



BACKFLOW PREVENTION

AND

CROSS-CONNECTION CONTROL

THE CITY OF LAGRANGE
WATER SYSTEM
LAGRANGE, GEORGIA

UPDATED 2002

FOREWORD

Georgia Code Section 12-5-176 empowers the Board of Natural Resources to promulgate rules and regulations for cross-connection control. The Board subsequently added to its “Rules for Safe Drinking Water” the requirement that water suppliers develop a written plan for the elimination and prevention of all cross-connections. This Backflow Prevention and Cross-Connection Control Program (“Program”) was created by the City of LaGrange to ensure compliance with State law. The City of LaGrange also enforces the cross-connection, Backflow, and Back-Siphonage regulations of the Plumbing Code as established by the state of Georgia pursuant to the Uniform Codes Act (O.C.G.A. Chapter 2, Title 8).

INDEX

Definitions	4
Section I Purpose and Control	7
Section II Responsibilities	8
Section III Implement and Enforcement	9
Section IV Inspection of Facilities	11
Section V Water from other Sources	12
Section VI Selection of Devices.....	13
Section VII Location and Installation of Devices	16
Section VIII Test, Maintenance and Repairs	20
Section IX Fire Protection.....	15
Test and Maintenance Report.....	23
Cross-connection Survey	24

DEFINITIONS

BACKFLOW – The undesirable reverse flow of water in a public water system.

BACKFLOW PREVENTER (BFP) – A device designed to prevent the reverse flow of water in a water system.

DOUBLE CHECK VALVE (DCV) – A backpressure type backflow prevention device designed for continuous or intermittent pressure, including backpressure, where pollutants may be involved.

DOUBLE DETECTOR CHECK (DDC) – A backpressure type backflow prevention device designed to serve also as a detector check on a fire protection system where pollutants may be involved. Including a line-sized approved (DCV) backflow preventer and a three-quarter approved (DCV) backflow preventer on the metered bypass side.

DUAL CHECK (DUC) – A backpressure type backflow prevention device designed especially for containing residential areas where pollutants only may be involved.

INTERMEDIATE ATMOSPHERIC VENT – A backpressure and back siphonage type backflow prevention device designed to operate under continuous pressure, including backpressure, where “low degree of hazard” contaminants may be involved.

REDUCED PRESSURE ZONE (RPZ) – A backpressure and back siphonage type backflow prevention device designed to operate under continuous pressure, including backpressure, where contaminants may be involved.

REDUCED PRESSURE ZONE DETECTOR CHECK (RPDC) – A backpressure and back siphonage type back flow prevention device designed to serve as a detector check on fire protection system where contaminants may be involved. It includes a line-sized reduced pressure zone backflow preventer with a metered by-pass, into which has also been incorporated an approved reduced pressure zone backflow preventer.

BACKFLOW PREVENTION – Actions designed to discover, eliminate, and prevent backflow and uncontrolled cross-connections.

BACKFLOW PREVENTION BY CROSS-CONNECTION CONTROL – Installation of a backflow control device at each cross-connection on a premises. (The First Line of Defense.)

BACKFLOW PREVENTION BY CONTAINMENT – The installation of a backflow prevention device at the service connection to the premises in order to protect the public water supply main only. (The Second Line of Defense.)

BACKPRESSURE – An increase in pressure in a Customer’s water system to a level above that of the public water system generally caused by pumps, thermal expansion, or reasons other than a reduction or loss of incoming pressure. Backpressure is generally more evident in a closed water system.

BACK SIPHONAGE – A reverse flow in a water system caused by a reduction in pressure in the public water system. Back siphonage is generally more evident in an open water system.

CERTIFIED TESTER – One who has successfully completed an approved training course on the proper techniques of testing backflow devices. This certification is mandatory under the AWWA Manual M-14 for Backflow Prevention. Testers must be periodically re-certified as required by law.

CLOSED WATER SYSTEM – Water System with a checking device installed at the service connection. A check valve, backflow preventer or pressure-reducing valve would create a closed system.

CONTAMINANT – Any substance that, if introduced into the potable water system, could create a health hazard.

CROSS-CONNECTION – A physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, sewage or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as the result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices, and other temporary or permanent devices through which backflow could occur are considered to be cross-connections.

CROSS-CONNECTION, NON PRESSURE TYPE – A low inlet installation where a potable water pipe is connected or extended below the overflow rim of a vessel, that contains a non-potable fluid at atmospheric pressure.

CROSS-CONNECTION, PRESSURE TYPE – An installation where potable water pipe is connected to a closed vessel, or a piping system, that contains non-potable fluid and is above atmospheric pressure.

