

THE CORPORATION OF THE TOWNSHIP OF WOOLWICH
BY-LAW NO 65-2022

BY-LAW TO REGULATE THE BACKFLOW OF WATER INTO A WATER
DISTRIBUTION SYSTEM THAT IS UNDER THE JURISDICTION OF
THE CORPORATION OF THE TOWNSHIP OF WOOLWICH

WHEREAS section 11(2) and (6) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality to pass by-laws respecting the health, safety and well-being of persons;

AND WHEREAS section 11(3) and (4) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality to pass by-laws respecting public utilities;

AND WHEREAS the term “public utility” includes systems that are used to provide water and sewage services for the public;

AND WHEREAS section 80(1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality, at reasonable times to, 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 or to inspect, repair, replace or alter a public utility meter;

AND WHEREAS section 80(2) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality to, for the purposes of s. 80(1), shut off or reduce the supply of the public utility to the land;

AND WHEREAS section 80(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality to enter on 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, if a customer discontinues the use of a public utility on land or a municipality lawfully decides to cease supplying the public utility to land;

AND WHEREAS section 82(1) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, states that a municipality is not liable for damages caused by the interruption or reduction of the amount of a public utility supplied to a municipality or to the land of any person as a result of an emergency or a breakdown, repair or extension of its public utility if, in the circumstances, reasonable notice of its intention to interrupt or reduce the supply is given;

AND WHEREAS section 391(1)(a) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, authorizes a municipality to impose fees or charges on persons for services or activities provided or done by or on behalf of it;

AND WHEREAS section 445 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, states that if a municipality is satisfied that a contravention of a by-law of the municipality passed under this or any other Act has occurred, the municipality may make an order requiring the person who

contravened the by-law or who caused or permitted the contravention or the owner or occupier of the land on which the contravention occurred to do work to correct the contravention;

AND WHEREAS section 446 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, states that if a municipality has the authority under this Act or under a by-law under this or any other Act to direct or require a person to do a matter or thing, the municipality may also provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense.

NOW THEREFORE the Council of the Corporation of the Township of Woolwich hereby enacts as follows:

Short Title

1. This by-law shall be known as the "*Backflow Prevention By-Law*".

Definitions

2. For the purposes of this By-law, the following terms shall have the corresponding meanings:

"*applicant*" means the owner of lands or their authorized agent requiring services.

"*area isolation*" means protection provided for a section of a piping system with potable and non-potable connections (that may or may not be considered cross-connections) downstream of a backflow preventer.

"*ASSE*" means the American Society of Sanitary Engineering.

"*authorized person*" means a person who is authorized to carry out such functions as set out in the Authorized Functions List of the CSA Standard.

"*auxiliary water supply*" means any water source or system other than the Township's direct water supply that may be available in a building or on any property, including any recycled water or cistern.

"*AWWA*" means the American Water Works Association.

"*backflow*" means the flowing back of or reversal of the normal direction of flow of water.

"*backflow prevention device*" means a device that prevents backflow and includes, but is not limited to, a reduced pressure principle assembly, a dual check valve, a double check valve.

"*back pressure*" means a pressure that is greater than the water system supply pressure.

"*back siphonage*" means a form of backflow caused by a negative or sub-atmospheric pressure within a water system.

"*building*" shall have the same meaning as set out in the *Building Code Act*.

“*Building Code*” means the regulation made under Section 34 of the Building Code Act.

“*Building Code Act*” means *Building Code Act*, 1992, S.O. 1992, c. 23 as amended.

“*Chief Building Official*” means a chief building official of the Township, or designate, appointed or constituted under sections 3 or 4 of the *Building Code Act*.

“*Council*” means the Council of the Corporation of the Township of Woolwich

“*Cross Connection*” means any actual or potential connection between a potable water supply or system and any source of pollution or contamination and includes any by-pass, jumper connection, removable section of pipe, swivel or changeover device and any other temporary or permanent connecting arrangement through which backflow can occur.

