

**AN ORDINANCE OF THE TOWN OF PROSPER, TEXAS, REPEALING EXISTING ARTICLE 13.10, "BACKFLOW PREVENTION PLAN," OF CHAPTER 13, "UTILITIES," OF THE CODE OF ORDINANCES OF THE TOWN OF PROSPER, TEXAS, AND REPLACING IT WITH A NEW ARTICLE 13.10, "BACKFLOW PREVENTION PLAN"; AMENDING THE PLAN TO PROMOTE THE PUBLIC HEALTH, SAFETY AND WELFARE OF THE PUBLIC WATER SYSTEM, INCLUDING RESTRICTIONS ON CONTROLLING CROSS CONNECTIONS; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; AMENDING APPENDIX A, "FEE SCHEDULE," TO THE TOWN'S CODE OF ORDINANCES BY AMENDING SECTION XVIII, "BACKFLOW PREVENTION PLAN AND ENFORCEMENT FEES"; PROVIDING FOR REPEALING, SAVINGS AND SEVERABILITY CLAUSES; PROVIDING FOR AN EFFECTIVE DATE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.**

**WHEREAS**, pursuant to Chapter 341 of the Texas Health & Safety Code, the Texas Commission of Environmental Quality (TCEQ) has developed rules and regulations which govern drinking water quality and reporting requirements for public water systems; and

**WHEREAS**, the Town of Prosper, Texas (the "Town"), has investigated and determined that it would be advantageous and beneficial to the citizens of Prosper to amend its backflow prevention program of uniform regulations governing the installation, testing, maintenance and inspection of backflow prevention assemblies that applies to all properties and registration of backflow prevention assembly testers; and

**WHEREAS**, TCEQ rules and regulations require the protection of a public water system from contaminants caused by backflow of contaminants through water service connections; and

**WHEREAS**, the Town has determined an urgent need in the best interests of the public to adopt this amended Backflow Prevention Plan; and

**WHEREAS**, pursuant to Chapter 54 of the Texas Local Government Code, the Town is authorized to adopt such ordinances deemed necessary by the Town to protect its water resources; and

**WHEREAS**, the Town Council has investigated and determined that it will be advantageous and beneficial to the citizens of Prosper and will protect the public health, safety and welfare to amend its Backflow Prevention Plan.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF PROSPER, TEXAS, THAT:**

### **SECTION 1**

The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

## **SECTION 2**

From and after the effective date of this Ordinance, Chapter 13, "Utilities," of the Town's Code of Ordinances is hereby repealed in its entirety and replaced with a new Article 13.10, "Backflow Prevention Plan," to read as follows:

### **"ARTICLE 13.10 BACKFLOW PREVENTION PLAN"**

#### **Sec. 13.10.001 Purpose.**

This plan shall regulate the installation, testing, maintenance, and inspection of backflow prevention assemblies as well as other measures of cross connection control. Further, the Town of Prosper has established a cross-connection control program to promote the public health, safety and welfare by regulations designed to:

- (a) Protect the public potable water supply of the Town of Prosper from the possibility of contamination or pollution by isolating within a customer's internal distribution systems or a customer's private water systems contaminants or pollutants that could backflow into the public water system; and
- (b) Promote the elimination or control of existing cross connections, whether actual or potential, between a customer's internal distributions systems or a customer's private water systems and non-potable water system(s), plumbing fixtures, and industrial piping system(s); and
- (c) Provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of the Town's potable water system; and
- (d) Establish requirements for Prosper Backflow Prevention Assembly Testers, as defined in Article 4.08 of this Code; and
- (e) Comply with the water hygiene requirements of Title 30, Part 1, Chapter 290 of the Texas Commission on Environmental Quality Rules and Regulations for Public Water Systems.

#### **Sec. 13.10.002 Definitions.**

For the purpose of this Plan, the following definitions shall apply unless the context clearly indicates or requires a different meaning. Other technical terms used will have the meanings or definitions listed in the 10th Edition of the *Manual of Cross Connection Control* published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, a copy of which is on file with the Town, or in the Third Edition of the *Recommended Practice for Backflow Prevention and Cross-Connection Control Manual M14* published by the American Water Works Association. In any case where provisions of these manuals are in conflict, the 10th Edition of the *Manual of Cross Connection Control* will prevail.

*Air gap separation (AG)* means an unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water to a tank, fixture, receptor, sink, or other assembly and the flood level rim of the receptacle. The vertical,

physical separation must be at least twice the diameter of the water supply outlet, but never less than one (1.0) inch.

*Approved water supply source* means the Town of Prosper water system.

*Atmospheric Vacuum Breaker (AVB)* means an assembly containing a float check, a check seat, and an air inlet port.

*Auxiliary water supply* means any water supply other than the Town of Prosper's approved public water supply, including water from another public water supply or from a natural source including, but not limited to, wells, cisterns, springs, rivers, streams, used waters, or industrial fluids.

*Backflow* means the reversal of flow of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of a potable water supply from any sources other than an approved water supply source.

