CITY OF AUBURN
"History's Hometown"
Department of Municipal Utilities

Application for Approval of Backflow Prevention Device Informational

You must contact Tim Clark, the City of Auburn Backflow Prevention Coordinator, at (315) 406-6730 within 7 days to begin the approval process.

Contents which include:

- City of Auburn's Cross Connection Control Program
- Cross Connection Control Backflow Prevention information booklet
- Chapter 6 of the American Water Works Association manual pertaining to backflow prevention and fire protection
- January 1992 DOH supplement to Cross Control Manual
- Policy Statement - Private unmetered fire hydrants ***(Required Document, if Applicable)***
- List of New York State DOH approved containment backflow prevention assemblies
- List of DOH certified testers in Cayuga County and adjacent prevention assemblies
- Regulations for water meter installation and reading requirements
- City of Auburn Checklist ***(Required Document)***
- Application for Approval of Backflow Device ***(Required Document)***
- Backflow Booklet Receipt for the City of Auburn ***(Required Document)***

PLEASE RETURN THE REQUIRED DOCUMENTS TO

35 Bradley St, Auburn NY, 13021 or email tclark@auburnny.gov. Also include a business card of contact person for any questions the City of Auburn may have regarding service installation requirements

PROTECTING OUR WATER:

City of Auburn's Cross Connection Control Program

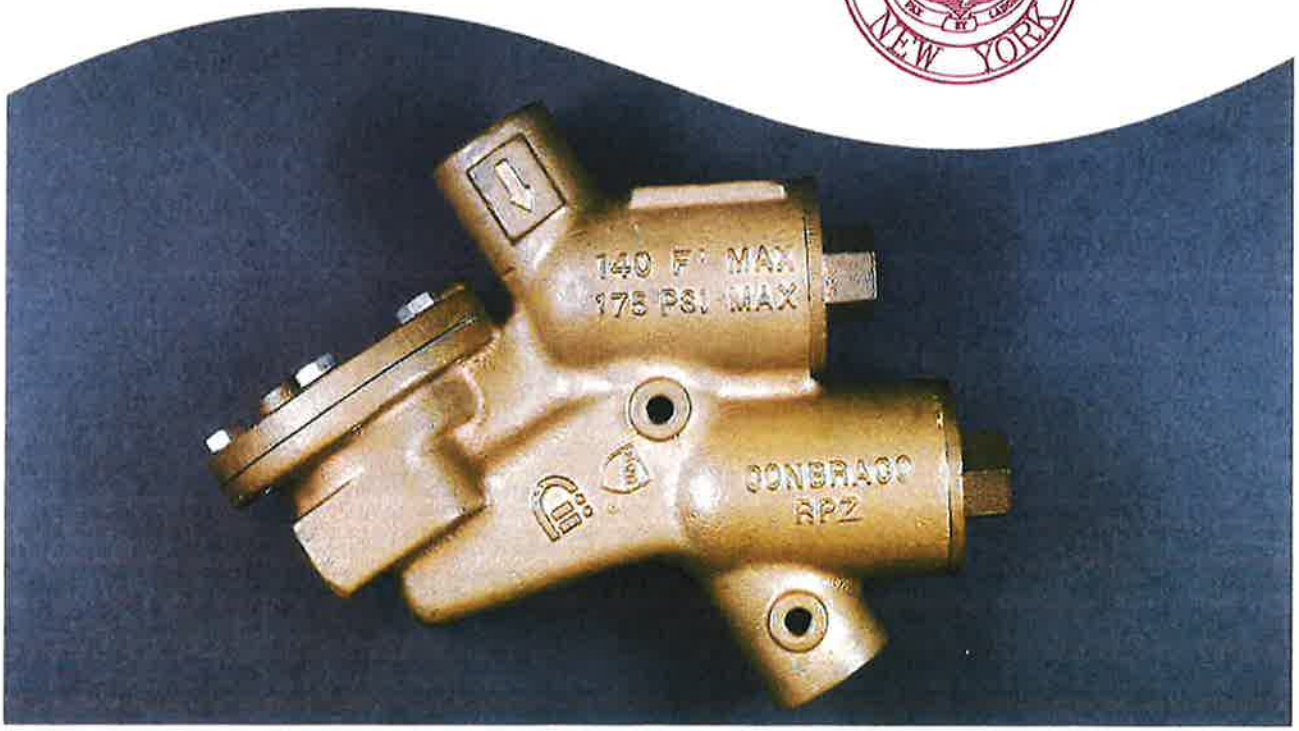
INTRODUCTION:

The Department of Municipal Utilities (DMU) is responsible for providing a continuous supply of safe, clean drinking water to more than 45,000 residents and visitors throughout the City and Cayuga County. To protect the City's drinking water from contamination, DMU has a robust water quality monitoring program and regularly performs sampling throughout the City to ensure all relevant State and Federal standards are met.

DMU also works to prevent contamination before it occurs by ensuring that local businesses comply with all relevant City and State codes. A key component of this enforcement and inspection initiative is the City's Cross Connection Control Program, which requires certain businesses to install and operate approved backflow prevention devices.

WHAT IS A BACKFLOW PREVENTION DEVICE?

Backflow devices prevent contaminated water or chemicals from flowing back into the drinking water supply if there is a sudden or unexpected change in water pressure. If a property requires a backflow prevention device, it must be installed on all water service lines to the property. Appropriate backflow prevention devices can be identified by a Professional Engineer (PE), Registered Architect (RA) or Licensed Master Plumber (LMP).



WHAT PROPERTY TYPES MUST INSTALL BACKFLOW PREVENTION DEVICES?

Unless they, receive a specific exemption from DMU the following types of businesses are required to use backflow preventers:

- All Commercial Properties
- Apartments with 4 Units or More
- Metal Plating Operations
- Photo-Processing Facilities
- Laundries and Dry Cleaners
- Commercial Car Washes
- Greenhouses
- Hospitals, Clinics and Laboratories (Including Veterinary Hospitals)
- Medical and Dental Offices
- Funeral Parlors
- Food Processing Plants, and Meat or Fish Packers
- Dye Plants
- Paper Processors
- Auto Repair Shops
- Breweries
- Tanneries
- Exterminators
- Large Residential Dwellings with Treated Water Boilers
- Sewage Treatment Plants or Handling Facilities
- Premises with Multiple Water Service Lines
- Premises with Roof Tanks and Elevated Storage Lines
- Canneries
- Schools and Colleges
- Food Processing Facilities
- Nursing Homes
- Barber Shops and Beauty Salons
- Properties with In-Ground Irrigation Sprinklers

If your property or business type is not included in the above list and you have a specific question about your legal requirements, please call (315)253-6511 and you will be directed to an appropriate DMU representative.

HOW DO I COMPLY WITH THE LAW?

1. First, you must hire a Professional Engineer (PE) or Registered Architect (RA) to prepare four sets of backflow prevention plans for your property. These must be submitted with a signed application form and $100 review fee to the Cayuga County Health Department(CCHD) for approval. If approved, CCHD will notify you and return two copies of the approved plans to your PE or RA, who will then forward a copy of the approved plans to you.
2. The backflow prevention device must then be installed by a Licensed Master Plumber (LMP) in accordance with the approved plans. Installation must comply with Code Enforcement regulations and requirements.
3. Once installed, the device must be tested by a New York State Certified Backflow Prevention Device Tester. The City of Auburn will perform and certify your new backflow preventer the first time, free of charge. Your PE or RA must then submit a letter of completion to the CCHD.
4. Once the new backflow device is certified by the City, the property will be entered into the City's annual backflow recertification program.
5. Your backflow prevention device must be properly maintained, and will be subject to annual testing and inspection by a certified tester. Annual certification of your backflow device shall be submitted to the City DMU. For a list of State Certified Testers, contact the CCHD at: (315)253-1405.

If your believe your property is exempt from backflow prevention requirements, you must hire a PE, RA, or an LMP to submit a formal exemption request.

All relevant application, test reporting and exemption forms are available online at: www.auburnny.gov.

FURTHER QUESTIONS:

If you have any questions about DMU's Cross Connection Control Program, please call (315)253-6511 or visit www.auburnny.gov

Tim Clark, Water Meter Service Worker
tclark@auburnny.gov
(315)406-6730

REFERENCES:

Backflow Application and Information:
https://www.cayugacounty.us/489/Public-Water-Supplies

Master Plumber List:
http://auburnny.gov/Public_Documents/AuburnNY_Code/Plumbers/

CROSS CONNECTION CONTROL

BACKFLOW PREVENTION

Enclosed are two new forms, the DOH-347 and DOH-1013, to be used for all future plan submittals for the approval of containment backflow preventers. All submittals must also include plans, specifications and an engineering report as outlined in the enclosed January 1992 supplement to the cross connection control manual.

The DOH-347 (5/91) form, "New York State Department of Health Application for Approval of Backflow Prevention Device", has 12 questions that must be completed by the design engineer or architect before the application, plan, engineering report and specifications are submitted to the supplier of water for his/her review and approval. Question 13 and 14 are completed by the supplier of water before the submission is forwarded to the Cayuga County Health Department. In the City of Auburn four (4) complete sets of the above noted items must be submitted to the supplier of water.

The DOH-1013 (9/91) form, "Report on Test and Maintenance for Backflow Prevention Devices", consists of two parts: (1) a place to document the initial test of the device(s) by a New York State Department of Health certified backflow prevention device tester: and (2) a Certification by the design engineer or architect that the installation is in accordance with the approved plans. Parts 1 and 2 must be returned within 30 days of installation.

CROSS CONNECTION CONTROL

BACKFLOW PREVENTION

For Commercial or Industrial Connection to Public Water Supply System

Legal Basis: New York Sanitary Code Part 5-1.31

Auburn Municipal Code Chapter 45 (Article IV)

The installation of a containment backflow preventer prior to plan approval by this Department may result in costly construction changes and legal action.

Purpose: The purpose of the above is to safeguard potable water supplies by preventing backflow into public supply systems.

A. APPLICATION: (Form DOH-347)

All applications must be accompanied by plans, specifications and an engineer's report describing the project in detail. The applicant must be signed by a NYS registered professional engineer or architect. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. Forms must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

B. SUBMISSION AND APPROVAL:

Forms:

1. DOH-347 New York State Department of Health Application for Backflow Prevention Device(s).

2. DOH-1013 Report on Test and Maintenance of Backflow Prevention Devices.

PROCEDURE

Water Customer	1. Notifies the Local Water Supply Official (LWSO) of intent to make and maintain a service connection to the public water supply system.
LWSO	2. Investigates conditions at the site of proposed service connection installation; requests technical advice from Local Health Department Engineer (LHDE), if necessary.
	3. Requests Water Customer to submit plans, specifications, and application (Form DOH-347), in quadruplicate.
Water Customer	4. Submits plans, specifications, engineering report and application (Form DOH-347) in quadruplicate.
LWSO	5. Reviews submission, transmits with recommendations to LHDE, in quadruplicate.
	5a. Disapproves and returns submission to Water Customer for correction and resubmittal.
LHDE	6. Reviews submission, transmits with recommendations for approval to Bureau of Public Water Supply (BPWS), in quadruplicate.
	6a. Disapproves and returns submission to LWSO for corrections and resubmittal.
BPWS	7. Evaluates application, plans, specifications and recommendations, approves application, sends letter of approval, and copy of approved plans, to LWSO, Water Customer and Design person.
Water Customer	8. Installs approved protective devices in accordance with the plans approved by BPWS.
Water Customer	9. Submits (Form DOH-1013), the form consists of two parts: (1) a place to document the initial test of the device(s) by a New York State Department of Health Certified Backflow Prevention Device Tester: and (2) a Certification by the design engineer or architect that installation is in accordance with approved plans. Parts 1 and 2 must be completed and returned within 30 days of installation.

Water Customer	10. Inspects and tests protective device(s) at least annually and maintains a record of inspections, (Form DOH-1013) submits reports of inspection, testing, disassembly and overhauls to LWSO and Local Health Department Engineer within 30 days of completion. (Form 1013) Testing must be done by a NYS DOH Certified Backflow Prevention Device Tester.
Water Customer	11. Disassembles and overhauls RPZ or DCVA every five years.

POLICY- Section 1

A. Hazardous cross-connections must be promptly eliminated.
B. Cross-connection control is the responsibility of the supplier of water and the water customer (Part 5, New York State Sanitary Code, Subpart 5-1 Public Water Supplies, Section 5-1.31).
C. Cross-connection control by containment must be employed and requires the installation of an acceptable backflow prevention device in every water service line to a facility for which a potential hazard exists. Such devices should be installed at or near the property line to the facility as possible.
D. The degree of protection shall be commensurate with the degree of hazard. The following is a minimum.

Degree of Hazard Of Facility	Protection Required
Hazardous	RPZ with Air Gap
Aesthetically Objectionable	DCVA
Non-Hazardous	Internal Plumbing Control

E. Internal plumbing control necessary for the protection of the on-premise user, is not equivalent to containment, but is necessary adjunct to a totally protective program. The water customer is responsible to prevent cross-connections within his/her facility.
F. Testing and maintenance records shall be kept by the supplier of water for each required backflow prevention device.

G. The planning and implementation steps, include suitable timetables, of a supplier's cross-connection control program should receive the endorsement of the Local Health Department Engineer.

RESPONSIBILITIES-Section 2

A. State Department of Health

The Department of Health is authorized by the Public Health Law § 201 to supervise and regulate the sanitary aspects of the water supplies. A community's water supply system must be free of all sanitary hazards, including unprotected cross-connections. Accordingly, the Department can require the supplier of water to take preventive action against any water customer who may pose a threat to the public water supply system and see to it that such a customer is required by the supplier to install, test and maintain an acceptable backflow prevention device.

