

FIRE DEPARTMENT CONNECTIONS

FIRE DEPARTMENT CONNECTION (FDC) LOCATIONS: FDCs shall be located in accordance with the following:

The FDC shall be located so that when in use, the fire apparatus and hose connections to the FDC and to the supply hydrant will not obstruct access to the building for other fire apparatus. (OFC Section 912.2)

FDC shall be located on street side of building or facing approved apparatus access roads. (OFC Section 912.2.1)

The FDC shall be within 150 feet of street or fire apparatus access road. (OFC Section 912.2)

The FDC shall be within 300 feet of a fire hydrant. (OFC Section 912.2)

The FDC shall be remotely located to the building it serves and 35 feet from the fall line. (OFC Section 912.2)

FDC shall be installed at a height between 18 inches and 48 above grade. (NFPA 13 Section 16.12.5.1)

A 3 foot clear space shall be provided around the circumference of fire hydrants. (OFC Section 507.5.5)

The FDC shall be fully visible, and recognizable from the street or nearest point of the fire department vehicle access or as otherwise approved. (OFC Section 912.2.1)

Where FDCs and fire hydrants are subject to impact by a motor vehicle, bollards or other vehicle impact protection must be provided. (OFC Sections 312, 507.5.6, 912.4.3)

Fire department connection location shall be determined by the Fire Code Official. (NFPA 13 Section 16.12)

The size of the pipe for the fire department connection shall be in accordance with one of the following:

1. 1 Pipe size shall be a minimum of 4 inches for fire engine connections
2. 2 Pipe shall be a minimum of 6 inches for fire boat connections
3. 3 For hydraulically calculated systems, the pipe size shall be permitted to be less than 4 inches, but **NOT less than the largest RISER being served by that connection.**

The fire department connection shall be located on the system side of the water supply check valve. (NFPA 13 Section 16.12.5.1)

The FDC shall have a sign stating "FDC". Multiple FDCs located in the same area shall be provided with signage indicating which building they serve. (OFC Section 912.5)

Steel piping manufactured in accordance with NFPA 13 Table 6.1.1.3 that is externally coated and wrapped and internally galvanized shall be permitted to be used between the hose coupling(s) on the FDC and the check valve installed in the FDC piping.

All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion retarding material after installation. (NFPA 13 Section 6.4.1.1)

Protection from mechanical damage. The depth of cover for private service mains and their appurtenances to protect against mechanical damage shall be in accordance with NFPA 13 Section 6.4.2.2.2. In locations where freezing is not a factor, the depth of cover shall not be less than 30 inches below grade to prevent mechanical damage.

Private fire service mains installed under driveways or roads shall be buried a minimum depth of 3 feet. (NFPA 13 Section 6.4.2.2.3)

When work is stopped, the open ends of piping, valves, hydrants and fittings shall be plugged or covered to prevent foreign material from entering. (NFPA 13 Section 6.8.4)

Pipes shall be supported in the trench throughout their full length and shall not be supported by the bell ends only or by blocks. (NFPA 13 Section 6.8.8)

The FDC shall be properly supported. (NFPA 13 Section 16.12.5.10)

Backfill material shall be tamped in layers or in puddles under and around pipes to prevent settlement or lateral movement. Nominal pipe sizes of 6 inches to 12 inches shall not exceed ¾ inch maximum particle size. (NFPA 13 Section 6.9.3 through 6.9.3.2)

The Contractors Material and Test Certificate for Underground Piping shall be provided at final. (NFPA 13 Section 6.10.1 and Figure 6.10.1)