*Backflow prevention assembly* means an assembly which, when properly installed between the Town water supply system and the terminus or point of ultimate use, will prevent backflow. Examples of such assemblies include, but are not limited to, reduced pressure backflow assemblies, double check valve assemblies, pressure vacuum breakers, and air gap separation.

*Backflow prevention assembly tester (BPAT)* means an individual licensed in accordance with Texas Commission on Environmental Quality rules to test backflow prevention assemblies.

*Back pressure* means any elevation of pressure in the downstream piping system (including by pump, elevation of piping, or steam 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.

*Back siphonage* means a form of backflow caused by a reduction in system pressure resulting in the existence of a negative or sub-atmospheric pressure at a site in the water system.

*Building official* means the Building Official of the Town of Prosper or his designee.

*Chemical injection system* means a system which automatically injects fertilizer, pesticide, weed killer, etc., into an irrigation system, while the irrigation system is operating.

*Closed System* means a piping system that has no space for water to expand.

*Commission* means the Texas Commission on Environmental Quality.

*Contamination* means an impairment of the quality of the public potable water supply or a private potable water supply by the introduction or admission of any foreign substance that degrades the quality, and which creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, or waste.

*Cross connection* means any actual or potential connection or structural arrangement between a public or consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid,

gas, or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices through which or because of which backflow can occur are considered to be cross-connections.

*Customer* means a person, company, or entity contracting with the Town of Prosper to receive potable water service.

*Customer's potable water system* means that portion of the privately owned potable water system lying between the service connection and the point of use by customer. The system includes, but is not limited to, all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, store, or utilize the potable water.

*Degree of hazard* means either a non-health or health hazard and is determined by the evaluation of the conditions within a system by the Director of Public Works, the Town of Prosper Health Department, or the Building Official.

*Director* means the Director of Public Works.

*Double Check Valve Assembly (DC)* means an assembly composed of two independently acting approved check valves, including tightly closing resilient-seated shutoff valves, attached at each end of the assembly and fitted with properly located resilient-seated test cocks.

*Health hazard* means a cross connection, potential cross connection, or other situation involving any substance that could cause death, illness, spread of disease, or has a high probability of causing such effects if introduced into the potable drinking water supply.

*Industrial fluids* means any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration which would constitute a health, system, pollutional, or plumbing hazard if introduced into an approved water supply. Examples of industrial fluids include, but are not limited to: polluted or contaminated used 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 alkalis; circulated cooling waters connected to an open cooling tower and/or cooling waters that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as form wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc.; and oils, gases, glycerin, paraffins, caustic and acid solutions and other liquid and gaseous fluids used industrially, for other processes, or for firefighting purposes.

*Material Reporting Deficiencies* shall mean inaccurate or incomplete reporting of information required in the Backflow Prevention Assembly Test Report form as noted in "Appendix A." Required information reported in section "B" is noted with an "x." Sections "C" and "D" are required in their entirety.

*Non-health hazard* means a cross connection or potential cross connection involving any substance that generally would not be a health hazard but would constitute a nuisance, or be aesthetically objectionable, if introduced into the potable water supply.

*Non-potable water* means a water supply which has not been approved for human consumption by the Commission.

*Person* means any individual or any association, firm, partnership, joint venture, corporation or other legally recognized entity, whether for profit or not for profit.

*Plumbing hazard* means an internal or plumbing type cross connection in a customer's potable water system that may be either a pollutional or a contamination type hazard, including, but not limited to, cross connections to toilets, sinks, lavatories, wash trays, and lawn sprinkling systems.

*Pollution* means an impairment of the quality of the public potable water supply to a degree which does not create a hazard to the public health but does adversely and unreasonably affect the aesthetic qualities of such water for domestic use.

*Potable water* means any public water supply which has been investigated and approved by the Commission as satisfactory for drinking, culinary and domestic purposes.

*Premises or Property* means any property, real, improved or personal that is connected to the Town of Prosper water system.

*Pressure Vacuum Breaker (PVB)* means an assembly which contains an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve with properly located resilient-seated test cocks and tightly closing resilient-seated shutoff valves attached at each end of the assembly.

*Process waters* means water used to cool any operation or manufacturing process.

*Prosper Backflow prevention assembly tester (Prosper BPAT)* means an individual licensed in accordance with Texas Commission on Environmental Quality rules and registered with the Town of Prosper Public Works Department for the purpose of testing backflow prevention assemblies.

*Public potable water supply* means any publicly or privately owned water system operated as a public utility under a health permit to supply water for domestic purposes. Such a system includes all sources, facilities and appurtenances between the source and the point of delivery 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.

*Public water system* means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, which includes all uses described under the definition for drinking water.

*Public Works Director* means the Public Works Director for the Town of Prosper or his designee.

*Pressure loss* means any reduction in the water pressure supplied by the Town.

*Reduced Pressure backflow prevention assembly (RP)* means an assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit includes properly located resilient- seated

test cocks and two tightly-closing resilient-seated shutoff valves at each end of the assembly.

