

**Florida Pipe Advisory Group Meeting  
October 7, 2008  
Meeting Minutes**

**Morning Session 10:00 AM – 12:00 PM**

Attendees:

Blanchard, Brian, FDOT	Morrison, Keith, Contech
Bohn, Greg, ADS	O'Hagan, David, FDOT
Botts, Jerry, Botts Consulting Group, LLC	Owens, Donnie, KWH Pipe
Burleson, Bob, FTBA	Parades, Mario, FDOT
Burnette, Bill, Contech	Pennington, Dale, Metal Culverts, Inc.
Childs, Matt, American Conc. Pipe Assoc.	Pluimer, Michael, PPI
Craig, Ron, Hanson	Powers, Rod, RGPA & Associates
DeJesus, Angel, Hanson	Quinlan, Noel, Tone & Associates
Forman, Eric, US Precast/Tri-County Conc.	Sadler, David, FDOT-SCO
Hapeman, Sean, Metal Culverts, Inc.	Sickels, Jon, ADS
Herr, Bob, KWH Pipe	Sprayberry, Mike, FDOT-DOM
Hite, Jeff, Cemex	Stepanovoch, Ron, Tone & Associates
Holdener, Doug, Cemex	Traylor, Rick, Cemex
James, Justin, Contech	Toliver, Tim, Advanced Pipe Systems
Johnston, John, J. Johnston Company	Tripp, Russell, ADS
Kessler, Richard, FDOT-SMO	Tyner, Carl, Quality Culvert
McCloskey, Ed, Hanson	Rick Renna, FDOT

**1. Welcome and Announcements**

- a) Rick Renna: Personnel changes at FDOT and PPI.  
Rod Powers has retired from FDOT; he now has his own private consulting business. Mario Paredes is filling in on an interim basis the position previously occupied by Mr. Powers. Mr. Brian Blanchard is FDOT's new chief engineer. Mr. David Sadler is the new State Construction Director. Mr. Michael Pluimer is back at PPI.
- b) Brian Blanchard, Chief Engineer.  
He welcomed all attendees and he thanked everyone for taking the time to attend. He also commented on the importance of FDOT transparency in all the actions it takes. He indicated that the work program may be affected by the slowdown of the economy since FDOT gets its funding from gas taxes. He expects bad news for the short term.

- c) All attendees introduced themselves.

## 2. **Construction Issues: David Sadler, Larry Ritchie.**

- a) Changes to Section 430: Problems with installed pipe and Pipe defects.  
The department is encountering a number of pipe defects during initial inspection. The department has not identified many problems during fabrication. All the problems seem to happen during or after installation. So changes have been drafted for Specification 430. The changes, if implemented, will affect projects let after July 2009. The basic idea is to inspect pipe early when the pipe has 3 ft. of cover. 100% initial pipe inspection during construction. If no major problems are found, then final inspection will be only 25% inspection of installed pipe including marginally deflected areas. If major problems are found during initial installation, then final inspection could be up to 100% pipe inspection. The department hopes to have uniform repair procedures in all districts. FDOT wants defect free installation.

Comments or questions on the above change:

Rick Traylor, Concrete Pipe Institute (CPI): Rigid and flexible pipe are not the same. Problems with RCP appear early. Flexible pipe problems do not appear early. 95% of problems of RCP can be detected during the first inspection. This change in specification represents unfair competition. Specification is a step backward. CPI does not support the changes. Flexible pipe problems are time dependent.

Discussion:

Blanchard: Full inspection, early and final, is not reasonable either

Traylor: Inspection for flexible pipe should be later on

Sadler: No evidence of deflection of flexible pipe. Evidence of a lot of installation issues

Traylor: Flexible pipe deflection issues have long been documented around the country.

Renna: Final inspection will concentrate on areas that, during early inspection, are approaching critical deflection limitations.

Traylor: Appears contractors were involved in the writing of the specification.

Sadler: No, the Department wanted to get ahead of issues before permanent structure above is built and replacement or repair becomes more costly.

Traylor: Wants same oversight on flexible as rigid pipe.

