



**THE CORPORATION OF THE
TOWN OF PENETANGUISHENE**

BY-LAW 2009-105

**Being a By-law to Provide For Backflow Prevention and Cross Connection Control
in the Town of Penetanguishene Municipal Drinking Water System**

WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, (the *Municipal Act, 2001*) provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under the Act;

AND WHEREAS section 8 of the *Municipal Act, 2001* provides that the powers of a municipality shall be interpreted broadly so as to confer broad authority on the municipality to enable the municipality to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues;

AND WHEREAS section 11 of the *Municipal Act, 2001* authorizes a lower tier municipality to pass by-laws with respect to public utilities;

AND WHEREAS section 80(1) of the *Municipal Act, 2001* as amended, authorizes a municipality at reasonable times, to enter on land to which it supplies a public utility to inspect, repair, alter or disconnect the service pipe or wire, machinery, equipment and other works used to supply the public utility;

AND WHEREAS section 80(2) of the *Municipal Act, 2001*, as amended authorizes a municipality to shut off or reduce the supply of the public utility;

AND WHEREAS section 80(3) of the *Municipal Act, 2001*, as amended, authorizes a municipality to enter on the land to shut off the supply of the public utility, to remove any property of the municipality or to determine whether the public utility has been or is being unlawfully used;

AND WHEREAS section 7 of the *Building Code Act*, S.O. 1992, c.23, as amended, (the *Building Code Act*) authorizes the municipality to enact by-laws to provide for classes of permits including permits in respect of any stage of construction;

AND WHEREAS Part 7 of the of the *Ontario Building Code* requires Potable Water systems to be protected from contamination, but limited to specific building uses;

AND WHEREAS section 11 of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended, requires every Owner and operator of a municipal drinking water system to ensure that all water provided by the system meets the requirements of drinking water quality standards and that the drinking water system is operated in accordance with that Act;

AND WHEREAS the Council of the Town of Penetanguishene deems it necessary to provide for Backflow prevention to protect the safety of the Municipal Drinking Water System.

NOW THEREFORE THE CORPORATION OF THE TOWN OF PENETANGUISHENE HEREBY ENACTS AS FOLLOWS:

1. DEFINITIONS:

1.1 In this By-law:

- a) "Backflow" means the flowing back of or reversal of the normal direction of flow of water.
- b) "Backflow Prevention Device" means a device that prevents Backflow.
- c) "Building" shall have the same meaning as set out in the *Building Code Act*, S.O. 1992, c. 23, as amended, or any successor thereof.
- d) "Chief Building Official" means the person duly appointed as such for the Town of Penetanguishene and includes a designate.
- e) "Cross Connection" means any actual or potential connection between a Potable Water supply or system, including the Municipal Drinking Water System, and any source of pollution or contamination. This includes any by-pass, jumper connection, removable section of pipe, swivel or changeover device and any other temporary or permanent connection arrangement through which Backflow may occur;
- f) "Cross Connection Control Program" is a program initiated by the Town to administer and regulate the selection, installation, testing, and maintenance of backflow prevention devices.
- g) "Cross Connection Survey" means a survey or report which must include existing Backflow Prevention Devices, Cross Connections discovered, corrective measures and recommendations on the standard Town Cross Connection Survey, as amended from time to time. The terms "Cross Connection Survey" and "Cross Connection Inspection Report" shall be interchangeable.
- h) "CSA Standard" means the document entitled CAN/CSA B64.10-94 & Amendments — Manual for the Selection, Installation, Maintenance and Field Testing of Backflow Prevention Devices published in 1994 by the Canadian Standards Association, or any successor thereof.
- i) "Fire Hydrant" means an upright pipe with a nozzle or spout for drawing water from a water main for the purpose of fighting fires and other municipal operational uses.
- j) "Hazard" means three levels of Hazard: minor (MH), moderate, (MoH) and high or severe (HH) as defined by CSA standard or any successor thereof.
 - 1. 'Minor Hazard' means an existing connection or potential connection between the domestic water pipe and any pipe, vat or tank intended for carrying or holding Potable Water, which has a low probability of becoming a moderate Hazard;
 - 2. 'Moderate Hazard' means an existing connection or potential connection between the domestic water pipe and any pipe, vat or tank intended for carrying or holding Potable Water; or a Cross Connection or potential Cross Connection involving any substance which has a low probability of becoming a severe Hazard and would constitute a nuisance or be aesthetically objectionable if introduced into the Municipal Drinking Water System;

