## 9480107 Miscellaneous Types of Pipe COMMENTS FROM INTERNAL/INDUSTRY REVIEW

## Douglas Holdener Rinker Materials Concrete Pipe Division

Comment: (1-17-14)

1. Who (e.g., Contech) Designed the Cover Height Table for Steel-Ribbed Thermoplastic Pipe?

Response: The changes in this specification deal with material issues. Your comment will be forwarded to the FDOT Roadway Design Office for their consideration.

2. Potential Design Risk to Contractors or CEIs per ASTM F 2562 Paragraph 6.2.1

Response: Please see response to Comment #1. No changes made.

3. Is the Plastic Important to the Pipe Performance or Not, and If So, then How?

Response: Please see response to Comment #1.

4. What, if any, Changes are Needed to the FDOT Pipe Construction and Inspection Specifications?

Response: Please see response to Comment #1.

5. Is the FDOT 5% Deflection Limit a Reliable Indicator of Safe Performance for Steel Ribbed Thermoplastic?

Response: Please see response to Comment #1.

6. Will Inspectors and CEIs Know What to Inspect For?

Response: Please see response to Comment #1.

7. Minimal Use of Steel Ribbed Thermoplastic Pipe in Florida?

Response: At the request of FDOT, Contech has produced a more robust repair procedure that addresses concerns with exposed steel ribs. Addition of the repair procedure to FDOT Contract Documents is being evaluated. No changes made.

D4 Const.

Comment: (3-19-14)

The change to 9480107 will present challenges. The specification does not provide much guidance on how to ensure the pipe has been adequately protected from direct exposure to sunlight. We anticipate that the contractor will state that the pipe has not been exposed to sunlight, would this be considered satisfactory to the engineer? The pipe may have been manufactured prior to the letting of the project. Interpretation of this specification will vary

greatly among CEI's and contractors. The spec. as it exists has not posed any disputes. The proposed change can introduce disputes.

Response: Agree. Change made to provide clarification.

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Comment: (5-20-14)

The proposed language "Pipe more than 2 years of age may not be used unless it can be demonstrated to the satisfaction of the Engineer...." is a very vague requirement. Since there are no acceptance guidelines have been established by the Department, it is not clear on what basis the Engineer will accept this product. This language will not only create confusion but also introduce inconsistency in accepting this product by the CEI personnel.

I have discussed my concern with Rudy during our DEC meeting last Monday 4/27 and he agreed that the language needs to be revised.

Please revise as needed and resubmit to our office for approval.

Response: Language has been revised as follows:

- → 948-1.7 PVC Pipe (12 Inches to 48 Inches): PVC pipe for side drain, cross drain, stormdrain and other specified applications shall conform to AASHTO M278 for smooth wall PVC pipe or ASTM F949 for PVC ribbed pipe. Resin shall contain a minimum of 1.5% by weight of titanium dioxide for UV protection. Mitered end sections are not to be constructed of PVC. Use only concrete or metal mitered end sections as indicated in the Design Standards.
- → PVC pipe·shall-be-installed-within-2two<sup>o</sup>years-from the date of manufacture. Pipe more than 2 years of age may not be used unless it can be demonstrated to the satisfaction of the Engineer that the pipe has been adequately protected from direct exposure to sunlight.
- → All pipe produced and shipped to the job site shall meet the requirements of 105-3.2.¶

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