

**6110203 ACCEPTANCE PROCEDURES FOR  
TRAFFIC CONTROL SIGNALS AND DEVICES  
INTERNAL/INDUSTRY REVIEW COMMENTS**

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Comments: (6-29-16)

The requirement to sign and seal as built drawings in section 611-2.3 is unclear. The specifications are not clear in a requirement for the contractor to work under the guidance of a Professional Engineer for signal installation, specific direction is given for specialty items but signal installation is not an identified specialty item.

Response: The Department will replace 611-2.3 with the following:

**611-2.3 As-Built Documentation:** As a condition precedent to acceptance under 611-2.1 or 611-2.2, submit as-built drawings for all installations, signed and sealed by a Professional Engineer or Professional Surveyor and Mapper registered in the State of Florida, along with supplemental as-built information using Feature Import Templates used for the Department's ITS Facility management (ITSFM) System. Feature Import Templates can be found on the Department's web site:

[http://www.dot.state.fl.us/trafficoperations/ITS/Projects\\_Telecom/ITSFM/ITSFM.shtm](http://www.dot.state.fl.us/trafficoperations/ITS/Projects_Telecom/ITSFM/ITSFM.shtm).

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Comments: (6-29-16)

Although this specification review is related to the Acceptance Procedures for Traffic Control Signals and Devices, since it is important to remember the role that the maintaining agency has with the acceptability/compatibility of the signals and devices installed, I offer the following suggestions.

1. Incorporate a statement in to the Specifications that requires the Contractor to submit as-built documentation to the maintaining agency. With the move to less plan notes the Contractor needs to be aware that the County requests the plans as part of their contract otherwise they could argue that it is extra work when they are asked to provide them at the end of the project. Recommend the addition of a supplemental sentence in either section 611-2.3 or 611-2.3.1, such as, "Submit as-built documentation to the maintaining agency to meet their agency requirements." FYI – For example, St. Lucie county traditionally has used the following statement for their requests for as-builts: THE CONTRACTOR SHALL PROVIDE FOUR COPIES OF MARKED-UP (AS-BUILT) CONSTRUCTION PLANS, AND ONE CADD FILE OF SUCH, AT THE TIME OF SIGNAL CONDITIONAL ACCEPTANCE INSPECTION BY ST. LUCIE COUNTY (AS-BUILT SHALL BE ENLARGED A MIN. OF 200%). Creation of and reference to an external website that contains all maintaining agency specific signal requirements (similar to that for permits and utility relocation schedules). (1)

2. We are typically seeing plan notes that broadly covers the need to provide combatable

equipment & meet maintaining agency requirements that state, "Provide submittal data that is compatible with the maintaining agency. Provide the maintaining agency's required equipment and verify with the maintaining agency prior to purchasing such equipment." And "Become familiar with and comply with \_\_\_\_'s inspection procedures." However, if we could have an external website that further breaks down and posts each maintenance agencies requirements and the specifications reference this website location, it would avoid the need to have each contractor do detailed homework during the bidding process to ensure they are bidding the appropriate materials. For example, one county specific requirement I have seen is, "WIRING TO BE AS PER COUNTY RECOMMENDATIONS SHEET. CONTRACTOR SHALL VERIFY ST. LUCIE COUNTY COLOR CODES PRIOR TO ORDERING WIRE." Recommend the addition of a supplemental requirement in either this section under industry review or perhaps Section 2-4 Examination of Contract Documents and Site Work, such as, "All signalization components shall be in accordance with these FDOT specification requirements. However, any additional maintaining agency requirements shall be adhered to, such as but not limited to, ensuring compatibility, providing for additional documentation and coordination of inspections; these specific additional requirements can be found at: www....." Having a pre-bid description per agency available to all contractors would help ensure that all contractors are bidding the same requirements. However, one caution on this is that I don't think we would want to get too far away from the fact that we install our signals in accordance with FDOT specifications. We don't want to make the contractor's necessarily conform to all maintaining agency requirements, as sometimes our FDOT requirements are more stringent, but more so we want to define when there are specific items that are substantial to a County to ensure functionality/compatibility with their existing systems that these requirements are clearly defined at a pre-bid time. (2)

Response: (1) The Department encourages the use of electronic files instead of printed copies. Providing a copy of these as-built plans to the maintaining agency should be the responsibility of the Department, or whichever local agency actually administers the contract. Enhanced requirements may need to be incorporated into the actual agreements between the Department and maintaining agency.

(2) This should be corrected in the Design Plans. We are coordinating with Roadway Design to provide better guidance in the Plans Preparation Manual.

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Comments: (6-30-16)

611-2.3.1 requires essentially all items (except signal heads & loops) to be located by GPS yet within many of the 611-2.3.2 components there are still requirements for edgeline distances/offsets to be shown on the asbuilt. Detailing edgeline distances/offsets for boxes & poles seems redundant to the GPS requirement. It also presents the opportunity for conflicting information when future geometric modifications are made. Please consider removing the requirements for any offset measurement requirements.

