CITY OF MOUNT DORA

Public Works and Utilities
1250 N. Highland St.
Mount Dora, FL 32757
352-735-7151 ext. 1805
Fax: 352-735-1539
E-mail: publicworks@cityofmountdora.com

DATE: **January 20, 2015**

TO: **Mayor and City Council**

FROM: **John A. Peters, III, PE, Public Works and Utilities Director**

VIA: **Michael Quinn, City Manager**

RE: **Cross-Connection Program – First Reading of Ordinance 2015-05**

Recommendation:
It is recommended that City Council approve the adoption of Ordinance 2015-05, Cross-Connection Program and scheduled a second reading for February 3, 2015.

Background/Information:
For over thirty years, the United States Environmental Protection Agency (US-EPA) has identified health risk related to potential contamination to the potable water system. Based on these concerns, Building Codes began requiring backflow prevention systems during the 1980's including in Mount Dora. State and local governments were slow to develop corresponding backflow prevention programs to monitor the reliability of individual units. With the advent of reclaimed water usage, the State of Florida began to implement a much more stringent program.

On December 4, 2006, the City of Mount Dora finalized their Manual of Cross-Connection Control which was formally approved by the Florida Department of Environmental Protection on January 16, 2007. In the intervening years, the City of Mount Dora worked to implement the protocol outlined in the Manual. On December 2, 2014, staff provided an overview of the current backflow prevention program, and it was recommended that an Ordinance be prepared for Council consideration to formally adopt the Manual of Cross-Connection Control.

Conclusion:
The City Public Works Department has drafted an Ordinance 2015-05 that authorizes the Superintendent of Utilities (Public Works Director) to administer and enforce the provisions of the December 4, 2006 Manual of Cross-Connection Control for Council consideration.

Attachments:
Ordinance 2015-05
2006 Manual of Cross-Connection Control

ORDINANCE 2015-05

AN ORDINANCE OF THE CITY OF MOUNT DORA, FLORIDA AMENDING CHAPTER 86, ADDING SECTION 86.100, CROSS CONNECTION CONTROL PROGRAM; SETTING FORTH DEFINITION AN DINSTALLATION REQUIEMENTS; REQUIRING INSPECTIONS AND/OR TESTING, AND NECESSARY REPAIR OR REPLACEMENT OF BACKFLOW PREVENTOERS, PROVIDING FOR ENFORCEMENT AND ESTABLISHING PENALTIES FOR VIOLATIONS; PROVIDING AUTHORITY TO BILL CUSTOMERS; REPEALING ORDINANCES IN CONFLICT HEREWITH; PROVIDING FOR THE SEVERABILITY OF THE PARTS HEREOF; PROVIDING FOR READING BY TITLE ONLY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Mount Dora operates a public water system that serves water customers of the City of Mount Dora and that meets the definition of a "community water system," as set forth in Section 703.852(3), Florida Statutes, and

WHEREAS, Community Water Systems must be protected to prevent the contamination of the potable water supply and subsequent hazards to public health and safety; and

WHEREAS, the Florida Department of Environmental Protection (FDEP), in Chapters 62-550 and 62-555, Florida Administrative Code, requires Community Water Systems to establish and implement a cross connection program to detect and control cross connections and prevent backflow of contaminants into the water system; and

WHEREAS, whenever an actual or potential cross-connection is detected, a Community Water System must require the installation of an appropriate backflow prevention device, or must discontinue service until the contaminant source is eliminated; and

WHEREAS, the City of Mount Dora Public Works Department developed the Manual of Cross-Connection Control on December 4, 2006 in compliance with the requirements of Florida Administrative Code, Chapters 62-550 and 62-555.

WHEREAS, the City Council of the City of Mount Dora finds that this Ordinance accomplishes the above requirements and is necessary to protect the public health, safety and welfare;

NOW, THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF MOUNT DORA, FLORIDA:

Section 1. The Mount Dora Code is hereby amended to add the following Section to Chapter 86, Utilities:

Sec. 80-100. Cross-Connection Program.

(a) The superintendent of utilities and other duly authorized employees bearing proper credentials shall be authorized to administer and enforce a cross-connection program in accordance with the City of Mount Dora Manual of Cross-Connection Control dated December 4, 2006.

CITY OF MOUNT DORA

PUBLIC WORKS AND UTILITIES DEPARTMENT

MANUAL

OF

CROSS-CONNECTION CONTROL

April 3, 2007

Preface

This manual of Cross-Connection Control has been prepared by the City of Mount Dora Public Works and Utilities Department to establish an effective Cross-Connection Control Program in the City's water service area in accordance with directives issued at the Federal and State level. Responsibilities for the control of cross-connections are shared by the consumer, this department, and the Florida Department of Environmental Protection. This manual of policies and specifications serves as a guide to ensure that the safety of the potable water system is maintained.

The City of Mount Dora Public Works and Utilities Department:

1. Urges the review of this manual of policies and specifications before designing or installing a backflow prevention device.

2. Believes the material in this manual will provide the consumer with the understanding of cross-connection and backflow prevention devices.

3. Will ensure that the policies, standards and specifications as set forth in this manual will be uniformly enforced.

4. Reserves the right to update this manual as necessary due to changes in Florida Department of Environmental Protection policies and regulations and/or American Water Works Association standards.

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SECTION 1 – PURPOSE AND INTENT

1.1 *Protection*

To protect the public potable water supply from the possibility of contamination or pollution by isolating actual and/or potential cross-connections in the water distribution system that could create backflow by back-pressure or backsiphonage into the public potable water supply (Ref.: F.A.C. Chapter 62-555.360 or latest edition).

1.2 *Elimination of Cross-Connections*

To promote the elimination and control of cross-connections (actual or potential) between the potable water system(s), and any other system(s) or plumbing fixture(s).

1.3 Cross-Connection Control Program

To provide for the maintenance and operation of a continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the City's water distribution system, as required by the Florida Department of Environmental Protection (Ref.: F.A.C. Chapter 62-555.360 or latest edition).

1.4 *Causes of Backflow*

Where cross-connections or the potential for cross-connections exist, protection against backflow is needed to reduce the possibility of contamination. The two major causes of backflow are backsiphonage and backpressure.

1.4.1 *Backsiphonage*

Backsiphonage is caused by a reduced or negative pressure being created in the supply piping. This reduction of pressure in the water supply system can result in the flow of water or other liquids, mixtures or other substances into the distribution pipes of a potable water supply system from a source other than its intended source. The most common causes of backsiphonage are: a line repair or break which occurs at a lower elevation than the service point; undersized piping; lowered pressure in a water main due to a high water withdrawal rate such as fire-fighting, water main flushing, or water main breaks; and reduced supply main pressure on the suction side of a booster pump.

1.4.2 *Backpressure*

Backpressure is caused by an elevation or pressure in the downstream piping system that is greater than the supply pressure. Typically, the result of this difference in pressure is a reversal of the normal direction of flow. The reversal of flow can, in turn, lead to contamination of the potable water supply. The high downstream pressures can be caused by pumps, boilers, elevation of piping, air pressure, etc.

SECTION 2 – Authority

The following authorities are justification for establishing a cross-connection control program.

2.1 *Florida Regulations*

The Safe Drinking Water Act, signed by President Ford on December 16, 1974, created new authority through a chain of laws and regulations that resulted in the State requirement (Florida Safe Drinking Water Act, Sections 403.850-403.864, Florida Statutes) for all potable public water systems to have a cross-connection control program.

Rule 62-555.200, Florida Administrative Codes, states "CROSS-CONNECTION means any 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 waste, or 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 or because of which backflow could occur are considered to be cross-connections.

Contained within the Rules of the Florida Department of Environmental Protection (DEP), Chapter 62-555, the State of Florida adopted the following policy:

> Cross-connection, as defined in Rule 62-550.200, F.A.C., is prohibited. However, a person who owns or manages a public water system may interconnect to another public water system if that system is operated and maintained in accordance with this chapter.
>
> Community water systems, and all public water systems that have service areas also served by reclaimed water systems regulated under Part III of Chapter 62-610, F.A.C., shall establish and implement a routine cross-connection control program to detect and control cross-connections and prevent backflow of contaminants into the water system. This program shall include a written plan that is developed using recommended practices of the American Water Works Association set forth in *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.
>
> Upon discovery of a prohibited cross-connection, public water systems shall either eliminate the cross-connection by installation of an appropriate backflow prevention device acceptable to the Department or shall discontinue service until the contaminant source is eliminated.
>
> (Rules of the Florida Department of Environmental Protection (DEP), Chapter 62-555.360 (1), (2), and (3).)