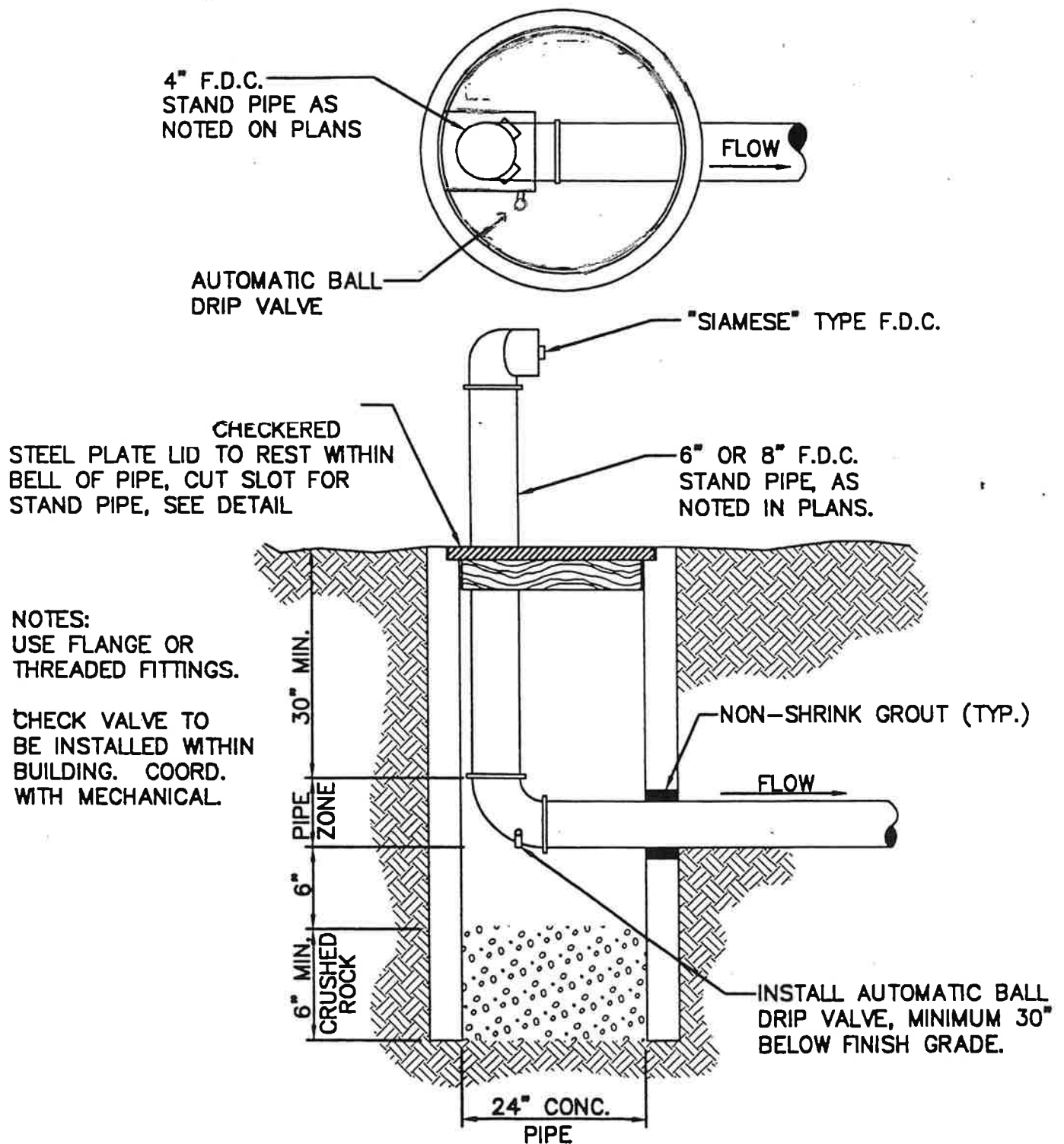
Flushing of the underground fire line shall be accomplished prior to connection to the aboveground fire system. (NFPA 13 Section 6.10.2.1.1)

A hydrostatic test at 200 psi for 2 hours shall be witnessed by the Authority Having Jurisdiction. (NFPA 13 Section 6.10.10.2)

Each FDC to sprinklers systems shall be designated by a sign having raised or engraved letters at least 1 inch in height on plate or fittings reading "Service Design; Auto Sprinklers". (NFPA 13 Section 16.12.5.8.1)

PRIVATE FIRE HYDRANT IDENTIFICATION: Private fire hydrants shall be painted red in color. Exception: Private fire hydrants within the City of Tualatin shall be yellow in color. (OFC Section 507)

REFLECTIVE HYDRANT MARKERS: Fire hydrant locations shall be identified by the installation of blue reflective markers. They shall be located adjacent and to the side of the center line of the access roadway that the fire hydrant is located on. In the case that there is no center line, then a center line shall be assumed the reflectors placed accordingly (TVF&R Ordinance #2020-01)



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