B. Supplier of Water

The supplier of water responsibility for cross- connection control is found in Part 5 of the State Sanitary Code, Section 5-1.31 entitled "Cross Connection Control." The supplier of water is responsible to assure that water of questionable or unsuitable quality does not enter the public water supply system. The supplier is required to determine the degree of hazard that a facility poses to his/her water supply system, and to require that an acceptable backflow prevention containment device be installed, tested, operated and maintained and that adequate records of maintenance and repair be kept.

C. Customer

The customer has the primary responsibility of preventing contaminants from entering the potable water piping system and subsequently, the public water supply.

TYPICAL INSTALLATION DETAILS-Section 7

A. Principles

The following material shows design concepts pertinent to the installation of backflow prevention devices. The design of specific installations should be in accordance with the requirements of the state Education Law.

In general, backflow prevention devices must be protected against freezing and must be accessible for testing and maintenance.

Pit installations are acceptable. However in the case of an RPZ, a pit installation is usually not feasible since a gravity drain must be provided which cannot be connected directly to a sewer.

The accompanying figures show the use of floor drains for RPZ installations. An acceptable alternate is the use of a funnel raised to just below the discharge port of the device ensuring, of course, that an air gap be maintained. No direct connection to the device for the purpose of drainage is permitted which negates the inherent protection afforded by an air gap at the relief valve discharge port. It is good practice to have the discharge end of the gravity drain visible so that it can be checked as a matter of daily routine by a facilities maintenance staff.

It must be kept in mind that a large RPZ with a fouled check valve can discharge at a rate of several hundred gallons per minute when subjected to high differential pressures. The gravity drain should be designed for the greatest discharge possible.

Although it is preferred that backflow prevention devices be installed as close to the property line as possible, it is recognized that in certain instances, as when in an urban area, that this is not possible. In those instances where it is necessary to install a device within a facility, the same considerations should be given to potential for freezing, access for maintenance and testing and in the case of RPZ drainage.

All devices must be installed so that they are not subject to flooding.

In certain instances, backflow prevention devices installed in parallel on a service line may be needed to meet the needs of a facility.

Such instances are:

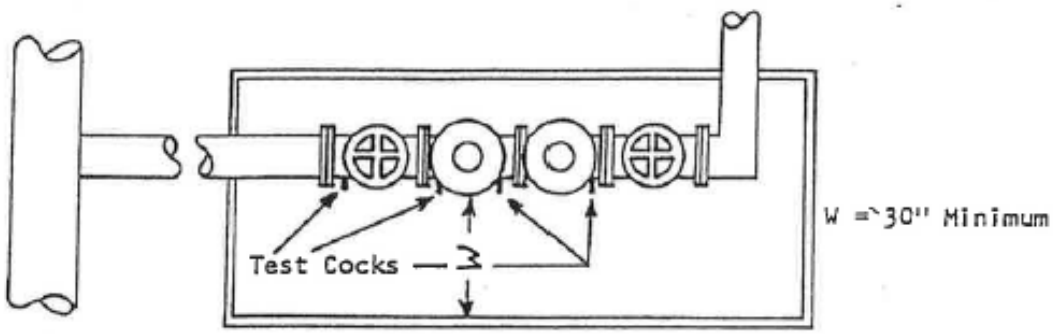
1. Where the water service line to be protected is greater than 10", branching the line and installing parallel devices may be utilized.
2. Where the facility requires continuous water service, a parallel installation will allow for removing one device at a time from service for testing and maintenance.
3. Where dual service for fire flow requirements are necessary as in Section 6, Figure 6-11.

In no case may the installation of a backflow prevention device include unprotected bypass piping. Closed gate valves on the bypass do not constitute protection.

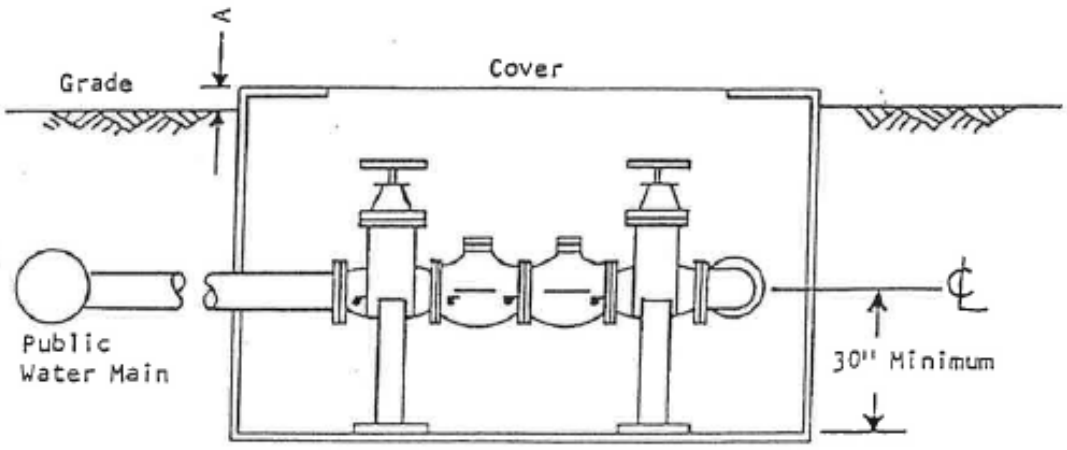
B. <u>DCVA</u>

This device does not require any special installation precautions except to protect the unit from freezing and insure that the test cocks are accessible. Adequate access to the test cocks is necessary to facilities required testing. Normal maintenance considerations should be satisfied.

FIG. 7-1



A = 6" to 12" Minimum



PIT INSTALLATION

DCV Installed

Within a Facility

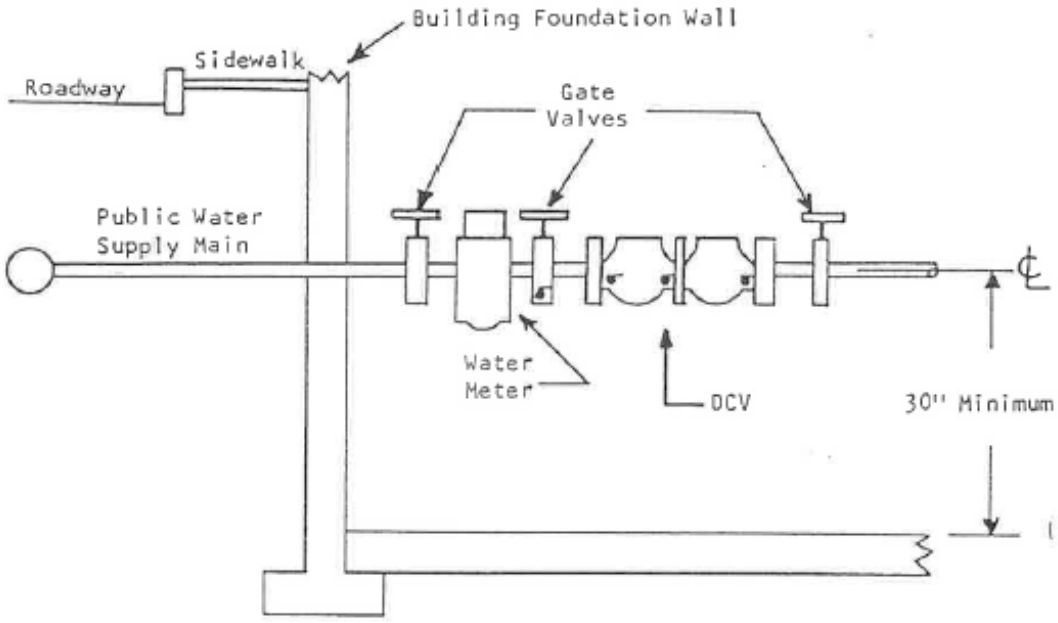
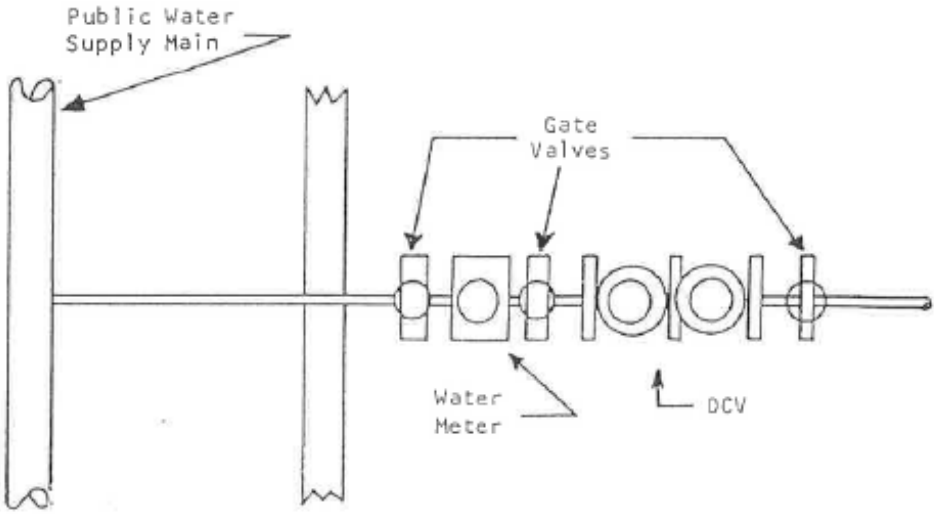


FIG. 7-2 NOTE: Device to be installed above highest possible flooding.

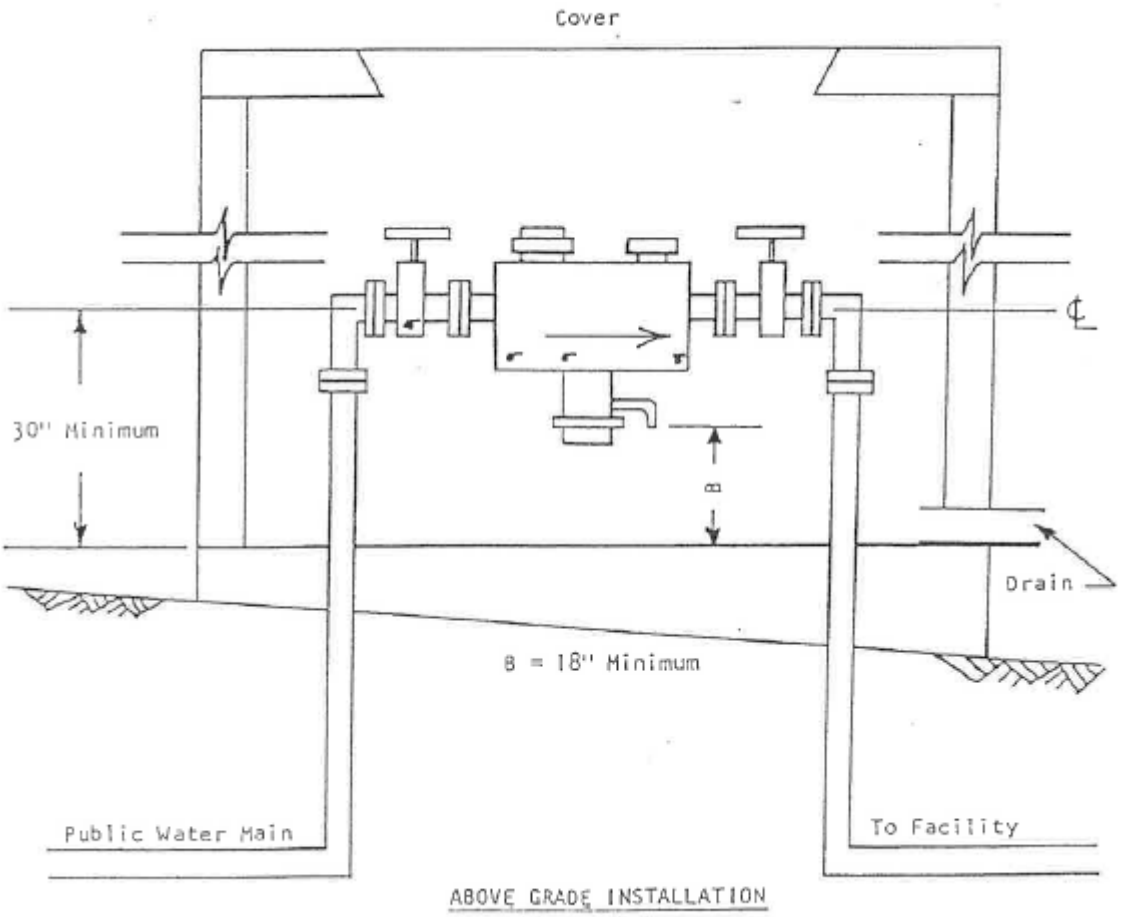


C. RPZ

These devices must also be protected against freezing and the test cocks should be positioned to facilitate testing. Normal maintenance considerations must also be satisfied. Experience to date shows that an above grade installation is usually required in order to satisfy adequate drainage and access.

Note: Keep snow cleared away from drain.