2.2 *City of Mount Dora New Construction Standard Details Manual*

City of Mount Dora, Florida, Standard Construction Detail for potable water requires the use of backflow preventors on all commercial, industrial and multi-family projects.

2.3 *Objectives*

The objectives of the City of Mount Dora Department of Public Works and Utiltiles Cross- Connection Control Program are as follows;

1. To protect the City of Mount Dora Potable Water Supply from the possibility of contamination by containing within its consumers' private water systems, contaminants or pollutants which could, under adverse conditions, backflow through uncontrolled cross-connections in the public potable water system.

2. To eliminate or control existing cross-connections, actual or potential, between the consumers' on premise potable water system(s) and non-potable water system(s) plumbing fixtures and industrial piping systems.

3. To provide a continuing inspection program of cross-connection control, which will systematically and effectively, control all actual or potential cross-connections which exist presently or may exist in the future.

4. To maintain an on-going information program to educate the community on cross-connection control, and to encourage customer cooperation and coordination toward a successful cross-connection control program.

SECTION 3 – Definitions

3.1 *Air-Gap Separation*

The term air-gap separation shall mean a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An approved air-gap separation shall be a distance of at least two (2) times the diameter of the supply pipe measured vertically above the top rim of the vessel, and in no case less than one (1) inch.

3.2 *Approved*

The term approved shall mean accepted by the Public Works and Utilities Director as meeting an applicable specification or meeting specifications of state and City codes.

3.3 *Atmospheric Vacuum Breaker (AVB)*

The term atmospheric vacuum breaker shall mean a backflow prevention device which is operated by atmospheric pressure in combination with the force of gravity. The unit is designed to work on a vertical plane only. The one moving part consists of a poppet valve which must be carefully sized to slide in a guided chamber and effectively shut off the reverse flow of water when a negative pressure exists.

3.4 *Auxiliary Water Supply*

The term auxiliary water supply shall mean any water supply on or available to the premises other than the water purveyor's approved public potable water supply. These auxiliary waters may include other potable water supply or any natural source, such as a well, lake, spring, river stream, etc., or used water or industrial fluids. These waters may be polluted or contaminated, or they may be objectionable and constitute an unacceptable water source over which the water purveyor does not have sanitary control.

3.5 *Backflow*

The term backflow shall mean the flow of water or other liquids, mixtures or substances into the City's potable water supply system from sources other than the City water system.

3.6 *Backflow Prevention Device –Approved*

The term approved backflow prevention device shall mean a device that has been manufactured and tested in full conformance with applicable standards and specifications and is approved by the Public Works and Utilities Director. (Refer to Section 8.1 for a list of applicable standards and specifications that must be met.) An approved backflow prevention device is used to prohibit the backflow or backsiphonage of water into the potable public water system.

3.7 *Backpressure*

The term backpressure shall mean any elevation or pressure in the downstream piping system (by pump, elevation of piping, or stream and/or air pressure) above the supply pressure at the point of consideration which would cause or tend to cause, a reversal of the normal direction of flow.

3.8 *Backsiphonage*

The term backsiphonage shall mean a form of backflow due to a reduction in system pressure which causes a negative or sub-atmospheric pressure to exist at a site in the water system. This reduction of pressure in the water supply system can result in the flow of water or other liquids, mixtures or other substances into the distribution pipes of a potable water supply system from a source other than its intended source.

3.9 *Certified Backflow Prevention Device Tester*

The term certified backflow prevention device tester shall mean a person who can prove competency in testing backflow prevention devices to the satisfaction of the City Engineer and the City of Mount Dora Public Works and Utilities Department. The tester shall have attended and successfully completed an AWWA approved course for Backflow Prevention Device Testers, or a course endorsed by the AWWA, or other programs or training acceptable to the Public Works and Utilities Director and the Florida Department of Environmental Protection.

3.10 *Certified Backflow Prevention Device Repairer*

The term certified backflow prevention device repairer shall mean a person who can prove competency in testing backflow prevention devices to the satisfaction of the Public Works and Utilities Director and the City of Mount Dora Public Works and Utilities Department. The repairer shall have attended and successfully completed an AWWA approved course for Backflow Prevention Device Repairers, or a course endorsed by the AWWA, or other programs or training acceptable to the Public Works and Utilities Director and the Florida Department of Environmental Protection.

3.11 *Certified Test Gauges*

The term certified test gauges shall mean gauges that are calibrated and certified annually to USC Standards by a testing lab approved by the Public Works and Utilities Director.

3.12 *Consumer*

The term consumer shall mean any person, business or any other entity residing in or doing business within the City limits or who by contract is bound to this article and who is or was connected to the City water system or who is or was receiving water service from the City.

3.13 *Contamination*

The term contamination shall mean an impairment of the quality of the potable water supply by compounds or other materials to a degree which creates an actual hazard to the public health.

3.14 *Cross-Connection*

The term cross connection shall mean any physical connection or arrangement of piping or fixtures between two otherwise separate systems, one of which contains potable water and the other, unapproved water, fluids, gases or other materials through which backflow may occur.

3.15 *Double Check Valve Assembly*

The term double check valve assembly shall mean an assembly consisting of two independently operating approved check valves that are internally loaded, either spring loaded or internally weighted, and installed as a unit between two tightly closing resilient-seated shutoff valves. Properly located resilient-seated test costs shall be provided for the testing of each check valve.

3.16 *Double Detector Check Valve Assembly*

The term double detector check valve assembly shall mean a specifically designed assembly composed of an approved double check valve assembly with a specific bypass water meter and an approved double check valve assembly all properly sized. The meter shall register accurately for low flow rates and shall total all flows.

3.17 Dual Check Assembly

The term dual check assembly shall mean a device consisting of two independent check valves which have been approved by the Public Works and Utilities Department for use to protect the public water system at a single family customer's service(s) where there is also a reclaimed water system service and no other backflow hazards exist. Such valves must meet the requirements of A.S.S.E. 1024.

3.18 *Emergency*

The term emergency shall mean any sudden, unexpected or unforeseen event which in the opinion of the Public Works and Utilities Department may present an imminent and substantial danger to the health, safety and welfare of the citizens of the City if not acted upon immediately.

3.19 *Hazard*

The term hazard shall mean any liquid or contaminant in the water other than the City's potable water supply which is considered a health or pollution hazard.

3.20 *Hazard – Degree of*

The term degree of hazard shall mean an evaluation of the potential risk to public health and the adverse effect on health from the public potable water system.

3.21 *Industrial Fluid*

The term industrial fluid shall mean any fluid or solution which may physically, chemically, biologically or otherwise contaminate or pollute potable water if introduced into the public potable water system or consumer plumbing system or potable water system. Industrial fluids may include, but not be limited to polluted or contaminated water; all types of process waters and "used waters" originating from the public potable water system which may deteriorate in sanitary quality; chemicals in fluid form; plating acids and alkalies; circulated cooling water connected to an open cooling tower and/or cooling waters that are chemically or biologically treated or stabilized with toxic substances; contaminated natural water such as from wells, lakes, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc., oil, gases, glycerin, paraffins, caustic and acid solutions; and other liquid and gaseous fluids used in commercial/industrial type processes or for fire fighting purposes.

3.22 *Laboratory – Approved for Testing*

The term approved testing laboratory shall mean the foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California or any other testing laboratory approved by the City Engineer.

3.23 *Meter tampering*

Shall mean reversing or physically altering a meter or appurtenance to a meter, breaking padlocks or pins, or removing a meter

3.24 *Non-Potable Water*

The term non-potable water shall mean any water which is not safe for human consumption or which is of questionable quality.

3.25 *Pollution*

The term pollution shall mean the presence of any foreign substance (organic, inorganic, or biological) in water, which tends to degrade its quality so as to constitute a health hazard.