*Service connection* means the terminal end of a service connection from the public potable water system (i.e., where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customer's 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.

*Spill-Resistant Pressure Vacuum Breaker (SVB)* means an assembly which contains an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve, with properly located resilient seated test cock, a properly located bleed/vent valve and tightly closing resilient seated shutoff valves attached at each end of the assembly.

*Supply pressure* means the existing pressure in the Town of Prosper water system.

*System hazard* means an actual or potential threat of severe danger to the physical properties of the public or the customer's potable water system or of a pollution or contamination which has or would have a protracted effect on the quality of the potable water in the system.

*Thermal Expansion* means heated water that does not have any space to expand.

*Town* means the Town of Prosper, Texas, and its duly authorized representatives.

*Used water* means any water supplied by a water purveyor from a public water system to a customer's water system after passing through the service connection and which is no longer controlled by the water purveyor.

*Utility* means the Town of Prosper Public Works Department.

*Utility water service area* means all locations within the Town of Prosper water system as defined by the Town's State Certificate of Convenience.

*Valid Backflow Prevention Assembly Test* shall mean test results reported by a Prosper BPAT who performed the test and reported within ten (10) calendar days of the test that meet the performance criteria located within the 10th Edition of the *Manual of Cross Connection Control* published by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research for the type of backflow prevention assembly tested, unless otherwise noted within this Plan.

*Water purveyor* means the operator of a potable water system supplying at least 15 service connections or servicing at least 25 individuals at least 60 days out of the year.

### **Sec. 13.10.003      Backflow prevention assemblies required.**

(a) Each service connection from the public water system to premises having an auxiliary water supply shall be protected against backflow of water from the premises into the public water system with a Reduced Pressure Backflow Prevention Assembly (RP).

(b) For all newly constructed premises on which a substance is handled so that it may enter the public water system, each service connection from the public water system to such

premises shall be protected against the backflow of water from the premises into the public water system. This requirement shall apply to each premise on which persons handle process water and water originating from the public water system which has been subjected to deterioration in sanitary quality.

(c) For all existing premises on which a substance is handled so that it may enter the public water system, each service connection from the public water system to such premises may be required to be protected against the backflow of water from the premises into the public water system upon the determination of the Public Works Director or the Building Official. This requirement shall apply to each premise on which persons handle process waters and waters originating from the public water system which have been subjected to deterioration in sanitary quality.

(d) Backflow prevention assemblies shall be installed on a service connection to a premises: (1) having internal cross connections that cannot be permanently corrected and controlled in compliance with this Plan, (2) upon the Public Works Director or Building Official's determination that an intricate plumbing and piping arrangement exists which makes it impractical to ascertain whether cross connections exist therein, or (3) where a portion of the Premises cannot be readily accessed for inspection purposes making it impractical or impossible to ascertain whether cross connections exist. The owner or person responsible for a property or the maintenance of a property connected to or required to be connected to the public potable water system shall make all necessary arrangements, at its sole expense, to remove without delay security barriers or other obstacles to access by the Public Works Director or the Building Official.

(e) If an inter-street main flow may result from two or more services supplying water to the same building, structure, or premises, then a standard check valve shall be installed adjacent to the respective meters and on the owner's property. If a check valve is not adequate to protect the public water system's mains from pollution or contamination, the installation of an approved backflow prevention assembly may be required by the Public Works Director. Approval will be given if a backflow prevention assembly is functioning.

(f) If a health hazard exists, a testable backflow prevention assembly or an air gap shall be required. The backflow prevention assemblies shall include a reduced pressure backflow prevention assembly (RP), pressure vacuum breaker (PVB) or a spill-resistant vacuum breaker (SVB). The PVB and SVB shall not be subjected to backpressure.

(g) If a business type is located in Table 2 as a health hazard, an RP will be required on the domestic main line, backflow prevention will still be required at point of use as necessary.

#### **Sec. 13.10.004      Type of backflow prevention assemblies required.**

(a) The type of backflow prevention assembly required shall be commensurate with the type of hazard that exists on the customer's premises. The minimum types of backflow prevention assemblies required to protect the Town's potable water supply are set forth in Table 1 below. However, the water user may choose a higher level of protection than required by the Town. All backflow prevention assemblies shall be from an approved list from the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.

Table 1

<u>Type of Hazard</u>	<u>Minimum Type of Backflow Prevention Assembly</u>
Fire protection systems utilizing chemicals or additives (New installations or remodels of existing system)	RP- UL or FM &USC approved assemblies only
Commercial and residential fire sprinkler systems without chemicals or additives (New installations or remodels of existing systems only)	DC-UL or FM &USC approved assemblies only
Commercial and residential landscape irrigation systems utilizing chemical additives or hose connections and/or quick couplers	RP or AG only
Stationary Construction Fire Hydrant Meters	RP or AG immediately adjacent to meter
Premises where any customer purchasing water for the purpose of resale or distribution	RP or AG at each service connection
Premises owned by any state, federal, or foreign government or	RP or AG at each service connection
Premises where there is history of cross-connections being established or re-established	RP or AG
Animal Watering Sites	AG or RP or PVB or SVB. PVB or SVB not approved where back pressure situations exist.
Non-Health Hazard	DC, PVB, SVB, or RP at point of connection to hazard or at the service connection prior to first branch line off customer's service line. PVB or SVB not approved where back pressure situations exist.
Health Hazard	AG,RP,PVB, or SVB at point of connection to hazard or at service connection prior to first branch line off customer's service line. PVB or SVB not approved where back pressure situations exist.
Carbonated Drink Machines	RP- Stainless Steel Assembly and all downstream piping shall be non-corrosive when in contact with CO2 gas.

