The Wilkinsburg-Penn Joint Water Authority

2200 Robinson Boulevard

Pittsburgh, PA 15221

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Specifications for Fire Lines Without Hydrants 4" and Larger

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1) A $200.00 estimate fee and building plans must be submitted to the Authority for new service lines.

2) A service line location must be given by Authority personnel for new service lines after a footer or foundation has been installed.

3) Service lines over 100' in length must have a meter vault.

4) All service lines shall be installed from inside the building or vault out to the curb line or main line.

5) All service lines shall be installed at a depth of 54"

6) When a service line runs under apportion of the building, a minimum depth of 18" will be required.

7) All service lines must be at right angles to the street (90°)

8) All joints and fittings must be restrained by use of Field-Loc gaskets, Meg-a-lugs, and or thrust blocking.

9) All service lines must be inspected in the **open trench** by Authority personnel. Pictures or video of installed service lines are not acceptable.

10) A hydrostatic test must be performed from the curb valve to the inlet valve at 1.5 times the actual pressure and maintained for 1 hour. This test will be conducted by the installation contractor and witnessed by an Authority Representative.

11) Requests for service line inspections must be received by the Authority office prior to 11:00AM on the date of the requested inspection. Requests received after 11:00AM shall be referred to the next business day.

12) All charges must be paid and inspections completed before the main will be tapped and the service line between main and curb will be installed.

13) The Allegheny County Plumbing inspector must be contacted for inspection.

MATERIAL SPECIFICATIONS

PIPE:

Ductile iron, centrifugal cast and shall comply in all respects to ANSI Specifications A21.51, Thickness Class 52 with push-on joints. All pipe shall be cement mortar lined. 1/8 inch (double thickness) on the inside and coal tar coated on the outside, lining and coating to comply with ANSI Specifications A21.50.

FITTINGS:

All fittings shall be cast from ductile iron in accordance with ANSI/AWWA C153/A21.53 with mechanical joint bells. Glands, bolts, nuts and gaskets shall be in accordance with requirements of ANSI/AWWA C153/A21.53. The working pressure rating shall be 350 PSI. All fittings shall be cement mortar lined. Fittings shall have an asphaltic outside coating in accordance with ANSI/AWWA C153/A21.53. Fittings maybe compact or full body types.

If you have questions, please contact the Wilkinsburg-Penn Joint Water Authority offices.

Hydrostatic Pressure Testing

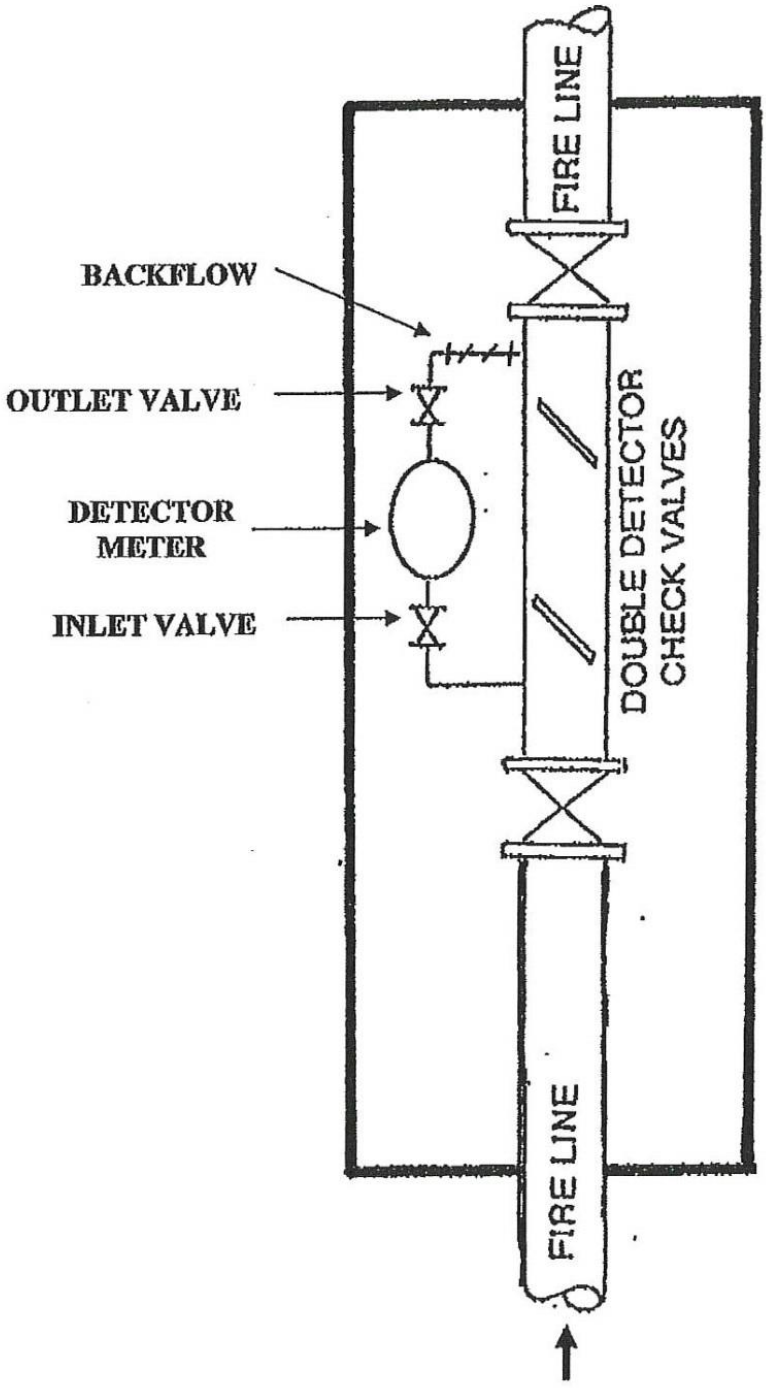
Overview:

Hydrostatic pressure tests are used to gauge the integrity of a pipeline following its construction or repair activities that could affect its leak-tightness. As the term implies, in hydrostatic testing of new or repaired pipelines, water in the line is pressurized beyond the maximum operating pressure, and then maintained for a predetermined amount of time to determine if there are any leaks. The operational integrity of connections and the pipe itself is assured if the hydrostatic test is successfully passed.

Testing:

The Contractor shall conduct the test. The pump, pipe connections, gauges and all necessary apparatus shall be furnished by the Contractor. The pipe shall be slowly filled with water. All air shall be expelled from the pipe as the line is filled. The line is pressurized to 1.5 times the actual pressure for a predetermined amount of time with zero pressure loss. A Water Authority Representative must witness the test. Lines, which fail to meet test requirements, shall be repaired and retested as necessary until test requirements are complied with. All pipe, fittings and other materials found to be defective under the test shall be repaired or replaced at the Contractor 's expense.

FIRE SERVICE WITHOUT HYDRANTS



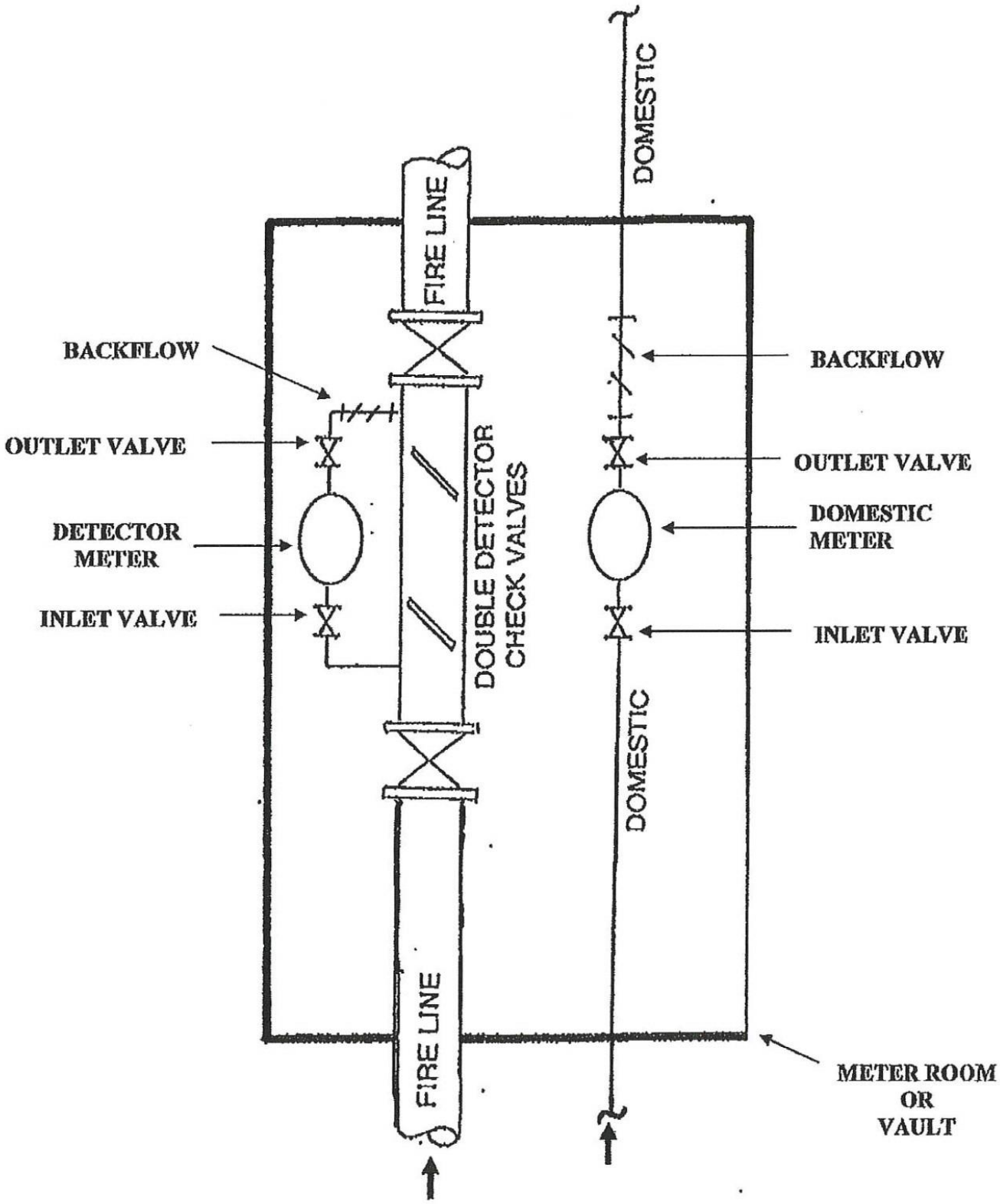
Meter Vault

1) Minimum size of vault will be:
   a) 4' x 4' Square x 5' Depth
   b) 4' Dia. Round x 5' Depth
2) Vault opening:
   a) Minimum 30" Square or Round
   b) Lid – maximum 50#.
3) Provisions for drainage or sump pump.
4) Ladder or steps:
   a) Directly under vault opening.
   b) Must be safe and convenient for entry.
5) Consumer to maintain vault in a safe and sanitary condition at all times.