3. 'Severe Hazard' means an existing connection or potential connection between the domestic water pipe and any pipe, vat or tank intended for carrying or holding Potable Water; or a Cross Connection or potential Cross Connection involving any substance in sufficient concentration to cause death, spread disease or illness, or contain any substance which has a high probability of causing such effect.
- k) "Municipal Drinking Water System" means the Town's system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water, and that includes:
- a) anything used for the collection, production, treatment, storage, supply or distribution of water;
 - b) anything related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system; and
 - c) a well or intake that serves as the source or entry point of raw water supply for the system.
- l) "Officer" means a Police Officer or a Municipal Law Enforcement Officer, and includes the Chief Building Official or designate.
- m) "Owner" means the registered owner of the lands and premises or the person or authorized agent in lawful control of the Premises, Building or occupancy and who permits the operation or maintenance of any business.
- n) "Person" means any Person, firm or corporation having control over property to which this By-law applies and includes the owner registered on the title of the property and any occupant of any Building located on such property.
- o) "Plumbing System" means a system for water and wastewater not on the Town right-of- ways and easements, separate from the Municipal Drinking Water System as defined in the *Ontario Building Code*, as amended.
- p) "Potable Water" means water that is safe for human consumption.
- q) "Premises" shall mean any house, tenement, Building, lot, or part of a lot, or both, in, through, or past which water service pipes run.
- r) "Premise Isolation" means isolation of the water Plumbing System within a Building or Structure from the Town's water supply.
- s) "Private Fire Hydrant" means an upright pipe with a nozzle or spout that is situated on private property for drawing water from a water main for the purpose of fighting fires.
- t) "Program Administrator" means the Director of Public Works for the Town of Penetanguishene. The Director may designate the Chief Water Operator or the Chief Building Official as his designate for the purpose of carrying out the duties of the Program Administrator as provided for and contained herein.

- u) "Qualified Person" means a private contractor with approved qualifications as set out in Schedule "A".
- v) "Source Isolation" means isolation of the water located within or having flowed through a source or potential source of contamination within a Building or Structure including a device, machine, water system or the like, from any Potable Water system.
- w) "Structure" means anything constructed or built permanently or temporarily which is provided with a source of Potable Water.
- x) "Town" means The Corporation of the Town of Penetanguishene.
- y) "Water Service Connection" means a piping connection that conveys water from the municipal Potable water main or private water source to the inside of a Premises.
- z) "Water Meter" means a device installed within a Premises to record the amount of water supplied to such Premises.
- aa) "Zone Isolation" means the isolation of the water located within an area of a Building or Structure from any Potable Water system located within such Building or Structure.

2. INTERPRETATION

2.1 Number

Words in the singular may include the plural and words in the plural may include the singular.

2.2 Gender

Specific terms include both sexes and include corporations.

3. APPLICATION OF BY-LAW

3.1 This By-law applies to all existing and future connections to the Municipal Drinking Water System within the Town of Penetanguishene.

3.2 In addition to and notwithstanding section 3.1, this By-law applies where a condition exists in any Building or Structure that may be a Hazard or detrimental to the Municipal Drinking Water System.

4. GENERAL PROVISIONS

4.1 The Program Administrator shall be responsible for all requirements associated with the program, including review, compliance, Backflow Prevention Device requirements and enforcement.

4.2 The Program Administrator may at any time order a Person to conduct tests, provide surveys and undertake any other measures required for the prevention of Backflow or protection of a Cross Connection.

4.3 Where a time frame is prescribed in this By-law, the Program Administrator may extend the time for compliance provided such extension is reasonably required and is acceptable to the Program Administrator.

4.4 All Cross Connection Surveys and test reports are to be submitted to the Program Administrator.

5. PROTECTION FROM CONTAMINATION AND BACKFLOW PREVENTION

5.1 Installation of Backflow Prevention Device – Required

In accordance with the provisions of this By-law, every Person having control over property to which this By-law applies shall ensure that a Backflow Prevention Device is installed in respect of Premise Isolation, Source Isolation and/or Zone Isolation in every Building or Structure where a Municipal Drinking Water System or other Potable Water exists. The installation of any Backflow Prevention Device shall be undertaken upon issuance of a building permit issued to the property owner, or authorized agent, who has filed a complete building permit application. Said devices shall not be deemed in service until the installation has been accepted by the Chief Building Official.