Situations which are not covered in Table 1 shall be evaluated on a case by case basis,



and the required backflow prevention assembly shall be determined by the Public Works Director.

- (b) Containment and/or secondary protection shall be required on certain health hazard installations in accordance with the following Table 2, in addition to any other protection, identified herein, which is required to isolate equipment within a facility. The Public Works Director or Building Official may require backflow prevention assembly to be installed on other facilities with a similar degree of hazard in accordance with the Plumbing Code of the Town of Prosper, as amended, or other applicable law. These backflow prevention assemblies shall be installed in the main service line on the building side of the meter or the principle branch serving a single tenant space. The location of the backflow prevention assembly shall be approved by the Public Works Director or Building Official in accordance with the provisions contained in Section 7.

Table 2

<b><u>Premises Isolation</u></b>	
<b><u>Health Hazard Installations</u></b>	<b><u>Type of Backflow Prevention</u></b>
Aircraft and missile plants	RP
Animal Feedlots	RP or AG
Animal hospitals or Clinics	RP
Automotive plants	RP
Auxiliary water supply	RP
Breweries	RP
Building containing a Reclaimed Water System	RP
Canneries, packing houses, and chemical plants	RP
Carwash	RP
Chillers	RP
Cooling Towers	RP
Commercial Laundry	RP
Cold storage facilities	RP
Connection to sewer pipe	RP or AG
Dairies	RP
Dye Works	RP
Multi-story buildings 3 floors or more	RP
Dental Office	RP
Doctor's Office	RP
Food and Beverage processing plants	RP
Funeral home and mortuary	RP
Green house or nursery (with toxic chemicals)	RP
Hospitals (parallel system required)	RP
Laboratories (including medical, dental, and research labs, and labs at educational facilities)	RP
Manufacturing plant	RP

Meat Processing plant	RP
Metal manufacturing, cleaning, processing and fabrication plants	RP
Morgues, mortuaries, or autopsy	RP
Micro chip fabrication facilities	RP
Multi-story buildings 3 floors or more	RP
Paper and paper products plants	RP
Petroleum processing or storage facilities	RP
Photo and film processing	RP
Plants using radioactive materials	RP
Plating or Chemical plants	RP
Premises where inspection is restricted or exempted	RP
Private/Individual Unmonitored Wells	RP
Rainwater Harvesting Systems	RP
Reclaimed water systems	RP
Rendering plant	RP
Restricted, classified or other closed facilities	RP
Sewage lift Stations	RP
Sewage treatment plants	RP
Slaughter houses	RP
Steam plants	RP
Space Heating Boilers	RP
<b>Internal Protection</b>	
<b><u>Health Hazard Installations</u></b>	<b><u>Type of Backflow Prevention Required</u></b>
Aspirators	RP, PVB, or SVB
Autoclave	RP
Autopsy and mortuary equipment	RP, PVB, or SVB
Bedpan washers	RP, PVB or SVB
Chemical Dispensers	AG, RP, PVB or SVB
Connection to industrial fluid systems	RP
Connection to plating tanks	RP
Connection to salt-water cooling	RP
Connection to sewer pipe	AG
Cooling towers with chemical additives	AG
Cuspidors	RP, PVB, or SVB

Domestic space heating boiler	RP
Dye vats or machines	RP
Fire-fighting system (toxic liquid foam concentrates)	RP
Flexible shower heads	AVB, RP, PVB, or SVB
Heating equipment commercial	RP
Heating equipment domestic	DCVA
Hose bibs	AVB or HBVB
Irrigation systems on properties with OSSF's	RP -specific conditions on existing systems addressed in irrigation ordinance
Commercial dishwashers	RP
Disposals or grinders with water connections	RP
Lab bench equipment	RP, PVB, or SVB
Ornamental fountains	RP, PVB, or SVB
Pitcher, cup or glass washers	AG or RP
Swimming pools- Public	RP
Swimming pools- Private	RP, PVB, or SVB
Sewage pump	AG
Sewage ejectors	AG
Shampoo basins	RP, PVB, or SVB
Specimen tanks	RP, PVB, or SVB
Steam generators	RP
Steam tables	RP, PVB, or SVB
Sterilizers	RP
Tank vats or other vessels containing toxic substances	RP
Trap Primers	AG
Vending machines	RP, PVB, or SVB
Water Filters- Commercial	RP*
Water Filters- Residential R/O or Whole home	RP
Water Softeners	RP
Watering troughs	AG, PVB, or SVB

\*Commercial in-line filters currently protected with DCVA's may continue to be served by current protection until it is no longer repairable in-line at which time it must be upgraded to an RP.

