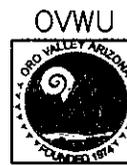
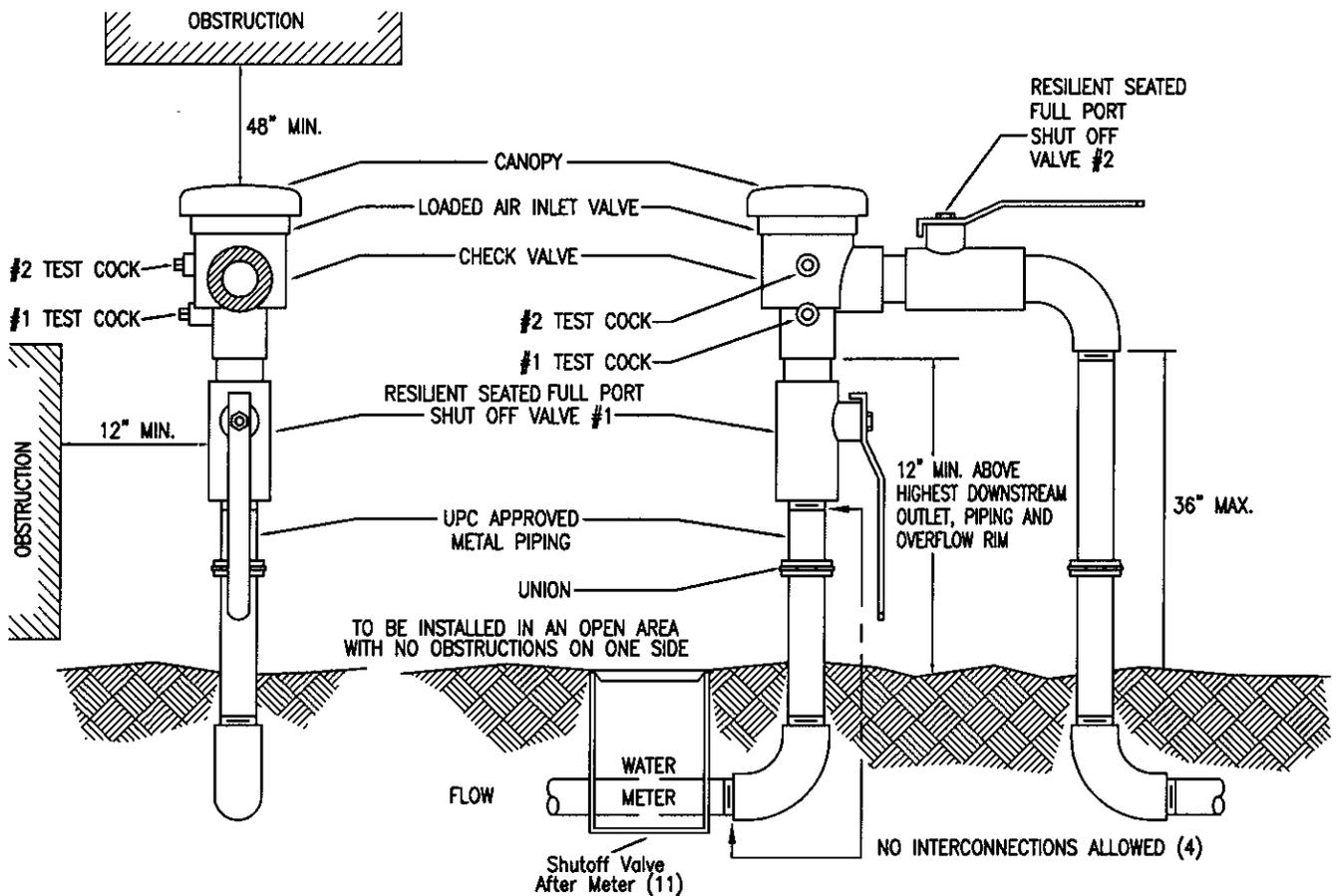


DOUBLE CHECK VALVE ASSEMBLY (DCVA) INSTALLATION
 These specifications are to be followed for all water service protection installations utilizing a DCVA.