3.26 *Person*

The term person shall mean any individual, firm, company, association, society, corporation or group.

3.27 *Potable Water*

The term potable water shall mean any water which, according to recognized standards, is safe for human consumption.

3.28 *Pressure Vacuum Breaker (PVB)*

The term pressure vacuum breaker shall mean an assembly similar to an atmospheric vacuum breaker except that the checking unit "poppet valve" is activated by a spring. This type of vacuum breaker does not require a negative pressure to react and can be used on the pressure side of a valve. The assembly shall include tightly-closing resilient-seated shutoff valves located at each end of the assembly and each assembly shall be fitted with properly located resilient-seated test cocks.

3.29 *Reclaimed Water (Reuse)*

The term reclaimed water (reuse) shall mean treated and disinfected effluent from a wastewater treatment plant used for irrigation, dust control, fire protection, and all other purposes permitted by Florida Administrative Code.

3.30 *Reduced Pressure Detector Assembly*

The term reduced pressure detector assembly shall mean a specifically designed assembly composed of an approved reduced pressure zone backflow preventor with a specific bypass water meter and an approved reduced pressure zone backflow preventor all properly sized. The meter shall register accurately for low flow rates and shall total all flows.

3.31 *Reduced Pressure Zone Backflow Preventor (RPZ)*

The term reduced pressure zone backflow preventor shall mean an assembly containing within its structure a minimum of two independently acting, approved check valves, together with an automatically operating pressure differential relief valve located between the two check valves. The first check valve reduces the supply pressure a predetermined amount, so that during normal flow and at cessation of normal flow, the pressure between the checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks less than the supply pressure. The assembly shall include tightly-closing resilient-seated shutoff valves located at each end of the assembly and each assembly shall be fitted with properly located resilient seated test cocks.

3.32 *Residential Dual Check Assembly*

The term residential dual check assembly shall mean a device consisting of two independent spring actuated check valves. The residential dual check is acceptable only as added backflow prevention in areas served by reuse systems.

3.33 *Straight Line*

The term straight line shall mean any piping or hose arrangement to replace or bypass a water meter or appurtenance to a meter.

3.34 *Unauthorized operation of city owned valve*

The term unauthorized operation of city owned valve shall mean any operation of any valve in the City's utility system by a person other than specifically authorized city employees, including, but not limited to, a contractor or resident operating city owned valves or curb stops.

3.35 *Unauthorized Tap*

The term unauthorized tap shall mean any attachment to the city utility system without prior written approval from the city, including but not limited to, direct connection to a city water main, force main or sewer line, or attachment to a fire hydrant or valve, back flow prevention device or curb stop.

3.36 *Water Purveyor*

The term water purveyor shall mean the utility owner or operator of the public potable water system supplying an approved potable water supply to the public.

3.37 *Water Service Connection*

The term water service connection shall mean the terminal end of a service connection from the public potable water system (i.e., where the City loses jurisdiction and sanitary control over water at its point of delivery to the consumers' water system). If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public water system. There shall be no unprotected takeoffs from the service line ahead of any meter or backflow prevention device.

3.38 *Water Supply – Approved*

The term approved water supply shall mean any public water supply that has been investigated and approved by the State of Florida Department of Environmental Protection. The system must be operating under a valid permit.

3.39 *Water Supply – Unapproved*

The term unapproved water supply shall mean a water supply that has not been approved for human consumption by the State of Florida Department of Environmental Protection and/or is not operating under a valid permit.

3.40 *Water System – Consumer's*

The term consumer's water system shall include any plumbing and/or water system located on the consumer's premises, whether supplied by a public potable water system or an auxiliary water supply. The system or systems may be either a potable water system or an industrial piping system.

3.41 *Water System – Consumer's Potable*

The term consumer's potable water system shall mean that portion of the privately owned potable water system lying between the water service connection and the consumer's point of use. This system will include all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, store or use potable water.

3.42 *Water System – Public Potable*

The term public potable water system shall mean the City of Mount Dora water system or any publicly or privately owned water system operated as a public utility, under a valid permit from the State of Florida Department of Environmental Protection and other applicable regulatory agencies to supply potable water for domestic purposes. This system will include all sources, facilities and appurtenances between the source and water service connection such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, treat or store potable water for public consumption or use.

3.43 *Water – Used*

The term used water shall mean any water supplied by a water purveyor from a public potable water system to a consumer's water system after it has passed through the water service connection and is no longer under the control of the water purveyor.

SECTION 4 – Records and Enforcement

4.1 *Responsibility*

4.1.1 *Water Purveyor*

Under the Safe Drinking Water Act of 1974 and Rules of the Florida Department of Environmental Protection (DEP) Chapter 62-555.360, relating to cross-connection, the water purveyor has the primary responsibility of maintaining a cross-connection control program to prevent water from unapproved sources, or any other substances, from entering the public potable water system. Upon detection of a prohibited cross-connection, the Public Works and Utilities Director shall either eliminate the cross-connection by requiring the installation of an appropriate approved backflow-prevention assembly or device, or immediately discontinue service until the contaminate source is eliminated.

4.1.2 *Consumer*

The consumer's responsibility starts at the point of delivery from the public potable water system and includes all of the consumer's water systems. The consumer is required to install, operate, test and maintain approved backflow-prevention assemblies as directed by the Public Works and Utilities Director in accordance with City Codes and Ordinances, this manual, and other applicable regulations. The consumer shall maintain records of all testing and repairs in accordance with the City Codes and Ordinances.

In the event of accidental pollution or contamination of the public or consumer's potable water system due to backflow on or from the consumer's premises, the consumer shall promptly take steps to confine further spread of pollution or contamination within the consumer's premises, and is required to immediately notify the Public Works and Utilities Department of the hazardous condition.

Nothing herein shall relieve the consumer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on their premises to determine where there are actual or potential cross connections in the public potable water system or consumer's potable water system.

4.2 *Enforcement Policy*

No water service connection to any premises shall be installed or maintained by the City of Mount Dora Public Works and Utilities Department unless the water supply is protected as required by Federal, State and Local Laws and Ordinances and this adopted manual.

Service of water to any premises shall be discontinued by the Public Works and Utilities Director if a backflow prevention device required by this policy is not installed, tested, and maintained, or if it is found that a backflow prevention device has been removed, by-

passed, or an unprotected cross-connection exists on the premises. In the event of a hazardous situation where contaminants are actually in the process or suspected of entering the distribution system of the public potable water supply, the Public Works and Utilities Director is authorized to take immediate steps deemed necessary to correct a hazardous condition. This shall include the right to immediately discontinue potable water service to premises where a hazardous condition may be occurring. Such emergency steps, including discontinuance of potable water service, may be taken without advance notice to the consumer. In any case of discontinuance, service shall not be restored until such conditions or defects that led to the discontinuation of service are corrected at the consumer's expense.

4.3 *Violations*

Submission by any person of any false statement or misrepresentation in any application, record, report, plan or other document filed or required by this policy shall constitute a violation. Any person who has not complied with Federal, State and Local Laws or Ordinances regarding cross-connection control shall be considered in violation of the conditions for water service. Any person not complying with the policies and guidelines within the City of Mount Dora's Manual of Cross-Connection Control shall be in violation.

4.4 *Written Notice*

Upon receipt of written notice that an approved backflow prevention device is required at a consumer's water connection, the consumer shall immediately install such a device at the sole expense of the customer.

4.5 *Auxiliary Water Supply*

The public water system shall be protected against backflow and backsiphonage by the installation of an approved backflow prevention device if an auxiliary water supply is found which may or may not be safe in bacteriological or chemical quality. The type of backflow prevention device installed shall be appropriate for the potential degree of hazard.

4.6 *Industrial Fluids*

If any industrial fluids or any other objectionable substances are handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected against backflow and backsiphonage. This protection shall include the installation of an approved backflow prevention device in the service line appropriate for the potential degree of hazard. Protection shall also apply to the handling of process water and waters originating from the utility system, which have been subject to deterioration in quality.