NOTE: AG=air gap; DCVA=double check valve backflow prevention assembly; PVB=pressure vacuum breaker; SVB=spill resistant vacuum breaker; RP=reduced pressure backflow prevention assembly.

#### **Sec. 13.10.005      Backflow prevention assembly installation requirements.**

(a) All new, replacement, or reconditioned backflow prevention assemblies shall be installed in accordance with the International Plumbing Code, as adopted and amended by the Town of Prosper and with the following standards, unless otherwise directed or approved by the Public Works Director.

(1) Plumbing permit required. Prior to installation, a plumbing permit must be obtained from the Building Inspection Department of the Town.

(2) Installation. The assembly shall not be located in the same vault or meter box with the Town's water meter. Backflow assemblies shall not be installed within three (3) feet of a water meter box or vault. All backflow assembly installation shall be done in accordance to the approval set forth in the list of Approved Backflow Prevention Assemblies issued by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research, a copy of which is on file in the Town Public Works Department. If installed in a structure all backflow assemblies must be easily accessible for testing, repair or replacement.

(3) Location. The owner or occupant must prove to the Town that no connections or tees are located between the meter and the backflow prevention assembly. The relief valve discharge on a reduced pressure backflow assembly (RP) shall not be solidly piped into a sump, sewer, drainage ditch, etc. Test cocks shall not be used as supply connections.

(4) Air gap separation (AG). All piping from the service connection to the receiving tank shall be above grade and be entirely visible. No water use shall be provided from any point between the service connection and the air gap separation. The water inlet piping shall terminate at a distance of at least two (2) pipe diameters of the supply inlet, but in no case less than one (1) inch above the overflow rim of the receiving tank. An 'approved air gap separation' shall be at least twice the diameter of the supply pipe measured vertically above the overflow rim of the vessel and shall in no case be less than one (1) inch (2.54cm).

(5) Reduced pressure backflow assemblies (RP). Reduced pressure backflow assemblies shall be installed above ground level and shall be placed a minimum of twelve (12) inches above the finished grade to allow clearance for repair work. A freeze-proof enclosure with a concrete slab at finished grade is recommended. Where it is impractical to install the assembly outside, the installation may be made inside the building in an area not susceptible to flooding. Proper free flowing/gravity drainage must be provided for the relief valve. If the drain line is to drain outside, then the termination point must be a minimum of twelve (12) inches above finished grade.

(6) Double check valve assemblies (DC). Double check valve assemblies can be installed above finished grade in a freeze-proof enclosure or below grade in a vault. If assembly is installed below grade the test cocks must be plugged with corrosion resistant watertight plugs. Assembly shall be a minimum of twelve inches above the floor.

(7) Bypass. If a bypass is installed around any approved backflow prevention assembly, the bypass must be protected from backflow/back pressure with the same type of backflow prevention assembly that it has bypassed. The backflow prevention assembly on the bypass must be installed according to the same requirements as the service line assembly.

(8) Thermal Expansion. The installation of a backflow assembly may create a closed system which may result in thermal expansion.

(b) Lost Pressure. The Town is not responsible for any pressure loss created by the installation of a backflow assembly.

**Sec. 13.10.006 Inspection, testing, and registration of backflow prevention assemblies.**

(a) Testing of backflow prevention assemblies. The owner, occupant, manager, or other person in control of any premises or the person responsible for the maintenance of the property on which, or on account of which, backflow prevention assemblies are installed, shall have the assemblies tested by a Prosper BPAT. Backflow prevention assemblies shall be tested annually and shall also be tested immediately after installation, relocation, repair or work performed upstream of the assembly. However, upon ten (10) days prior written notice by the Town to the owner, occupant, manager, or other person in control of the premises or the person responsible for the maintenance of the property must provide more frequent testing as required in the written notice.

(b) Report of backflow prevention assembly test. A Town of Prosper Backflow Prevention Assembly Test Report form (original form) shall be completed by a Prosper BPAT on each backflow prevention assembly tested. Each completed original form, together with the records of tests, repairs, or replacement, shall be submitted via town portal or email to the Public Works Department of the Town of Prosper within ten (10) calendar days after the testing, repair, replacement, or work performed upstream of the assembly.

(c) Test Results. Only backflow prevention assembly field test procedures approved by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research will be accepted. If an assembly fails, the Prosper BPAT shall immediately notify the Public Works Director or his designee in person or by phone during regular business hours of the Town of Prosper Public Works Department. If an assembly failure occurs at any time other than regular business hours, the Prosper BPAT shall notify the Public Works Director or his designee on the next regular business day.

Upon notification to the Public Works Director or his designee of assembly failure, the Public Works Director or his designee will notify the owner, occupant, manager or other person in control of any premises or the person responsible for the maintenance of the property of the time period that they have to repair or replace the assembly. The assembly shall be replaced or repaired within the time period set by the Public Works Director or his designee or within five (5)

calendar days from the date of assembly failure whichever date is sooner. In the event of assembly failure, the tester must contact the Public Works Directors designee.