CUSTOMER’S WATER SYSTEM – All potable water piping, valves, fittings and appurtenances on the Customer side of the service connection.

HAZARD, DEGREE OF – The range in danger or potential danger to health, due to contaminants entering the potable water system via an uncontrolled cross-connection, which can be classified from mildly toxic to lethal.

IMPURITIES – Objectionable or dangerous substances introduced into the potable water system.

INSPECTOR – An individual qualified and authorized to make inspections, interpret codes, regulations and procedures related to Backflow Prevention.

OPEN WATER SYSTEM – A Customer water system with no checking devices installed in the service pipe. Water from the Customer's system is free to backflow into the main for whatever reason.

POLLUTANT – Any substance that, if introduced into the potable water system, could be objectionable but would not create a serious health hazard.

POTABLE (WATER) – Any water that is safe for human consumption.

PUBLIC WATER SYSTEM – A water system (including but not limited to supply, treatment, transmission, and distribution facilities and appurtenances) operated as a public utility that supplies potable water to the service connection of the Customer's water system (herein defined as the City of LaGrange water distribution system).

SERVICE CONNECTION – The point of delivery of water to a Customer's water system, the normal location of the meter. It is the end of the public water system and the beginning of the customer's water system.

VACUUM BREAKER (VB) – A Back siphonage prevention device that uses atmospheric pressure when the system pressure drops below an acceptable level. It is designed for use where the receptacle or the environment being served is subject to atmospheric pressure only.

VACUUM BREAKER, ATMOSPHERIC TYPE (AVB) – A vacuum breaker designed for use under flow conditions not to exceed twelve (12) consecutive hours and where it will be subject to no static pressure and no backpressure.

VACUUM BREAKER, PRESSURE TYPE (PVB) – a vacuum breaker designed to operate under continuous pressure and flow, but no backpressure.

VACUUM BREAKER, HOSE TYPE (HVB) – A vacuum breaker designed for hose connections only, but not for continuous pressure.

VACUUM RELIEF VALVE – A device to limit the degree of vacuum in a vessel or pipe, but not for use in cross-connection control.

SECTION I PURPOSE AND CONTROL

1. Purpose

- a) To recognize that many customer's water systems have connections to apparatus, vessels, etc., that could contain impurities in varying degrees, that if not properly controlled could contaminate or pollute both the customer's water system and the Public Water System.
- b) To assist the customer in protecting the customer's own potable water system against actual or potential backflow or back siphonage of any contaminants or pollutants by controlling each cross-connection on said premises with an approved backflow preventer.
- c) To protect the public potable water system against backflow by containing within a customer's premises, any contaminate or pollutant that has entered or may enter the customer's potable water system through an uncontrolled cross-connection.
- d) To establish, coordinate, execute and maintain a complete Backflow Prevention Program.

2. Control:

Enforcement of this Backflow Prevention Program is the responsibility of the City of LaGrange as required by Federal and State law. Successful implementation of the Program requires cooperation between the City's Utility Department, Department of Community and Economic Development, and the Customer in the execution of and adherence to the duties and responsibilities outlined herein.

SECTION II RESPONSIBILITIES

1. The Public Health Department:

The LaGrange/Troup County Health Department is primarily responsible for enforcing health regulations to prevent contaminants and pollutants from entering the customer's water system, and for conducting epidemiological investigations of waterborne illnesses or outbreaks.

2. Utility Department-Water Division:

The Water Division under the Utility Department has the primary responsibility for implementing and enforcing this backflow program.

3. Department of Community and Economic Development and Its Plumbing Official:

This Department has the primary responsibility of enforcing the Plumbing Code within the corporate limits of the city of LaGrange. This Department will also assist in educating plumbing contractors and customers about the dangers of cross-connections and the proper use of backflow devices.

4. The Customer:

The Customer has the responsibility for protecting both the potable water in his/her own facility by complying with the Plumbing Code and this Backflow Program, and also for protecting the quality of water in the public water system against any uncontrolled cross-connections, by Backflow Prevention at the service connection. The Customer is responsible for the cost of procurement, installation, testing, repair, and maintenance of required backflow preventers. The Customer is liable for any health hazard due to backflow from uncontrolled cross-connections on his/her premises.

SECTION III IMPLEMENTATION AND ENFORCEMENT

1. This Program shall be implemented in compliance with Georgia Rules for Safe Drinking Water (391-3-5-.13), the Southern Building Code Congress International, and AWWA Manual 14 for all connections to the public water system.