5.2 Offence - Cross Connections Prohibited

It shall be an offence for a person to connect, cause to be connected, or allow to remain connected to the water supply and Municipal Drinking Water System any piping, fixture, fitting, container or appliance, in a manner which under any circumstances, may allow untreated water, waste water, any source of pollution or any other liquid, chemical or substance to enter the water supply and Municipal Drinking Water System.

5.3 Offence – Auxiliary Water Supply Connections Prohibited

It shall be an offence for a person to connect, cause to be connected, or allow to remain connected, any auxiliary water supply to the Municipal Drinking Water System.

6. CROSS CONNECTION SURVEYS

6.1 Commercial Water Billing - Inspection Surveys

Persons responsible for any Buildings billed for water (WS) as a “Commercial Water Billing Account (WC)”, being Institutional, Commercial, Industrial (ICI) or large volume consumers, shall retain a Qualified Person, at the owner’s expense, to prepare Cross Connection Surveys as required.

6.2 Survey - Qualified - Person

The Cross Connection Survey shall be completed, at the owner’s expense, by a Qualified Person, of the property's piping system starting at the Water Service Connection (property line service box) of all Commercial Water Billing Accounts (WC), pursuant to section 6.1.

6.3 Survey - Details - Date

The initial Cross Connection Survey shall be submitted to the Program Administrator before the date stated in section 13. The Cross Connection Survey shall include:

- a) a detailed drawing of the piping system
- b) existing Backflow Prevention Devices
- c) a summary, including dates, of Backflow Prevention Device inspection and testing over the previous six (6) years
- d) Cross Connections discovered
- e) corrective measures
- f) recommendations; and
- g) a schedule of work to be completed

The inspection Survey must also assess a health Hazard level designation and the method of Cross Connection control and/or selection and installation of Backflow Prevention Devices according to the CSA Standard or any successor thereof.

6.4 Survey - Not Provided - Water - Shut-off

A Cross Connection Survey shall be completed and submitted as required. If the Survey is not provided within the time frame required, the Program Administrator may, at his discretion, shut off the supply of water to the Premises until such time as the Survey is provided.

6.5 Survey - Submission - Date

A Cross Connection Survey shall be completed and submitted to the Program Administrator no more than five (5) years and two (2) months from the date of the previous Survey.

6.6 Access - Reasonable Notice and Owner's Expense

Notwithstanding the obligations for Persons to undertake a Cross Connection Survey, the Town shall be allowed access, with reasonable notice, to any Premises that are connected to the Municipal Drinking Water System for the purpose of performing inspections to locate possible Cross Connections. The Program Administrator may require a routine Cross Connection inspection of the Premises to be performed by a Qualified Person, at the owner's expense.

6.7 Access - Not Provided - Water - Shut-off

Where the access is not provided, a written notice by the Program Administrator may be issued providing the time frame to allow access. If access is not provided within this time frame, the Program Administrator may, at his discretion, shut off the supply of water to the Premises until such time as the access is provided. Any costs associated with shut off and/or reconnections shall be at the owner's expense.

6.8 Compliance Notice

If a condition is found to exist which is contrary to this By-law, the Program Administrator may issue a compliance notice to the Person, to be compliant with this By-law. If determined, in the Program Administrator's sole discretion, that an immediate threat of contamination to the Municipal Drinking Water System exists that may endanger public safety, the Program Administrator may shut off the water service immediately without notice. Any costs associated with shut off and/or reconnection shall be at the owner's expense.

7. BACKFLOW - STANDARDS

7.1 Except as otherwise set out in this By-law, the installation, maintenance, and field testing of Backflow Prevention Devices shall be in accordance with CSA Standard or any successor thereof.

7.2 Every Person having control over property to which this By-law applies shall ensure that every Backflow Prevention Device required for Premise Isolation on the property is, in the case of non-residential properties, a testable device, and is the proper device to be used pursuant to Section 5.1 of this By-law.

7.3 The Backflow Prevention Device, whether it be for Premise Isolation, Source Isolation or Zone Isolation, shall be determined by a Qualified Person using the *Ontario Building Code*, as amended, or any successor thereof and the CSA Standard, as amended, or any successor thereof.

