



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

ESTIMATES BULLETIN 12-15

DATE: January 7, 2013

TO: District Estimates Coordinators; District Design Engineers

FROM: Phillip Greg Davis, State Estimates Engineer

COPIES TO: Duane Brautigam, David Sadler, Tim Lattner, Mark Wilson, Robert Robertson, Rudy Powell, Stefanie Maxwell, Chester Henson, Trey Tillander

SUBJECT: Conduit and related changes

ISSUE BACKGROUND: Conduit is commonly used for signalization, lighting, and Intelligent Transportation Systems (ITS) applications. While the materials and installation requirements are similar, three separate specifications are being used, along with three separate pay item structures. Working with industry representatives, the specifications and pay items have been consolidated into one specification with one pay item structure. Related specifications for Directional Bore and Jack & Bore have also been updated to coordinate with the new specification and pay item structure.

Some of the changes resulting from the consolidation are as follows:

- Material and installation requirements for all applications (signals, lighting, and ITS) are shown together in Section 630 of the specifications. When minor differences exist, they are noted for the intended application.
- Conduit specifications for lighting applications (Section 715) and for ITS applications (Section 783) will be updated to refer to Section 630. **No separate payment will be made for conduit under 715- or 783- pay items.**
- Measurement will be consistent for all applications. Conduit that is located underground or underpavement will be “based on the horizontal length of the trench or bore measured in a straight line between the centers of the pull boxes, cabinets, poles, etc. in linear feet, regardless of the length or number of conduits installed. No allowance will be made for sweeps or vertical distances below the ground.” When multiple conduits are needed in a single trench or bore, **payment will be for the trench length, NOT the conduit length.** For example, 4 conduits in a 100’ trench will be paid as 100’, not 400’. This change recognizes that the cost is primarily in the labor and equipment (trench or directional bore), not the conduit materials.
- **The Designer will select the pay item based on existing conditions.** For installations under existing pavement, driveways, or sidewalk that cannot be cut or trenched, payment for

“directional bore” will be identified in the plans, for the box-to-box length. For all other underground installations, the “open trench” pay item will be used. Above ground and bridge mount will continue to be available, as applicable. Jack & Bore should only be used when open trench or directional bore methods are not practical.

- **No separate payment will be made under Section 555 for Directional Bore or Section 556 for Jack & Bore.** As indicated above, the conduit pay item structure will indicate the location and installation method. No adjustment will be made if the contractor chooses to use an alternative method.
- **Vibratory Plowing, Section 557, was previously available as an alternative method.** This method is not valid for conduit or drainage applications. When needed for utility applications, project specific Technical Special Provisions will be required. The standard specification will be deleted.

IMPLEMENTATION: Effective with projects let July 1, 2013, update plans, including the tabulation sheets, pay items, and quantities, to coordinate with the new specification.

- Use the “box to box” length when considering the “open trench” or “directional bore” pay item. Do not show partial lengths of different installation methods between pull boxes, as only one method of installation will be used.
- Per the specification, the default conduit diameter is 2”. If a larger size is needed, note the diameter in the plans.
- When more than one conduit is to be installed in a single trench or bore, note the number of conduits, along with the pay item, in the plans. Example notes are shown below:
 - For 2, 2-inch conduits in a 100’ trench → 630-2-11 (2 runs @ 100’)
 - For 1, 2-inch conduit in a 100’ trench → 630-2-11 (1 run @ 100’)
 - For 2, 4-inch conduits in a 100’ trench → 630-2-11 (2 runs of 4” @ 100’)
 - For 1, 4-inch conduit in a 100’ trench → 630-2-11 (1 run of 4” @ 100’)
- Select the pay item based on existing conditions, not future/final pavement or sidewalk.
- Remove any 555 or 556 pay items. No separate payment will be made under these specifications.

Note: The contractor will consider existing conditions, construction phasing, and final conditions when preparing their bids. No payment adjustment will be made if the contractor chooses to use an alternative installation method approved by the Engineer.

Update Pay Items: The 2013 Basis of Estimates Manual (BOE) will be updated to reflect the above changes. The following pay items are valid through June 30, 2013:

630-1-AB	Conduit, LF
715-2-AB	Lighting Conduit, LF
783-4-1AB	ITS Conduit, LF
555-1- AB	Directional Bore, LF
556-1-A	Jack & Bore, LF
557-1-A	Vibratory Plowing, LF

The following pay item will be effective July 1, 2013:

630-2-AB Conduit, LF

A= Operation

1 (Furnish & Install)

B= Installation Method/location

1 (Open Trench) Underground *

2 (Directional Bore) Underground or Underpavement*

3 (Jack & Bore) Typically under railroad*

4 (Aboveground)**

5 (Bridge Mount)**

*Measured as the horizontal length of the trench or bore; no additional payment for multiple conduits in trench.

**Measured as the actual length of each conduit.

Update Plans and Pay Item Notes: For applicable projects, update the tabulation sheets and Proposal Summary of Quantities (Transport report) in the plans. Continue to summarize signals applications in the signalization plans, lighting applications in the lighting plans, etc.

Specifications: Specifications will be available with the July 2013 workbook.

If you have any questions regarding the above items, please contact Melissa Hollis 850-414-4182.