2. The Program shall be implemented to ensure that any uncontrolled customer cross-connections are eliminated in order of priority based on the degree of potential hazard as described below:
 - A. High Hazard (Contamination or Health Hazard)
 - a. Agriculture – where fertilizers, herbicides, or pesticides are used
 - b. Cooling Systems – where chemical protective additives are used
 - c. Industries – where a High Hazard process is involved
 - d. Carwashes
 - e. Hospitals, sanitariums, clinics, morgues, mortuaries, veterinarians and other medical facilities
 - f. Water and wastewater treatment plants
 - g. Laundries and dry cleaners

 - B. Low Hazard (Pollutant or Nuisance Hazard Only)
 - a. Commercial buildings – hotels, motels, mobile home parks, multi-story, offices, other facilities with 15 or more units connected through one service
 - b. Food services – food processing, dairies, food storage, bottling restaurants. Where a potential health hazard exists, facilities should be classified as High Hazard.
 - c. Irrigation systems – except where chemicals are injected thus creating a High Hazard
 - d. Educational facilities
 - e. Industries – where no High Hazard processes are involved
 - f. Service stations and garages

 - C. Residential and Small Commercial
 - a. Residential – including multifamily with less than 15 units
 - b. Small commercial – single level

3. Additional risk factors to be evaluated include the following:
- a) The existence of cross-connections;
 - b) The nature of the materials handled on the property;
 - c) The probability of backflow occurring;
 - d) The degree of piping system complexity;
 - e) The potential for system modification.

SECTION IV INSPECTION OF FACILITIES

1. The Customer, upon request, shall furnish the City all pertinent information regarding the water system on such premises where backflow and/or back siphonage are deemed possible through uncontrolled plumbing cross-connections.
2. Nothing herein shall relieve the Customer of the responsibility for conducting periodic surveys of water use practices on his/her premises to determine whether there are actual or potential uncontrolled cross-connections
3. Facilities considered to pose an actual or potential threat to the public water system will be subject to inspection by a representative of the City. Inspections will focus on plumbing outlets and potential contaminants or pollutants within the facility. Information gathered will be used to determine the degree of hazard and corresponding backflow protection required at the service connection and any cross-connections within the premises. If the premises is a government classified or other type of high security facility that prohibits inspection by City personnel, maximum (RPZ) protection at the service is required.
4. If a facility is found not to be in full compliance with the plumbing code or any part of this Program, maximum (RPZ) protection at the service line connection may be required.
5. If a customer is found to be in violation of one or more parts of this Program, water service may be discontinued following proper notice. If the City discovers a high hazard condition that is considered, in the sole discretion of the City, an imminent risk to the public water system, service may be immediately discontinued until the hazardous condition has been remedied.
6. In the event of accidental contamination or pollution of the public water system due to backflow or back-siphonage, the Customer, if he/she is aware, shall immediately notify the City so that appropriate containment measures may be implemented. Failure to report a backflow condition is a criminal offense punishable under local, State, and Federal law.

SECTION V WATER FROM OTHER SOURCES

1. In no case shall a customer's water system be configured so that the public water supply is interconnected with another source of water such as a well or reservoir.
2. Upon discovery of an uncontrolled interconnection between another water system and the public water system, water service will be discontinued until the appropriate backflow prevention device is installed
3. Booster pumps installed and connected to a customer's water system must be approved and permitted by the City, and such pumps shall be equipped with a low pressure cut-off device designed to shut off the pump when the suction pressure feeding the pump drops below a predetermined level.
4. All vehicles that use fire hydrants connected to the public water system to fill or flush equipment (i.e., tanker trucks, spray trucks) must be equipped with an approved and tested backflow prevention device or air gap and be permitted by the City.

SECTION VI SELECTION OF BACKFLOW PREVENTORS

1. Backflow preventers shall be selected on the basis of the level of hazard involved and the types of cross-connections present. Impurities are classified as Contaminants or Pollutants, and cross-connections as Pressure or Non-pressure (see Definitions). A minimum air gap, vacuum breaker, or backflow preventer may be used to protect non-pressure connections. Pressure connections require an approved backflow prevention device. The City shall have ultimate authority in determining the required type of backflow device.

Note: Because irrigation systems serve an environment that is open to the atmosphere, it would not be classified as a pressure type cross-connection. However, due to the special nature of this installation, minimum protection against backflow shall include a double check backflow preventer. If chemical injection systems are present, an RPZ preventer is required.