7.4 Despite Section 5.1 of this By-law, where a Source Isolation Backflow Prevention Device has been previously installed by the manufacturer of equipment, the Cross Connection is required to be reviewed by an approved company or Person as prescribed in the authorized functions listed in Schedule "A" to this By-law – Qualified Persons, to determine if the Backflow Prevention Device meets the selection specifications. These Cross Connections are to be clearly indicated on the Cross Connection Survey.

8. INSTALLATION OF BACKFLOW PREVENTION DEVICES

8.1 Every person installing a Backflow Prevention Device shall ensure that:

a) such device is installed in accordance with acceptable engineering practices and the requirements of the *Ontario Building Code*, as amended or any successor thereof; and applicable regulations, this by-law and the CSA Standard or any successor thereof;

(b) such device is located in such a manner so that in the event of backflow the device prevents contamination of the Municipal Drinking Water System and any other Potable Water system;

(c) where such device is installed in respect of Premise Isolation, such device is located within a maximum of 3.0 metres downstream of the water meter, except where circumstances require the device to be installed upstream of the water meter and such location is to the satisfaction of the Program Administrator;

9. CROSS CONNECTION COMPLIANCE

9.1 Survey - Review - Compliance Notice

The Program Administrator will review the submitted Cross Connection Survey and if there are deficiencies, issue a compliance notice that may support the recommendations contained in the Cross Connection Survey and may contain additional or alternative requirements deemed by the Program Administrator as required under this By-law.

9.2 Compliance Notice - Qualified Person - 30 Days

The Person receiving the compliance notice shall retain a Qualified Person to undertake the required works within thirty (30) business days of receipt of written notification and advise the Program Administrator in writing of completion of the work by submitting a Corrective Actions form.

9.3 Compliance Notice - Failure to Comply

If the Person to whom the Program Administrator has issued a compliance notice fails to comply with the notice, the Program Administrator, at his discretion, may:

- a) give notice to the Person to correct the fault, at the Person's expense, within five (5) business days and if the notice is not complied with, the Program Administrator may then shut off the water service or services; or
- b) refer the non-compliance to the Chief Building Official who may consider issuing an Unsafe Order in accordance with the *Building Code Act* in a condition that could be hazardous to the health or safety of Persons in the normal use of the Building, persons outside the Building or persons who access the Building; or
- c) without notice to the Person having control over the property, shut off water service, where the Program Administrator has determined, in his sole discretion, that an immediate threat of contamination to the Municipal Drinking Water System exists that may endanger public safety or health.

10. PREMISE ISOLATION

10.1 Contamination - Risk

Where, in the opinion of the Program Administrator, a risk of possible contamination of the Municipal Drinking Water System exists, a Person, on notice from the Program Administrator shall install, at the Person's expense, Premise Isolation within the Building in addition to any other source of protection devices on the premise.

10.2 Specification

Premise Isolation shall be installed:

- a) in Buildings of high or severe Hazard in accordance with Premise Isolation requirements as stated in the Ontario Building Code – Part 7 – Plumbing; or
- b) as specified by the Program Administrator.

11. MAINTENANCE AND FIELD-TESTING OF BACKFLOW PREVENTION DEVICES

11.1 Commercial Water Billing - Moderate - Severe Hazard

This section applies to all Industrial, Commercial and Institutional (ICI) water account holders, described in section 6.1 for which a Moderate or Severe Hazard has been identified.

11.2 Qualified Person - Inspection – Annual Testing Schedule

Person(s) responsible for Buildings and Structures shall retain a Qualified Person, as per Schedule "A" to inspect and test, at the expense of the owner, to demonstrate that the Backflow Prevention Device is in good working condition. Such inspection and testing shall be completed prior to or in conjunction with the initial Cross Connection Survey and within thirteen (13) months of the previous

testing thereafter. All equipment used to test Backflow Prevention Devices shall be verified or calibrated for accuracy, as described in the CSA Standard or any successor thereof.

11.3 Five Days - Repair - Replace

When the results of a test show that a Backflow Prevention Device is not in good working condition, the Person shall make repairs or replace the device within five (5) business days of issuance. A corrective actions form shall be submitted by the Qualified Person detailing necessary repairs and a completion date immediately after inspection.