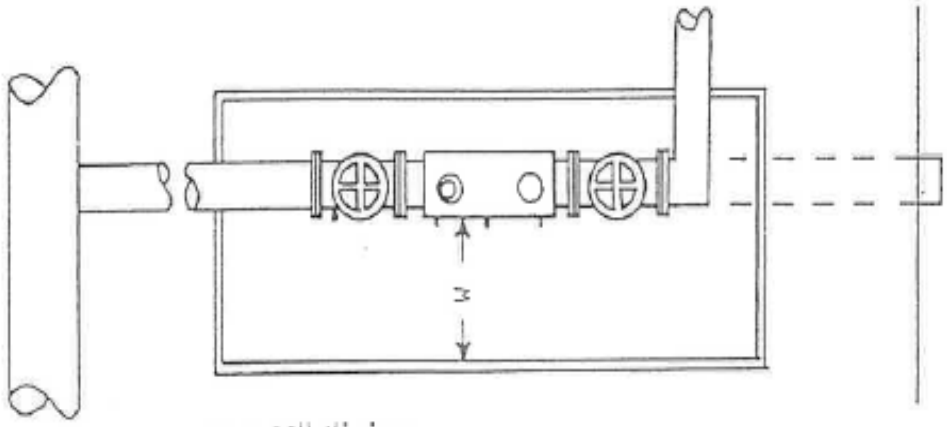
FIG. 7-5



ABOVE GRADE INSTALLATION

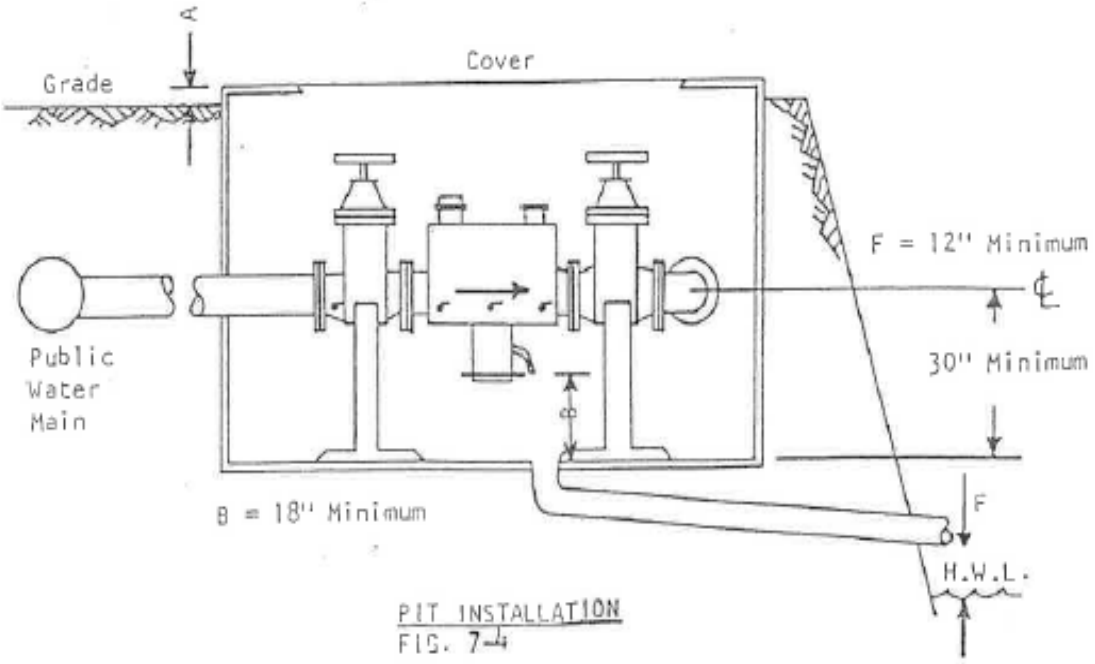
RPZ

The improper installation of these devices can negate the desired protection. Most critical is the need to provide a gravity drain large enough to receive the maximum potential discharge of the relief valve. This drain cannot be subject to flooding and must be screened.



W = 30" Minimum

A = 6" to 12" Minimum



PIT INSTALLATION
FIG. 7-4

RPZ

INSTALLED WITHIN A FACILITY

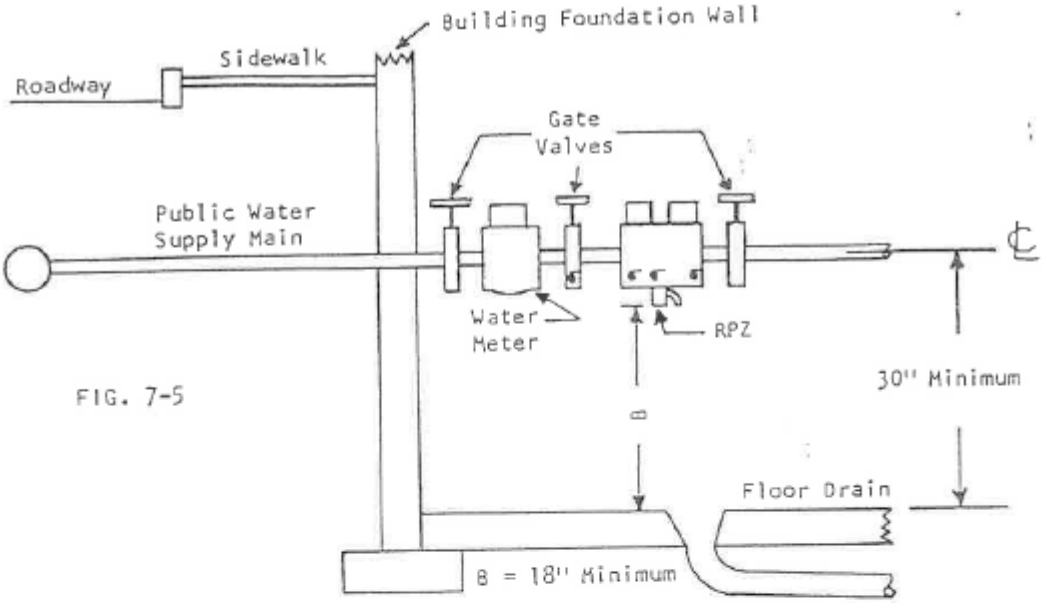
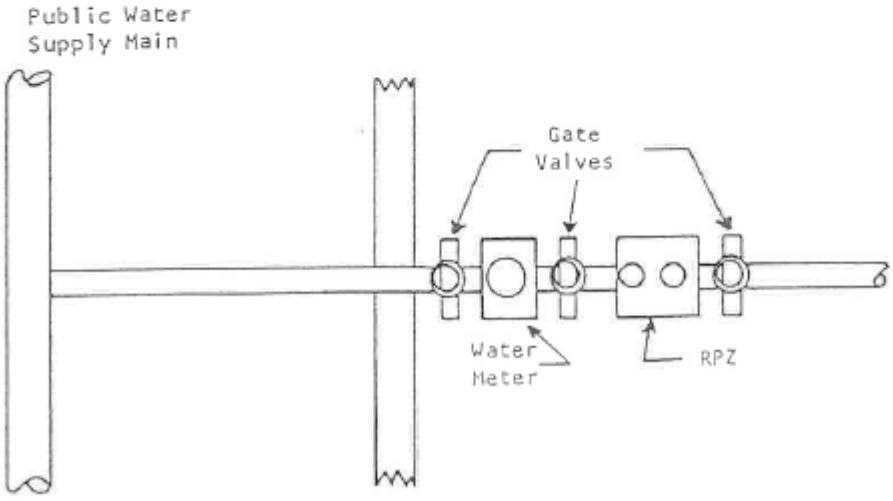


FIG. 7-5

NOTE: Device to be installed above highest possible flooding



D. Air Gap

This method of cross connection prevention is profusely illustrated in plumbing control publications. The same basic requirement is also appropriate for containment control; namely, that the opening of the inlet pipe be at least two (2) diameters (of the inlet pipe) above the flood or overflow level of the tank or vessel. In no case shall the gap be less than 1 inch.

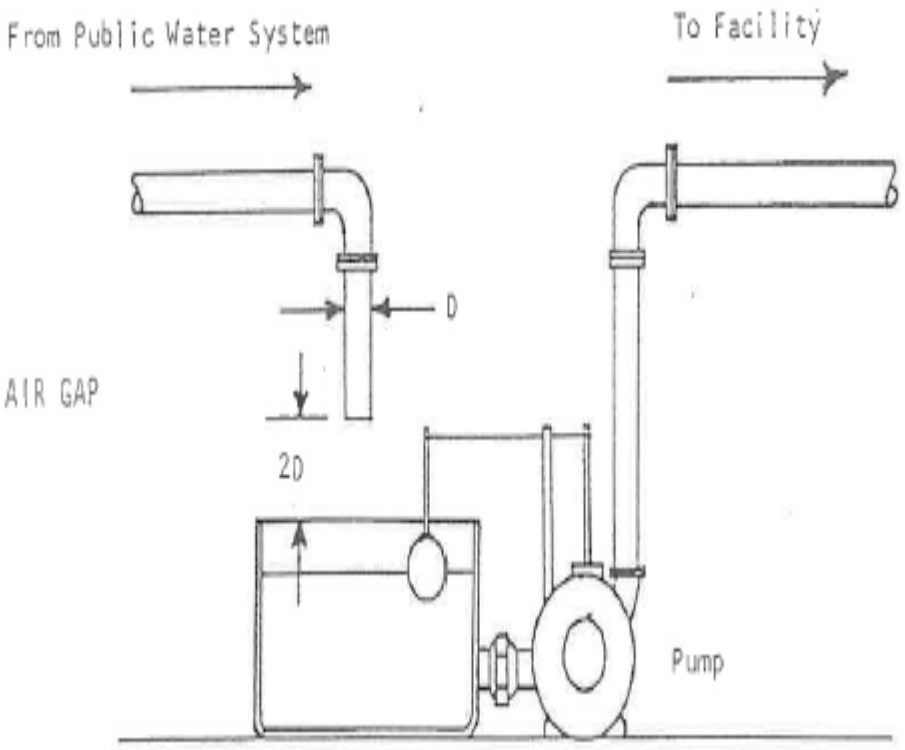


FIG. 7-6

ACCEPTABLE DEVICES - Section 8

Determination of Acceptability

Only three devices are applicable to the containment concept of cross-connection control. These are the DCVA, RPZ, and air gap. Which DCVA or RPZ are acceptable? Acceptance of a device is based on one of the following two evaluation procedures:

1. A device will be placed on the New York State Department of Health list of Acceptable Devices when it has successfully passed both the Laboratory and the Field Evaluation phases of the Foundation for Cross Connection Control & Hydraulic Research approval program and the manufacturer has been granted a Certificate of Approval.

2. A device which has been evaluated against each of the following three standards by an independent testing laboratory and shown to comply will be placed on the New York State Department of Health list of Acceptable Devices:

    A. Foundation for Cross-Connection Control and Hydraulic Research, Manual of Cross-Connection Control, Section 10 – Specifications of Backflow Prevention Devices.
    B. American Society of Sanitary Engineering Standard No. 1013 (RPZ) or No. 1015 (DCVA)
    C. American Water Works Association Standard C506. The Bureau of Public Water Supply will review the evaluation report of the backflow prevention devices under test and shall determine what sizes, if any, are acceptable.

Based on the above, a list of acceptable devices is published from time to time. As new units are found acceptable, the list will be revised and will be available as a separate guideline available from the Local Health Department Engineer.

The plan submittal must include the following:

1. A site plan of the facility containing a general location map, buildings, the public water main(s) – location size, all water services including all fire services – location and size, meter pits, yard hydrants, pumper connection(s), interconnections and the location of the proposed backflow preventer(s);
2. A plumbing floor plan (plan view) or partial floor plan indicating water service, water meter layout, proposed backflow preventer(s), booster pump system, floor drain(s) and all nearby objects (examples: electrical panels, boilers, chillers, storage tanks, fire pumps, fire sprinkler risers, etc.). The plan must be drawn to scale or with dimensions indicated from walls and all nearby objects;
3. A vertical cross section(s) of the proposed installation with elevations from floor, ceiling, outside grade and all nearby objects.

An engineering report must be included with the plan submittal. The report must describe the project in

detail. Items that should be included or described in the report include:

1. General use of water within the facility,
2. Size and description of water services;
3. Number of floors within the facility;
4. Actual of estimated maximum flow demand;
5. Pressures – existing and after the installation of the backflow preventer(s);
6. Description of the firefighting system – indicate the A.W.W.A. Manual M-14 class of sprinkler service;
7. Description of the proposed installation of the backflow preventer – indicate the location of backflow preventer, drainage, lighting, heating, access to unit, square footage of the floor level where the backflow preventer is to be located;
8. Description of the existing or proposed booster pump system, answering the following questions:
   A. After the installation of the proposed backflow preventer(s), will the Net Positive Suction Head (NPSH) required for all proper operation of the booster pump system be adequate?
   B. After the installation of the backflow preventer(s) in the suction line to the booster pump system, will the booster pump system operate properly at peak demand to deliver adequate pressure to the highest elevation and/or most remote fixture unit or any other operation requiring a certain pressure? Note: The New York State Uniform Fire Prevention and Building Code Part 902.4c requires the minimum pressure at water outlets at all times to be as follows:

      Fixture – non flush valve - 8 psi.

      Fixture – flush valve - 15 psi.

   C. Does the booster pump system have a pressure cut off switch in the suction line? What is the pressure setting of the switch? An existing or proposed cutoff switch must be set at the following setting:

      For a cutoff switch where the backflow preventer is located upstream of the booster pump (s) – set at 10 psi.

      For a cutoff switch where the backflow preventer is located downstream of the booster pump (s) – set at 20 psi.

9. The need for dual backflow preventers. Does the facility need a continuous water supply?
10. The location of the 100 year flood plain. If the facility is located within the flood plain, what is the 100 year flood plain elevation? A reduced pressure zone (RPZ) backflow preventer must be installed 1” above the 100 year flood plain elevation.

