Expectations (continued)

- The work **is ready** to be inspected.
- If a problem develops where the work is not ready for inspection, call the FMO and **cancel** the inspection as soon as you are aware there is a problem.

M-F 703-792-6360

Weekends- 703-792-6813 and ask for the **Duty Fire Marshal**
There are seven categories of inspections:

- Underground Fire Main
- Fire Alarm
- Sprinkler
- Hood System
- Fire Lane
- Stocking
- Pre-occupancy
Underground Fire Main (UGM) inspections available

- Visual (59)
- Hydrostatic (60)
- Flush (61)
- Final (82)
A **visual** inspection of the piping, connections, thrust blocks, threaded rods, and/or mega lug connectors from the street water valve to the base of the flange for the connection to piping of the automatic sprinkler and/or standpipe system.
Must be installed per the approved plan.

PWC Design and Construction Standards require a minimum of 42” of cover over an underground fire main.
(60) UGM hydrostatic test/inspection

- A 200 P.S.I. or 50 pounds over static water pressure, whichever is greater, hydrostatic test for a two (2) hour period of UGM components from the street water valve to the base of the flange for the connection to where the automatic sprinkler and/or standpipe system will be connected.
UGM hydrostatic test/inspection

- Gauges used in performing acceptance tests on fire suppression systems witnessed by the Fire Marshal’s Office must meet the following criteria:
The gauge shall be appropriate for the type of test; i.e., air gauge for an air pressure test, a water gauge for a hydrostatic test.

Air gauges shall have increment markings of two pounds or less. Water gauges must have increment marking of ten pounds or less.
The gauge shall be capable of registering pressures above the minimum pressure required during the test. (0 PSI to 300 PSI)

- Gauges must be marked as accepted by UL and/or FM testing laboratories.
The test gauge must “zero” out at the end of the test period or the inspection will be rejected.
(61) UGM flush

- A flush of the UGM piping between the street water valve and the base of the automatic sprinkler and/or standpipe system flange.
- **This test and inspection is required for all sprinkler system water supplies. (NFPA 13, 13R, and 13D)**
- Where there is not a separate fire protection permit number the inspection request is called in on the sprinkler fire protection permit number.
(61) UGM flush

- Minimum 4” diameter hose used for discharge unless the piping being flushed is less than 4” in diameter.

- Must be done in a safe manner, I.E. the hose used for flushing must be secured in a proper manner to prevent it from moving.
The above tests/inspections are done in accordance with NFPA 24 (1995), Private Fire Service Mains and Their Appurtenances.

The tests/inspections can be done on separate days or on the same day provided that they are performed in the proper sequence that is visual, hydrostatic, and flush.
A review of the UGM test and inspection records to assure that all the required system tests/inspections on the underground fire main are code compliant and have been approved.
Common Failures

- Inadequate depth of cover.
- Approved plans **not** on site.
- Not installed per approved plan.
- Inability to hold test pressure.
- Inadequate flow to flush line.
- Improper restraint of piping.
Fire Alarm Inspections available

- Fire Alarm (73)
- Fire Alarm Battery Test (74)
- Fire Alarm Final (81)
(73) Fire Alarm Test

- A test/inspection of all fire alarm system components, including all manual and automatic activation/initiation devices, visual, and audible warning devices.

- This is a **100% test** of all installed devices according to the manufacturer’s recommended method.
(73) Fire Alarm Test

- The system should be **pre-tested** by the installer **PRIOR** to calling in for the fire alarm inspection.

- Device addressing and failure to function should not be found during the FMO inspection.
(73) Fire Alarm Test

- Do not have the system in “test” mode without instruction to do so by the inspector.

- The fire alarm control panel must be clear of “trouble” before the test can be conducted.
(74) Fire Alarm Battery Test

- A test of the ability of the fire alarm system to sound all visual and audible horns for five (5) minutes after the system has been on battery power for a twenty-four (24) hour period.

- Normally started upon completion of the fire alarm test/inspection.