December 10, 2008

MEMORANDUM

To: District Structures Design Engineers (Gerard Moliere, Rod Nelson, Keith Shores, Fred Ochoa, Neil Kenis, Jorge Rodriguez, Scott Arnold, Russ Snyder); District Construction Engineers (Jon Sands, Tim Ruelke, Steve Benak, Pete Nissen, Frank O’Dea, Mark Croft, Brian McKishnie, Paul Wai)

From: Robert V. Robertson, P.E., State Structures Design Engineer


Subject: Temporary Design Bulletin C08-08
Elimination of Central Office Review of Mechanical/Electrical Shop Drawings

REQUIREMENTS

1. Replace the current Plans Preparation Manual (PPM), Volume 1, Exhibit 28-A Shop Drawing Flow Diagram for Review by Consultant EOR Only (Structural Items), with the new flowchart shown in the Attachment.

2. Replace the current PPM, Volume 1, Exhibit 28-B Shop Drawing Flow Diagram for EOR & DOT Review (Structural Items), with the new flowchart shown in the Attachment.

3. Replace the current Table 28.3 in PPM, Volume 1, with the following:
Table 28.3 Shop Drawing Distribution Schedule

<table>
<thead>
<tr>
<th>DISTRIBUTION</th>
<th>FDOT - EOR</th>
<th>Consultant - EOR With Department Review</th>
<th>Consultant - EOR Without Department Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDOT Shop Drawing Review Office File</td>
<td>1 Set Original Prints + 1 Set Calcs</td>
<td>1 Set Original Prints + 1 Set Calcs</td>
<td>1 Set Prints + 1 Set Calcs</td>
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<tr>
<td>Engineer of Record</td>
<td>N/A</td>
<td>1 Set Prints + 1 Set Calcs</td>
<td>1 Set Original Prints + 1 Set Prints + 1 Set Calcs</td>
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<tr>
<td>FDOT Resident Engineer</td>
<td>2 Sets Prints</td>
<td>2 Sets Prints</td>
<td>2 Sets Prints</td>
</tr>
<tr>
<td>Prime Contractor</td>
<td>3 Sets Prints + 1 Set Calcs</td>
<td>3 Sets Prints + 1 Set Calcs</td>
<td>3 Sets Prints + 1 Set Calcs</td>
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<tr>
<td>M/E Section</td>
<td>N/A</td>
<td>N/A</td>
<td>Mechanical/Electrical - 1 Set Prints + 1 Set Calcs</td>
</tr>
<tr>
<td>State Structures Design Office</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. In PPM, Volume 1, Section 28.9, replace the first paragraph following Table 28.3 Shop Drawing Distribution Schedule with the following paragraph:

When precast/prestressed concrete components are involved, the Department’s District Prestress Engineer is furnished two (2) sets and the State Materials Office (Gainesville) is furnished one (1) set of prints. When structural steel components are involved, the Department’s Assigned Commercial Inspection Agency (ACIA) is furnished two (2) sets. When mechanical/electrical components of movable bridges are involved, the Mechanical/Electrical Section of the State Structures Design Office (SSDO) is furnished one (1) set of prints and one (1) set of calculations.

COMMENTARY

Review of the mechanical and electrical shop drawings for movable bridges by the Mechanical/Electrical (M/E) Section of the State Structures Design Office (SSDO) is being phased out. With the implementation of this change, one set of mechanical and electrical shop drawings, reviewed and stamped with the EOR’s review disposition, shall be forwarded to the M/E Section. The revision to the process is shown in the attached flow diagrams, Exhibit 28-A and 28-B of the PPM. The M/E Section will perform random quality assurance reviews to ensure that the submittals and EOR reviews meet FDOT guidelines and requirements. The M/E Section will assist the EOR in the evaluation of special shop drawing related issues when requested. The M/E Section’s involvement in plans reviews, and construction and maintenance support will remain, as is the current practice.
BACKGROUND

The SSDO has customarily reviewed shop drawings for the mechanical and electrical components of movable bridges. Due to the need to focus efforts on developing standard design aids for consultants to use, it was agreed with a request to eliminate the review of these shop drawings within the SSDO. The Engineers of Record are performing in-depth reviews of all the components, and few major issues have not been properly addressed during these reviews. At the October 2008 Structures Technical Advisory Group meeting, the group agreed with a request to eliminate the SSDO in-depth review of mechanical and electrical Shop Drawings for movable bridges, and to transition to performing Quality Assurance/Independent Assurance reviews only.

IMPLEMENTATION

For projects now under construction, the shop drawing process currently being used will not change. The process contained in this bulletin will be used for projects beginning with the January 2009 letting.

1. Construction Specifications
   No changes required.
2. Basis of Estimates
   No changes required.
   New Exhibits 28-A and 28-B and new Table 28.3. New language added to Section 28.9.
4. CADD
   No changes required.
5. Design and Analysis Software
   No changes required.
6. CPAM
   Office of Construction will revise Shop Drawing Flowcharts to match PPM.

CONTACT

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RVR/afr

Attachment
Exhibit 28-A  Shop Drawing Flow Diagram for Review by Consultant EOR Only (Structural and Movable Bridge Items)
Exhibit 28-B  Shop Drawing Flow Diagram for EOR & DOT Review (Structural and Movable Bridge Items)