SPECIAL REQUIREMENTS FOR BACKFLOW PREVENTION

ON FIRE PROTECTION SYSTEMS

The attached booklet is an informational guideline for fire protection systems.

The City of Auburn acknowledges the guidelines recommended by the American Water Works Association pertaining to backflow prevention and fire protection as outlined in their manual M-14, Chapter 6.

The City of auburn requires that all recommended protection for fire protection systems consist of detector assemblies (i.e., RPDA-reduced pressure detector assembly).

The City of Auburn requires that any fire protection system not requiring an approved backflow prevention assembly, must have a detector check valve installed as minimum protection.

CHAPTER 6 –AWWA MANUAL M-14

BACKFLOW PREVENTION AND FIRE PROTECTION

Like other situations encountered in cross connection control, the degree of backflow protection necessary for a particular fire-protection system will depend on specific conditions present. Generally, it is recommended that the potable water supply be protected when serving fire systems. Guidelines given in this chapter pertaining to fire booster pumps should also be noted.

The responsible authority may recognize the use of alarm checks, single checks, or detector check meters for certain limited installations, such as fire protection piping systems serving buildings not greater than three stories with no auxiliary source of water supply and no use of chemical additives. It is important to note that none of these check valves can be considered acceptable backflow preventers.

The responsible authority could require more protection depending on the particular circumstances. A reduced-pressure assembly may be installed within system piping to isolate only that portion of the system containing the antifreeze solution.

Pressure losses across backflow-prevention assemblies do occur. This loss must be accounted for in the design or redesign of the fire protection system, if it is to function properly. This factor is particularly important when assemblies are added to existing fire-protection systems.

6.1 FIRE HYDRANTS

Northern area water utilities have been known to add chemical solutions to their fire hydrants for freeze protection. These compounds include substances, such as ethylene glycol and calcium chloride. The substances are unacceptable from a public health standpoint because they are toxic. This practice cannot be condoned. Water utilities should repair leaking hydrant valves and pump out hydrants after use. Hydrant drains should not be connected to the sewer.

6.2 CLASSIFICATION FOR BACKFLOW PROTECTION

Industrial fire protection systems consist of sprinklers, hose connection(s), and hydrants. Sprinkler systems may be dry or wet, open or closed. Systems of fixed-spray nozzles may be used indoors or outdoors for protection of flammable liquids and other hazardous processes. It is standard practice, especially in cities, to equip automatic sprinkler systems with fire department pumper connections. For cross-connection control, fire-protection systems may be classified on the basis of water source and arrangement of supplies as follows:

Class 1 Direct connections from public water mains only; no pumps, tanks, or reservoirs; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to atmosphere, dry wells, or other safe outlets (Figure 6-1).

Class 2 Same as Class 1except that booster pumps may be installed in the connections from the street mains (booster pumps do not affect the potability of the system). It is necessary that pressure in the water main is reduced below 10 psi (69 kPa) to avoid drawing too much water from the main (Figure 6-2).

Class 3 Direct connection from public water supply mains, plus one or more of the following: elevated storage tanks; fire pumps taking suction from aboveground covered reservoirs, or tanks; and pressure tanks (Figure 6-3). (All storage facilities are filled or connected to public water only, the water in the tanks are to be maintained in a potable condition. Otherwise, Class 3 systems are the same as Class 1).

Class 4 Directly supplied from public mains, similar to Class 1 and Class 2, with an auxiliary water supply dedicated to fire department use and available to the premises, such as auxiliary supply located within 1700 ft. (518 m) of the pumper connection (Figure 6-4).

Class 5 Directly supplied from public mains and interconnected with auxiliary supplies, such as pumps taking suction from reservoirs exposed to contamination, or rivers and ponds; driven wells; mills or other industrial water systems; or where antifreeze or other additives are used (Figure 6-5).

Class 6 Combined industrial and fire protection systems supplied from the public water mains only, with or without gravity storage or pump suction tanks (Figure 6-6).

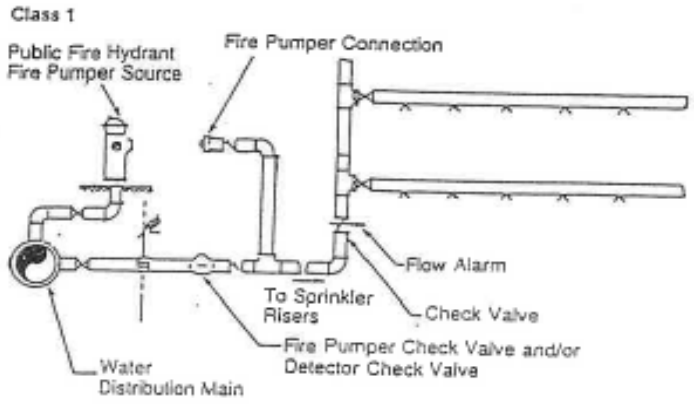


Figure 6-1 Class 1 fire-protection system.

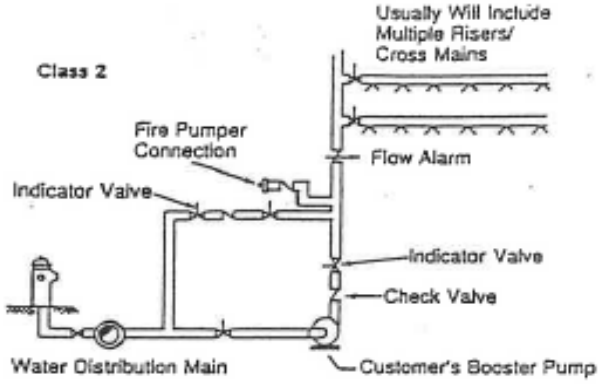


Figure 6-2 Class 2 fire-protection system.

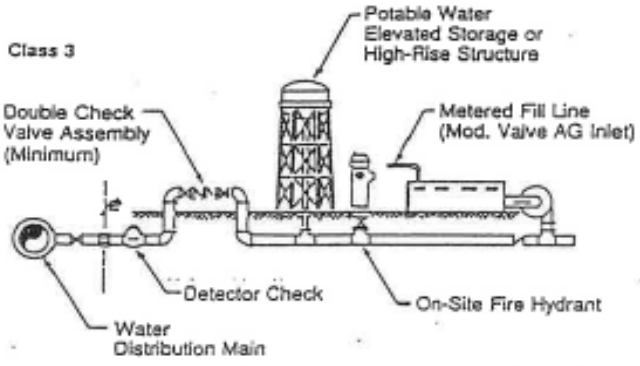


Figure 6-3 Class 3 fire-protection system.

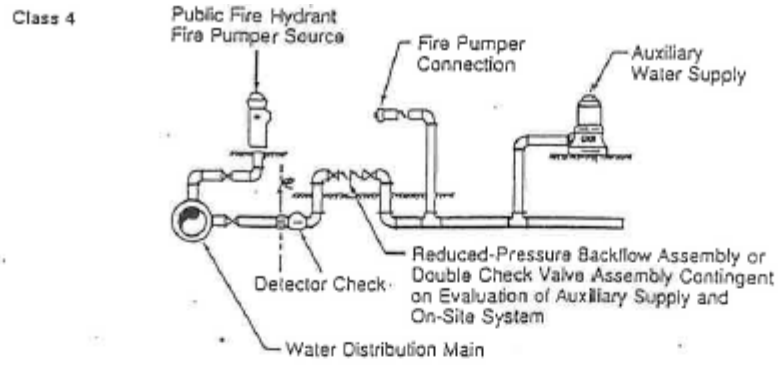


Figure 6-4 Class 4 fire-protection system.

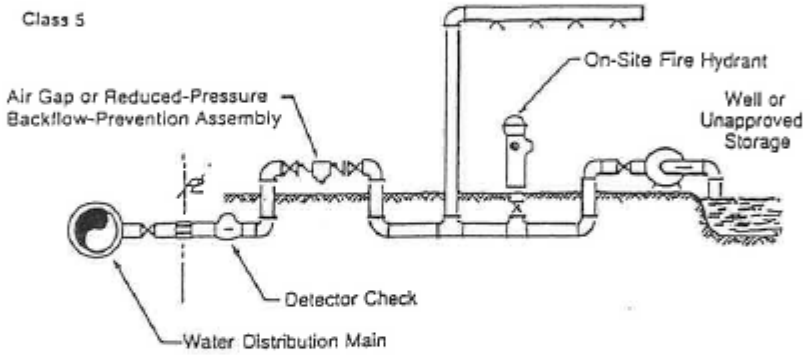


Figure 6-5 Class 5 fire-protection system.

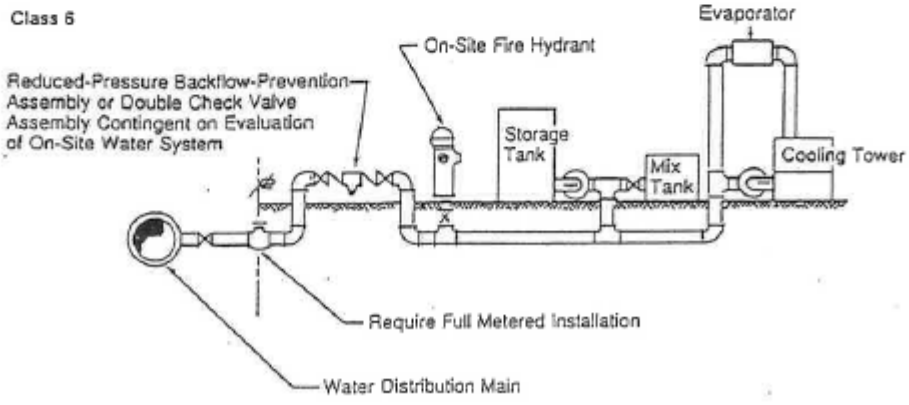


Figure 6-6 Class 6 combined industrial and fire-protection systems.

6.3 PROTECTION RECOMMENDED

Class 1 and 2 fire-protection systems are those systems that generally and ordinarily would not require an approved backflow-protection assembly at the fire system user connection in order to protect the public water system. However, it is recognized that special conditions may exist on the sites of Class 1 or Class 2 fire sprinkler systems such that actual or potential contamination hazards are presented to the domestic water supply. Under these special conditions, an approved backflow-prevention assembly at the user connection for the fire sprinkler system is warranted. Some examples of special conditions include:

-underground fire sprinkler pipelines parallel to and within 10 ft. (3 m) horizontally of sewer pipelines or other pipelines carrying significantly toxic materials;
-when water is supplied to a site or an area from two or more services of a water utility of from two different water utilities, flow problems should be evaluated;
-occupancies (or changes in occupancies) that involve the use, storage, or handling of types and quantities of materials in a manner that could present a significant health hazard to the domestic supply;
-premises with unusually complex piping systems (usually these premises will have an approved backflow-prevention assembly on their domestic service piping); and
-systems with pumper connections in which corrosion inhibitors or other chemicals are added to tanks of fire trucks, or where the water purveyor cannot be assured of the potability of the input to the pumper connection.

Class 3 systems will generally require minimum protection (approved double check valve assembly) to prevent stagnant waters from back flowing into the potable water system.

Class 4 systems will normally require backflow protection at the service connection. The type (air gap, reduced-pressure backflow prevention assembly, or double check valve assembly) will generally depend on the quality of the auxiliary supply.

Class 4 and 5 systems normally would need maximum protection (air gap or reduced-pressure backflow-protection assembly) to protect the public potable water system.

Class 6 system protection would depend on the requirements of both industry and fire protection and could only be determined by a survey of the premises. A meter (compound or detector check) should not normally be permitted as part of a backflow-protection assembly. However, an exception may be mad if the meter and backflow prevention assembly are specifically designed for that purpose. At any time where the fire sprinkler system piping is not an acceptable potable water system material, there shall be a backflow-prevention assembly isolating the fire sprinkler system from the potable water system. There are also chemicals, such as liquid foam concentrates used for fighting certain types of fires, that are toxic and, therefore, require maximum protection. NOTE: Where backflow protection is required on an industrial-domestic service that is located on the same premises, backflow protection should be provided on the fire service connection. The industrial-domestic system and fire systems in

Classes 3, 4, 5, and 6 should have adequate protection foe the highest degree of hazard affecting either system.

6.4 JOCKEY PUMPS

Fire protection systems may require the use of jockey pumps (an auxiliary pump with high-head and low-capacity characteristics) to maintain elevated pressure within the system. Discharge of a jockey pump must be on the downstream side of any check valve, double check valve assembly, or reduced-pressure principle backflow-prevention assembly as appropriate by class. Supply for a jockey pump may be from either the upstream or downstream side of an assembly. If supply is taken from the upstream side, an assembly of the same type as required on the main line must be installed on the supply line. Figures 6-7 and 6-8 both show proper installation of a jockey pump in a system requiring a backflow-prevention assembly. Fire 6-7 shows the entire assembly downstream of the backflow preventer, and Figure 6-8 shows a proper way to take supply from the upstream side of a backflow preventer.