2. Backflow preventers shall be sized the same as the service line serving the facility.
3. Materials used to manufacturer the BFP shall be bronze, stainless steel, or an equally non-corrosive material and assembled with bolts that are resistant to electrolysis.
4. A brass identification tag shall be provided and attached securely to the valve body by corrosion resistant mechanical fasteners. The information on the tag shall be the manufacturer, type, model, maximum working pressure, maximum working temperature, direction of flow, inlet and outlet pipe size, date or manufacturer, serial number.
5. All backflow prevention devices shall be approved and installed in accordance with the applicable standard of the American Society of Sanitary Engineers (ASSE), the American National Standards Institute (ANSI), the American Water Works Association (AWWA), the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, or the International Plumbing Code. The unit shall be factory tested, shipped, and installed as a unit.

Exception: If no standard exists for a particular device or the device is not covered by a national standard, the City shall determine whether the device will be allowed.

6. **RPZ backflow devices** shall be used on all High Hazard Level service connections, except where a sufficient air gap is provided. RPZ preventers shall meet the following specifications:

- A. The ¾" to 2" unit shall include a full-port ball valves with Teflon seats on

the inlet and outlet sides with a union or swivel coupling nut between the BFP and each valve. The 3" and larger BFP shall be provided with flanged resilient seat OS&Y gate valve near the inlet and outlet sides of the BFP. Three brass ball valve test cocks in the vertical position fitted with brass or plastic plugs and a fourth test cock on the upstream side of the inlet shutoff valve shall be provided. Replacement seats shall be used.

- B. A bronze strainer shall be installed immediately upstream of the BFP.
- C. The BFP shall be readily accessible for inspection and testing and no more than 4' from centerline to floor grade.

Approved RPZ assemblies include:

- A. Ames 4000RP
- B. Conbraco 40-200-02, 40-200, OS&Y-03
- C. Febco 825 YD, OS&Y, RW
- D. Flowmatic B9200
- E. Hersey FRP II w/unions, No. 6CM
- F. Watts U-0009QT-23009/909, OS&Y-RW-A
- G. Wilkins 975 XLUS, 975ROS&Y

- 7. **Vacuum breakers** shall be corrosion resistant.
- 8. **Dual Check Valve** units may be used on residential, small commercial, and irrigation systems without chemical injection equipment. These units are typically used on ¾ " and 1" service connections. The preventer shall have a bronze-body with one female union. The union adapter shall be provided with wrench flats to facilitate tightening.
- 9. **Double Check Valve** units may be used on Low Level Hazard service connections. The following characteristics are required:
 - A. The ¾" to 1" unit shall include a full-port ball valves with Teflon seats on the inlet and outlet sides with a union or swivel coupling nut between the BFP and each valve. The 3" and larger BFP shall be provided with flanged resilient seat OS&Y gate valve near the inlet and outlet sides of the BFP. Three brass ball valve test cocks in the vertical position fitted with brass or plastic plugs and a fourth test cock on the upstream side of the inlet shutoff valve shall be provided.
 - B. Approved assemblies include:
 - a) Ames 200DCA, 2000SE, 300DCA/SS/SE
 - b) Conbraco 40-105-105-A4T, 40-107-A4T, 40-108-A4T, 40-100, 10A,

10C, 10E, 10G-03, 40-600, 60A, 60C, 60E, 60G-E3

- c) Febco 805YD – OS&Y – RW, 806 YD
- d) Hersey FDC w/unions, DDC-II
- e) Watts U-007QT-23, 007/709/770/772 DCDA – OS&Y – RW- A
- f) Wilkins 950XL4, 950 – OS&Y, 950 - DAR