4.7 *Internal Cross-Connections*

If an internal cross-connection(s) cannot be permanently corrected and controlled, or undefined plumbing and piping arrangements exist or where entry to all portions of the premises is not readily assessable for inspection purposes, the public water system shall be protected against backflow and backsiphonage from the premises by the installation of an approved backflow prevention device in the service line.

4.8 *Installation*

Backflow prevention devices shall be installed at the direction of the Public Works and Utilities Director or their designated representative at the consumer's meter, property line of a consumer, or at a designated location. Refer to the Installation Requirements section of this manual for more details.

4.9 *Records*

Records concerning installation and testing shall be kept on-site and accessible for a period not less than ten (10) years. The Public Works and Utilities Director or their designated representative shall be permitted reasonable access to these records as required for the purpose of monitoring compliance with City Codes and Ordinances.

SECTION 5 – Inspections

5.1 *Frequency*

Due to changes in models or components of equipment, methods of manufacturing and additions to plants, buildings, etc., water use requirements undergo continual change. As a result, new cross-connections may be installed and existing protection may be bypassed, removed or made otherwise ineffective; therefore, an annual, biannual, or more frequent detailed inspection of all water usage is required. In addition, all new building construction shall also be plan-checked and inspected during installation by the City of Mount Dora Engineering Department to ensure conformance with the City's cross-connection control (containment and isolation) requirements.

5.2 *Proposed Construction*

All construction plans and specifications for proposed new facilities shall be made available to City of Mount Dora Engineering and Public Works and Utilities Departments to review for conformance with the cross-connection control requirements. Evaluation shall include a determination of the degree of possible cross-connection hazards and what approved backflow prevention devices are required and coordination on the proper location for the device. Plans will not be approved until they meet backflow prevention requirements found in this manual. During construction, field inspections will be made to confirm proper installation of backflow prevention devices. These inspections will also serve to identify hazards that may not have been apparent during plans review or that were introduced during construction.

5.3 *Existing Development*

In order to determine the degree of hazard to the public potable water system, a survey will be made of the customer's presently installed water system. This survey is intended to establish the water uses on premises, check for the existence of cross-connections, and determine the availability of auxiliary or non-potable water supplies. Should any assembly or plumbing changes be required, a follow-up inspection will be made of the same site at a later date.

SECTION 6 – Degree of Hazard and Type of Protection

6.1 *Degree of Hazard*

Hazard definitions are as follows:

6.1.1 *Non-Potable Water Supply*

Non-potable water supply is an auxiliary water supply as defined in Section 4.5. The public water supply system shall be protected by an approved reduced pressure zone backflow preventor.

6.1.2 *Objectionable, but Not Hazardous*

Water or substance(s) present that would be objectionable if introduced into the potable water system but not hazardous to public health. The public water supply system shall be protected by an approved double check valve assembly unless it is a condition specifically listed under Section 6.2.

6.1.3 *Actual or Potential Hazard*

An actual or potential hazard is defined as any material dangerous to health that is handled in such a fashion as to create an actual or potential hazard to the potable water system. The public water supply system shall be protected by an approved reduced pressure zone backflow preventor.

6.2 *Type of Protection Required*

The following are the facilities and/or conditions under which backflow prevention devices will be required and the type of protection required for each.

An air-gap separation offers the highest level of protection and is the preferred method of backflow protection. When air-gap separation is not possible, backflow prevention devices shall be installed according to the following requirements:

6.2.1 *Commercial, Industrial, and Multi-family*

Reduced pressure zone backflow preventors shall be required on all commercial, industrial, and multi-family developments.

6.2.2 *Private Water System*

Reduced pressure zone backflow preventors shall be required at the point of entry to private water systems.

6.2.3 *Fire Lines*

Reduced pressure zone detector assemblies shall be required on all fire lines using chemical injection. Double detector check assemblies will be allowed, in place of reduced pressure zone detector assemblies, on fire lines that do not use chemical injection. Fire lines shall be isolated from the potable system at the property line.

6.2.4 *Residential Irrigation Lines*

Pressure vacuum breaker or reduced pressure zone backflow preventors shall be required on all residential irrigation lines. Atmospheric vacuum breakers are not allowed.

6.2.5 *Hazardous Material On-site*

Reduced pressure zone backflow preventors shall be required at the connection point to the public water supply system for all facilities which use or store hazardous materials on-site.

6.2.6 *Reclaimed Water System*

Any reclaim water service area that also has potable water being serviced to the same property must put in an approved backflow prevention assembly on the potable water at the meter and must be properly installed as described in Section 8 of this manual.

6.3 *Actual or Potential Cross-Connection*

Any uncontrolled cross-connections, either actual or potential, to the potable water system shall be protected by an approved reduced pressure zone backflow assembly at the service line connection.

6.4 *Restricted Premises (Security)*

Any premises where security requirements or other prohibitions or restrictions exist and it is impossible or impractical to make a complete in-plant cross-connection survey, the potable water system shall be protected against backflow or backsiphonage by an approved backflow prevention device at the service line connection. In this case, maximum protection will be required. An approved reduced pressure zone backflow preventor shall be installed in each service to these premises.

6.5 *Internal Protection*

This manual does not include specific provisions to provide internal protection for private water systems. Consumers should take additional steps to evaluate plumbing and check for internal cross-connections in order to further protect themselves. Refer to applicable standards for guidelines on the assessment of hazards and selection of assemblies for internal protection.

SECTION 7 – Reclaimed Water Installation Program

7.1 *Design Requirements*

The City of Mount Dora reclaimed water system is regulated by the FDEP Chapter 62-610 of the Florida Administrative Code (F.A.C.). Specific requirements affecting the design and construction of the reclaimed water system are as follows:

7.1.1 *Cross-Connection Control*

Cross-connections between reclaimed water and potable water are specifically prohibited. (ref. 62-610.419 F.A.C.)

An approved backflow prevention device shall be installed on any potable water line serving property also served by reclaimed water.

7.1.2 *Pipeline Separation Distances*

Maximum obtainable separation of reclaimed water lines and domestic water lines shall be practiced. A minimum horizontal separation of three feet (outside to outside) shall be maintained between reclaimed water lines and either potable water mains or sewage collection lines. (ref. 62-610.469 (7) F.A.C.)

Minimum vertical separations between reclaimed water lines, potable water lines and sewage lines shall be maintained in accordance with Chapter 62-604.400 F.A.C. and Chapter 62-555.314 F.A.C. At utility crossings between such pipes, the pipes shall be arranged in accordance with Chapter 62-604.400 F.A.C. and Chapter 62-555.314 F.A.C.

7.1.3 *Setback Requirements*

All reclaimed water irrigation sites and transmission facilities must be a minimum of 75 feet from potable water supply wells that are existing or have been approved by the Department of Environmental Protection. No setback distances are required to any non-potable water supply wells. (ref. 62-610.471 F.A.C.)

7.1.4 *Signage and Coding*

The public shall be notified of the use of reclaimed water. This shall be accomplished by the posting of advisory signs, notes on scorecards, or by other methods. Advisory signs shall include the text “Do not drink” in English and Spanish along with the equivalent standard international symbol. (ref. 62-610.468 F.A.C.).

All reclaimed water transmission lines shall be color coded and/or labeled to specifically identify said piping as reclaimed water lines. The color purple pantone shall be used in the color coding of reclaimed water piping.

7.1.5 *Use of Reclaimed Water*

The use of reclaimed water is regulated by Chapter 62-610 F.A.C. Reclaimed water to be used for purpose other than irrigation requires specific authorization by the Public Works and Utilities Director.

7.1.6 *Prohibited Uses of Reclaimed Water*

The regulations in Chapter 62-610 F.A.C. specifically prohibit the use of reclaimed water for filling swimming pools, hot tubs, or wading pools. In addition, reclaimed water lines are specifically prohibited from entering a dwelling unit or a building which contains a dwelling unit except for a specifically approved use. The use of reclaimed water for any purpose other than those allowed by Chapter 62-610 F.A.C. is prohibited.

There shall be no above ground hose bib connections to the reclaimed water system. All hose bib connections must be located in below grade, locked vaults that are clearly labeled as being non-potable.

Failure to comply with the regulations governing the use of reclaimed water shall be cause for the discontinuation of reclaimed water service, and other penalties as appropriate.