6) The size of the service line, meter type and backflow preventer will determine the vault dimensions

Meter Room

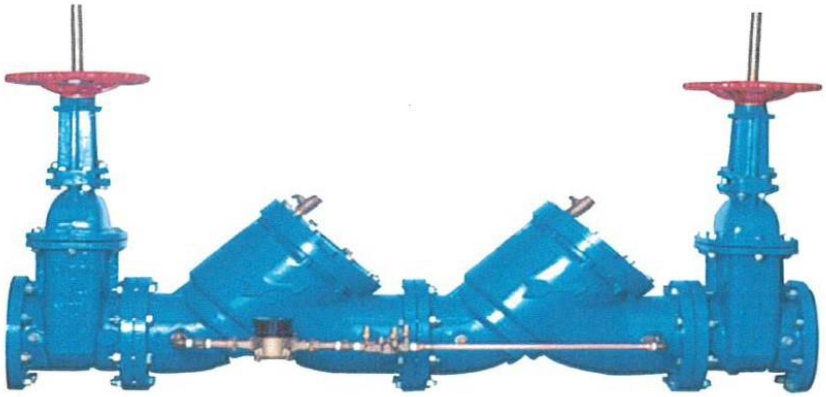
1) Must have a permanent heat source.
2) Minimum of 6'-6" head clearance.
3) Provisions for drainage or sump pump.
4) Provide lighting.
5) Be easily accessible.
7) Consumer to maintain room in a safe and sanitary condition at all times.
8) The size of the service line, meter type and backflow preventer will determine the meter room dimensions

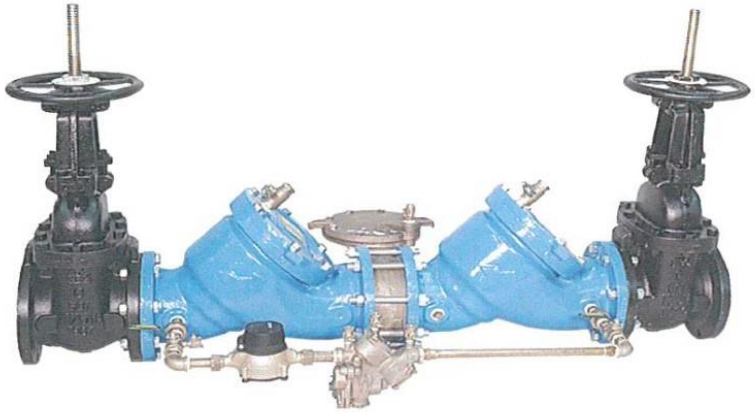
DOMESTIC AND FIRE SERVICE



DOMESTIC AND FIRE SERVICE CAN NOT BE COMBINED.
THERE MUST BE A SEPARATE TAP FOR EACH

Double Check Detector Assembly





Reduced Pressure Detector Assembly

Backflow Assemblies Must Be AWWA Approved

Meter Vault

1) Size
   a) Minimum size of vault will be 6’ x 6’ x 6’ Depth

   b) The size of the service line /fire line, meter type and backflow preventer will determine the vault dimensions

2) Vault opening:
   a) Minimum 48” x 48” Double leaf Access Hatch
   b) The placement of the vault i.e. Grass, sidewalk, road will determine Grade of hatch necessary.

3) Provisions for drainage or sump pump.

4) Ladder or steps:
   a) Directly under vault opening.

   b) Must be safe and convenient for entry.

5) Consumer to maintain vault in a safe and sanitary condition at all times.

Meter Room

1) Must have a permanent heat source.
2) Minimum of 6’-6” head clearance.
3) Provisions for drainage or sump pump.
4) Provide lighting.
5) Be easily accessible.
6) Consumer to maintain room in a safe and sanitary condition at all times.
7) The size of the service line, meter type and backflow preventer will determine the meter room dimensions