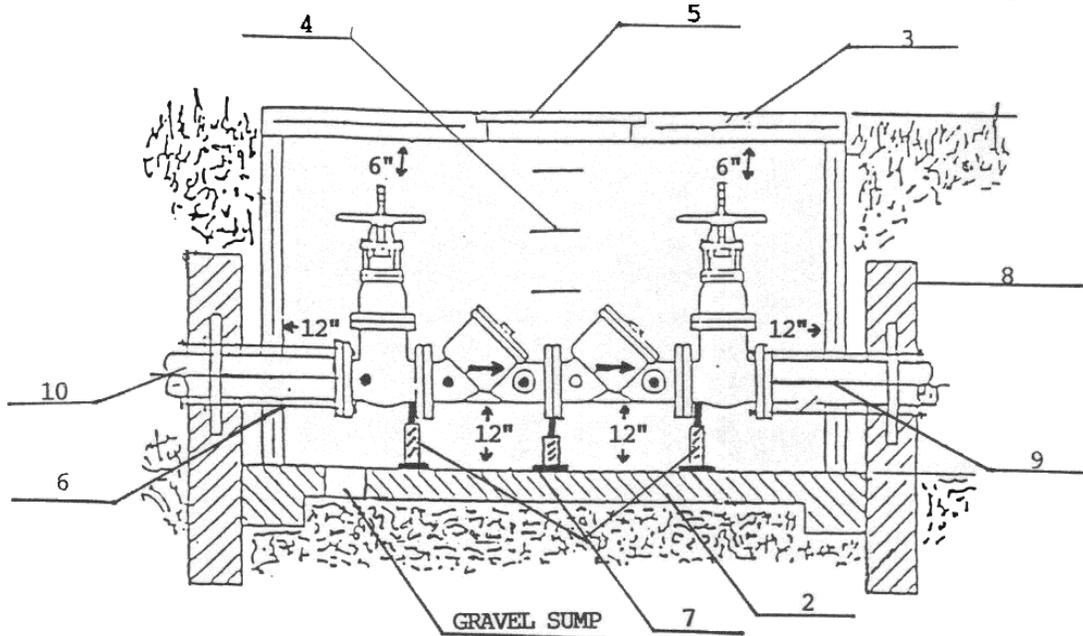
SECTION VII LOCATION AND INSTALLATION

1. Backflow devices shall be located in an area that provides a safe working environment for testing and maintenance.
2. Customer's that require uninterrupted water supply may install backflow prevention devices in parallel for testing purposes. **Note:** In no case shall a bypass be installed without the appropriate backflow device.
3. **Special Caution:** Whenever water is heated in a branch of a water system that has been closed by the operation of a backflow device, thermal expansion and damage to the piping system can occur. To prevent this problem, an approved relief valve or expansion chamber shall be installed on all customer water systems protected by a backflow device. The installation of this device should be in accordance with the Plumbing Code and is the sole responsibility of the customer. The City is not responsible for damage occurring inside the customer's water system due to thermal expansion.
4. **Vacuum Breakers** and other devices equipped with atmospheric vents shall be installed as follows:
 - A. To prevent any vent from being submerged. The AVB shall be installed at least 6" above and the PVB 12" above the highest outlet or the overflow level of the non-potable system (i.e., sink).
 - B. The AVG shall be installed downstream of the last shut off valve, but a PVB may be upstream.
 - C. A HVB should be installed directly on hose threads and may not be subjected to continuous pressure.
 - D. BFPs with an intermediate atmospheric vent (IAV) shall not be installed below grade, and the relief valve discharge should be piped via an air gap or funnel to a floor drain in order to avoid water damage. Shut-off valves and unions shall be located near the inlet and outlet sides of the device.
5. **RPZs** units shall be installed as follows:
 - A. The device shall be above ground in a structure that is protected from freezing. Approved boxes are Hot Box/ROK and Hydrocowl. The City may allow the RPZ to be installed immediately inside the building as long as it is accessible for inspection and no connections are made between the BFP and meter. If a pit is used, a drain must be installed directly to the outside of the vault piped to the full size of the service line and with a relief pipe terminated in a downward direction at a point not less than 12" below grade.

- B. Relief valve discharge should be piped via an air gap or funnel at the vent port to a floor drain or other approved location to avoid damage from water discharge.
 - C. No branch connections shall be allowed between the shut-offs and the BFP.
6. **DUC and DCV** assemblies shall be installed as follows:
- A. When the unit is used on the main service line, it should be installed as close as possible to the meter. This is typically within a few feet of the property line. The BFP may be installed in the meter vault with prior approval from the City.
 - B. These devices shall not be buried in the earth, but may be installed below grade in a meter box or other approved enclosure. A positive shut-off valve and union shall be near the inlet and outlet sides of the BFP.
7. **Vaults** containing a BFP shall be installed as close as practical to the property line to the premises and have the following characteristics:
- A. The bottom shall be a 4" poured concrete slab on top of 4" #57 compacted stone.
 - B. The top shall be reinforced concrete with a 3' x 3' access opening. A ladder should be doweled to the wall and centered on the opening. The hatch cover should be Bilco-aluminum (single model #J-4AL) or equal.
 - C. Inlet and outlet piping shall be sealed with grout or mortar. Pipe must not support pipe. Thrust blocking and bitumastic coated tie rods are required in accordance with standard water pipe installation practices.
 - D. The BFP should be supported at a minimum of three points with pipe stands.
 - E. All pipe and fittings must be ductile iron.

TYPICAL BFP VAULT INSTALLATION DETAIL

1. NOTE: Vault to be installed as closed as possible to the property line of owner. A 15' x 30' EASEMENT and or GCDPU Right of Entry Clause to be furnished.