Renna: Possible solution – conduct both 100% early and final 100% inspection for awhile until we learn what sort of deflection changes to expect between early and final inspection. This will educate the Department's selection of pipe to be inspected during final inspection. DOT can then decide on a proper amount and criteria for re-checking pipes that may pass early inspection but creep over the allowable deflection by the time final inspection occurs.

- b) Ed McCloskey: Documents or review comments do not get the same weight that face to face PAG comments get.

Renna: Comments from Industry are addressed and taken seriously. Face to face comments will always carry more weight due to the improved communication – a very human issue common to any group. Industry thoughts and ideas on specification changes are always welcome.

## LUNCH

### Afternoon Session 1:00 PM – 2:00 PM

- d) Policies on repairs to new pipes:

The department wants to identify common repair methods and strategies, establishing the expected service life or general longevity of pipe repair methods. This is a national effort, not just FDOT.

Continuation of discussion on Item 2b:

Mr. Renna: Identify target scenarios of both early and final inspection. Tim McGrath to analyze data gathered. All types of pipe will be evaluated. FDOT will gather the data. Changes to Specification 430 will not be implemented until July 2009. 2 ½ years will pass before it shows up in projects. Keep the present specification and use supplementary contract to do data gathering. The transparency of data gathering important - Industry wants to see data acquired by FDOT.

Another possibility - modify inspection of current projects to acquire the needed time dependent deflection data. The sample size for final inspection would need to be resolved. Under any study, the laser profiling protocol will be employed, including the appropriate calibration of equipment.

If needed, a mandatory specification change can shorten the implementation time once analysis is done. Renna will discuss with Sadler as the Department completes its investigation.

Final Direction: Hold off on specification. Do data gathering for a period of time. Keep implementation goals. Implement spec after analysis of data gathered. Keep track of different kinds of pipe. FDOT will get comments from industry on the protocol as the study progresses.

e) Problems with differences in laser technology from different manufacturers: Did not find NASSCO helpful. NASSCO should resolve technical competing technology issues. NASSCO is new to laser technology too. FDOT started 100% video inspection in 1998.

f) De Jesus: Is structural engineer responsible for design calculations such as cover heights?

Renna: FDOT is responsible for the information in our standards. When an engineer correctly applies the policy from FDOT's standards, FDOT, not the design engineer is responsible.

g) Upcoming Change in Design Service Life Policy: A few years ago, FDOT studied pipe costs vs. service life and discovered no discernable difference in cost to FDOT for 50 or 100 year pipes. Accordingly, the District Drainage Engineers decided to eliminate the 50-year pipe category, targeting 100-year pipe in all applications except for driveways. Wishing to avoid impacts on Florida businesses, FDOT held off on this change, until HDPE qualified for the 100-year service life. Though ADS has qualified, Quality Culvert has not, but expects to be qualified by the end of 2009. Renna called Carl Tyner who indicated it would put Quality Culvert in market disadvantage. FDOT will continue to wait on this change until the end of 2009.

### 3. Pipe Service Life Issues. Paredes, Renna

a) HDPE Class II pipe.  
Specification Changes: New materials bulleting was released with new requirements. Melt index added to incubation samples to make sure no degradation when OIT's are low. Link to materials bulletin is below:

<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/materialsbulletins/topics/2008/mb07-08.pdf>

948 Specification change in FDOT's specs office. Specification change will go for industry review soon. CSLE test methods have been updated. Link below:

<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/fstmpage6.shtm>

All plant quality control training plans were approved for all active plants. Once HDPE class II pipe starts being used in project, FDOT will do random independent verification at project sites. FDOT will perform single point test of pipe being delivered. Quality Control Materials manual will be modified to incorporate verification testing; Specific tests will be added to the MM. Manufacturer's acceptance status: Contech Springfield, Illinois PVC plant was inspected and the QC plan was accepted.

- b) Update on NCHRP 20-07  
Main topic is pipe selection. The scope of work looks at gaps in knowledge for pipe selection. It is intended to provide defensible technical guidance for policy decision. The project scope is still in draft form.

**Meeting Adjourned**