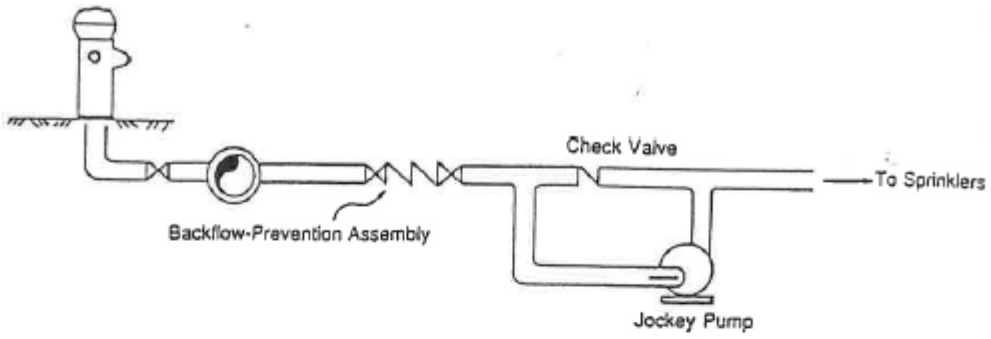


Figure 6-7 Supply for jockey pump; downstream of backflow-prevention assembly.

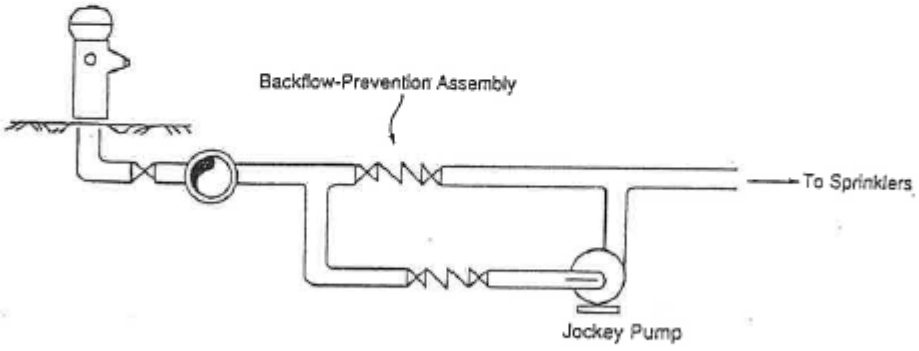


Figure 6-8 Supply for jockey pump; upstream of backflow-prevention assembly on main supply line.

6.5 BOOSTER PUMPS

Large volume fire pumps connected to a water main should be equipped with a suction-limiting control to modulate the pump if suction pressure approaches 10 psi (69 kPa). Ideally, such pumps should draw from an in-house reservoir, thus allowing pumped fire flows greater than the available water main capacity. The reservoir may be fed by several supply lines increasing the security. If any of the lines have a source other than the potable water system, all input lines must have air-gap discharges into the reservoir.

NEW YORK STATE DEPARTMENT OF HEALTH
BUREAU OF PUBLIC WATER SUPPLY PROETECTION
Guidelines for Designing Backflow Prevention Assembly Installations
Supplement to the 1981 Cross Connection Control Manual
January 1992

Purpose

The purpose of these guidelines is to augment and/or clarify those guidelines outlined in the January 1981 Cross Connection Control manual. These guidelines reflect accepted design considerations based on experience in implementing cross connection control programs and policies set forth by the American Water Works Association, Environmental Protection Agency, USC Foundation for Cross Connection Control and Hydraulic Research and state and local health departments. Pending revisions to the manual, these guidelines should clearly outline what an acceptable design and installation constitutes. They are to be reasonably interpreted and will be updated as new design solutions and technologies are offered.

General Installation Details

I. **Clearances**

All double check valve (DCV) and reduced pressure zone (RPZ) backflow prevention assemblies are designed for in-line service and must be installed to prevent freezing, flooding and mechanical damage with adequate space to facilitate maintenance and testing. Ideally, the installation should not require platforms, ladders or lifts for access. Adequate clearances from floors, ceilings and walls must be provided to access the test cocks and to allow the repair and/or removal of the relief valve and check valves; as follows:

- All assemblies shall be installed with a centerline height from 30 inches to 60 inches above the floor. Any installation at a greater height shall be provided with a fixed platform, a portable scaffold or a lift meeting OSHA standards.
- All RPZ devices must have an 18 inch minimum clearance between the bottom of the relief valve and the floor to prevent submersion and provide access for servicing and relief valve.
- A minimum of 12 inches of clear space shall be maintained above the assembly to allow for servicing check valves and for operation of shut-off valves.
- A minimum of 30 inches of clear space shall be maintained between the front side of the device and the nearest wall or obstruction.
- At least 8 inches clearance should be maintained from the back side of the device to the nearest wall or obstruction. This clearance may need to be increased for models that have side mounted test cocks or relief valves that would be facing the back wall.

II. **Miscellaneous Considerations**

- All assemblies shall be adequately supported and/or restrained to prevent lateral movement. Pipe hangers, braces, saddles, stanchions, piers, etc., should be used to support the device and should be placed in a manner that will not obstruct the function of or access to the relief valve.

- Strainers are recommended prior to each backflow prevention assembly on non-fire fighting water lines. **No strainer is to be used in a fire line without the approval of the Insurance Underwriters or the authority having jurisdiction.**
- The assembly should be sized hydraulically, taking into account both the volume requirements of the service and the head loss of the assembly. The head loss of the assembly is not necessarily directed proportional to flow. (Refer to the manufacturers head loss curves).
- Before selection and installation, refer to manufacturers literature for temperature ranges. All assemblies must be protected from freezing temperatures and if installed where temperatures will reach 100 degrees F or above, a hot water type assembly must be used. Consult manufacturers specifications for recommendations.
- Thermal water expansion and/or water hammer downstream of the assembly can cause excessive pressure. To avoid possible damage to the system and assembly, use water hammer arresters, surge protectors or expansion tanks as appropriate.
- All assemblies should be specified and installed with the manufacturer supplied resilient seated shut-off valves integral to the assembly.
- Water lines should be thoroughly flushed before installing the assembly. Most test failures on new installations are the result of debris fouling one of the check valves or the relief valve.
- All assemblies must be installed horizontally unless they are specifically approved for vertical installation. (Ref. Technical Reference PWS-14).
- Parallel installations should be considered at those facilities where water service cannot be interrupted. Manifold installations may also be used on any water line larger than 10 inches.
- Assemblies shall not be installed in areas containing corrosive, toxic or poisonous fumes or gases which could render the assembly inoperable or pose a safety hazard to personnel.
- Because of the inherent design of a reduced pressure backflow assembly, fluctuating supply pressure on an extremely low flow or static flow condition may cause nuisance dripping and potential fouling of the assembly. While not effective in all cases, the installation of a soft seated check valve immediately ahead of the RPZ will often hold the pressure constant to the assembly in times of fluctuating supply pressure.
- Where the distance between the water meter and the device is greater than 10 feet, all exposed piping should be stenciled "Feed Line to Backflow Preventer – DO NOT TAP" at 5 foot intervals.

III. Drainage

Drainage for backflow prevention assemblies shall be provided for **all** installations of DCV or RPZ to accommodate discharge during testing or draining of the unit and for RPZ relief valve discharges, as follows:

- For RPZ devices, drainage capacity shall be sized to accommodate both intermittent discharges **and** a catastrophic failure of the relief valve. Refer to manufacturers flow curves to determine maximum discharge rate based on supply pressure or on-site pressure; whichever is greater.

- Discharge from relief valves must be readily detectable to maintenance personnel either visually or by means of water level alarms, flow indicator lights, etc.
- All drainage from RPZ's must be by gravity drains. Sump pumps are not allowed unless they are sized to accommodate the maximum discharge rate **and** connected to emergency power supplies.
- An air gap must be maintained between the RPZ relief valve opening and any discharge piping. The air gap must be at least twice the dimension of the effective opening of the relief valve; but in no case less than 1 inch.
- Manufacturer's air gap fittings may be utilized provided that they maintain a proper air gap and do not enclose or cover the relief valve. These fittings are only sized to handle intermittent and low flow discharges. Additional drainage capacity may be required to accommodate a catastrophic relief valve failure.
- Discharge piping from relief valves shall be terminated a minimum of one inch above any floor drain or other receiving receptacle.
- Discharge piping connected to a storm sewer shall be equipped with backwater check valve.
- Discharge piping connected to a sanitary sewer shall be trapped **and** equipped with a backwater check valve.
- Discharge piping from pits or other structures must be terminated above grade in an area not subject to flooding (generally one foot above the 100 year flood elevation). The terminal end of the discharge piping must have a rodent screen and may need to be supported by a headwall. Flap valves should also be considered to prevent entry of cold air.
- All exterior drains shall be kept free of snow during winter.

IV. Pit Installations

Primarily due to considerations for access, safety and gravity drainage, it is preferred that backflow prevention devices not be installed in pits. Where pit installations are proposed, however, they shall be designed:

- To be watertight with watertight manholes or access doors extending a minimum of 6 inches above grade and located to allow natural light into the pit during testing/maintenance.
- With stairways, ladders or step irons.
- For crane access for installing and removing large assemblies.
- With adequate horizontal and vertical clearances to allow access to the device.
- With a full flow screened gravity drain terminating above grade for all RPZ installations as detailed in the drainage requirements.
- With sump pumps or gravity daylight drains for all DCVA installations.
- With floors pitched to drain.
- With adequate ground cover to prevent freezing.
- With surface grading to divert runoff away from the entrance way.
- Semi-buried pits for berm installations may be necessary to satisfy gravity drainage requirements.

OFFICE OF THE WATER DEPARTMENT
CITY OF AUBURN, NEW YORK
Memorial City Hall, 24 South St.
Auburn, New York 13021
Phone (315) 255-4142, 255-4182
Fax (315) 252-4182

POLICY STATEMENT
PRIVATE UNMETERED HYDRANTS

Private unmetered fire hydrants will be under the exclusive control of the City Fire/Water Departments.

Any unauthorized use for any reason other than fighting fires will require the installation, at the owner's expense, of a water meter and backflow prevention device in a City approved hotbox.

Maintenance and repairs will be performed by the Water Department when requested by the owner or when determined to be required by the Water Department personnel. All expenses for labor, equipment, and parts will be charged to the owner.

Each fire hydrant must be controlled by a gate valve. All fire hydrants and gate valves are required to meet City of Auburn specifications.

Any failure to comply with these criteria may result in termination of service to this hydrant. The City of Auburn reserves the right to inspect all private hydrants connected to the City water supply.

Date _____

_____
Facility name

_____
Property owner

_____
Mailing address

_____

Number of hydrants _____

I, the undersigned, hereby certify that I received the above policy statement and agree to comply with all the requirements stated and the information provided is correct.

_____
Signature

_____
Title

USC University of Southern California

List of Approved Backflow Prevention Assemblies

16 January 2019
Supersedes All Prior Lists

Foundation for Cross-Connection Control and Hydraulic Research

a Division of the University of Southern California

The following changes have been made to the USC List since February 22, 2018

ADDITIONS

Double Check Valve Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
DC	ARI	DC 501	1	H	15-Mar-2018
DC	Backflow Direct	Magnum 20	2 1/2	H	15-Mar-2018
DC	Backflow Direct	Magnum 20	2 1/2	VU	15-Mar-2018
DC	Backflow Direct	Magnum 20	3	H	15-Mar-2018
DC	Backflow Direct	Magnum 20	3	VU	15-Mar-2018
DC	Backflow Direct	Magnum 20	4	H	15-Mar-2018
DC	Backflow Direct	Magnum 20	4	VU	15-Mar-2018
DC	Backflow Direct	Magnum 20	6	H	15-Mar-2018
DC	Backflow Direct	Magnum 20	6	VU	15-Mar-2018
DC	Backflow Direct	Magnum 20X	6	H	15-Mar-2018
DC	Backflow Direct	Magnum 20X	6	VU	15-Mar-2018
DC	Febco	LF870V	10	VUVD	29-May-2018
DC	Febco	LF870V	10	VUVU	29-May-2018
DC	Wilkins	450ST	4	VUVD	13-Jun-2018
DC	Wilkins	450ST	6	VUVD	13-Jun-2018
DC	Wilkins	450STR	4	VUVD	13-Jun-2018
DC	Wilkins	450STR	6	VUVD	13-Jun-2018
DC	Backflow Direct	Deringer 20G	8	H	31-Jul-2018
DC	Backflow Direct	Deringer 20G	8	VU	31-Jul-2018
DC	Backflow Direct	Deringer 20GX	6	H	31-Jul-2018
DC	Backflow Direct	Deringer 20GX	6	VU	31-Jul-2018
DC	Backflow Direct	Magnum 20G	8	H	31-Jul-2018
DC	Backflow Direct	Magnum 20G	8	VU	31-Jul-2018
DC	Backflow Direct	Magnum 20GX	6	H	31-Jul-2018
DC	Backflow Direct	Magnum 20GX	6	VU	31-Jul-2018
DC	ARI	DC 501	1/2	H	6-Sep-2018
DC	Apollo/Conbraco	DC4AY	3/4	VU	24-Oct-2018
DC	Apollo/Conbraco	DC4AY	1	VU	24-Oct-2018
DC	Apollo/Conbraco	DCLF4AY	3/4	VU	24-Oct-2018
DC	Apollo/Conbraco	DCLF4AY	1	VU	24-Oct-2018
DC	Backflow Direct	Deringer 20G	2 1/2	H	7-Dec-2018
DC	Backflow Direct	Deringer 20G	2 1/2	VU	7-Dec-2018
DC	Backflow Direct	Deringer 20G	3	H	7-Dec-2018
DC	Backflow Direct	Deringer 20G	3	VU	7-Dec-2018
DC	Backflow Direct	Deringer 20G	4	H	7-Dec-2018
DC	Backflow Direct	Deringer 20G	4	VU	7-Dec-2018
DC	Backflow Direct	Magnum 20G	2 1/2	H	7-Dec-2018
DC	Backflow Direct	Magnum 20G	2 1/2	VU	7-Dec-2018
DC	Backflow Direct	Magnum 20G	3	H	7-Dec-2018
DC	Backflow Direct	Magnum 20G	3	VU	7-Dec-2018
DC	Backflow Direct	Magnum 20G	4	H	7-Dec-2018
DC	Backflow Direct	Magnum 20G	4	VU	7-Dec-2018
DC	BEECO	Barracuda 20	2 1/2	H	18-Dec-2018
DC	BEECO	Barracuda 20	2 1/2	VU	18-Dec-2018
DC	BEECO	Barracuda 20	3	H	18-Dec-2018
DC	BEECO	Barracuda 20	3	VU	18-Dec-2018
DC	BEECO	Barracuda 20	4	H	18-Dec-2018
DC	BEECO	Barracuda 20	4	VU	18-Dec-2018
DC	BEECO	Barracuda 20	8	H	18-Dec-2018
DC	BEECO	Barracuda 20	8	VU	18-Dec-2018
DC	BEECO	Barracuda 20X	6	H	18-Dec-2018
DC	BEECO	Barracuda 20X	6	VU	18-Dec-2018
DC	BEECO	FDC	2 1/2	H	18-Dec-2018
DC	BEECO	FDC	2 1/2	VU	18-Dec-2018
DC	BEECO	FDC	3	H	18-Dec-2018
DC	BEECO	FDC	3	VU	18-Dec-2018
DC	BEECO	FDC	4	H	18-Dec-2018
DC	BEECO	FDC	4	VU	18-Dec-2018
DC	BEECO	FDC	6	H	18-Dec-2018
DC	BEECO	FDC	6	VU	18-Dec-2018
DC	Wilkins	450ST	8	VUVD	18-Dec-2018
DC	Wilkins	450ST	10	VUVD	18-Dec-2018
DC	Wilkins	450STR	8	VUVD	18-Dec-2018
DC	Wilkins	450STR	10	VUVD	18-Dec-2018
DC	Wilkins	950XLDTCU	3/4	H	18-Dec-2018
DC	Apollo/Conbraco	DC4AY	3/4	H	16-Jan-2019
DC	Apollo/Conbraco	DC4AY	1	H	16-Jan-2019
DC	Apollo/Conbraco	DCLF4AY	3/4	H	16-Jan-2019
DC	Apollo/Conbraco	DCLF4AY	1	H	16-Jan-2019