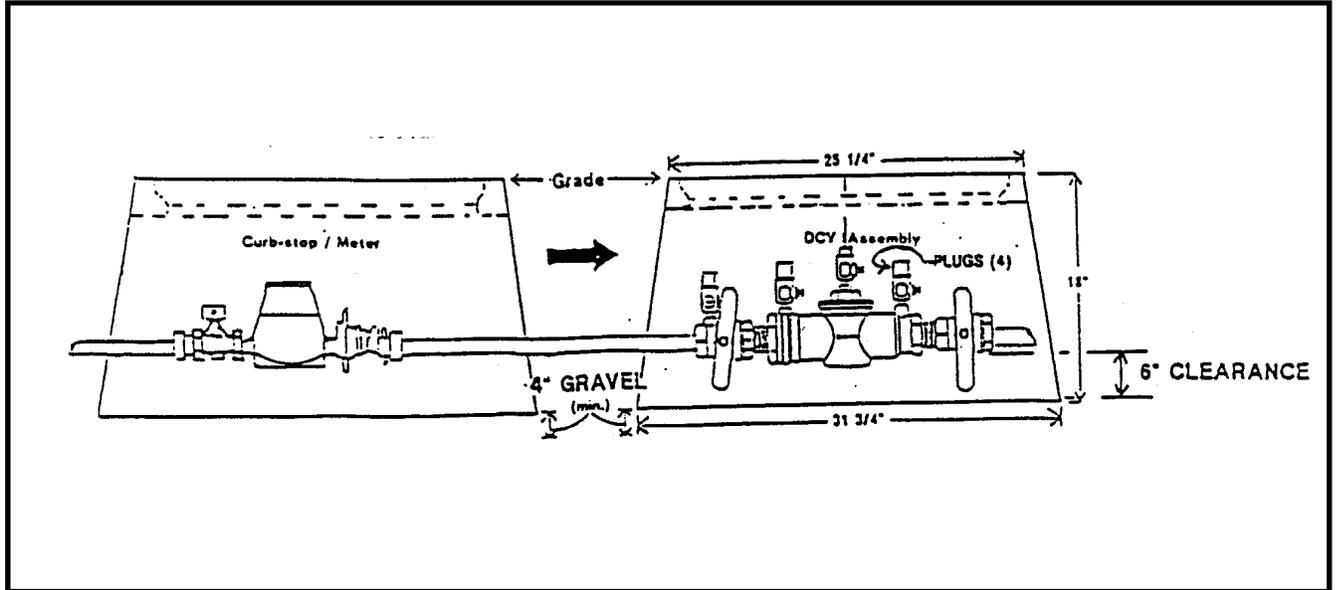


Vault bottom (4") poured concrete slab, sloped to Gravel Sump. Slab to be poured on (4") of #57 compacted stone.

3. Vault top shall be reinforced concrete with a 36" x 36" access opening.
4. Access ladder doweled to wall and centered with access opening.
5. Hatch Cover - Bilco-Aluminum (Single Model #J-4AL) or equal.
6. Vault inlet/outlet pipe opening to be sealed with grout or mortar. PIPE MUST NOT SUPPORT VAULT.
7. Backflow Preventer to be supported at (3) points with pipe stands.
8. Thrust blocking (as required) and in accordance with CRDPW drawing #A-1.
9. Thrust tie rods shall be bitumastic coated.

All pipe and pipe fittings shall be of ductile iron.

TYPICAL BFP METER BOX INSTALLATION DETAIL



SECTION VIII TESTING AND MAINTENANCE

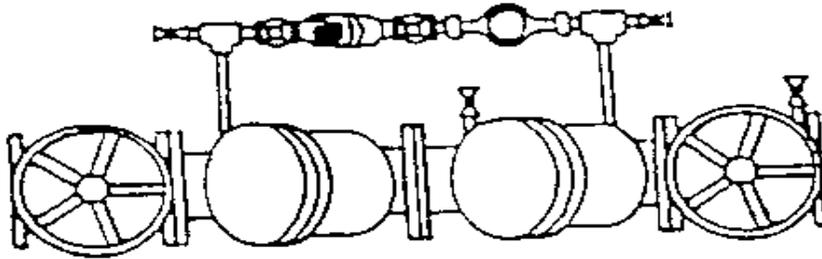
1. All backflow prevention devices shall be maintained in a safe condition and in good working order.
2. The Customer shall be responsible for the cost of testing, maintenance and repair of all backflow prevention devices connected to his/her water system. The City currently provides, installs, and maintains DUC protection for standard residential and small commercial ¾" services. The customer is responsible for backflow protection on larger or more hazardous service connections.
3. Tests must be done in accordance with the lesser of the following schedule, manufacturer's instructions, or State or Federal law:
 - A. Air Gap – annually
 - B. PVB – annually
 - C. DUC – changed out by City when meter is replaced
 - D. DCV – annually
 - E. RPZ – annually
4. Test procedures for all devices shall be as outlined by the Manufacturer, AWWA Manual 14, and other references discussed in this document.
5. Testing must be performed by an individual who is certified and trained to understand the design and intended operation of the BFP being tested. Test results shall be sent to the City and contain the following information:
 - A. Name and address of facility
 - B. Name of certified tester
 - C. Device type, manufacturer, model, size, serial number
 - D. Date of installation
 - E. Date of test
 - F. Test results
 - G. Repairs made
6. Questions regarding testing should be addressed to:

City of LaGrange
P.O. Box 430
LaGrange, Ga 30241
706-883-2130

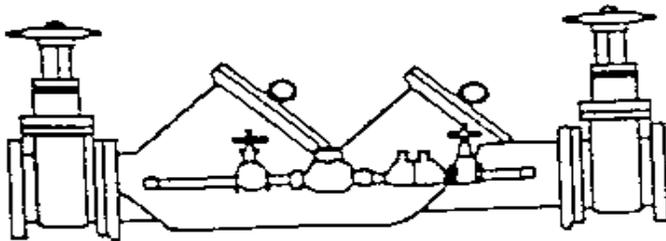
SECTION IX FIRE PROTECTION

1. Fire protection systems are broken down into six classes as defined in AWWA Manual 14:
 - C. Class 1 - DDC Assembly - Direct connection to the public water system with no pumps, tanks, other supply sources, antifreeze or additives. Sprinkler drains are discharging to atmosphere, dry wells, or other safe outlets. A fire department pumper connection may be provided on the customer side of the DDC.
 - D. Class 2 – DDC Assembly – Class 1 except customer owned booster pumps might be installed from the public water system. A fire department pumper connection may be provided on the customer side of the DDC.
 - E. Class 3 – DDC Assembly – Class 1 plus an elevated storage tank, fire pump with covered reservoir, and/or pressure tank.
 - F. Class 4 – RPZ Assembly – Class 1 plus an auxiliary pumper connection to an auxiliary supply located on the premises.
 - G. Class 5 – RPZ Assembly - Class 1 plus an auxiliary supply such as a pump with a reservoir exposed to contamination, or where antifreeze or other chemical additives are used.
 - H. Class 6 – RPZ Assembly - Combined industrial process and fire protection systems on the same service line (this is not an approved configuration on the City of LaGrange system) with or without storage tanks or pumps.
10. The BFP shall match the size of the required fire line connection.
11. The metered bypass line on the DDC shall be a $\frac{3}{4}$ " copper pipe and include a bronze detector meter and a $\frac{3}{4}$ " DCV BFP.
12. The device and valve bodies shall be equivalent to cast iron, coated inside and out with FDA approved fused epoxy coating and assembled with corrosion resistant bolts. All other components shall be of bronze or equivalent corrosion resistant materials.
13. The BFP shall not be buried in earth but installed below ground in a concrete or other approved vault and as close as practical to the property line of the premises.
14. **Note:** Under no circumstances should a domestic or other non-fire related tap be made on the fire line system.