7.2 *Inspection*

All applications for reclaimed water service must receive a site inspection prior to activation. All sites receiving reclaimed water must have an approved backflow prevention device on the incoming potable water supply line as reference in this manual. No reclaimed water service shall be activated without an approved backflow prevention device properly installed. All backflow prevention devices shall have certified inspections and operational tests as described in Section 8 of this manual.

SECTION 8 – Approval, Testing, and Repairs of Backflow Prevention Devices

8.1 *Approved Backflow Prevention Devices*

Any backflow prevention device required herein shall be of a manufacturer, model, and size approved by the Public Works and Utilities Director. The term, approved backflow prevention device, shall mean a device that has been manufactured in full conformance with the standards established by the American Water Works Association entitled: AWWA C511 Standards for Reduced Pressure Principle and AWWA C510 Double Check Valve Backflow Prevention Devices, or later adopted version.

Backflow prevention devices must have the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California, or other approved testing laboratory.

The listed backflow prevention devices that are recognized by the utility shall be in compliance with the standards set forth by the following agencies:

- State of Florida Department of Environmental Protection – Rule Nos. 62-555.330 & 62-555.335
- AWWA (American Water Works Association) – #C510 and C511
- ASSE (American Society of Sanitary Engineers) – #1001, 1011, 1012, 1013, 1015, 1020, 1024, 1047 and 1048
- University of Southern California, USC Foundation for Cross-Connection Control and Hydraulic Research Manual
- SBCC/IPC (Southern Building Code Congress/International Plumbing Code)
- ANSI (American National Standards Institute) – #DIN EN 1717 and DIN EN 12729

All devices will be tested for compliance with these standards as described below.

Sample standard drawings of some of the approved backflow prevention devices are included in Appendix A.

8.2 *Testing of Backflow Prevention Devices*

It shall be the duty of the consumer at any premise where backflow prevention devices are installed to have certified inspections and operational tests made at least once per year. In those instances where the Public Works and Utilities Director deems the hazard to be exceptional, additional certified inspections may be required at more frequent intervals. Additionally, all new backflow prevention devices are to be tested directly upon installation. These inspections and tests shall be at the expense of the consumer and shall be performed by a certified tester, approved by the utilities department, using certified test gauges. A list of certified testers will be provided by the Public Works and Utilities Department upon request.

It shall be the duty of the consumer to conform to schedule testing. The customer shall notify the Public Works and Utilities Department in writing at least 48 hours prior to the occurrence of tests of protective devices in order that the City may have a representative witness test, if desired.

8.2.1 *Field Test Equipment*

a. Field Test Equipment shall be properly calibrated once a year to insure accurate data acquisition.

b. Field Test Equipment used in testing reclaim backflow prevention assemblies should be clearly identified as non potable field-test equipment and should be kept separate from field test equipment used to test backflow prevention assemblies supplied by potable water.

8.3 *Repair of Backflow Prevention Devices*

If deficiencies are noted during the test, such devices shall be repaired, overhauled, or replaced at the expense of the consumer by a certified repairer approved by the Public Works and Utilities Director. Upon completion of any repairs, overhauls, or replacement of a device, an operational test shall be made before the system is put back into service. Record of such tests, repairs, and overhauls shall be maintained by the Public Works and Utilities Department.

8.4 *Records, Test and Repair Reports*

Copies of any written reports, summaries, or other communications relating to this cross-connection control program or sanitary surveys of the system conducted by the system itself, by a private consultant, or by any local, State or Federal agency, shall be maintained by the Public Works and Utilities Department for a period of not less than ten (10) years. (Ref: F.A.C. Chapter 62-550.720 (3))

8.5 *Field Test Procedures*

Fire Sprinkler Systems – The tester shall request that the owner or occupant notify the authority having jurisdiction, the fire department, if required, and the alarm receiving facility before shutting down a fire sprinkler system or its water supply. The notification prior to testing shall include the purpose for the shutdown of the system, the component(s) involved, and the estimated time required.

8.5.1 *Physical Identification*

Physical identification of the backflow prevention assembly must be recorded. This information should include, but not limited to:

Assembly – Manufacturer, model, serial number, size
Location – Address, physical location.

Record all of this information, as well as the test data before leaving the location.

8.5.2 *Field Test Results*

The field tests results from the field test procedure must be accurately recorded on the appropriate Field Test Form (See Appendix C). The Field Test Form should contain the following:

a. Initial Test Results/actual p.s.i. values
b. Repair/Maintenance performed
c. Retest Results/actual p.s.i. values

8.5.3 *Tester Information*

The tester must put his/her information on the Field Test Form containing the following:

a. Tester identification (i.e., certification No. or license No.)
b. Tester's signature, printed name, address, and phone number
c. Date and Time of test
d. Tester must put a tag or a sticker with the tester's information, month, and year on the backflow prevention device once the device has passed the required test.

8.5.4 *Distribution of Field Test Forms*

a. Administrative Authority(s)
b. Owner
c. Tester

SECTION 9 – Installation Requirements for Backflow Prevention Devices

All backflow prevention devices will be installed in strict accordance with the manufacturer's installation instructions and the following guidelines. In addition, all installations shall conform to the following minimum requirements:

9.1 *Location*

Backflow prevention devices shall be installed on the discharge side of the meter or as close as possible to the point of connection with the public potable water system. For the purpose of testing, repair and maintenance, access to all backflow prevention devices shall be unobstructed.

9.2 *Property Access*

Employees of the utilities and engineering departments and their agents bearing proper credentials and identification shall be permitted to enter any building, structure, or property served by a connection to the public potable water supply system of the City for the purpose of inspecting the connection, backflow protection devices, and all portions of the piping system on such property. If consent to such access cannot be obtained from the owner, occupant or customer of the premises to be inspected, the City may obtain an inspection warrant pursuant to F.S. 933.21 or, in an emergency; the City employees and their agents may enter the premises without consent.

9.3 *Installation Requirements for homes with potable water*

All new irrigation systems using potable water to irrigate must put in an approved backflow prevention device on the meter that serves the irrigation system and must be properly installed as described in Section 8 of this manual.

9.3.1 *Installation Requirements for homes with reclaim water*

All new irrigation systems using reclaim water to irrigate must put in an approved backflow prevention device on the potable meter and must be properly installed as described in Section 8 of this manual.

9.4 *Support*

The device shall be adequately supported to prevent the assembly from sagging.

9.5 *Flushing*

Pipe lines shall be thoroughly flushed to remove foreign material and debris before installing the device.

9.6 *Parallel Backflow Device*

If continuous flow is required during backflow device servicing or testing, then two backflow devices connected in parallel will be required.

9.7 *Reduced Pressure Zone Backflow Preventor*

All reduced pressure zone backflow assembly installations shall meet the following requirements:

1. Device shall be installed a minimum of 1 foot above the ground or the maximum flood level, whichever is highest. Device may not be buried.
2. Device shall be installed in the horizontal position unless otherwise recommended by the manufacturer and approved by the Public Works and Utilities Director.
3. No galvanized pipe or fittings are allowed.

9.8 *Reduced Pressure Zone Detector Assembly*

All reduced pressure zone detector assembly installations shall meet the following requirements:

1. Device shall be installed a minimum of 1 foot above the ground or the maximum flood level, whichever is highest. Device may not be buried.
2. Device shall be installed in the horizontal position unless otherwise recommended by the manufacturer and approved by the Public Works and Utilities Director.
3. No galvanized pipe or fittings are allowed.

9.9 *Double Detector Check Assembly*

All double detector check assembly installations shall meet the following requirements:

1. Device shall be installed a minimum of 1 foot above the ground or the maximum flood level, whichever is highest.
2. Device shall be installed in the horizontal position unless otherwise recommended by the manufacturer and approved by the Public Works and Utilities Director.
3. No galvanized pipe or fittings are allowed.

9.10 *Pressure Vacuum Breaker Assembly*

All pressure vacuum breaker assembly installations shall meet the following requirements:

1. Assembly shall be installed a minimum of 1 foot and a maximum of 5 feet above the highest piping outlet.
2. Assembly shall not be subjected to backpressure.

