

## Fire Service Information

**Address:**

**Project Name:**

This information is intended to provide assistance to the developer and project engineer and contractor in the design and installation of fire suppression services in the City of Portage pursuant to the latest adopted edition of the International Fire Code. The information consists of requirements and recommendations for construction practices and materials used in fire service construction. The applicant is responsible for being sufficiently familiar with and have a working knowledge of the codes and ordinances of the City of Portage but the Department of Community Development will be glad to assist. A meeting with Department staff is encouraged.

### Positioning of Fire Services

Yes No N/A

- 1. Water service lines for fire suppression shall be installed in a straight line from the water main to the facility served.
- 2. The fire suppression service shall enter the building at the point nearest the street right of way.
- 3. The fire suppression service shall be positioned to avoid driveways and driveway approaches, transformers, air conditioning units and other utilities such as gas and electric or any other obstacles that may obstruct reasonable access to the service line for repair or maintenance activities.
- 4. Each fire suppression service shall possess a curb stop (valve) and a valve box located within the street right of way.
- 5. With ground post indicator valves, the reduced pressure zone backflow preventer (RPZ) will be located in a heated enclosure. The heated enclosure is to be located on private property 8 feet from the right of way line. All heated enclosures are to be located in landscaped areas.
- 6. When (RPZ) is installed in a building, they must be protected from freezing. The (RPZ) must be installed at a point of entry to the building. A minimum clearance of 3 feet must be maintained in front of the (RPZ) to provide reasonable access to the meter, valves and (RPZ).

### Construction of Fire Services

Yes No N/A

- 1. All fire service lines shall be installed with a minimum of 5 feet of cover and a maximum of 6 feet of cover.
- 2. All valve boxes shall be centered on the valve operating nut and adjusted to grade.
- 3. Joint restraint is required a minimum of 70 feet from all bends and tees in the line. Thrust blocks are not permitted.
- 4. Pressure testing and chlorination of all service lines is required.
- 5. The "trim" for the bypass meter on the (RPZ) valve shall be provided and installed by the contractor. The "trim" shall possess backflow prevention.
- 6. All post indicator valves (wall and/or ground) shall be located on the discharge side of the (RPZ).
- 7. All service lines shall be constructed consistent with a typical water main (see Water Main Information).

### Materials

Yes No N/A

- 1. All pipe 10 inch or smaller shall be mortar lined class 52 ductile iron pipe.
- 2. All pipe 12 inch or larger shall be mortar lined class 53 ductile iron pipe.
- 3. All valves shall be RW (resilient wedge) gate valves with MJ (mechanical joint) connections. All valves must open counterclockwise.
- 4. Valves placed underground shall have 2 inch operator nuts with valve boxes. Valves placed inside pits or buildings shall have handwheel operators.
- 5. All underground fittings shall be mortar lined ductile iron with MJ connections.
- 6. All fittings 4 inches or larger within pits or buildings and on the city side of the (RPZ), shall have flanged-type connections.
- 7. The "trim" for the bypass meter on the (RPZ) shall be provided and installed by the contractor. All "trim" shall be constructed using threaded fittings. Solder fittings will not be accepted.

## Fire Safety

Yes No N/A

- 1. A Michigan Fire Fighter Right-To-Know Form shall be completed and submitted by all businesses as part of the building plans.
- 2. Spray application for flammable finishes shall be done in an approved spray booth. The booth will be protected by an approved automatic extinguishing system.
- 3. Commercial-type cooking equipment will be protected by an approved automatic extinguishing system.
- 4. Portable fire extinguishers will be provided for this structure. Extinguishers will have a minimum rating of 2A10BC and shall be located as approved by the Fire Department.
- 5. Fire apparatus access at least 20 feet wide shall be required adjacent to the building when any portion of an exterior wall is greater than 150 feet from vehicular access.
- 6. Plans for all fire detection and suppression systems are to be submitted to the Fire Department for review and approval prior to commencing installation of those systems. A minimum of four sets of plans are to be submitted, with one set accompanying the permit application and the other three sets submitted directly to the Fire Department.