

## ORIGINATION FORM

Date: **March 20<sup>th</sup>, 2014**

Originator: **Chase C. Knight**

Contact Information: **State Materials Office, 352-955-6642, [chase.knight@dot.state.fl.us](mailto:chase.knight@dot.state.fl.us)**

Specification Title: **Structural Plate Pipe and Pipe Arch Culverts**

Specification Section, Article, or Sub-article Number: **435**

Why does the existing language need to be changed? **Change needed to section for clarification to project personnel and is consistent with other structure requirements referred to in Section 105. Liner Repair Systems added for repair options to existing structures.**

Summary of the changes: **Expanded product description. Additional verbiage added to section to clarify selecting a pipe producer and the delivered structural plate products. Reference to 948 Liner Repair Systems added.**

Are these changes applicable to all Department jobs? **Yes**

If not, what are the restrictions?

Will these changes result in an increase or decrease in project costs? **No**

If yes, what is the estimated change in costs?

With who have you discussed these changes? **Mario Paredes, Greg Weich**

What other offices will be impacted by these changes? **Construction, Drainage**

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? **No**

Are all references to external publications current? **Yes**

If not, what references need to be updated (please include changes in the redline)?

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? **No**

Contact the State Specifications Office for assistance in completing this form.

Daniel Scheer 850-414-4130 [daniel.scheer@dot.state.fl.us](mailto:daniel.scheer@dot.state.fl.us)

Frances Thomas 850-414-4101 [frances.thomas@dot.state.fl.us](mailto:frances.thomas@dot.state.fl.us)

Debbie Toole 850-414-4114 [deborah.toole@dot.state.fl.us](mailto:deborah.toole@dot.state.fl.us)

Andy Harper 850-414-4127 [clifton.harper@dot.state.fl.us](mailto:clifton.harper@dot.state.fl.us)

Ray Haverty 850-414-4129 [ray.haverty@dot.state.fl.us](mailto:ray.haverty@dot.state.fl.us)



*Florida Department of Transportation*

RICK SCOTT  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.  
SECRETARY

**MEMORANDUM**

**DATE:** May 30, 2014

**TO:** Specification Review Distribution List

**FROM:** Daniel Scheer, P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: **4350000 Structural Plate Pipe and Pipe Arch Culverts.**

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

This change was proposed by Chase Knight of the Department's State Materials Office (SMO) to update the language for consistency with other sections regarding certification requirements for structures, add liner repair systems to 435-2, and for formatting.

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 to my attention via e-mail at SP965DS, or [daniel.scheer@dot.state.fl.us](mailto:daniel.scheer@dot.state.fl.us). Comments received after **June 27, 2014**, may not be considered. Your input is encouraged.

DS/dt  
Attachment

**STRUCTURAL PLATE PIPE AND PIPE ARCH CULVERTS.**

(REV ~~12-13-131-2-145-12-14~~)

SECTION 435 is deleted and the following substituted:

**SECTION 435  
STRUCTURAL PLATE PIPE AND PIPE ARCH CULVERTS**

**435-1 Description.**

Construct structural plate pipe and pipe arch culverts *as shown in the Plans.*

*Obtain pipe culverts from a plant currently on the Department's list of Producers with Accepted Quality Control Programs. Producers seeking inclusion on the list shall meet the requirements of 105-3.*

*At the beginning of each project, provide a notarized certification statement to the Engineer from a company designated representative certifying that the structural steel plant will manufacture the products in accordance with the requirements set forth in the Contract Documents and plant's approved Quality Control (QC) Plan. The QC Manager's stamp on each product indicates certification that the product was fabricated in conformance with the Contractor's QC Plan, the Contract, and this Section. Ensure that each shipment of structural plate products to the project site is accompanied with a QC signed or stamped delivery ticket providing the description and the list of the products.*

*When the producer's Quality Control Program is suspended by the Department, accept responsibility of either obtaining products from a plant with an approved Quality Control Program, or await re-approval of the plant.*

*The Engineer will not allow changes in Contract time or completion dates as a result of the plant's loss of qualification. Accept responsibility for all delay costs or other costs associated with the loss of the plant's qualification.*

**435-2 Materials.**

*Meet the following requirements:*

<i>Steel Pipe .....</i>	<i>Section 944</i>
<i>Aluminum Pipe.....</i>	<i>Section 945</i>
<i>Liner Repair Systems .....</i>	<i>Section 948</i>

~~Meet the requirements of Section 944 for steel and Section 945 for aluminum.~~

When the Plans call for bituminous coated pipe or pipe arch, meet the coating requirements of 944-4.

When other types of coating material are shown in the Plans, use a coating that consists of at least two coats of the specified material, applied at the job site. Apply the coating by brush or by spray.

**435-3 Trench, Foundation, Laying, and Backfill.**

Perform this work as specified in Section 430, and as follows.

Provide a foundation for the bottom plates that is of uniform density and carefully shaped to fit the lower plate of the pipe or pipe arch. Thoroughly tamp the backfill material against the remaining plates.

**435-4 Assembly.**

Assemble the plates to form the pipe or pipe arch structure in accordance with the diagram furnished by the manufacturer. Connect the plates by bolting tightly in all bolt holes provided.

**435-5 Method of Measurement.**

The quantities to be paid for will be the plan quantity, in feet, of pipe or pipe arch, installed in place, completed and accepted. The quantity will be measured along the centerline of the structure from end to end of metal for full section structures, from average end to end at top and bottom for beveled-end structures.

**435-6 Basis of Payment.**

Prices and payments will be full compensation for all work specified in this Section, including all materials, backfilling, and disposal of surplus material and all excavation except the volume included in the items for grading work and for other items specified for payment in Section 125.

Payment will be made under:

Item No. 435-                      Structural Plate Pipe Culvert - per foot.