



**ATTENTION: TP&D, DESIGN, CONSTRUCTION, MAINTENANCE AND  
TRAFFIC OPERATIONS ENGINEERS**

**SPECIAL PROVISION AND/OR SPECIFICATION CHANGE MEMORANDUM 16-18**

**MEMO**

**Date:** August 29, 2018

**To:** District Engineers

**From:** Gina E. Gallegos, P.E.  
Construction Division Director

**Subject:** Statewide Special Specification 4122 (14), "Thermoplastic Pipe"

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The above-referenced special specification has been approved for statewide use and is required for all projects using thermoplastic pipe beginning with the November 2018 letting. However, use of this special specification prior to the November 2018 letting is at the district's option.

The attached Statewide Special Specification for Thermoplastic Pipe has been developed for District use. Districts may use thermoplastic pipe on TxDOT projects subject to the Phase I Restrictions of the Pipe Selection document until further notice. The Phase I Restrictions are:

- Roadways with current ADT less than 2,000 per lane.
- Inside pipe diameters no greater than 36 inches.
- Multiple pipe installations will be limited to a maximum of two adjacent pipes.
- Fill heights over pipe from 2 feet to 12 feet. Minimum fill height for private driveways may be reduced to 1 foot.
- Installations to be cross-drainage or side-drainage culverts. The purpose of this restriction is to allow post-construction inspection and evaluation of the pipe installation without having to enter manholes or other closed systems. Closed storm sewer systems are specifically disallowed under this restriction.

Please note the following for Plans, Specifications, and Estimate (PS&E) preparation:

- The Special Specification allows the choice of three materials for backfilling the pipe. Type I is flowable fill, Type II is cement stabilized backfill, and Type III is an aggregate backfill. Backfill Types I and II will need to be included as pay items. Type I is paid for under Statewide Special Specification Item 4438, "Flowable Backfill." Type II is paid for as "Cement Stabilized Backfill" under Standard Specification Item 400, "Excavation and Backfill for Structures."
- The Special Specification requires safety end treatments on the pipe, which are a separate item and need to be paid for separately.
- The Special Specification allows the choice of two joint types, Soiltight and Watertight. Both joint types are gasketed. The Soiltight joint is similar to typical joints for Reinforced Concrete Pipe and CMP in that small amounts of water may be able to leak into or out of the pipe, but soil should not be carried

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into the pipe. The Watertight joint is a very tight joint that is laboratory tested to over ten psi. Pipe with the Watertight joint is somewhat more expensive.

- The PS&E package will need to designate pipe diameter, joint type and backfill type.
- When Thermoplastic Pipe is included in a contract, it should be set up as an alternate to another pipe type. Bidding Thermoplastic Pipe as an alternate will allow tracking of the bid price and usage of the product.

Please disseminate this information to your Transportation Planning & Development, Design, Construction, Laboratory, Maintenance, and Traffic Operations Engineers.

**CC:** TxDOT Specification Committee  
Federal Highway Administration  
The Associated General Contractors of Texas