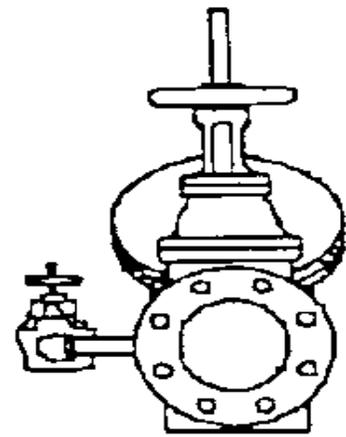
**FIRE LINE BACKFLOW PREVENTER
DDC VALVE ASSEMBLY
TYPICAL DETAIL**



OVERHEAD VIEW



SIDE VIEW



END VIEW

City of LaGrange

TEST & MAINTENANCE REPORT

BACKFLOW PREVENTION ASSEMBLIES

NAME OF PREMISE: _____

STREET ADDRESS: _____

LOCATION OF DEVICE: _____

SERVICE: _____ POTABLE _____ FIRE _____ IRRIGATION _____ OTHER

Manufacturer: _____ Model: _____ Serial No.: _____ Size: RP DC
 PVB AVB AG

PRESSURE DROP ACROSS FIRST CHECK VALVE _____ PSI

	CHECK VALVE #1	CHECK VALVE #2	DIFFERENTIAL PRESSURE RELIEF VALUE	PRESSURE VACUUM BREAKER
INITIAL TEST	1. LEAKED 2. CLOSED TIGHT <input type="checkbox"/>	1. LEAKED 2. CLOSED TIGHT <input type="checkbox"/>	OPENED AT _____ DID NOT OPEN <input type="checkbox"/>	AIR INLET OPENED AT _____ PSI DID NOT OPEN <input type="checkbox"/>
R E P A I R S	CLEANED <input type="checkbox"/> REPLACED: RIBBER PARTS KIT <input type="checkbox"/> C. V. ASSEMBLY <input type="checkbox"/> OR DISC <input type="checkbox"/> O-RINGS <input type="checkbox"/> SEAT <input type="checkbox"/> SPRING <input type="checkbox"/> STEM/GUIDE <input type="checkbox"/> RETAINER <input type="checkbox"/> LOCK NUTS <input type="checkbox"/> OTHER <input type="checkbox"/>	CLEANED <input type="checkbox"/> REPLACED: RIBBER PARTS KIT <input type="checkbox"/> C. V. ASSEMBLY <input type="checkbox"/> OR DISC <input type="checkbox"/> O-RINGS <input type="checkbox"/> SEAT <input type="checkbox"/> SPRING <input type="checkbox"/> STEM/GUIDE <input type="checkbox"/> RETAINER <input type="checkbox"/> LOCK NUTS <input type="checkbox"/> OTHER <input type="checkbox"/>	CLEANED <input type="checkbox"/> REPLACED: RIBBER PARTS KIT <input type="checkbox"/> C. V. ASSEMBLY <input type="checkbox"/> OR DISC <input type="checkbox"/> O-RINGS <input type="checkbox"/> SEAT <input type="checkbox"/> SPRING <input type="checkbox"/> STEM/GUIDE <input type="checkbox"/> RETAINER <input type="checkbox"/> LOCK NUTS <input type="checkbox"/> OTHER <input type="checkbox"/>	CHECK VALVE: _____ PSI LEAKED <input type="checkbox"/> CLEANED <input type="checkbox"/> REPLACED: C. V. ASSEMBLY <input type="checkbox"/> DISC. AIR INLET <input type="checkbox"/> DISC. C. V. <input type="checkbox"/> SPRING <input type="checkbox"/> RETAINER <input type="checkbox"/> GUIDE <input type="checkbox"/> O-RING <input type="checkbox"/> OTHER <input type="checkbox"/>
FINAL TEST	CLOSED TIGHT <input type="checkbox"/>	CLOSED TIGHT <input type="checkbox"/>	OPEN AT _____ LBS REDUCED PRESSURE	SATISFACTORY <input type="checkbox"/>

NOTE: ALL REPAIRS/REPLACEMENT SHALL BE COMPLETED WITHIN TEN (10) DAYS.

REMARKS:

I HEREBY CERTIFY THAT THIS DATA IS ACCURATE AND REFLECTS THE PROPER OPERATION AND MAINTENANCE OF THE UNIT.

CERTIFIED TESTING COMPANY: _____

INITIAL TEST BY: _____ CERTIFIED TESTER NO. _____ DATE: _____

REPAIRED BY: _____ DATE: _____

FINAL TEST BY: _____ CERTIFIED TESTER NO. _____ DATE: _____

CITY OF LAGRANGE
BACKFLOW PREVENTION

CROSS-CONNECTION SURVEY

Business-Company Name: _____

Address: _____

Phone: () _____ Contact: _____

1. Premises Water Service & Locations

- | | | |
|--------------------|------------|-----------------|
| A. Potable | Size _____ | Location: _____ |
| B. Fire Protection | Size _____ | Location: _____ |
| C. Irrigation | Size _____ | Location: _____ |
| D. Others | Size _____ | Location: _____ |

2. Any Non-Interrupted Water Services Required? _____

Describe: _____

3. Any Process(es) within your facility that use potable water? _____

Describe: _____

4. Any Chemical additives used within your facility? _
(such as boilers, cooling towers, fire protection, etc.)

Describe: _____

5. Any Secondary water sources used at this facility? _
(such as wells, storage tanks, etc.)

Describe: _____

A. Has this water source been tested by the Health Department to determine if potable? _

B. Is there any kind of chlorinator or chemicals used to make this water potable? _____

C. What is this water use for (per your facility)? _____

D. Is the City water source protected from this second source of water? _____

Describe: _____

6. Any type of Backflow preventer(s) in use at this facility? _____

Describe: _____

A. Have these devices been tested? _____

B. Date last tested _____ By whom? _____

7. Any type of pressurized system in the facility that is connected to the city's water supply? _

Describe: _____

A copy of this report should be marked "Backflow Survey" and mailed to:

*City of LaGrange
P O Box 430
LaGrange, GA 30241*