Response: The Department does not recommend consideration of these comments. The purposes for edgeline reference and GPS locations is different and we still recommend having access to both. Edgeline distance/offsets are for plans; GPS locations are primarily for CAD, ITSFM, and performing future locates for facilities.

611-2.3.2.6 includes reference to a cabinet corner blow up detailing pull box locations with all conduit and cable. Yet pull boxes, conduit and cable have their own sections within 611-2.3.2. Recommend 611-2.3.2.6 strictly reference cabinet requirements.

Response: The Department recommends keeping this requirement.

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Comments: (6-30-16)

The Engineer will make the final inspection with a Contractor's representative and, when applicable, a representative of the agency designated to accept maintenance responsibility. The Statement "... when applicable, a representative of the agency designated to accept maintenance responsibility" needs to change. This allows the maintaining agency believe they do not have to final accept the signalization unless we conform to their preference. The preferences were in the plans as Plan Notes. However, these plan notes have been eliminated. If the maintaining agency does not accept the transfer of maintenance after final acceptance, we have an intersection that is in limbo.

Response: The Department agrees with this comment. ", when applicable," should be removed, but this is associated with 611-2.2, not 611-2.3.

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Comments: (7-13-16)

1. Suggest change to '...submit signed and sealed as-built drawings for all installations along with supplemental as-built information for each installed equipment as identified in the equipment feature import templates used for the Department's ITS Facility Management (ITSFM) System. (1)
  2. Website does not directly identify the Feature Import Templates. Suggest replacing with this page: [http://www.dot.state.fl.us/trafficoperations/ITSFM-featureforms.shtm#ITSFM\\_Import\\_Templates](http://www.dot.state.fl.us/trafficoperations/ITSFM-featureforms.shtm#ITSFM_Import_Templates) 611-2.3.1 (2)
  3. Include statement for submitting the completed equipment feature import templates. (3)
  4. The website provides instructions on how to use the Import Templates. If these instructions as written are not intended for the Contractor, then indicate in submittal requirements what (or what steps) the Contractor must perform. 611-2.3.3 (4)
  5. Change to ".... in submitting as-built documentation are incidental.."
- Response: See references above. (1) See replacement of 611-2.3 above.  
(2) The Department does not recommend consideration of these comments. The link that was chosen provides instructions and other important ITSM information as well as how to use the

**Feature Import Templates.**

(3) See replacement of 611-2.3 above.

(4) The Department will update the ITSFM web site to provide further clarification on the Contractor's submittal requirements.

(5) The Department agrees and will replace "drawings" with "documentation" in 611-2.3.3.

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Comments: (7-27-16 from Internal)

This will add cost to these jobs. Does it have to be signed by a PE. Or will they accept a Register land survey?

Response: See replacement of 611-2.3 above.

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Comments: (7-27-16)

Is the FDOT going to make Electronic Recording to database available from the field ...as noted in 3 items below?

Either by use of data collector and FDOT provided Code Library/Database or Direct access to Live Database (I doubt this one) (1)

1 611-2.3        We talked about the fact that the S&S Eng/Land Surveyor is unlikely to be the one doing the Feature Import Templates...and therefore NOT having the Feature Templates S&S We also talked about being able to do electronically and NOT having to do hard paper templates/excel forms (2)

2 611-2.3        Comment to add web link reference suggests acceptance of LESS position for direct electronic recording noted above (3a)

3 611-2.3.1      Comment to add feature template import suggests acceptance of LESS position need for direct electronic recording noted above (3b)

4 611-2.3.3      Comment to add feature template import suggests acceptance of LESS position need for direct electronic recording noted above (3c)

5 611-2.3.3      CRITICAL - It is the opinion of ALL LESS Committee (& FTBA Contractors that attended any of the last 3 meeting where this was a topic) that 611-2.3.3.5 – This level of Asbuilt effort, required use of ITSFM is NOT incidental and should get its OWN PAY ITEM (4)

Comments in response to Albert Salas comment:

LESS Committee agrees...that the ASBUILTS should NOT be Signed & Sealed unless on a Design Build project

And for Bid/Builds the that the contractor continues long standing requirement to "redline" (ok electronically now) the S&S plans from design engineer and return to CEI/FDOT (5)

Response: See references above. (1) The intent of this language is not to require direct access to ITSFM by the construction contractors. The Feature Import Templates will be verified by CE&I

and submitted to the Department to perform the actual importing of the data into ITISFM. In general, the construction contractor will collect the data, CEI will verify, and the Department will ensure the data gets input into ITISFM.

(2) It is not the intent of this section to require signed and sealed Feature Import Templates for ITISFM. See replacement of 611-2.3 above.

(3) a. The web link was added to assist the contractor in locating the necessary ITISFM instructions, documentation, and templates. b. The contractor is not responsible for direct recording of as-built data into ITISFM. c. Feature Import Template language was added as clarification of the requirements for ITISFM.

(4) The Department recently compiled average costs per mile to collect ITISFM data. Development of an associated Pay Item is being discussed and will be considered in the future.

(5) The Department will consider revising this requirement in the future.

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