Issue 9.

Separation of Mains- Requirements not Included on Plans, False Statement on Permit Applications:

No apparent effort was made to maximize distance or provide an elevation difference between sewer force and potable water mains. Plans call for a six foot minimum separation between pipes as standard practice even though a ten foot separation is to be provided unless it can be demonstrated that there is "no reasonable alternative". The depth of cover requirement is the same for water or force main so of course the contractor keeps installation costs to a minimum and both pipes get buried at the same minimum depth. Many thousands of gallons are lost daily from the water mains, so it is reasonable to expect that many thousands of gallons of raw, septic waste water will also be injected into the ground, saturating the area near the pipe with bacteria. The force main pressure is expected to be up to 3 times that of the water main at times, which will further facilitate leakage. There appears to be no effort to comply with 62-604.400.3(g) F.A.C.: "Except as provided in 62.604(3) F.A.C., sewers and force mains shall be laid at least ten feet (outside to outside) horizontally from water mains." See Exhibit AA for an example of a plan calling for minimum 6' separation on a new sewer force main adjacent to an existing water main.

Note that another DEP rule 62-555.314 Location of Public Water System Mains allows new water mains to be laid at 6 feet minimum separation (10' preferred). Note that this applies to NEW water mains, and the argument might be made for the seeming conflict in regulations that the regulators allowed less separation on a new water main because of better confidence in a new water main's integrity than an existing water main of unknown age and material. The fact remains that the 10' separation on new sewer force mains was violated during design and not noted as an exception on the permit application.

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