## **ORIGINATION FORM**

## **Proposed Revisions to the Specifications**

(Please provide all information - incomplete forms will be returned)

Date:	Office:				
Originator:	Specification Section:				
Telephone:	Article/Subarticle:				
email:					
Will the proposed revision require changes to:					
Publication	Yes	No	Office	Staff Contacted	
Standard Plans Index					
Traffic Engineering Manual					
FDOT Design Manual					
<b>Construction Project Administration Manual</b>					
Basis of Estimate/Pay Items					
Structures Design Guidelines					
Approved Product List					
Materials Manual					
Will this revision necessitate any of the following	ng:				
Design Bulletin Construction Bulletin	E	Estimates Bulletin		Materials Bulletin	
Are all references to external publications current?		Yes	No		
If not, what references need to be updated? (PI	ease inclu	ude changes	in the redline d	ocument.)	
Why does the existing language need to be changed?					
Summary of the changes:					
Summary of the changes.					
Are these changes applicable to all Department If not, what are the restrictions?	: jobs?	Yes	No		



RICK SCOTT GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 MIKE DEW SECRETARY

## MEMORANDUM

**DATE:** October 4, 2018

**TO:** Specification Review Distribution List

**FROM:** Dan Hurtado, P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: 1080201 Monitor Existing Structures.

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

This change was proposed by Juan Castellanos to clarify the language.

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 online at <a href="http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx">http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx</a>.

Comments received after **November 1, 2018**, may not be considered. Your input is encouraged.

DH/rf Attachment

## MONITOR EXISTING STRUCTURES

(REV109-4-18)

SUBARTICLE 108-2.1.3 is deleted and the following substituted:

**108-2.1.3 Roadway Compaction Operations:** When performing embankment and asphalt compaction, inspect and document the condition of the following existing structures, and survey and monitor for settlement the following existing structures:

- 1. as shown in the Plans.
- 2. within 75 feet of vibratory compaction (in any <u>vibratory</u> mode)

operations.

108-2.1.4 Inspection and Documentation Requirements: Inspect and document the condition of the existing structures and all existing cracks with descriptions and pictures using a qualified Specialty Engineer. SubmitPrepare two reports, signed and sealed by the Specialty Engineer, documenting the condition of the structures. Submit one report before beginning the construction operations that may affect the existing structures such as but not limited to foundation construction, excavations, vibratory compaction, dewatering and retaining wall construction. and Submit the a second report documenting the condition of the structures after the construction operations are complete. after completing such construction operations. Include in the reports the Specialty Engineer's assessment of any damage present, and in the event of damage, the Specialty Engineer's assessment of whether the observed damage is the result of the construction operations. Submit both reports to the Engineer. Inspecting and documenting the condition of bridges, sign, signal, lighting and ITS structures owned by the Department is not required except when shown in the Contract Documents.

The Department will make the necessary arrangements to provide right of way entry to the existing structures.

**108-2.1.5 Settlement Surveying and Monitoring Requirements:** Obtain the Engineer's approval for the number and location of monitoring points. Survey and monitor the settlement of structures, <u>providing +/-0.005 foot accuracy</u>, recording elevations to 0.001 foot:

- 1. before beginning construction
- 2. daily, during the driving of any casings, piling, or sheeting,
- 3. daily, during compaction
- 4. daily, during foundation drilling
- 5. weekly, for two weeks after stopping pile driving
- 6. during excavation
- 7. during blasting
- 8. or, as directed by the Engineer

Upon either detecting movement of 0.0105 feet or damage to the structure, immediately stop the construction operations affecting the structure, backfill any open excavations, notify the Engineer and submit a corrective action plan for acceptance by the Engineer. Submit settlement monitoring records to the Engineer on a weekly basis.

**108-2.2 Vibration Monitoring:** When shown in the Contract Documents, employ a qualified Specialty Engineer to continuously monitor and record <u>ground</u> vibration levels <u>at-near</u> the structures shown in the Plans during the operation of any equipment causing vibrations or during blasting operations. Submit the vibration records to the Engineer within 24 hours of performing the monitoring activity. Provide vibration monitoring equipment capable of detecting

velocities of 0.01 inches per second or less. Obtain the Engineer's approval of the number and locations of the monitoring points.

Upon either detecting vibration levels reaching 0.5 inches per second or damage to the structure, immediately stop the source of vibrations, backfill any open excavations, notify the Engineer and submit a corrective action plan for acceptance by the Engineer.

108-2.3 Groundwater Monitoring: When shown in the Contract Documents, in the piezometer at the right of way line and near any existing structure that may be affected by dewatering operations, or as directed by the Engineer. Monitor the piezometer and record the groundwater elevation level each day that dewatering activities are performed and for one week after activities have ceased, or on a schedule approved by the Engineer. Notify the Engineer of any groundwater lowering near the structure of 12 inches or more.