3. No galvanized pipe or fittings are allowed.

9.11 *Double Check Assembly*

All double check assembly installations shall meet the following requirements:

Standard Installation:

1. Device shall be installed a minimum of 1 foot above the ground or the maximum flood level, whichever is highest.
2. Device must not be locked up or behind a fence.
3. Device shall be installed in the horizontal position unless otherwise recommended by the manufacturer and approved by the Public Works and Utilities Director.
4. No galvanized pipe or fittings are allowed.

Meter Box Installation (Residential only):

1. Test cocks must face up.
2. Information shall be readable (size, type, model #, serial #)
3. Shut off valves shall be in a workable position.
4. Device shall be testable and accessible in meter box.
5. Device shall be installed in the horizontal position unless otherwise recommended by the manufacturer and approved by the Public Works and Utilities Director.

9.12 *Dual Check Assembly*

All dual check assembly installations shall meet the following requirements:

1. This device is applicable only on low hazard, domestic installations.
2. Device must be installed at least 2-inches above grade in meter box.
3. Device must have union type fitting on discharge side of meter.

SECTION 10 – Emergency Procedures

10.1 *Emergency Procedures*

Upon discovery of a hazardous situation where contaminants are actually in the process or suspected of entering the distribution system of the public potable water supply, the Cross Connection Control Supervisor shall be notified immediately as well as the Superintendent of Water Division of the City of Mount Dora.

The Cross-Connection Control Supervisor, acting for the Manager of the Water/Wastewater Division, is authorized to take immediate steps he deems necessary to correct a hazardous condition; which shall include the right to immediately discontinue potable water service to premises where a hazardous condition may be occurring. Such emergency steps, including discontinuance of potable water service, may be taken without advance notice to the consumer. The consumer shall be notified as soon as possible thereafter if potable water service has been discontinued; and the matter simultaneously brought to the attention of the City's Director of Public Works and Utilities.

In the event of a contaminant entering the Potable Water Distribution System the following procedures will be followed:

Step 1 Investigate
* Identify and isolate source of contaminant (if possible)
* Conduct sampling to identify contaminant and extent of contamination
* Notify Health Department

Step 2 Containment
* Conduct directional flushing to purge contaminant from system
* Close appropriate system valves to contain contaminant
* Continue sampling until system is clear of contaminants

Step 3 Notification of Affected Area's
* Door Hangers
* Radio
* T.V.
* Newspaper

SECTION 11 – Enhanced Public Education

11.1 *Public Education*

The City of Mount Dora through it's on going public education process will provide two educational flyers per year to its residential and commercial customers on cross connection control issues. Through our inspection process we will educate the customer on cross connection control, backflow prevention, thermal expansion, freeze protection and any cross connection issue's that may arise.

SECTION 12 – Discontinued Service

12.1 *Discontinued Service*

No water service connection shall be installed or maintained by the City unless the customer is in compliance with the requirements of the Cross Connection Control Manual. If a backflow prevention device does not exist on a parcel of property receiving water service from the City on the effective date of this manual, or if such device is not installed, or, if installed, is not tested ever twelve (12) months and maintained continuously, or if an unprotected cross connection exists on a premises.

A thirty (30) day reminder notice shall be sent out to the customer on the utility bill to let the customer know that they need to have their backflow device tested. After the thirty (30) day has expired and the consumer is still in non-compliance, a thirty (30) day 2nd notice will be resent to the customer. If non-compliance still exist then a ten (10) day notice of non-compliance shall be given to the customer prior to discontinuing service.

Thereafter, service to said noticed customer shall be discontinued if the premises are not in compliance with this manual. In event of an emergency, no notice shall be required and service may be discontinued immediately.

SECTION 13 – Prohibited Acts

13.1 *Prohibited Acts*

No person, unless expressly authorized in writing by the director of public works or his designee, shall tamper with, work on, connect to, or in any way alter or damage any part of the city's utility system, the potable water and reclaimed water. Tampering or work shall include, but not be limited to, unauthorized operation of city owned valves, meter tampering, straight lines, unauthorized taps, and/or line ruptures.

Unauthorized operation of city owned valve shall mean any operation of any valve in the City's utility system by a person other than specifically authorized city employees, including, but not limited to, a contractor or resident operating city owned valves or curb stops.

Unauthorized tap shall mean any attachment to the city utility system without prior written approval from the city, including but not limited to, direct connection to a city water main or attachment to a fire hydrant or valve, back flow prevention device or curb stop.

13.2 *Damaging, misusing hydrants*

(a) It shall be unlawful for any person to tamper with, molest, damage or attempt to remove by any device any water from any water or fire hydrant of the city.

(b) It shall be unlawful for any person to use water from any fire hydrant of the city for any purpose, without first securing permission from the city, which may be obtained by notifying the Public Works and Utilities Department in advance thereof, in order for the proper backflow prevention assembly to be attained to protect the water supply.

13.3 *Tampering, damaging water system*

It shall be unlawful for any unauthorized person to tamper with, molest or damage any portion of the city water system, whether on public or private property, including, but not limited to the breaking of seals placed on the water meters of the customer or user, and tampering with, molesting or using water mains, standpipes, valves, pumps, tanks, or waterlines. Any violation by a user of the city's water system or any violation by a non-user of the system shall be punishable pursuant to section 13 of this manual.

13.4 *Penalties for violation*

(a) If any person violates the provisions of the City of Mount Dora Cross Connection Control Manual section 13 Prohibited Acts, the city may commence an action for appropriate legal and/or equitable relief in the circuit court for Lake County.

(1) *Injunctive relief.* Whenever any person, including any industrial user, has violated or continues to violate the provisions of the Cross Connection Control Manual section 13 Prohibited Acts, the city may petition the circuit court for the issuance of a preliminary or permanent

injunction or both (as may be appropriate) which restrains or compels the activities on the part of the violator.

(2) ***Civil penalties***.

a. Any person who has violated or continues to violate Cross Connection Control Manual section 13 Prohibited Acts, shall be liable to the city for a civil penalty of not more than ten thousand dollars ($10,000.00) but not less than one thousand dollars ($1,000.00), plus actual damages incurred by the city per violation, per day, for as long as the violation continues. In addition to the above described penalty and damages, the city shall be entitled to recover reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including sampling/monitoring expenses.

b. The city shall petition the circuit court to impose assess, and recover such sums. In determining amount of liability, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the person's violation, corrective actions by the person, the compliance history of the person, and such other factors as justice requires.

(3) ***Criminal prosecution.***

a. ***Violations generally.***

1. Any person who willfully or negligently violates any provision of the City of Mount Dora Cross Connection Control Manual section 13 Prohibited Acts, shall be punishable by a fine not to exceed one thousand dollars ($1,000.00) per violation, per day, and/or imprisonment for not more than one (1) year.
2. In the event of a second conviction, the person shall be punishable by a fine not to exceed three thousand dollars ($3,000.00) per violation, per day, and/or imprisonment for not more than three (3) years.

(a) In addition to the penalties provided in section (a) above, whoever shall violate the provisions of this section shall be liable to the city for any damage caused to the property of the city or water resources and for reasonable costs and expenses, including attorney's fees, of the city incurred in tracing, controlling and abating the violation and in restoring the property or water resources to their former condition.

(b) The owner of a building, structure or premises where anything in violation of this section shall be placed or shall exist and an architect, builder, contractor, agent, person or corporation employed in connection with and who assisted or caused the commission of such violation, shall each be guilty of the separate offense and liable for penalties provided.

(c) As an additional means of ensuring compliance with the provisions of this section, the City of Mount Dora Code Enforcement Board shall have jurisdiction and authority to hear and decide alleged violations occurring in the service areas of Mount Dora. Proceedings before the code enforcement board shall be governed by its rules and procedures.

(d) Upon detection of prohibited acts as herein defined, the city shall be authorized to take immediate action to stop the violation and to remove and seize any equipment used in the commission of the violation.

CITY OF MOUNT DORA

Public Works & Utilities
1250 North Highland Street
Mount Dora, FL 32757

(352) 735-7151
Fax: (352) 735-1539

(Date)

Dear Customer:

On _____/_____/_____, an inspection at your premises revealed a violation of the City of Mount Dora Cross Connection with reference to your unauthorized use of the City's water system.

