## Sanford Improves Water Pipelines Through Innovation

In our continued commitment to improve our water distribution system within the City's service area, we will be initiating water main replacement using an innovative method called prechlorinated pipe bursting. This method has been widely used in Florida for water main replacements due to the benefits of allowing pipes to be replaced without the entire route of the pipeline being excavated. Pre-chlorinated pipe bursting is not a new technology as it has been used for potable water lines in Europe for the past 3 decades with over 100 Million feet of main replaced. Since 1999, U.S. utilities have benefited from this technology because of anticipated project savings. The following are other benefits achieved with this water main replacement method:

Minimizes the removal of driveways and landscapes
Minimizes traffic concerns by keeping streets opened while

making only small excavations along the project

• Reduced engineering design cost as the new pipe will be run

through the old one and the pipe can be enlarged up to two sizes without permits • Reduces workers exposure to possible hazardous material and/or its disposal • FDEP Permit cost and compliance is eliminated • Customers will only see a crew in front of their home for one day vs. with normal pipe installation procedures customers can expect to be inconvenienced for a week or more.

For the City, this technology is a way to improve water quality, fix pipe leaks and improve fire flow while using the best cost-effective construction approach. The first area to be rehabilitated with this new technology is the Sunland sub-division. This area was built in the mid 1950s. The City's GIS water system map shows that there are approximately 16,499 linear feet of pipe that needs be improved in this area. The water hydraulic model also showed some pressure issues due to undersized pipes feeding the area. During this project, undersized lines are to



be increased from 4" to 6" and new fire hydrants are to be installed to improve fire protection. The water line replacement using pipe bursting in Sunland started in August. Two additional subdivisions will be replaced using the technology.

Murphy Pipeline Contractors, Inc. (MPC) has been selected by the City to perform the water main rehabilitation projects. MPC first introduced this technology to North America in 1999 and has gained the reputation as the industry leader with over 1 Million feet of experience.

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