(d) Registration and maintenance of backflow prevention assemblies.

(1) Each backflow prevention assembly located on property subject to this Plan shall be registered with the Public Works Department of the Town of Prosper.

(2) The owner, occupant, manager, other person in control of the property or the person responsible for the maintenance of the property is responsible for general maintenance and upkeep of all approved backflow prevention assemblies located thereon.

(3) Backflow prevention assemblies shall be tested, repaired, and/or replaced at the expense of the owner, occupant, manager, other person in control of the property or the person responsible for the maintenance of the property whenever such assemblies are determined to be defective by the Public Works Director or Building Official. An assembly is defective if it is not a properly installed backflow prevention assembly as required by this Department.

(e) New Plumbing or Plumbing Modifications. The Building Official or Public Works Director's designee shall inspect all new backflow prevention assembly installations, which are subject to this Plan and are required by application for a plumbing permit. A Customer Service Inspection form shall be completed by the Building Official or Public Works Director on each new plumbing installation or on plumbing modifications. Each completed form shall be received by the Public Works Department within ten (10) days after the inspection.

(f) Existing properties. The Public Works Directors designee shall inspect all existing properties connected to the potable water system for the purpose of determining whether a cross-connection exists and what type of backflow prevention assembly should be installed pursuant to this Plan.

(g) Existing backflow prevention assemblies. Properties with existing backflow prevention assemblies installed in their system, which have not been registered with the Public Works Director, as of the effective date of this Plan shall come into compliance with the provisions of this Plan within sixty (60) days of notification unless the Public Works Director finds a health hazard exists in which case the Public Works Director shall determine the appropriate time of compliance.

(h) Existing assemblies in compliance. The owner, occupant, manager, or other person in control of any premises or the person responsible for the maintenance of a property with existing assemblies, which comply with the provisions of this Plan, shall provide written proof that each such assembly has been properly maintained and serviced by a Prosper BPAT. If maintenance and service records are not available, the assembly shall be tested in accordance with the requirements of this Plan.

(i) Replacement. If the assembly is not capable of being tested, identified, or cannot be repaired, it must be replaced with an approved assembly in accordance with the requirements of this Plan.

(j) Testing Fee. A \$25.00 fee shall be submitted to the Town for each backflow

prevention assembly tested and shall be paid at the time that the Prosper BPAT files the Backflow Prevention Assembly Test Report form with the Town.

(k) Retesting Fee. A \$25.00 fee shall be submitted to the Town for each backflow prevention assembly that is required to be retested due to a deficiency or a violation of this Plan including, an invalid test report, or one of the following;

- Falsification of Backflow Prevention Assembly Test Report form
- Incorrect serial number
- Blank or incomplete information fields on Backflow Prevention Assembly Test Report forms,
- Prosper BPAT's test gauges are not registered with the Town
- Duplicate serial number on multiple Backflow Prevention Assembly Test Report forms
- Performing a Backflow Prevention Assembly Test using unapproved testing procedures
- Inappropriate registration with the Town
- BPAT is not registered with the Town of Prosper Public Works Department at the time the test(s) was performed.

(l) Retest procedure. The retest(s) shall be performed in the presence of the Public Works Director or his designee. The retest(s) shall be completed within five (5) business days from first notification. Any retest(s) required shall be performed by the Prosper BPAT or BPAT who is responsible for the deficiency or violation unless the Prosper BPAT or BPAT has resigned or lost their testing privileges. All retest(s) should be performed during normal Town business hours.

(m) Exemption. Atmospheric Vacuum Breakers are exempt from this section.

#### **Sec. 13.10.007      Quality assurance program.**

To assure the quality of the backflow prevention tests being performed each month at least one (1) but no more than five (5) Prosper BPATs will be randomly selected to be observed by the Public Works Director or his designee. The tester will be notified by certified mail to the address on file with the Town. When a tester has been chosen for random observation he/she shall have thirty (30) calendar days from the date of the letter to schedule and complete an approved observation with the Town Public Works department. Failure to do so shall result in the Prosper BPAT's testing privileges being suspended. Testing privileges shall not be reinstated until the observation has been completed and approved.

#### **Sec. 13.10.008      Removal of backflow prevention assembly.**

(a) Removal. Prior written approval must be obtained from the Public Works Director before a backflow prevention assembly may be removed or relocated.

(b) Discontinued use. The use of a backflow prevention assembly may be discontinued, and the assembly removed from service, upon written approval from the Public Works Director after presentation to the Public Works Director of sufficient written evidence to verify that a hazard no longer exists and is not likely to be created in the future.

(c) Relocation. A backflow prevention assembly may be relocated following written approval from the Public Works Director or his designee after presentation to the Public Works Director or his designee of sufficient written evidence to verify that the relocation will continue to provide the required protection and satisfy installation requirements. An assembly may not be removed for relocation unless water use is discontinued, until the relocation is complete, or until the service connection is equipped with other backflow protection approved by the Public Works Director or his designee and sufficient to prevent backflow during relocation. A retest will be required following the relocation of the assembly.