Reduced Pressure Principle Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
RP	Apollo/Conbraco	RPLF4AR	8	H	22-Feb-2018
RP	Ames	4000BM2-FP	1 1/4	H	15-Mar-2018
RP	Ames	4000BM2-FP	1 1/2	H	15-Mar-2018

Double Check Detector Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
DCDA	Wilkins	450STDA	4	VUVD	18-Dec-2018
DCDA	Wilkins	450STDA	6	VUVD	18-Dec-2018
DCDA	Wilkins	450STDA	8	VUVD	18-Dec-2018
DCDA	Wilkins	450STDA	10	VUVD	18-Dec-2018
DCDA	Wilkins	450STDAR	4	VUVD	18-Dec-2018
DCDA	Wilkins	450STDAR	6	VUVD	18-Dec-2018
DCDA	Wilkins	450STDAR	8	VUVD	18-Dec-2018
DCDA	Wilkins	450STDAR	10	VUVD	18-Dec-2018

Reduced Pressure Principle Detector Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
RPDA	Apollo/Conbraco	RPDALF4A	8	H	22-Feb-2018
RPDA	Apollo/Conbraco	RPDALF4AN	8	VUVD	22-Feb-2018
RPDA	Apollo/Conbraco	RPDALF4AN	8	VUVU	22-Feb-2018
RPDA	Apollo/Conbraco	RPDALF4AR	8	H	22-Feb-2018
RPDA	Wilkins	475STDA	4	VUVD	18-Dec-2018
RPDA	Wilkins	475STDA	4	VUVU	18-Dec-2018
RPDA	Wilkins	475STDA	6	VUVD	18-Dec-2018
RPDA	Wilkins	475STDA	6	VUVU	18-Dec-2018
RPDA	Wilkins	475STDA	8	VUVD	18-Dec-2018
RPDA	Wilkins	475STDA	8	VUVU	18-Dec-2018
RPDA	Wilkins	475STDA	10	VUVD	18-Dec-2018
RPDA	Wilkins	475STDA	10	VUVU	18-Dec-2018
RPDA	Wilkins	475STDAR	4	VUVD	18-Dec-2018
RPDA	Wilkins	475STDAR	4	VUVU	18-Dec-2018
RPDA	Wilkins	475STDAR	6	VUVD	18-Dec-2018
RPDA	Wilkins	475STDAR	6	VUVU	18-Dec-2018
RPDA	Wilkins	475STDAR	8	VUVD	18-Dec-2018
RPDA	Wilkins	475STDAR	8	VUVU	18-Dec-2018
RPDA	Wilkins	475STDAR	10	VUVD	18-Dec-2018
RPDA	Wilkins	475STDAR	10	VUVU	18-Dec-2018

Double Check Detector Assemblies-Type II

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	2 1/2	H	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	2 1/2	VU	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	3	H	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	3	VU	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	4	H	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	4	VU	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	6	H	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	6	VU	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	8	H	27-Mar-2018
DCDA-II	Apollo/Conbraco	DCDA2LF4AR	8	VU	27-Mar-2018
DCDA-II	Febco	LF876V	10	VUVD	29-May-2018
DCDA-II	Febco	LF876V	10	VUVU	29-May-2018
DCDA-II	Backflow Direct	Deringer 30G	8	H	31-Jul-2018
DCDA-II	Backflow Direct	Deringer 30G	8	VU	31-Jul-2018
DCDA-II	Backflow Direct	Deringer 30GX	6	H	31-Jul-2018
DCDA-II	Backflow Direct	Deringer 30GX	6	VU	31-Jul-2018
DCDA-II	Backflow Direct	Deringer 30G	2 1/2	H	7-Dec-2018
DCDA-II	Backflow Direct	Deringer 30G	2 1/2	VU	7-Dec-2018
DCDA-II	Backflow Direct	Deringer 30G	3	H	7-Dec-2018
DCDA-II	Backflow Direct	Deringer 30G	3	VU	7-Dec-2018
DCDA-II	Backflow Direct	Deringer 30G	4	H	7-Dec-2018
DCDA-II	Backflow Direct	Deringer 30G	4	VU	7-Dec-2018

Reduced Pressure Principle Detector Assemblies-Type II

Type	Manufacturer	Model	Size	Orientation(s)	Date Added
RPDA-II	Apollo/Conbraco	RPDA2LF4AR	2 1/2	H	27-Mar-2018
RPDA-II	Apollo/Conbraco	RPDA2LF4AR	3	H	27-Mar-2018
RPDA-II	Apollo/Conbraco	RPDA2LF4AR	4	H	27-Mar-2018
RPDA-II	Apollo/Conbraco	RPDA2LF4AR	6	H	27-Mar-2018
RPDA-II	Apollo/Conbraco	RPDA2LF4AR	8	H	27-Mar-2018
RPDA-II	Febco	LF886V	10	VUVD	29-May-2018
RPDA-II	Febco	LF886V	10	VUVU	29-May-2018
RPDA-II	Backflow Direct	Deringer 50G	2 1/2	H	24-Oct-2018
RPDA-II	Backflow Direct	Deringer 50G	3	H	24-Oct-2018
RPDA-II	Backflow Direct	Deringer 50G	4	H	24-Oct-2018

RP	Ames	4000BM2-FP	2	H	15-Mar-2018
RP	Backflow Direct	Magnum 40	2 1/2	H	15-Mar-2018
RP	Backflow Direct	Magnum 40	3	H	15-Mar-2018
RP	Backflow Direct	Magnum 40	4	H	15-Mar-2018
RP	Backflow Direct	Magnum 40	8	H	15-Mar-2018
RP	Backflow Direct	Magnum 40X	6	H	15-Mar-2018
RP	Febco	LF880V	10	VUVD	29-May-2018
RP	Febco	LF880V	10	VUVU	29-May-2018
RP	ARI	RP 501	1/2	H	6-Sep-2018
RP	Backflow Direct	Deringer 40G	2 1/2	H	24-Oct-2018
RP	Backflow Direct	Deringer 40G	3	H	24-Oct-2018
RP	Backflow Direct	Deringer 40G	4	H	24-Oct-2018
RP	Backflow Direct	Magnum 40G	2 1/2	H	24-Oct-2018
RP	Backflow Direct	Magnum 40G	3	H	24-Oct-2018
RP	Backflow Direct	Magnum 40G	4	H	24-Oct-2018
RP	BEECO	Barracuda 40	2 1/2	H	18-Dec-2018
RP	BEECO	Barracuda 40	3	H	18-Dec-2018
RP	BEECO	Barracuda 40	4	H	18-Dec-2018
RP	Wilkins	475ST	4	VUVD	18-Dec-2018
RP	Wilkins	475ST	4	VUVU	18-Dec-2018
RP	Wilkins	475ST	6	VUVD	18-Dec-2018
RP	Wilkins	475ST	6	VUVU	18-Dec-2018
RP	Wilkins	475ST	8	VUVD	18-Dec-2018
RP	Wilkins	475ST	8	VUVU	18-Dec-2018
RP	Wilkins	475ST	10	VUVD	18-Dec-2018
RP	Wilkins	475ST	10	VUVU	18-Dec-2018
RP	Wilkins	475STR	4	VUVD	18-Dec-2018
RP	Wilkins	475STR	4	VUVU	18-Dec-2018
RP	Wilkins	475STR	6	VUVD	18-Dec-2018
RP	Wilkins	475STR	6	VUVU	18-Dec-2018
RP	WilkIns	475STR	8	VUVD	18-Dec-2018
RP	Wilkins	475STR	8	VUVU	18-Dec-2018
RP	Wilkins	475STR	10	VUVD	18-Dec-2018
RP	Wilkins	475STR	10	VUVU	18-Dec-2018
RP	Wilkins	975XLDTCU	3/4	H	18-Dec-2018
RP	Apollo/Conbraco	RP4AN	1	VUVD	16-Jan-2019
RP	Apollo/Conbraco	RPLF4AN	1	VUVD	16-Jan-2019
RP	Wilkins	375ASTRW1	2 1/2	H	16-Jan-2019
RP	Wilkins	375ASTRW1	3	H	16-Jan-2019
RP	Wilkins	375ASTRW1	4	H	16-Jan-2019
RP	WilkIns	375ASTRW1	6	H	16-Jan-2019
RP	WilkIns	375ASTW1	2 1/2	H	16-Jan-2019
RP	Wilkins	375ASTW1	3	H	16-Jan-2019
RP	Wilkins	375ASTW1	4	H	16-Jan-2019
RP	Wilkins	375ASTW1	6	H	16-Jan-2019

Pressure Vacuum Breaker Assemblies

PVB	ARI	VB-501	3/4	VUH	13-Jun-2018
PVB	ARI	VB-501	1	VUH	13-Jun-2018
PVB	ARI	VB-501	1/2	VUH	6-Sep-2018

Spill Resistant Pressure Vacuum Breaker Assemblies

DELETIONS

ASSEMBLY AND SPARE PARTS ARE NO LONGER MANUFACTURED

Double Check Valve Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Deleted
DC	Cash Acme	DC 500	3/4	H	22-Feb-2018
DC	Cash Acme	DC 500	1	H	22-Feb-2018
DC	Cash Acme	DC100	3/4	H	22-Feb-2018
DC	Cash Acme	DC100	1	H	22-Feb-2018
DC	Cash Acme	DC100	1 1/2	H	22-Feb-2018
DC	Cash Acme	DC100	2	H	22-Feb-2018
DC	Febco	750	10	H	22-Feb-2018
DC	Febco	750	10	H	22-Feb-2018
DC	Febco	750	10	VU	22-Feb-2018
DC	Febco	750	10	VU	22-Feb-2018
DC	Febco	750	2 1/2	H	22-Feb-2018
DC	Febco	750	2 1/2	H	22-Feb-2018
DC	Febco	750	2 1/2	VU	22-Feb-2018
DC	Febco	750	2 1/2	VU	22-Feb-2018
DC	Febco	750	3	H	22-Feb-2018
DC	Febco	750	3	H	22-Feb-2018
DC	Febco	750	3	VU	22-Feb-2018
DC	Febco	750	3	VU	22-Feb-2018
DC	Febco	750	4	H	22-Feb-2018
DC	Febco	750	4	H	22-Feb-2018
DC	Febco	750	4	VU	22-Feb-2018
DC	Febco	750	4	VU	22-Feb-2018
DC	Febco	750	6	H	22-Feb-2018
DC	Febco	750	6	H	22-Feb-2018
DC	Febco	750	6	VU	22-Feb-2018
DC	Febco	750	6	VU	22-Feb-2018
DC	Febco	750	8	H	22-Feb-2018
DC	Febco	750	8	H	22-Feb-2018
DC	Febco	750	8	VU	22-Feb-2018
DC	Febco	750	8	VU	22-Feb-2018

