MONROE COUNTY WATER AUTHORITY
PROJECT INFORMATION BULLETIN
2017 CATHODIC PROTECTION PROGRAM

Eng. No. 16-018 *September 2017*

Background

The Water Authority will be doing maintenance work on our water transmission main located near your property. This bulletin explains the upcoming work, and identifies whom to contact if you have any questions while the work is being done.

Project Details

Why is this Project needed? The transmission main is made of steel and has to be protected from corrosion. The original pipeline installation included two protection methods which were designed to work together: a coating system which was applied during the manufacturing process and a cathodic protection system that was installed during pipeline installation. The cathodic protection system is designed to deteriorate over time. (Basically parts of the cathodic protection corrode instead of the transmission main.) The current cathodic protection system has reached the end of its useful life, and by replacing it, we greatly extend the life of the transmission main. The new system is designed to last 20-25 years. In addition to replacing portions of the existing cathodic protection system, we are also performing repairs on certain components of the system and installing cathodic protection on existing buried steel vault structures.

Where is the project located? The steel water main receiving a replacement cathodic protection system is located along I-390 between Latta Road and Eileen Drive on Water Authority easement or property owned by the Water Authority. Repair work is being performed at various locations throughout the Water Authority's service area.

Work Details

The new protection system installation generally consists of the following four phases:

1. Testing along the water main,
2. Installing cathodic protection anodes and test stations,
3. Testing of the new installations, and
4. Restoring disturbed areas.

Initial testing is done to confirm that the transmission main is electrically isolated from other underground facilities such as gas mains. If any problems are discovered, they are corrected.

The new cathodic protection system will be buried underground and out of sight. This system includes the **installation of anode bags** along the water main. Anode bags consist of a magnesium bar (anode) placed in a cloth sack surrounded by gypsum. Once the anode is connected to the water main, it will electrically sacrifice itself (corrode) to protect the steel main.

Anode bags will be installed within the easements and street rights-of-way parallel to the main. The anodes will be placed into holes and connected to each other with a buried wire. The buried wire will then be connected to the water main at test stations. Although there will be digging near the main, this project should create little inconvenience to residents and traffic.

Testing will be performed at the test stations to assure that the protection system is functioning properly.

The **restoration work** includes returning grass and paved areas to their preconstruction condition. Lawn and field areas will be graded and seeded. If any area fails to grow properly, the contractor will be required to correct the problem. The Authority's contractor will also complete all pavement restoration.

Installation of the cathodic protection system at buried steel vault structures consists of the installation of the anode system around the vault followed by testing and restoration as described above.

Repair work will take place at existing test station locations and involves correcting damage to existing wires and test boards.

Schedule

The duration of this work depends on a number of factors. However, our expectations are for the work to start in early October and be completed by November. Final lawn restoration will be completed by June of 2018.

Questions

A MCWA inspector will be on-site throughout the project. All of our inspectors carry a photo ID card, wear MCWA uniforms, and drive a vehicle with a Water Authority logo on it. You can also contact our Customer Service representatives at 442-7200 weekdays from 8:30 a.m. to 4:30 p.m., or our Dispatcher at 442-2009 weekdays before 8:30 a.m., after 4:30 p.m., and on weekends and holidays.