The City specifically prohibits any person to work on, connect to, or in any way alter or damage any part of the City's water system. Your unauthorized connection into the City's utility system constitutes an illegal act.

The penalty for tampering with the utility system can result in a fine starting at $1,000.00, and/or imprisonment not to exceed (1) year. Either or both penalties may be imposed. Each day during which violation occurs constitutes a separate offense.

You must respond, in person, at the Customer Service Office within 10 (Ten) days of this letter. Failure to respond may result in prosecution by the City of Mount Dora. The Customer Service Office is located in City Hall at 510 Baker St., Mount Dora, Florida. 32757.

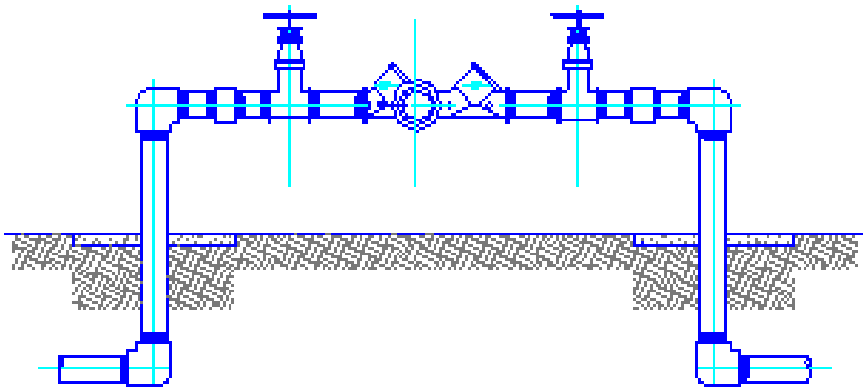
Sincerely,

_____
Inspector (print)

Appendix A

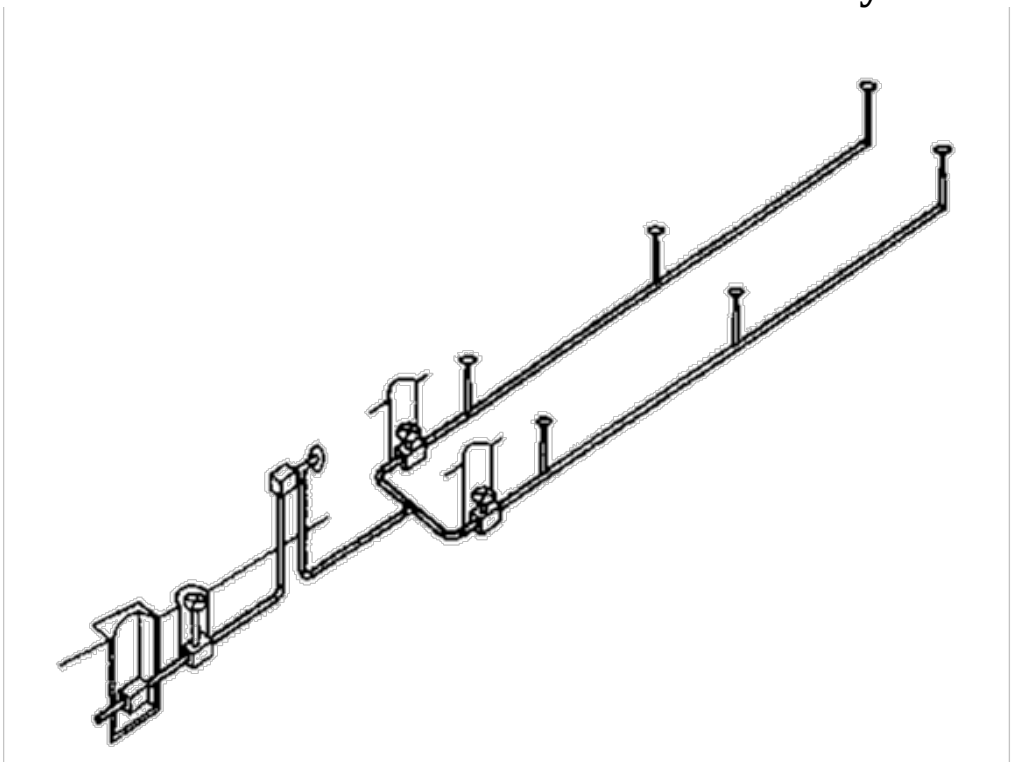
Backflow Prevention Device
Standard Drawings