Reduced Pressure Principle Assemblies

Type	Manufacturer	Model	Size	Orientation(s)	Date Deleted
RP	Cash Acme	RP 500	3/4	H	22-Feb-2018
RP	Cash Acme	RP 500	1	H	22-Feb-2018
RP	Cash Acme	RP100	3/4	H	22-Feb-2018
RP	Cash Acme	RP100	1	H	22-Feb-2018
RP	Cash Acme	RP100	1 1/2	H	22-Feb-2018
RP	Cash Acme	RP100	2	H	22-Feb-2018
RP	Cash Acme	RP200	1/2	H	22-Feb-2018
RP	Cash Acme	RP200	3/4	H	22-Feb-2018
RP	Febco	760	2 1/2	H	22-Feb-2018
RP	Febco	760	2 1/2	H	22-Feb-2018
RP	Febco	760	3	H	22-Feb-2018
RP	Febco	760	3	H	22-Feb-2018
RP	Febco	760	4	H	22-Feb-2018
RP	Febco	760	4	H	22-Feb-2018
RP	Febco	760	6	H	22-Feb-2018
RP	Febco	760	6	H	22-Feb-2018
RP	Febco	760	8	H	22-Feb-2018
RP	Febco	760	8	H	22-Feb-2018
RP	Febco	760	10	H	22-Feb-2018
RP	Febco	760	10	H	22-Feb-2018
RP	Febco	760N	2 1/2	VUVD	22-Feb-2018
RP	Febco	760N	2 1/2	VUVD	22-Feb-2018
RP	Febco	760N	3	VUVD	22-Feb-2018
RP	Febco	760N	3	VUVD	22-Feb-2018
RP	Febco	760N	4	VUVD	22-Feb-2018
RP	Febco	760N	4	VUVD	22-Feb-2018
RP	Febco	760Z	2 1/2	VUVU	22-Feb-2018
RP	Febco	760Z	2 1/2	VUVU	22-Feb-2018
RP	Febco	760Z	3	VUVU	22-Feb-2018
RP	Febco	760Z	3	VUVU	22-Feb-2018

DC	Febco	750N	2 1/2	VUVD	22-Feb-2018
DC	Febco	750N	2 1/2	VUVD	22-Feb-2018
DC	Febco	750N	3	VUVD	22-Feb-2018
DC	Febco	750N	3	VUVD	22-Feb-2018
DC	Febco	750N	4	VUVD	22-Feb-2018
DC	Febco	750N	4	VUVD	22-Feb-2018
DC	Febco	750N	6	VUVD	22-Feb-2018
DC	Febco	750N	6	VUVD	22-Feb-2018
DC	Flomatic	DCV	3/4	H	22-Feb-2018
DC	Flomatic	DCV	1	H	22-Feb-2018
DC	Flomatic	DCV	1 1/2	H	22-Feb-2018
DC	Flomatic	DCV	2	H	22-Feb-2018
DC	Flomatic	DCV	2 1/2	H	22-Feb-2018
DC	Flomatic	DCV	3	H	22-Feb-2018
DC	Flomatic	DCV	4	H	22-Feb-2018
DC	Flomatic	DCV	4	H	22-Feb-2018
DC	Flomatic	DCV	6	H	22-Feb-2018
DC	Flomatic	DCV	6	H	22 Feb-2018
DC	Flomatic	DCV	8	H	22-Feb-2018
DC	Flomatic	DCVE	3/4	H	22-Feb-2018
DC	Flomatic	DCVE	1	H	22-Feb-2018
DC	Flomatic	DCVE	1 1/2	H	22-Feb-2018
DC	Flomatic	DCVE	2	H	22-Feb-2018
DC	Hersey	2	3	H	22-Feb-2018
DC	Hersey	2	4	H	22-Feb-2018
DC	Hersey	2	6	H	22-Feb-2018
DC	Hersey	2	8	H	22-Feb-2018
DC	Hersey	2	10	H	22-Feb-2018

Pressure Vacuum Breaker Assemblies

PVB	Flomatic	PVB	3/4	VUH	22-Feb-2018
PVB	Flomatic	PVB	1	VUH	22-Feb-2018

RP	Febco	760Z	4	VUVU	22-Feb-2018
RP	Febco	760Z	4	VUVU	22-Feb-2018
RP	Flomatic	RPZ	3/4	H	22-Feb-2018
RP	Flomatic	RPZ	1	H	22-Feb-2018
RP	Flomatic	RPZ	1 1/2	H	22-Feb-2018
RP	Flomatic	RPZ	2	H	22-Feb-2018
RP	Flomatic	RPZ	2 1/2	H	22-Feb-2018
RP	Flomatic	RPZ	3	H	22-Feb-2018
RP	Flomatic	RPZ	4	H	22-Feb-2018
RP	Flomatic	RPZ	4	H	22-Feb-2018
RP	Flomatic	RPZ	6	H	22-Feb-2018
RP	Flomatic	RPZ	6	H	22-Feb-2018
RP	Flomatic	RPZ	8	H	22-Feb-2018
RP	Flomatic	RPZE	3/4	H	22-Feb-2018
RP	Flomatic	RPZE	1	H	22-Feb-2018
RP	Flomatic	RPZE	1 1/2	H	22-Feb-2018
RP	Flomatic	RPZE	2	H	22-Feb-2018
RP	Flomatic	RPZE II	1/2	H	22-Feb-2018
RP	Flomatic	RPZE II	3/4	H	22-Feb-2018
RP	Flomatic	RPZII	1/2	H	22-Feb-2018
RP	Flomatic	RPZII	3/4	H	22-Feb-2018
RP	Flomatic	RPZIIE	1/2		22-Feb-2018
RP	Flomatic	RPZIIE	3/4		22-Feb-2018

Reduced Pressure Principle Detector Assemblies

RPDA	Watts	009NRSRPDA	4	H	22-Feb-2018
RPDA	Watts	009NRSRPDA	6	H	22-Feb-2018
RPDA	Watts	009OSYRPDA	4	H	22-Feb-2018
RPDA	Watts	009OSYRPDA	6	H	22-Feb-2018

COUNTY NAME	Last Name	First Name	Middle Initial	End	Certification Number	Address Line One	Address Line Two	City	State or Province	Zip Code	PHONE	Fire Line Inspector
Onondaga	Abbott	David	H	10/31/2021	7259	Associated Fire Protection Corp	PO Box 3181	Syracuse	NY	13220	315.463.9890	*
Cayuga	Baier	David		8/31/2022	13145	Self	1589 Turnpike Rd	Auburn	NY	13021	315.730.7874	*
Cayuga	Bench	Randy		12/31/2021	11264	Wells College	170 Wells College	Aurora	NY	13165	315.364.3266	
Cayuga	English	Michael	D	9/30/2021	9766	Cornell University	640 West North Street	Geneva	NY	14456	315.787.2305	
Cayuga	Gregory	Brian	D	6/30/2022	13056	Cornell Argritech	650 West North St	Geneva	NY	14456	315.787.2302	
Cayuga	Kepple	Mark	G	4/30/2022	5543	Millenial Builders	10029 Spook Woods Rd	Port Byron	NY	13140	585.255.0245	
Cayuga	Kepple	Philip	P	9/30/2022	13198	Specialty Mech Services Corp	PO Box 1069	Weedsport	NY	13166	315.834.6636	*
Cayuga	Kepple	Timothy	J	3/31/2022	9964	Speciality Mechanical Services	8350 Weedsport Sennet Rd	Weedsport	NY	13166	315.834.6636	*
Cayuga	Kerstetter	Timothy	A	1/31/2023	13338	Self	PO Box 250	Auburn	NY	13021	315.729.0702	*
Oswego	Manwaring	John	P	6/30/2021	11002	Davis-Ulmer Fire Protection	7633 Edgecomb Dr	Liverpool	NY	13088	315.451.0971	*
Cayuga	Matijas	Chad	A	11/30/2021	6254	Cortland University	32 Stratton Dr	Cortland	NY	13045	607.753.2100	
Onondaga	Metallo	John	D	11/30/2020	10735	Metallo Automatic Sprinkler Co.	14 Corporate Cir Ste7	E. Syracuse	NY	13057	315.437.3700	*
Cayuga	Moon	Michael	J	11/30/2021	11197	Cornell University	Humphries Svc. Bldg, 639 Dryden Road	Ithaca	NY	14853	607.255.5322	
Cayuga	Murtari	Frank	A	5/31/2022	11430	TYCO Simplex Grinnell	6731 Collamer Rd	E Syracuse	NY	13057	315.437.7718	
Cayuga	Rice	Richard	L	4/30/2021	12409	NYS DOCCS	135 State St	Auburn	NY	13021	315.567.1319	
Cayuga	Ryan	Timothy	R	4/30/2020	11884	Five Points Correctional Facility	6600 State Rt 96	Romulus	NY	14541	607.869.5111	
Cayuga	Senter	Kevin		10/31/2020	10711	Borg Warner Morse Tech	800 Warren Road	Ithaca	NY	14850	607.266.3735	
Cayuga	Sliwka II	Joseph	J	4/30/2022	12955	City of Auburn	35 Bradley St	Auburn	NY	13021	315.253.6511	*
Cayuga	Stevens	Mark	R	6/30/2020	11997	ABJ Fire Protection	6500 New Venture Gear Drive	East Syracuse	NY	13057	315.423.9766	*
Cayuga	Topolski	Gene	R	7/31/2022	13108	Upstate Hospital	750 E. Adams St	Syracuse	NY	13210		
Onondaga	Town	Todd	M	11/30/20203	6960	AP Plumbing	690 State Fair Blvd	Syracuse	NY	13209	315.635.5515	*
Onondaga	Virginia	Mark	S	12/31/2021	11285	Associated Fire Protection Corp	PO Box 3181	Syracuse	NY	13220	315.463.9890	*

* Notes Fire Line & Domestic Backflow Tester *

REGULATIONS FOR THE INSTALLATION OF WATER METERS

THESE REGULATIONS DO NOT PRE-EMPT THE NEED FOR A BACKFLOW PREVENTION DEVICE WHERE REQUIRED:

- See attached for special compound water meter installation requirements
- All service lines MUST be metered - including fire lines, which must have at the minimum, a detector check system
- All fire line metering systems MUST be pre-approved by the Water Department
- All 5/8" meters shall be furnished at the expense of the Water Department
- All meters larger than 5/8" MUST be purchased or approved by the Water Department
- All meters MUST be installed in a horizontal position
- All meters regardless of size MUST have both an inlet and outlet ball valve located on either side of the meter
- All meters 1 ½" and larger in size MUST have both an inlet and outlet ball valve located on either side of the meter; additionally, they must have a by-pass line around the meter with a * locking handle ball valve
- All meters 2" and larger MUST be of the compound type, unless approved differently by the Water Department
- All pit installations MUST be pre-approved by the Water Department
- All meters shall be maintained in proper working condition
- All meters installed by agents other than from the Water Department, **MUST BE INSPECTED by the Water Department**
- Failure to comply with any of these regulations could lead to costly construction changes at a latter time

REGULATIONS PERTAINING TO THE READING OF WATER METERS

- The City Municipal Code states that you MUST supply the Water Department with meter readings, when so requested
- The owner and tenant shall provide ready and convenient access to the meter so that it may be frequently read and examined by the Water Department

* Nibco series 585 fullport ball valve with optional Locking Handle or equivalent

Special Installation Requirements

Sensus Compound Water Meters

Proper meter installation will help assure long term meter accuracy, maximum revenue and reduce future meter maintenance and expense.

In order to maintain factory calibration levels, the following instructions and installation depicted should be followed:

1. Install meter in horizontal plane.
2. Valves immediately upstream of the meter should only be full-open gate valves. Butterfly valves are acceptable if five (5) pipe diameters or more upstream. Downstream, full-open gate or butterfly valves can be used.
3. For protection of the meter from debris and to condition incoming flows from upstream flow disturbances, a strainer is recommended to be installed immediately upstream of the meter.
4. Do not install check valves or pressure reducing devices less than ten (10) pipe diameters upstream of the meter and three (3) to five (5) pipe diameters downstream.
5. Elbows, bends and non-concentric reducers should be a minimum of ten (10) pipe diameters upstream of meter.

Reference Sensus Bulletin CM-712 for a factory Pre-Fab Pak meter installation package.

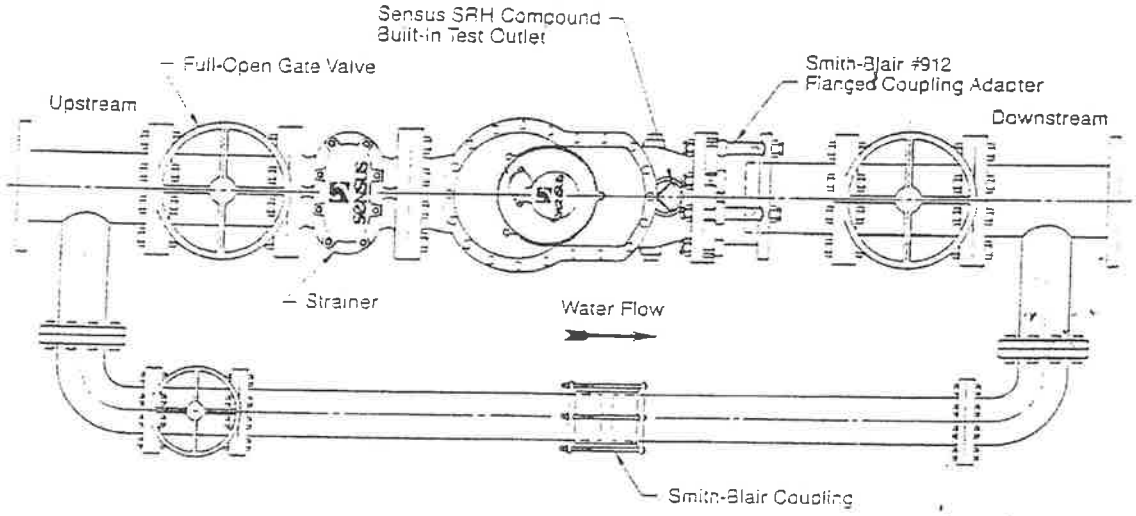


Figure 1.

