



Design Engineering
MEMORANDUM

DATE: September 27, 2021
TO: Paul Zachary, Engineering Services Department Director
FROM: Henry Som de Cerff, Design Manager
SUBJECT: Standards and Specifications for 408 Pipe Bursting and 409 Sliplining.
Approved by Committee: September 14, 2021

The Specification Review Committee recommends and asks the Engineering Services Department Director to approve the following:

1. Modification to City of Tulsa Standard Specification 408 Pipe Bursting and 409 Sliplining.

Please call me at (918) 596-7355 if you have any questions.

Thank you.

APPROVED:



Paul Zachary, Director



Date

Cc: Engineering Services Department Specification Review Committee

SP-1 TECHNICAL REQUIREMENTS AND SPECIFICATIONS

MODIFICATION TO CITY OF TULSA STANDARD SPECIFICATION 408 PIPE BURSTING & 409 SLIPLINING

The following modification(s) shall not replace the referenced specifications sections but rather act as an addition to the existing specification located in the City of Tulsa Standard Specifications and Standard Details, dated October 2013.

PART 1 GENERAL

- 1.1 When HDPE pipe is delivered to the jobsite it shall not be exposed to sunlight for more than three (3) weeks. HDPE pipe exposed to sunlight for more than three (3) weeks shall be covered with an opaque protective covering. The pipe shall be left stacked and no more pipe than can be installed in one day shall be strung along the jobsite.
- 1.2 Pipe and fittings shall be joined by one of the following types of thermal fusion per the Manufacturer's recommended procedures: Butt fusion, Saddle fusion or Socket fusion.
- 1.3 Polyethylene pipe and fittings may be joined together or to other materials using electrofusion fittings, flange adapters with back-up rings, mechanical couplings designed for connecting polyethylene pipe and fittings to itself or to another material, or MJ adapters. The manufacturer of the joining device shall be consulted for proper installation procedures.
- 1.4 Polyethylene pipe and fittings joined together using a hydraulically operated heat butt fusion machine, shall utilize a data recording device per ASTM F3124 – STANDARD PRACTICE FOR DATA RECORDING THE PROCEDURE USED TO PRODUCE HEAT BUTT FUSION JOINTS IN PLASTIC PIPING SYSTEMS OR FITTINGS. Each HDPE joint shall be traceable to the fusion operator and equipment. Electrofusion reports of each weld shall be appropriately identified and provided to City of Tulsa Inspector. The reports shall include, as a minimum, the fusion date, time, ambient temperature, fitting type and size, user ID, and the manufacturer of the part.
- 1.5 The Contractor shall be responsible for ensuring all personnel operating heat fusion equipment are qualified Heat Fusion Equipment Operators in accordance with ASTM F3190-16 – STANDARD PRACTICE FOR HEAT FUSION EQUIPMENT (HFE) OPERATOR QUALIFICATION ON POLYETHYLENE (PE) AND POLYAMIDE (PA) PIPE AND FITTINGS. All polyethylene joints shall be thermally butt fused by an HFE Operator. The HFE Operators Card shall be submitted at the Pre-Construction Conference and provided at the request of the Engineer. Certification by a distributor shall not be an acceptable substitute.
- 1.6 PAYMENT: No additional payment shall be made.

END OF SECTION