

# HOLLAND BOARD OF PUBLIC WORKS

Water & Wastewater Services

## **FIRE PROTECTION SERVICE REQUIREMENTS**

### **FIRE SERVICES**

**Plans for fire service installations must be submitted to the Holland BPW prior to installation and must contain all of the following items, if used:**

- All underground piping and appurtenances – valves, hydrants, pits, etc.
- Sizing and material of all piping
- Domestic service connections
- Remote Fire Department Connection location and if a ball drip valve will be installed
- Backflow Preventer Type

Domestic service connections must have an independent service valve outside the building.

Holland BPW personnel shall witness chlorination, pressure testing and take bacteriological samples on all underground service piping from the public water main to the building. These tests must pass prior to connection to the public water main.

For fire service lines less than 4", the Holland BPW personnel shall witness all connections under live conditions to verify no leakage (drip test).

The Holland BPW requires a minimum of 24-hour notice prior to inspection for scheduling purposes. Initial inspection and testing of the services shall be included in standard Holland BPW inspection **fees**. Additional inspections and testing will result in additional fees.

Fire services shall be billed monthly at the current rate as established by the Holland BPW. Billing will begin at the time the fire service valve is turned on or the domestic meter is installed, whichever comes first. The billing rate will be based on the size of the fire service riser as it enters the building.

### **PRIVATE HYDRANTS**

- Private hydrants are not permitted without Holland BPW approved backflow prevention to the public water.
- Private hydrants must be painted all red, if installed.
- Private hydrants must be operational at all times and must be maintained in accordance with the requirements of the local fire marshal.
- Weep drains in private hydrants must be plugged.
- Private hydrants may only be used for fire system maintenance unless a Holland BPW issued hydrant meter and backflow preventer are used.

**Keep in mind the following:**

- Trunkage fees shall be paid prior to connecting a building or structure to a public main.
- Service connections to live public water mains shall be made by Holland BPW personnel only and billed to the contractor. The contractor shall be responsible for excavating and making a safe trench and for backfill and compaction.

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### REMOTE FIRE DEPARTMENT CONNECTION (FDC)

Fire Marshal or local jurisdictional Fire Department personnel shall determine whether a FDC is required or not and shall witness underground piping installation for remote connections.

Installation requirements with a Ball Drip Valve downstream of a double check valve assembly:

- Soils must be well draining (sand or gravel), AND
- Groundwater levels must be below the draining valve, AND
- There is no evidence or record of groundwater contamination in the area (irregardless of current groundwater level), AND
- Ball drip valve is placed on a minimum of six (6) inches of pea stone. Installation shall include a tile (drain pit) to the surface with an access cover so soil and groundwater conditions can be verified. Ball drip valve can not be installed in a sealed pit or vault unless it drains via gravity to an open air situation (i.e. a pit is installed with a drain away to the side of a bank; draining to a storm sewer is not allowed).

**If the above conditions can not be met, then a drain pit is not required but a RPZ (Reduced Pressure Zone Backflow Preventer) must be installed inside the building.**

### AUTOMATED SPRINKLER SYSTEMS

The Building Official approves and inspects the plans, internal piping and installation of the backflow preventer. The Building Official will require records of a flow test on the public main for supply pressures and flow rates. The flow test shall have been conducted within the previous year without any major changes to the public distribution system.

#### **Backflow Preventer:**

- Installation shall be the appropriate double check valve assembly or a reduced pressure zone assembly. Double Check Detector Assemblies (DCDA) and Reduced Pressure Detector Assemblies (RPDA) are not allowed since the Holland BPW does not read the detector meters.
- Backflow preventers are not required on the fire suppression system for deluge, pre-action or dry pipe systems. However, if a remote FDC with a ball drip valve is installed on one of these systems, backflow prevention will be required.
- Installation per ASSE Seal Authorizations including direction of flow (horizontal, vertical flow up, etc.). Assembly must include listed valves and test cocks.
- Backflow preventer shall be tested (Michigan Plumbing Code 312.9.2) at time of installation with copy submitted to Holland BPW Water Engineering Dept.

#### **Feel free to contact the following people regarding these related topics:**

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