SENSUS TECHNOLOGIES, INC.
A SFR Company

Sensus Technologies, Inc.
P.O. Box 487
Bailey & Gallatin Avenues
Uniontown, PA 15401

TOLL FREE HOTLINE
1-800-METER-IT
1-800-638-3748

AUTHORIZED DISTRIBUTOR

Engineer's Report

Name of Facility/Project: _____

Address: _____

_____

1. Facility/Project Classification (check all that apply):

- ☐ Residential Multi Family ; Number of Units _____
- ☐ Single Retail Store
- ☐ Multiple Retail Stores/Plazas
- ☐ Single Business
- ☐ Multiple Business, Professional/Office Building
- ☐ Food Service/Restaurant
- ☐ Laundromats/Dry Cleaners
- ☐ Hotel/Motel; Number of Units _____
- ☐ Car Wash
- ☐ Medical Center/ Nursing Home/Hospital
- ☐ Funeral Home
- ☐ School/Public/Private
- ☐ Country Club/Golf Course
- ☐ Church
- ☐ Nurseries/Garden Store
- ☐ Automotive Sales/Service Center
- ☐ Grocers
- ☐ Warehouse/Distribution Center ; Please describe what is warehoused and/or distributed at the facility _____
  _____
- ☐ Manufacturing ; Please describe the type of manufacturing and what is manufactured at the facility _____
  _____
  _____
- ☐ Industrial ; Please describe the type of industrial facility _____
  _____
  _____
- ☐ Other , Be specific ; _____

1.a Total number of buildings _____

1.b Total number of stories (floors) will the facility have? _____

1.c What is the square footage of floor space at the facility? _____

2.a General use of water within the facility, proposed or existing, check all that apply;

☐ Rest Room Facilities	☐ Trap Primers	☐ Mortuary Equipment
☐ Vending/Soda Machines	☐ Aspirators	☐ Autoclaves/Sterilizers
☐ Kitchen Equipment	☐ Swimming Pool	☐ Power Washing Equipment
☐ Laundry Equipment	☐ Hose Bibbs	☐ Water Cooled Equipment
☐ Boiler Makeup Water	☐ Plating Tank	☐ Sewage pump/ejectors
☐ Ornamental Fountain	☐ Cuspidors	☐ Solar Domestic Hot Water

Other - ***Be Specific ;*** _____

_____

_____

2.b Does the facility contain any of the following, existing or proposed, check all that apply ;

☐ Dedicated Irrigation System	☐ Private Fire Hydrant(s)
☐ Booster Pump System	☐ Auxiliary Water Supply
☐ Reclaimed Water System	☐ Dedicated Fire Suppression/Sprinkler System

3.a Give a detailed description of the Heating and Cooling system and any connections they may have to the internal plumbing in the facility ; _____

_____

_____

_____

	Y	N	
3.b	☐	☐	Will the heating/cooling be directly connected (e.g. makeup line for boiler/ cooling, etc.) to the internal plumbing?
3.c	☐	☐	Will the heating/cooling system use or be set up to use automatic chemical feed equipment and/or chemical feed tanks for additive chemicals such as antifreeze, descaler, conditioners, cleaning agents, etc.?
3.d	☐	☐	Will the makeup line have any backflow containment device installed on it as a means of internal containment?

4.a List the size of all domestic service lines _____ ☐ Proposed ☐ Existing

4.b List the size of all Fire service lines_____ ☐ Proposed ☐ Existing

4.c What is the type of fire system? Check all that apply.

☐ Wet System	☐ Dry System
☐ Private Fire Hydrant (external)	☐ Pumper (Siamese) Connection (external)
☐ Other _____	

4.d What is the AWWA Manual M-14 Classification of the fire system? _____

You *Must* supply written documentation from your sprinkler company, on their letterhead, indicating the American Water Works Authority (A.W.W.A.) Manual M-14 Class of sprinkler system for all proposed and existing fire suppression systems.

	Y	N	
5.	☐	☐	Will the internal domestic water supply be directly connected to the Sanitary and/or Storm Sewer water system, (e.g. Trap Primers, Automatic or Manual drain/sewer flushing equipment, etc.)? If YES, please describe _____
6.	☐	☐	Will the area where the backflow preventer is located, be adequately heated to prevent freezing?
7.	☐	☐	Will the area where the backflow preventer is located, be adequately lighted to allow for maintenance and testing of the device(s)?
8.	☐	☐	Will the backflow preventer be housed in an outdoor insulated enclosure (e.g. Hot Box or HydroCowl)?
9.	☐	☐	Does the facility need a continuous water supply? (If YES dual backflow preventers will be required)?
10.	☐	☐	Will the facility require a booster pump on the domestic service?
11.	☐	☐	Will the facility have an underground irrigation (lawn sprinkler) system?

12. Please indicate to where does the RPZ Relief Port Discharge (drain)?

- ☐ non-applicable for Double Check Valve Assembly (DCVA)
- ☐ Sanitary Sewer Lateral - ***Discharge piping connected to a sanitary sewer must be trapped and equipped with a backwater check valve***
- ☐ Storm Sewer Lateral - ***Discharge piping connected to a storm sewer must be equipped with a backwater check valve***
- ☐ Floor Drain - ***Discharge piping from relief valves must be terminated a minimum of one inch above any floor drain***
- ☐ Outside Grade - ***Terminal end of discharge piping must have a rodent screen. Flap valves should also be considered to prevent the entry of cold air.***
- ☐ Other _____

Important Consideration - ***The drain for the RPZ Relief Port must be adequately sized to accommodate a full discharge (dump) from the relief port without flooding the surrounding area.***

Any item left blank could result in a delay in reviewing the backflow application. The City may require additional information based on a detailed review of this project.

I certify that this information is true to the best of my knowledge.

Owners Signature _____ Date _____

I certify that I have reviewed the information contained in this report.

Plumbing Contractor Signature _____ Date _____

Do not write below this line - Department use only

Y N

☐ ☐ Is the facility located in the 100 year flood plain?

With respect to the facility, what is the degree of Hazard of potential cross connection contaminants used, stored or processed at the facility. (Read Definition A at the end of this form)

☐ Aesthetically Objectionable
☐ Hazardous

Reason: _____
_____

With respect to the Domestic Service, what is the potential for cross connection and subsequent backflow to occur? (Read Definition B at the end of this form)

☐ Low
☐ Moderate
☐ High

Reason: _____
_____

Comments: _____
_____
_____
_____

Application Reviewed by: _____ Date _____

CITY OF AUBURN
"History's Hometown"
Department of Municipal Utilities

Checklist for Required Items to be submitted for Backflow Applications

1. 4 Copies of NYSDOH Application Form DOH-347 ☐
   a. Items 1 thru 12 filled out ☐
   b. Items 13 and 14 are the responsibility of the City Water Department ☐
   c. Original ink seal and signature of design engineer or architect on all 4 copies ☐

2. 4 Copies of an Engineer's/Architect's Report
   a. With description of the facility layout - to include:
      i. facility location ☐
      ii. number of buildings ☐
      iii. number of floors ☐
      iv. structure type ☐
      v. foundation type ☐
   b. With description for the use of the facility ☐
   c. With description of how water will be used within the facility ☐
   d. State type of service(s), i.e. Fire, Domestic or Combination ☐
      i. List all service connections to the City Water Supply ☐
      ii. Note any auxiliary water supply source ☐
      iii. List sizes for all service connections ☐
      iv. Whether services are existing or proposed ☐
   e. Actual or estimated maximum flow demand ☐
   f. For existing & proposed line pressures, state:
      i. Existing static pressure at City waterline ☐
      ii. Proposed static pressure after backflow device ☐
      iii. If pressure drop across backflow device will affect any existing/proposed water appurtenances ☐
   g. For a Fire Suppression System, state:
      i. Whether system is existing, proposed or is to be modified ☐
      ii. AWWA Manual M-14 Class of Sprinkler System ☐
   h. For Private Fire Hydrants, state:
      i. Whether Policy Statement - Private Fire Hydrants will be signed, and included as part of Engineer's Report or if backflow devices will be provided on all private fire hydrants ☐
   i. With presence & location of backflow device(s) noted ☐
   j. With presence of heat & light at device location ☐
   k. With specific explanation of how device discharge will be drained ☐
   l. For a Lawn Irrigation system, state:

i. Whether system is subject to back pressure from:
   1. Pumps ☐
   2. Elevated Piping ☐
   3. Compressed Air ☐
ii. Whether system has provisions for injected chemicals ☐

m. The need for a continuous water supply ☐
   i. The need for dual backflow devices ☐
n. For a 100 year floodplain, state: ☐
   i. If site is located in a floodplain area ☐
      1. State floodplain elevation ☐
   ii. If the site is not in a floodplain area ☐
o. Description of the existing or proposed booster pump system, Indicating: ☐
   i. Adequate Net Positive Suction Head ☐
   ii. Adequate pressure to the highest elevation and/or most remote fixture ☐
   iii. Pressure Cut-Off switch in suction line ☐
p. An inventory of any existing containment devices to include:
   i. Make ☐
   ii. Model ☐
   iii. Size ☐
   iv. Serial Number ☐
   v. Current annual test reports must also be submitted ☐
q. With Engineer's/Architect's seal & signature ☐

3. 4 Copies of a Site Plan
   a. With a general location map ☐
   b. With size & location of water main being tapped ☐
   c. Indicate street fronted on ☐
   d. Show location of facility ☐
   e. With location of service line(s) shown ☐
   f. Show & note location of backflow device(s) ☐
   g. For a Fire Sprinkler System:
      i. Show a riser detail (may be submitted as a separate sheet) ☐
      ii. State AWWA M-14 Class ☐
4. 4 Copies of Backflow Device Installation Details (elevation & plan views)
   a. With all required clearance dimensions shown or noted ☐
   b. With all valves, water meter and meter bypass shown ☐
   c. With drainage provisions shown or noted ; to include
      i. Size of drains ☐
      ii. Routing of drains ☐
   d. Determine if proper support is required for all devices, if so, show or note as necessary ☐

e. Indicate direction of flow ☐
f. Details to be drawn to scale or with dimensions noted ☐
g. With Engineer's/Architect's seal & signature ☐

5. Enclose a copy of this completed checklist. Any item left blank could result in a delay in reviewing the backflow application. The City may require extra information based on a detailed review of the project. ☐
6. If application for approval is being made for one or more containment devices for a particular project, one submittal package should be made by an Engineering or Architectural consulting firm. ☐

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Public Water Supply Protection

Application for Approval of Backflow Prevention Devices

PRINT OR TYPE ALL ENTRIES EXCEPT SIGNATURES
Please completed items 1 through 12a + Block and Lot Numbers

Block #	Lot #	FOR DEPARTMENT USE ONLY Log No.

1. Name of Facility	2. City, Village, Town	3. County

4. Location of Facility Street	City	state	zip

4a. Phone Numbers	5. Contact Person

5. Approx. Location of Device(s)	6. Mfg. Model #	Size of Device(s)

# of Fire Services	# of Domestic Services	# of Combined Services	Total # of Services	Total # of Buildings

7. Name of Owner	Title	Phone Number	8. Nature of works ☐ Initial Device Installation ☐ Replace Existing Device

Full Mailing Address
Address _____ street

City _____ state _____ zip _____

Owner's Signature _____ Date _____/_____/_____ M D Y

8a.
☐ New Service
☐ Existing Service

8b.
☐ New Building
☐ Existing Building
☐ Major Renovations

9. Name of Design Engineer or Architect

Street
Address _____

City _____

State _____ Zip _____

_____
Signature

Original Ink signature and seal required on all copies

10. NYS License #

_____

☐ PE ☐ RA ☐ Other

_____

10a. Telephone Number(s)

_____

Date _____/_____/_____ M D Y

11. Water System Pressure (psi) at Point of Connection	12. Estimate Installation Cost	12a. Estimate Design Cost
Max _____ Avg _____ Min _____		

13. Degree of Hazard

☐ Hazardous
☐ Aesthetically Objectionable

List of processes or reasons that lead to degree of hazard checked:

_____

_____

14. Public water supply name

Mailing Address

_____
street

_____
City state zip

Telephone No. ( )

Name of supplier's designate representative

Title

_____

Signature _____ _____/_____/_____ M D Y

Note: All applicants must be accompanied by plans, specifications and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. This form must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

DOH-347 (5/91)

BACKFLOW BOOKLET RECEIPT
CITY OF AUBURN, WATER DEPARTMENT

property location	date
owner	issued by:
mailing address	WATER DEPT. USE ONLY
	Service connection
city/state/zip	Meter installed

It is the responsibility of the water supplier to ensure the safeguards to protect its water supply.

The rules governing cross-connection control as stated in the Auburn Municipal Code, Chapter 45, article IV and the New York Sanitary Code, Part 5-1.31 are strictly enforced. Our Backflow Information booklet contains all the necessary forms and regulations to comply with these standards.

I have received a packet containing the following:

- A backflow information booklet.
- A copy of Chapter 6 of the American Water Works Association manual pertaining to backflow prevention and fire protection.
- Regulations pertaining to water meter installation and reading.
- Business card of the contact person for any questions regarding service installation requirements.

THIS SECTION IS TO BE COMPLETED IF BEING ISSUED TO OTHER THAN THE PROPERTY OWNER. PLEASE PRINT	
Name	
Representing	Telephone no.

signature of owner or agent

white	Yellow	Pink	Gold
Meter/Backflow Department (bflwrcpt.frm)	Water Billing Department	Code Enforcement	Applicant