



## BST&G Fire District

### Fire Prevention Bureau – Community Risk Reduction

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#### Fire Protection Underground Pipe Inspections and Test Procedures

<b>Date:</b>
<b>Project Name:</b>
<b>Project Address:</b>
<b>Designers Name:</b>
<b>Company Name:</b>
<b>Phone Number:</b>
<b>Fax Number:</b>
<b>Email:</b>

#### Scheduling the Inspection:

The licensed contractor requesting the inspection must notify the BST&G Fire District Prevention Bureau, forty-eight (48) hours in advance of the inspection date. In addition, the following agencies shall also be notified for these inspections;

- Delaware County Code Compliance: (740) 833-2200
- Delco Water Company: (740) 548-7746

The following shall be the required test procedures per 2016 NFPA 24 for All Fire Protection Underground Fire Lines. ***The Inspections shall be done in order as listed below with NO EXCEPTIONS.....***

#### **1. Visual Inspection:**

Offloading of pipe, valves and other appurtenances – The BST&G Fire District Fire Prevention Bureau shall be present for off loading of all fire suppression line materials. At no time shall materials be dumped or dropped per **2016 NFPA 24 Section 10.8.8**

## **2. Visual Inspection of Underground Installation:**

- Inspection of trench, depth of cover, four feet (4 ft) from top of pipe to finished grade.
- Confirm, pipe type and class, fittings, clamps and rods.
- Areas that thrust blocks are to be poured, per attached and or approved drawings.
- Corrosion Resistance application, per 2016 **NFPA 13 10.6.2.5 or NFPA 24 10.3.6.2.5**
- Backfill of the trench per **2016 NFPA 13 Section 10.9.1 and/or 2016 NFPA 24 10.9**

### **Acceptance Testing (The Day of the Scheduled Inspection):**

**The contractor shall supply all required material to perform all acceptance testing.**

## **3. Flushing of underground pipe(s):**

- Shall be done in accordance with **2016 NFPA 24 Section 10.10.2.1**
- The minimum acceptable flushing line shall be a found four inch (4") flushing line.
- The FDC line shall be supplied by a five-inch (5") supply line.
- A mechanical method of securing the discharge flushing line(s), (like a Hose Monster, tube hitch adapter/pipe vice shall be used.) **The flushing discharge line shall be mechanically secured.**
- A burlap bag shall be attached to the end of the flushing line during the acceptance test.

### **THE ACCEPTANCE TEST SHALL BE CANCELED BY THE INSPECTOR FOR THE FOLLOWING:**

- The flushing line is not acceptable due to holes, tears or coupling issues.
- The flushing line is not mechanically secured and created a dangerous atmosphere for the inspector.

## **4. Minimum Flushing Rate for Flushing:**

- A.) Hydraulically calculated water demand flow rate of the system, including hose requirements.  
B.) Flow to provide a velocity of ten feet per second (10'/sec) per 2016 NFPA 13, Table 10.10.2.1.3  
C.) Maximum flow rate available to the system under fire conditions.
- Flush until the water is clear and no foreign material is noted in the flushing bag.

### **Pilot Test:**

The contractor shall provide all equipment required to take a pilot reading to ensure that all street or isolation valves are open and the required flow for vase of the riser is available.

### **Hydrostatic Test per 2016 NFPA 24 Section 10.10.2.2.:**

All piping and attached appurtenances subject to system working pressure shall be hydrostatically tested at 200 psi for 2 hours. Allowance of pressure loss per **2016 NFPA 24 section 10.10.2.2.6**

Upon the arrival of the inspector, the system shall be pressurized to 200 lbs.

- All valves will be checked to insure they are fully open.
- The test pump shall be disconnected.

### **The test will end for the following:**

- The test meets the required 2-hour test.
- The contractor is not pre-paired to start the test (trip charge will be incurred by the contractor.)
- The system will not hold pressure.

### **Capping of Flushed Rise**

- After the riser has been flushed and hydrostatically test, a blank cover shall be installed / secured over any and all open-end risers.

### **Contractor's Material and Test Certificate for Underground Piping:**

*The 2016 NFPA 24 Form 10.10.1 shall be completed.*

- All blanks or check boxes shall be completed.
- All signatures shall be completed

*Revised December 2020*