

Section 02605

CONDUCTIVE TRACE WIRE FOR NONMETALLIC PIPE INSTALLATION

PART 1 GENERAL

1.01 SUMMARY

- A. This section covers the requirements for installation of a conductive trace wire with underground, nonmetallic pipe.

1.02 MEASUREMENT AND PAYMENT

- A. Work performed under this section shall be paid for under the lump sum bid price or included in the unit price for pipe installation as applicable, unless otherwise indicated on the Bid Form.

1.03 SYSTEM DESCRIPTION

- A. Install electrically continuous trace wire, with access points as described herein, to be used for locating nonmetallic pipe with an electronic pipe locator after installation.

PART 2 PRODUCTS

2.01 TRACE WIRE

- A. Trace wire to be twelve (12) gauge minimum solid copper with thermoplastic insulation recommended for direct burial. Wire connectors to be 3M DBR, or approved equal and shall be watertight and provide electrical continuity.

PART 3 EXECUTION

3.01 ERECTION/INSTALLATION/APPLICATION AND/OR CONSTRUCTION

- A. Trace wire shall be installed in the same trench and inside bored holes and casing with nonmetallic pipe during pipe installation. It shall be secured to the pipe, as required, to insure that the wire remains directly adjacent to the pipe. The trace wire shall be securely bonded together at all wire joints with an approved watertight connector to provide electrical continuity, and it shall be accessible at all new water valve boxes, water meter boxes, fire hydrants, sewer manholes, sewer cleanouts, gas valves and gas meter risers as applicable to the utility line being installed. At manholes, the wire shall be installed from the exterior of the manhole to the interior by installing the wire underneath the manhole frame. For lines with more than 5 feet of cover, the wire shall be installed directly over the pipe at a depth of 5 feet.

5 feet. If the spacing of valves and meters is greater than one mile, the trace wire shall be looped up in a 2" PVC pipe to be located at the right-of-way fence line or at a cross fence line, as applicable, for protection. A cap shall be placed on the 2" pipe when used, but it shall not be solvent welded onto the pipe. Where access points for trace wire on gas lines exceeds 500', install test lead boxes such that maximum access point spacing is 500'.

3.02 TESTING

- A. Contractor shall perform a continuity test on all trace wire in the presence of the Director of Public Works (DPW) or the designated representative of the DPW.

3.01 REPAIR/RESTORATION

- A. If the trace wire is found to be not continuous after testing, Contractor shall repair or replace the failed segment of the wire.

END OF SECTION