(d) Repair. A backflow prevention assembly may be removed for repair and a retest will be required following the repair of the assembly. Before an assembly is repaired, the Prosper BPAT shall notify the Public Works Director or his designee. The Public Works Director or his designee shall determine the time period allowed for repair of the assembly and determine whether water service will be discontinued during that time period.

(e) Replacement. An assembly may be removed and replaced. All replacement assemblies must be approved by the Public Works Director or his designee and must be commensurate with the degree of hazard involved. A retest will be required following the replacement of the assembly. Before an assembly is replaced, the Prosper BPAT shall notify the Public Works Director or his designee. The Public Works Director or his designee shall determine the time period allowed for replacement of the assembly and determine whether water service will be discontinued during that time period.

#### **Sec. 13.10.009 Requirements for Backflow Prevention Assembly Testers.**

(a) Registration. Prior to performing any testing of backflow prevention assemblies within the Town of Prosper, a backflow prevention assembly tester must be registered with the Town of Prosper.

(1) Eligibility for registration shall be conditioned upon applicant providing proof that they are currently licensed as a backflow prevention assembly tester by the Texas Commission on Environmental Quality and have not been found to be in violation of Section 12 of this Plan.

(2) Each applicant licensed as a backflow prevention assembly tester with the State shall furnish evidence to the Public Works Director to show that he/she has available the necessary tools and equipment to properly test and certify such assemblies. Serial numbers of all test gauges shall be registered with the Public Works Director. Registered serial numbers of test gauges shall be listed on tests and maintenance reports prior to being submitted to the Public Works Director. Each recorded test kit shall be tested annually for accuracy and calibrated to maintain a +/- two percent (+/-2%) accuracy factor. Failure to register the serial number or calibrate gauges annually shall be grounds for temporary suspension of a tester's registration until compliance with this requirement is attained.

(3) Registration shall remain in force provided that the tester maintains his/her eligibility for registration by complying with all requirements of this Plan and applicable State law. Evidence of renewal of the tester's TCEQ backflow prevention assembly testing license shall be furnished to the Public Works Director upon request. A tester shall advise the Public Works Director if the tester's State license is ever suspended or terminated.



within five (5) business days of notice to the tester of such suspension or termination.

(b) Registration Fee. An annual registration fee as found in appendix A shall be paid at the time an application for annual registration is submitted to the Public Works Director.

(c) Responsibilities of Testers. Prosper BPAT's shall be responsible for performing competent tests, issuing accurate reports of backflow prevention assemblies tested, filing timely backflow prevention assembly test reports and test fees to the Town. Prosper BPAT's shall not change the design or operational characteristics of a backflow prevention assembly during repair or maintenance without prior written approval of the Public Works Director.

**Sec. 13.10.010      Revocation of assembly tester registration.**

(a) Failure to make immediate notification of a backflow prevention assembly field test failure as required by this Plan shall result in revocation of the Prosper BPAT's registration.

(b) Refusal to perform retest(s) or pay appropriate fee as required by this Plan shall result in revocation of Prosper BPAT's registration.

(c) Submitting a falsified test report shall result in revocation of a Prosper BPAT's registration.

(d) The Public Works Director shall send written notice to the Prosper BPAT at the last known address on file for the Prosper BPAT informing the Prosper BPAT of a revocation. The date specified on the notice shall be the effective date of the revocation.

**Sec. 13.10.011      Prohibited conduct.**

The following actions or omissions are prohibited:

(a) Installing, allowing to remain installed, or maintaining a potable water supply, piping, or part thereof in such a manner that allows used, unclean, polluted, or contaminated water, mixtures, gasses, or other substances to enter any portion of the public potable water supply by reason of back siphonage, back pressure, or any other cause.

(b) Maintaining any water-operated equipment or mechanism or use of any water-treating chemical or substance if it is determined that such equipment, mechanism, chemical, or substance may cause pollution or contamination of the public potable water supply. Provided, however, that such equipment or mechanism may be permitted when equipped with a backflow prevention assembly approved by the Town.

(c) Connecting, allowing to be connected, or allowing to remain connected to the public potable water system any mechanisms or systems designed to return used water to the public potable water system.

(d) Connecting, allowing to be connected, or allowing to remain connected to the public potable water system an auxiliary water system without the prior written approval of the Public Works Director or his designee.

(e) Incorrectly installing a backflow prevention assembly or allowing an incorrectly

installed backflow prevention assembly to remain installed.

(f) Failing to report to the Public Works Director or his designee a backflow prevention assembly that failed a test.

(g) Falsifying any information in a backflow prevention assembly testing report submitted to the Town.

(h) Conducting a backflow assembly test without being registered with the Town.

(i) Conducting a backflow assembly test without a valid registration.

(j) Submitting an incomplete backflow prevention assembly testing report to the Town.

(k) Disconnecting, Removing, or discontinuing the use of a backflow prevention assembly without the written permission of the Public Works Director or his designee.