11.4 Five Days - Water Shut-Off

If a Person does not make the appropriate repairs or replace the defective device within five (5) business days, the Program Administrator may shut the water service or services off.

11.5 Backflow Prevention Device Tested

If a Person fails to have a Backflow Prevention Device tested, the Program Administrator may notify the Person that the Backflow Prevention Device must be tested within a specified time.

11.6 Backflow Prevention Device - Water Shut-Off

If a Person fails to have a Backflow Prevention Device tested within the specified time of the notice, the Program Administrator may shut off the water service or water services until the Backflow Prevention Device has been tested and approved. Any costs associated with shut off and/or reconnection shall be at the owner's expense.

11.7 Documentation Maintained

Current documentation of inspection and testing shall be maintained by the Owner on the Premises for inspection by the Program Administrator upon request.

12. OFFENCE - REMOVAL OF BACKFLOW PREVENTION DEVICES PROHIBITED

12.1 It shall be an offence for a person to remove a Backflow Prevention Device or part thereof after it has been installed and no owner of a Building or Structure in which a Backflow Prevention Device is installed shall cause or permit the removal of such device unless such removal is:

- a) to facilitate the repair of the device and such device is replaced immediately after such repair is carried out, or
- b) to replace the device with another device that meets or exceeds the provisions of this By-law, and written notification must be received by the Program Administrator prior to removal of the device.

13. INSPECTION SURVEY, IMPLEMENTATION AND RETESTING SCHEDULE

13.1 Requirements

The requirements under this By-law shall be undertaken as follows:

a) **ICI Water Billing Accounts (Institutional, Commercial, Industrial and Large Volume Consumers)**

Submission of Initial Cross Connection Survey is due within two months of awareness that a Survey is required. The implementation deadline for completion of Survey recommendations is to be determined by the Program Administrator and shall be at least three months but will not exceed one year from the original Survey submission. For new Buildings and renovations that include plumbing, a Cross Connection Survey shall be submitted prior to issuance of the Water Meter installation permit. Retesting shall be scheduled as set out in section 11.2.

b) **Residential Water Billing Accounts – Survey and Testing not Required**

All new dwelling units must have a Backflow Prevention Device installed prior to connection to the Town's Municipal Drinking Water System. This device will be part of the Water Meter package that must be purchased through the Town. Inspection and approval will be granted at the same time the Water Meter is tested and sealed. Inspection Surveys and scheduled testing of Backflow Prevention Devices shall not be required for low volume residential units. The Town shall install Backflow Prevention Devices in existing residential units where practical and in conjunction with Water Meter replacements, at the owner's expense. The Backflow Prevention Devices installed shall become the responsibility of the owner of the dwelling unit.

13.2 Surveys - Submission

All Cross Connection Surveys are to be submitted to the Program Administrator at:

The Corporation of the Town of Penetanguishene
P. O. Box 5009
10 Robert Street West,
Penetanguishene, ON L9M 2G2
Public Works Department
Attn: Program Administrator

14. FIRE HYDRANTS

14.1 Offence - Fire Hydrant - Connection

It shall be an offence for a person to connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container or appliance to a municipally-owned or Private Fire Hydrant in a manner which, under any circumstances, may allow water, wastewater or any liquid or substance of any kind to enter the Town's water supply system.

15. LAWN SPRINKLER SYSTEMS

15.1 Sprinkler System - Backflow Prevention

After January 1, 2010 all new sprinkler systems must be connected downstream of the Premises' Water Meter. The Building's water supply must include Backflow Prevention Devices. The system must be installed in compliance with the *Ontario Building Code*.

15.2 Compliance - Date

By December 31, 2010, all systems installed prior to January, 2010 must be compliant with the requirements of section 15.1. The Program Administrator may grant an extension to this compliance date for existing systems.

16. SEVERABILITY AND RESTRICTIVE PROVISIONS

16.1 If a court of competent jurisdiction should declare any section or part of a section of this By-law to be invalid such section or part of a section shall not be construed as having persuaded or influenced Council to pass the remainder of this By-law and it is hereby declared that the remainder of this By-law shall be valid and shall remain in force.

16.2 Where the provisions of this By-law conflict with the provisions of any other by-law or Act, the more restrictive provisions shall apply.

