance with an appropriate ASTM standard and clearly stated in the report.

3~~4~~. Perform repetitions of Cycle 1 in Table X2.1 of ASTM G154 for a minimum duration of 1000 hours for the simulated sunlight exposure test.

4~~5~~. Use deflection-measuring devices positioned to measure vertical and lateral deflection (wherever maximum deflection occurs) for the vertical sidewall load test.

When testing pull and splice boxes of various sizes (width x length x depth), the cover impact test, internal equipment protection test, coefficient of friction test, and all environmental tests, can be completed using a single representative box/cover (instead of samples from all box/cover sizes) as long as the test report indicates the following:

1. Materials of construction, compositions, and manufacturing processes are identical for all box and cover sizes submitted for listing on the APL.
2. Size (width x length x depth) of the representative box/cover.

SUBARTICLE 635-3.1 (of the Supplemental Specification) is deleted and the following substituted:

635-3.1 General: ~~Do not pull signal or communication cable through a pull box used for loop termination.~~ *Do not install power* ~~Use separate pull boxes for signal~~ and communication ~~cables~~ *in the same box unless otherwise shown in the Plans*.

When signal or 120V (or greater) power is present, ground all metal covers in accordance with Section 620.

PULL, SPLICE, AND JUNCTION BOXES.
(REV 5-2-13)

SUBARTICLE 635-2.2.5 (of the Supplemental Specification) is deleted and the following substituted:

635-2.2.5 Testing Requirements: Ensure pull and splice boxes meet the American National Standards Institute/Society of Cable Telecommunications Engineers (ANSI/SCTE) 77 2010 Specification for Underground Enclosure Integrity for TIER 15 loading with the following additional clarifications and requirements:

1. Apply all environmental tests to the box and its cover.
2. All flexural testing must be conducted in accordance with an appropriate ASTM standard and clearly stated in the report.
3. Perform repetitions of Cycle 1 in Table X2.1 of ASTM G154 for a minimum duration of 1000 hours for the simulated sunlight exposure test.
4. Use deflection-measuring devices positioned to measure vertical and lateral deflection (wherever maximum deflection occurs) for the vertical sidewall load test.

When testing pull and splice boxes of various sizes (width x length x depth), the cover impact test, internal equipment protection test, coefficient of friction test, and all environmental tests, can be completed using a single representative box/cover (instead of samples from all box/cover sizes) as long as the test report indicates the following:

1. Materials of construction, compositions, and manufacturing processes are identical for all box and cover sizes submitted for listing on the APL.
2. Size (width x length x depth) of the representative box/cover.

SUBARTICLE 635-3.1 (of the Supplemental Specification) is deleted and the following substituted:

635-3.1 General: Do not install power and communication in the same box unless otherwise shown in the Plans.

When signal or 120V (or greater) power is present, ground all metal covers in accordance with Section 620.