Reduced Pressure Zone Backflow Assembly



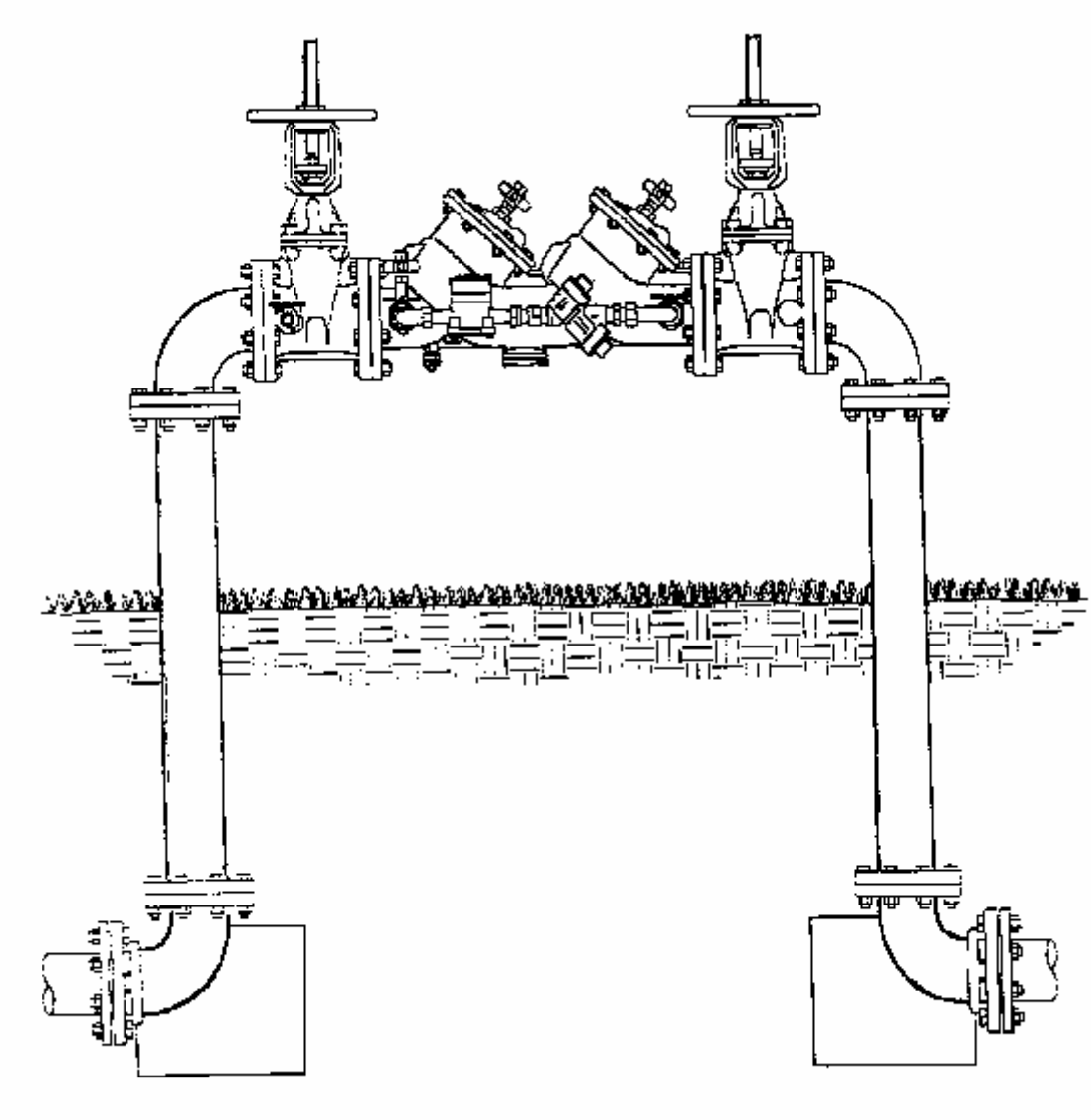
Appendix A-1

Pressure Vacuum Breaker Assembly



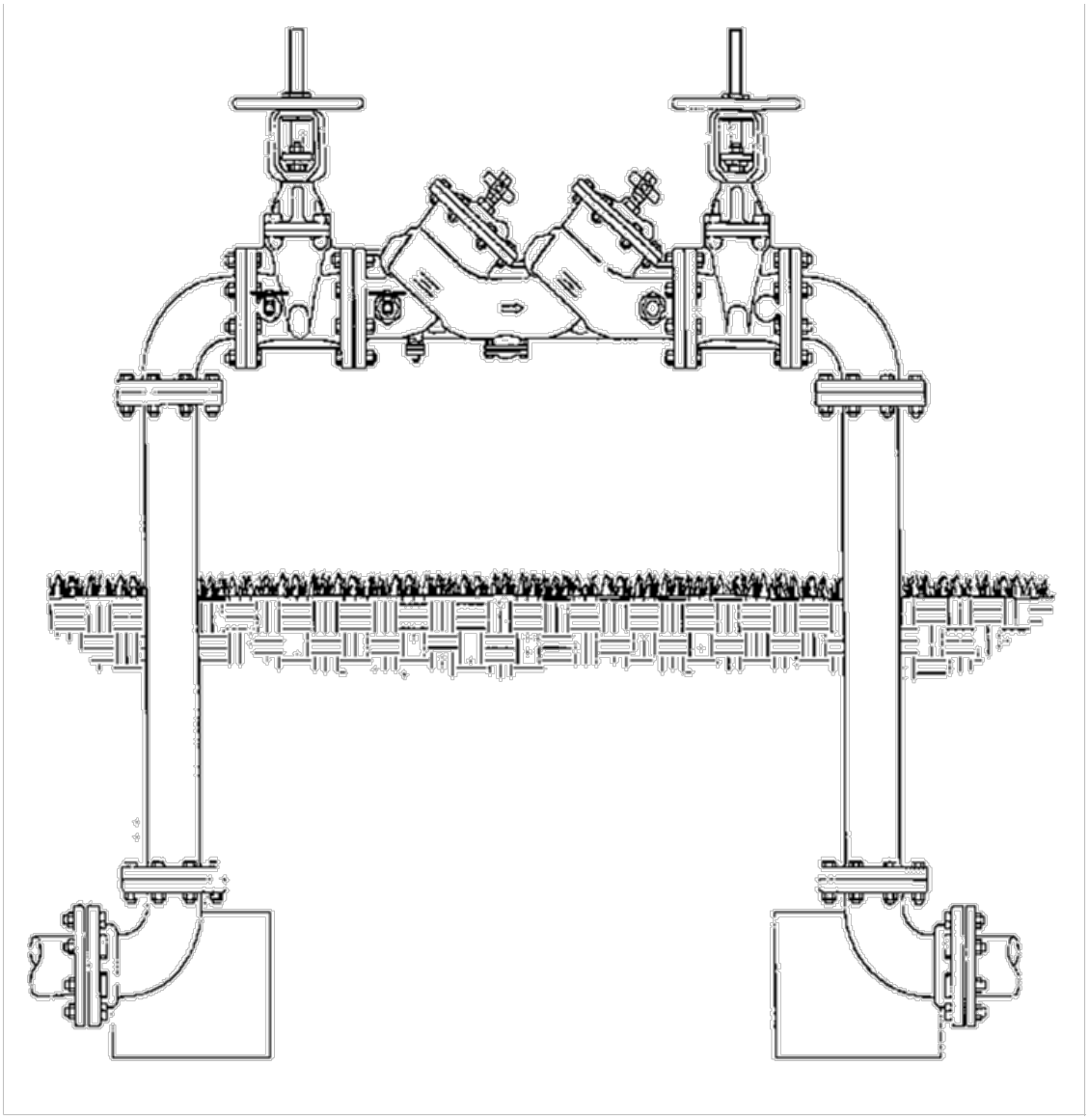
Appendix A-2

Double Detector Check Assembly



Appendix A-3

Double Check Assembly



Appendix A-4

Appendix B

Florida Statutes

Abstract: 933.21 Requirements for issuance of inspection warrant. --An inspection warrant shall be issued only upon cause, supported by affidavit, particularly describing the place, dwelling, structure, or premises to be inspected and the purpose for which the inspection is to be made. In addition, the affidavit shall contain a statement that consent to inspect has been sought and refused or a statement setting forth facts or circumstances reasonably justifying the failure to seek such consent.

Appendix C

Field Test Report

CITY OF MOUNT DORA

TEST & MAINTENANCE REPORT
BACK FLOW PREVENTION ASSEMBLIES

City of Mount Dora
Water Department
1250 N. Highland St.
Mount Dora, Fl. 32757
(352) 735-7157

Name of Premise: _____

Street Address: _____, Mount Dora, Florida

Location of Device: _____

Manufacturer: _____ Model: _____ Serial #: _____ Size: _____

RP ☐ DDC ☐ DC ☐ PVB ☐

Pressure drop across first check valve _____ PSI Final test pressure drop across first check valve _____ PSI

#2 SHUT OFF VALVE: Leaked ☐ Closed Tight ☐ Repaired ☐ Replaced ☐

	CHECK VALVE #1	CHECK VALVE #2	DIFFERENTIAL PRESSURE RELIEF VALVE	PRESSURE VACUUM BREAKER
Initial Test	1. LEAKED ☐ 2. CLOSED TIGHT ☐	1. LEAKED ☐ 2. CLOSED TIGHT ☐	OPENED AT _____ LBS DID NOT OPEN ☐	AIR INLET OPENED AT _____PSI DID NOT OPEN ☐
R E P A I R S	CLEANED ☐ REPLACED: Rubber Parts Kit ☐ C.V. Assembly ☐ - OR - Disc_____ ☐ O-Rings_____ ☐ Seat_____ ☐ Spring_____ ☐ Stem Guide_____ ☐ Retainer_____ ☐ Lock Nuts_____ ☐ Other_____ ☐	CLEANED ☐ REPLACE: Rubber Parts Kit ☐ C.V. Assembly ☐ - OR - Disc_____ ☐ O-Rings_____ ☐ Seat_____ ☐ Spring_____ ☐ Stem Guide_____ ☐ Retainer_____ ☐ Lock Nuts_____ ☐ Other_____ ☐	CLEANED ☐ REPLACED: Rubber Parts Kit ☐ C.V. Assembly ☐ - OR - Disc_____ ☐ O-Rings_____ ☐ Seat_____ ☐ Spring_____ ☐ Guide_____ ☐ Diaphragm_____ ☐ Other_____ ☐	CHECK VALVE_____PSI LEAKED ☐ CLEANED ☐ REPLACED: Disc Air Inlet_____ ☐ C.V. Assembly_____ ☐ Disc C.V._____ ☐ O-Rings_____ ☐ Spring_____ ☐ Guide_____ ☐ Other_____ ☐
FINAL TEST	Closed Tight ☐ PSI_____	Closed Tight ☐ PSI_____	Opened at_____lbs. Reduced pressure	Satisfactory ☐

Remarks: _____

_____

_____

Test Equipment Used: _____ Last Calibration Date: _____

Initial Test By: _____ Certified Tester No.: _____ Date: _____

I hereby certify that this data is accurate and reflects the proper operation of the unit.

Repaired By: _____ Certified Repair No.: _____ Date: _____

Final Test By: _____ Certified Repair No.: _____ Date: _____

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Appendix D
Backflow Assembly Tag

City of Mount Dora Public Utilities
1250 N. Highland St.
Mount Dora, Fl. 32756
(352) 735 – 7151
Cross Connection Control Program

Year Due	2006	**2007**	2008	2009	2010	2011	2012	2013

Month Due	Jan.	Feb.	Mar.	April	May	June
	July	Aug.	Sept.	Oct.	Nov.	**Dec.**