1. A permit is required before installing or replacing a backflow assembly. Permits shall be obtained at OVWU, 11000 N. La Canada Dr.
2. A listing of approved backflow assemblies is available from OVWU.
3. The DCVA shall be installed outside, above ground, as close to the water meter as possible and on private property unless otherwise authorized. (Right-of-ways are not private property.)
4. There shall be no other piping connected to the piping between the meter and the backflow assembly except for parallel assembly installations.
5. Installations shall meet current international plumbing codes and fire codes as applicable in addition to OVWU's Standard Details
6. Installations shall be left exposed until inspected and approved by OVWU.
7. Protective cages are optional, and will meet clearance, access and drainage requirements.
8. It is recommended that backflow assemblies be protected from the elements. Care shall be taken to ensure that the protection does not hinder operation of the assembly.
9. Before installing a backflow assembly on any fire system, consult with the fire authority for additional requirements. (ie OS & Y Shutoffs, Alarms etc.)
10. The installation of a backflow assembly may create a closed system. Consult international plumbing codes for pressure relief valve and thermal expansion requirements.
11. Developer or Builder is required to install a Customer's Shutoff Ball Valve with handle inside of meter box.
12. For additional information contact the Backflow Prevention Section at (520) 229-5061.

ISSUED:		STANDARD DETAIL		DETAIL NO.
09/01/06		DOUBLE CHECK VALVE ASSEMBLY (DCVA) INSTALLATION		SD-204
REVISED:				Sheet 1 of 1