#### **Sec. 13.10.012 Private Customer Service Inspection**

(a) *Completion of a private customer service inspection (CSI).* The owner, manager, or other person in control of any premises, or the person responsible for the maintenance of the property on which, or on account of which, an auxiliary water supply exists, shall have the physical separation of the auxiliary water supply and the public water supply verified annually by a customer service inspector registered in the town. The verification of a physical separation between the auxiliary water supply and the public water supply must also be attended by a member of the town's Public Works Department who will perform a "meter disconnection test" during the CSI. The TCEQ "air gap" will only be allowed on existing systems that do not currently have an existing RPZ, as of the effective date of this article. The physical separation between the auxiliary water supply and the public water supply shall be verified annually and upon installation, relocation, repair or work performed upstream of the separation; however, upon ten (10) calendar days prior written notice by the town to the owner, occupant, manager, or other person in control of the premises, or the person responsible for the maintenance of the property must provide for more frequent inspection, as required in the written notice.

(b) *Report of private customer service inspection.* A town customer service inspection certificate (original form) shall be completed by a customer service inspector, licensed in accordance with TCEQ requirements, for each premises inspected. Each completed certificate shall be emailed to the Public Works Director or designee within ten calendar days of the inspection.

(c) *Customer service inspection fee.* A customer service inspection fee as found in appendix A to this Code shall be submitted to the Town for each customer service inspection completed and shall be paid at the time that the customer service inspector files the customer service inspection certificate with the Town.

(d) *Public Works fee.* A public works fee as found in appendix A to this Code shall be submitted to the Town to perform a meter disconnection test during each CSI, and shall be paid at the time that the customer service inspector files the customer service inspection certificate with the town.

**Sec. 13.10.013      Penalty.**

Any customer, as that term is defined pursuant to Title 30, Part 1, Chapter 291 of the Texas Administrative Code, as amended, failing to comply with the provisions of the Backflow Prevention Plan shall be subject to a fine of up to two thousand dollars (\$2,000.00) per day per occurrence and/or discontinuance of water service by the Town. Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Backflow Prevention Plan is a separate violation. The Town's authority to seek injunctive or other relief available under the law shall not be limited by this section."

**SECTION 3**

From and after the effective date of this Ordinance, Appendix A, "Fee Schedule," to the Town's Code of Ordinances is hereby amended to read as follows:

**"Sec. XVIII      Backflow Prevention Plan and Enforcement Fees**

The Town may elect to exercise the following administrative remedies for violations of the Town's Backflow Prevention Plan in lieu of pursuing criminal penalties against non-single family water account holders, such as business and professional parks, homeowners' associations, apartments, home builders, land developers, and entities other than customers residing at single family homes.

- (1)      Administrative Fees. The following administrative fees that will be assessed:

Backflow Registration Fee	\$100.00
Backflow Test (per assembly)	\$25.00
CSI Fee	\$25.00
Public Works Fee	\$50.00
Retest (per device)	\$25.00

- (2)      Contesting Violations. A non-single family water customer as defined above may request a hearing before a hearing officer(s) appointed by the Executive Director of Development and Community Services within fifteen (15) business days after the date on the Notice. The hearing officer(s) shall evaluate all information offered by the petitioner at the hearing. The customer shall bear the burden of proof to show why, by preponderance of the evidence, the administrative fee should not be assessed. The hearing officer(s) will render a decision in writing within three (3) business days of the conclusion of the hearing. A customer may appeal the decision from the hearing officer(s) in writing to the Executive Director of Development and Community Services within three (3) business days of the conclusion of the hearing. The decision by the Executive Director of Development and Community Services is final and binding.
- (3)      Paying Assessed Fees. If, after the expiration of the fifteen (15) business days from the date on the Notice, the customer has not requested an administrative hearing to contest the assessment of an administrative fee or paid the administrative fee, the Town shall apply and charge the assessed administrative fee to the customer's next Town Utility Bill.

(a) Unpaid assessed administrative fees related to violations of Backflow Prevention Plan restrictions under the Town Plan shall incur late payment penalties and may result in termination of water service.”

#### **SECTION 4**

All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.

#### **SECTION 5**

Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. Prosper hereby declares that it would have passed this Ordinance, and each section, subsection, sentence, clause or phrase thereof regardless of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

#### **SECTION 6**

The Town Manager or his designee is hereby directed to file a copy of the Town’s Backflow Prevention Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

#### **SECTION 7**

This Ordinance shall take effect and be in full force from and after its passage and publication, as provided by the Revised Civil Statutes of the State of Texas and the Home Rule Charter of the Town of Prosper, Texas.

**DULY PASSED AND APPROVED BY THE TOWN COUNCIL OF THE TOWN OF PROSPER, TEXAS ON THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2023.**

**APPROVED:**

\_\_\_\_\_  
**David F. Bristol, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Michelle Lewis Sirianni, Town Secretary**

**APPROVED AS TO FORM AND LEGALITY:**

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**Terrence S. Welch, Town Attorney**