

A P P E N D I X H

GREENVILLE FIRE PREVENTION BUREAU PROCEDURES FOR CLEANING AND TESTING PRIVATE FIRE SERVICE MAINS

This Appendix contains the procedural requirements of the City of Greenville Fire Prevention Bureau for cleaning and testing private fire service mains. This document is being provided by the Greenville Utilities Commission for information only and to make known the need to coordinate the described activities with the regulatory authority.

GREENVILLE FIRE PREVENTION BUREAU

Procedures for Cleaning and Testing Private Fire Service Mains

The purpose of this document is to aid contractors in the procedural requirements for cleaning and testing of new private fire service mains throughout the City of Greenville and within the extra territorial jurisdiction (ETJ) governed by the Greenville Fire Prevention Bureau. Private systems commence at the public water purveyor's point of service (typically defined as the inlet side of the backflow prevention device).

The following operations shall be conducted for and witnessed by the Greenville Fire Prevention Bureau prior to approval of any new system for service.

1. Cleaning of Piping
2. Hydrostatic Testing

Cleaning of Piping

Private fire service mains and lead-in connections to system risers shall be cleaned thoroughly before connection is made to the sprinkler system piping in order to remove foreign materials that might have entered the main during the installation. The cleaning can be accomplished either by flushing with water or use of an approved polyurethane pig in accordance with the following:

Mains smaller than 4" in diameter shall be cleaned by flushing with water. The minimum rate of flow shall not be less than the water demand rate of the system, which is determined by the system design, or not less than that necessary to provide a velocity of 10 ft/s (3 m/s), whichever is greater. The flushing operation shall continue for a sufficient time to ensure thorough cleaning.

Mains 4" and larger in diameter shall be cleaned by passing through the pipe a polyurethane "pig" of the appropriate size and density (as manufactured by Poly-Pig or approved equal). Pig(s) shall be furnished by the contractor. As an alternative to "pigging", pipes of less than 100 feet in length which are difficult to "pig" may be cleaned by flushing with prior approval. Flushing shall be accomplished in the same manner as that required for pipes less than four inches (4") in diameter.

When planning the appropriate cleaning operation, consideration shall be given to disposal of the water issuing from the outlet.

Hydrostatic Test Requirements

All private fire service mains shall be tested hydrostatically at not less than 200 psi for two hours. The allowable leakage shall be as specified by the National Fire Prevention Association (NFPA). Additives shall not be used to stop leaks while hydrostatically testing the system.

Each fire hydrant shall be fully opened and closed under system pressure.

Schedule/Fees

The contractor shall contact the Greenville Fire Prevention Bureau at least 24 hours in advance to schedule the appropriate test. Office hours are 8-5 Monday-Friday and the telephone number is (252) 329-4415.

Each scheduled visit will be billed at a rate of \$30.00 or \$60.00 for project sites inside or outside of the City of Greenville Corporate Limits respectively. It is the aim of the Greenville Fire Prevention Bureau to promote the protection of life and property from fire, through the proper cleaning and testing of private fire service mains, as set forth herein.