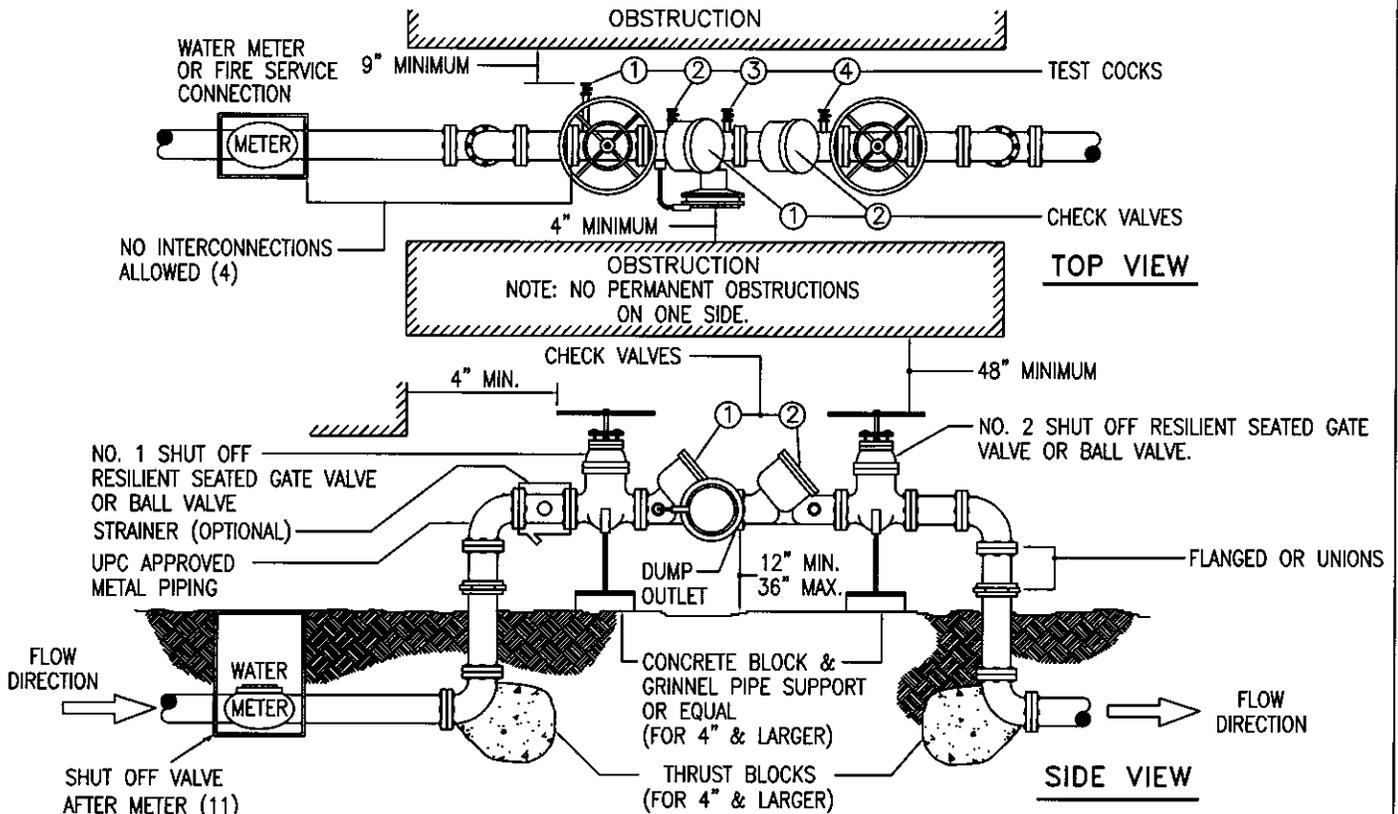


PRESSURE VACUUM BREAKER ASSEMBLY (PVB) INSTALLATION

These specifications are to be followed for all water service protection installations utilizing PVB.

1. A permit is required before installing or replacing a backflow assembly. Permits shall be obtained at OVWU, 11000 N. La Canada Dr.
2. A listing of approved backflow assemblies is available from OVWU.
3. The PVB shall be installed outside, above ground, as close to the water meter as possible and on private property unless otherwise authorized. (Right-of-ways are not private property.)
4. There shall be no other piping connected to the piping between the meter and the backflow assembly.
5. Installations shall meet current international plumbing codes in addition to OVWU's Standard Details.
6. Installations shall be left exposed until inspected and approved by OVWU.
7. Protective cages are optional, and will meet clearance, access and drainage requirements.
8. It is recommended that backflow assemblies be protected from the elements. Care shall be taken to ensure that the protection does not hinder operation of the assembly.
9. PVB's may be maintained under continuous pressure and have shut off valves downstream, but there shall be no means of imposing back pressure on the PVB from any other source.
10. PVB's shall only be approved for irrigation meter service protection where there is no other source of water supply to the premises, i.e. median islands.
11. Developer or Builder is required to install a Customer's Shutoff Ball Valve with handle inside of meter box.
12. For additional information contact the Backflow Prevention Section at (520) 229-5061.

ISSUED:		STANDARD DETAIL		DETAIL NO.
09/01/06		PRESSURE VACUUM BREAKER ASSEMBLY		SD-202
REVISED:		(PVB) INSTALLATION		SHEET 1 OF 1

