To ensure proper operation and accessibility of all backflow prevention device assemblies, the following requirements shall apply to installation of these devices, unless specifically approved by the City Engineer.

1. No part of the backflow prevention device shall be submerged in water or installed in a location subject to flooding. If installed in a vault or chamber, adequate drainage shall be provided by either drainage to daylight or by sump pump with high water alarm system. Test cocks shall be plugged. The plugs shall not be of dissimilar metals.

2. The device assembly must be protected from freezing and other severe weather conditions.

3. Only devices approved for vertical installation may be installed vertically.

4. The device assembly shall be readily accessibly with adequate room for maintenance and testing. Devices 2 inches and smaller shall have a 12-inch clearance below and on both sides of the device assembly; and if located in a vault, the top of the device assembly shall be between 12 and 24 inches below grade.

All device assemblies larger than 2 inches shall have a 12-inch clearance on the backside, a 24-inch clearance on the test–cock side, and 12 inches below the device assemblies. Adequate clearance (3 inches minimum) must be maintained above operating stem and yoke, gate–valve stem. Headroom of 6’0” is required in vaults. Access to the device and to any vault or chamber shall remain clear at all times. An OR/OSHA approved chamber ladder that extends 3 ft above surface of vault shall be installed.

5. No post indicating valves are allowed on Double Check Device assemblies.

6. Only approved Double Check Detector Check Valve Assemblies are to be used for system containment on fire line services in the City of Wilsonville. The meter on bypass assembly shall read in cubic feet.

7. If a Fire Line Flow, or Tamper Switch is installed, it must be connected to a monitored Fire Alarm System approved by the Fire Marshal. No installation will modify the backflow device assembly or interfere with its operation or maintenance.

8. All backflow devices shall be installed at the service connection to the premises per Oregon Administrative Rules 333–61–070, Cross Connection Control Requirements, unless specifically approved by the Water Division Engineer. (service connection – a location where the public water facilities end at or near the property line)

9. All pipe between main and device shall be restrained. Use Mega–Lug retainer glands on mj fittings and Field–Lok gaskets on bell joints. Uni–Flange adapters may be used in vaults.

10. All check valve assemblies are required to be UL Tested or Factory Mutual Approved as well as State of Oregon Approved per NFPA 13 & 24.