17. POWERS OF ENTRY

17.1 An Officer may enter on a lot at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:

- a) the provisions of this By-law;
- b) a direction or order issued under this By-law; or
- c) an order made under Section 431 of the *Municipal Act, 2001*.

17.2 Where an inspection is conducted by the Town, an Officer may:

- a) require the production for inspection of documents or things relevant to the inspection;
- b) inspect and remove documents or things relevant to the inspection for the purpose of making copies or extracts;
- c) require information from any person concerning a matter related to the inspection including their name, address, phone number and identification;
- d) alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purposes of the inspection.

17.3 If a sample is taken under clause 17.2 (d) and the sample has not been divided into two parts, a copy of any report on the sample shall be given to the Person from whom the sample was taken.

17.4 A receipt shall be provided for any document or thing removed under clause 17.2 (d) and the document or thing shall be promptly returned after the copies or extracts are made.

17.5 Copies of or extracts from documents and things removed under this section and certified as being true copies of or extracts from the originals by the Person who made them are admissible in evidence to the same extent as, and have the same evidentiary value as, the originals.

17.6 Every owner or person occupying the property shall permit an Officer to inspect any land for the purposes as set out in this By-law. An Officer may be accompanied by a person under the Officer's direction.

17.7 The Town may undertake an inspection pursuant to an order issued under s. 438 of the *Municipal Act, 2001*.

17.8 Power of entry may be exercised by an Officer as defined in this By-law.

18. NOTICE OF NON-COMPLIANCE

18.1 An Officer may issue a notice of non-compliance to any person who has contravened a provision of this By-law.

19. OFFENCE - OBSTRUCTION

19.1 It shall be an offence for a person to hinder or obstruct, or attempt to hinder or obstruct, an Officer who is exercising a power or performing a duty under the *Municipal Act, 2001* or under a by-law passed under the *Municipal Act, 2001*.

19.2 Any person who has been alleged to have contravened any of the provisions of a by-law passed under the *Municipal Act, 2001*, shall identify themselves to the Officer upon request. Failure to do so shall be deemed to have obstructed or hindered the Officer in the execution of the Officer's duties.

20. PENALTY PROVISIONS

20.1 Any Person who contravenes any provisions of this By-law is guilty of an offence and upon conviction is liable to a fine as provided in the *Provincial Offences Act, R.S.O. 1990, c. P.33*, as may be amended from time to time.

21. FEES

21.1 Installation of Backflow Prevention Devices shall be subject to building permit fees as outlined in the Town's Composite Fee By-law, as amended and the Town's Building By-law, as amended.

22. SHORT TITLE

22.1 This By-law may be cited as the "Backflow Prevention and Cross Connection Control By-law".

23. SCHEDULES

23.1 Schedule "A" being a *List of Qualified Persons*, is attached and forms part of this By-law.

24. FORCE AND EFFECT

24.1 This By-law shall come into force and take effect on the date of passing.

BY-LAW read a first, second and third time and finally passed by Council on the 9th day of December, 2009.

MAYOR

Signed

ACTING CLERK

**THE CORPORATION OF THE TOWN OF PENETANGUISHENE
SCHEDULE "A" TO BY-LAW NUMBER 2009-105**

LIST OF QUALIFIED PERSONS

ITEM	FUNCTION	Professional Engineer with Tester's License	*Certified Engineering Technologist with Tester's License	Licensed Master Plumber with Contractor and Tester's License	**Journeyman Plumber with Tester's License	***Apprentice Plumber with Tester's License	Fire System Sprinkler Fitter with Tester's License	Lawn Irrigation Installer with Tester's License
1	Carry out Cross Connection Survey	√	√	√	√			
2	Install, Relocate or Replace Backflow Prevention Device			√	√	√		
3	Repair of Backflow Prevention Device	√	√	√	√	√		
4	Test Backflow Prevention Device	√	√	√	√	√		√
5	Items 2,3, & 4 above in respect of Fire Protection Systems****	√	√	√	√	√	√	
6	Item 3 & 4 above in respect of Lawn Sprinkler Systems	√	√	√	√	√		

* Required to be under the direction of a Professional Engineer

** Required to be employed by a Licensed Plumbing Contractor

*** Required to be employed by a Licensed Plumbing Contractor and under the direct supervision of a Journeyman Plumber or Master Plumber.

**** Design and specifications of devices to be installed will require a qualified designer in accordance with the provisions of the Ontario Building Code