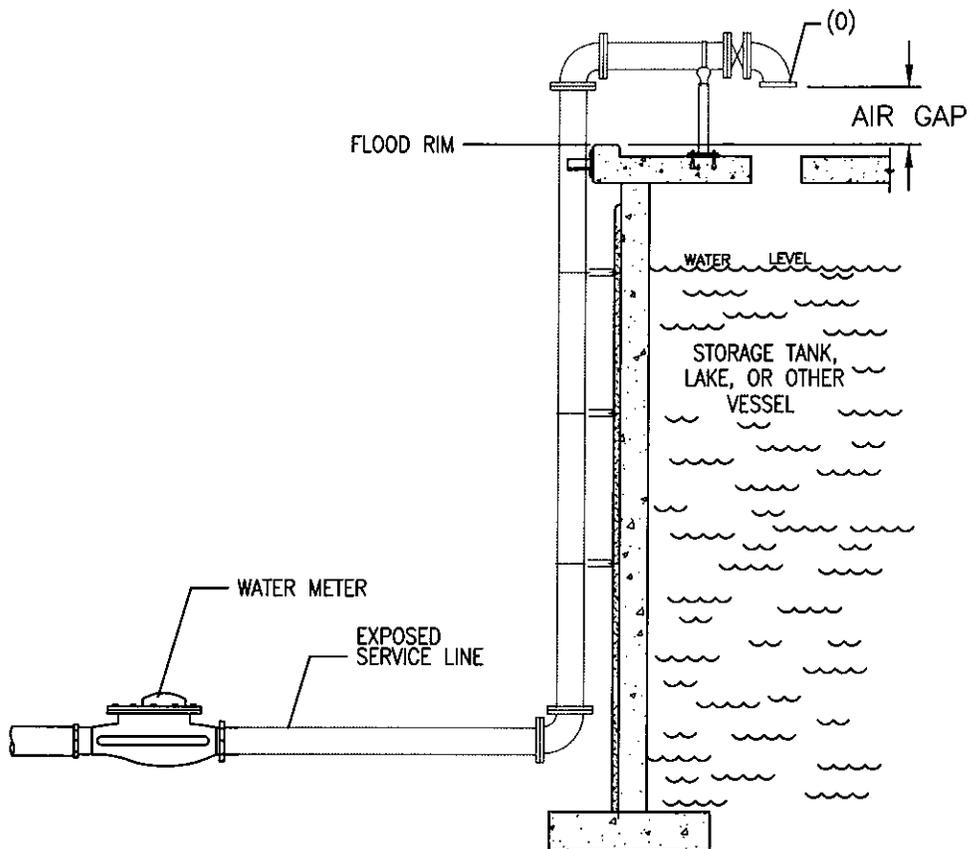


REDUCED PRESSURE ASSEMBLY (RPA) INSTALLATION

These specifications are to be followed for all water service protection installations utilizing a RPA.

1. A permit is required before installing or replacing a backflow assembly. Permits shall be obtained at OVWU, 11000 N. La Canada Dr.
2. A listing of approved backflow assemblies is available from OVWU.
3. The RPA shall be installed outside, above ground, as close to the water meter as possible and on private property unless otherwise authorized. (Right-of-ways are not private property.)
4. There shall be no other piping connected to the piping between the meter and the backflow assembly except for parallel assembly installations.
5. Installations shall meet current international plumbing codes and fire codes as applicable in addition OVWU Standard Details.
6. Installations shall be left exposed until inspected and approved by OVWU.
7. Protective cages are optional, and will meet clearance, access and drainage requirements.
8. It is recommended that backflow assemblies be protected from the elements. Care shall be taken to ensure that the protection does not hinder operation of the assembly.
9. Before installing a backflow assembly on any fire system, consult with the fire authority for additional requirements. (ie: OS & Y Shutoffs, Alarms etc.)
10. The installation of a backflow assembly may create a closed system. Consult international plumbing codes for pressure relief valve and thermal expansion requirements.
11. Developer or Builder is required to install a Customer's Shutoff Ball Valve with handle inside meter box.
12. For additional information contact the Backflow Prevention Section at (520) 229-5061.

ISSUED:	OVWU	STANDARD DETAIL	OVWU	DETAIL NO.
09/01/06		REDUCED PRESSURE ASSEMBLY (RPA) INSTALLATION		SD-201
REVISED:				SHEET 1 OF 1



The prevention of backflow in a potable water supply system is necessary to prevent contamination or pollution of the water supply. Prevention is accomplished by the use of air-gap separations or by mechanical backflow prevention assemblies. Air-gap separations and backflow prevention assemblies shall be installed according to current OVWU's Standard Details to assure protection of the public water supply system.

An air gap is not generally utilized for water service line protection since all supply pressure is lost. A water service line to a lake, tank or other vessel is generally where an air gap is used. However, for service protection, another deterrent is that all piping to the air gap must remain exposed.

The minimum required air-gap separation shall be measured vertically from the lowest end of the potable water outlet to the flood rim of the receptacle into which the potable water discharges. This air-gap distance shall be a minimum of twice the effective opening (0) of the potable water outlet. If the water outlet is located at a distance less than three times the effective opening (0) away from a wall or similar vertical surface, the minimum air-gap shall be three times the effective opening (0) of the outlet. In no case may the minimum required air-gap be less than one inch.

There shall not be any provisions for extending the fixture below the flood level rim. If the end of the potable water pipe or fixture outlet is threaded or allows for any type of extension by any means, a properly installed and approved backflow preventer shall be installed.

Note: the air gap may be screened or shielded with a perforated material for protection.

For additional information contact the Backflow Prevention Section at (520) 229-5061.

ISSUED:	OVWU 	STANDARD DETAIL	OVWU 	DETAIL NO.
09/01/06		AIR GAP SEPARATION INSTALLATION		SD-200
REVISED:				SHEET 1 OF 1