“*Cross Connection Survey Form*” means a form maintained and provided by the Township of Woolwich, as amended from time to time.

“*CSA Standard*” means the document entitled *National Standard of Canada – CAN/CSA-B64.10 and Amendments – Manual for the Selection, Installation, Maintenance and Field Testing of Backflow Prevention Devices – Plumbing Products and Materials – A National Standard of Canada* published in 1997 by the Canadian Standards Association or any successor thereof.

“*Director*” means the Director of Infrastructure Services for the Township of Woolwich or designate.

“*good repair*” means free from health hazard; free from fire hazard; in good working order; not in poor condition by way of deterioration, neglect, damage or defacement; able to perform its intended function; and protected from freezing.

“*individual protection*” means protection at the connection to a fixture or appliance.

“*Owner*” means any person, firm or corporation having control over property to which this Chapter applies and includes the owner registered on the title of the property and any occupant of any building or structure located on such property.

“*OWWA*” means the Ontario Water Works Association.

“*Potable Water*” means water that is safe for human consumption.

“*premise isolation*” means isolation of the water supply that is provided at the entrance to a building or facility from the Township’s water supply.

“*survey*” means a complete review of the potable water system or systems located within a building to determine the presence of any existing backflow prevention systems and/or any cross connections, corrective measures, recommendations and a date for which each device will be installed.

“*testable*” means the ability to conduct tests to determine if a device is functioning properly.

“*tester*” means a person who is a certified backflow prevention device tester who has successfully completed a cross connection course in backflow prevention device testing

at an accredited school or college as defined in the CAN/CSA B64.10 and has a current tester's certificate.

"*Test Report*" means a report in the form as prescribed by the Township from time to time.

"*test tag*" means a tag indicating that the backflow prevention device is in working order as indicated through the Test Report in the form as prescribed by the Township from time to time.

"*Township*" means the Corporation of the Township of Woolwich and includes its employees, servants and agents.

"*water meter*" means the water meter installed within a premise to record the amount of water supplied to such premise by the Township.

"*water purveyor*" means the owner and operator of a water system.

"*water system*" means any Township owned and operated water supply and distribution system.

"*zone isolation*" means the protection provided for sections of a piping system within a building or facility with no potable connections downstream of a backflow preventer.

Application

3. This by-law applies to all properties within the *Township*, except *buildings* or structures of residential occupancy where each dwelling unit is individually serviced from the water system through a single connection less than 2 inches in diameter.
4. Notwithstanding Section 3, this by-law applies,
 - a. to plumbing in buildings or structures of residential occupancy having connections to the *water system* with:
 - i. Any auxiliary water supply; or,
 - ii. A lawn sprinkler system; or,
 - iii. A fire protection system, except for a residential full flow-through fire sprinkler/standpipe system.
 - or;
 - b. where a condition exists in any *building* or structure that may be hazardous or detrimental to *potable water* supply and services as determined by the *Chief Building Official, Director* or designate, or in any other situation where it has been deemed appropriate by the *Chief Building Official, Director* or designate.

General Provisions

5. A permit is required prior to installation of a backflow prevention device(s) pursuant to this by-law and any other relevant Township by-law as well as the *Building Code Act*.
6. Every owner of a property upon which a backflow prevention device is installed shall ensure that such device is in proper working order and good repair at all times.

Cross Connection Prohibited

7. No person or owner shall connect, cause to be connected or allow to remain connected to the water system or any other potable water system any piping, fixture, fitting, container, appliance, vehicle, machine or the like in a manner which may under any circumstance allow water, waste water, any source of pollution or any other liquid, chemical or substance to enter such supply or system except in compliance with this by-law and the CSA standard.
8. No person or owner shall make any connection to the water purveyor or any other potable water system in a building type set out in Section 3 without first installing a proper backflow prevention device in accordance with this by-law.
9. In all cases, premise isolation shall be required where an auxiliary water supply system exists.
10. No connection shall be made between a potable water system supplied with water from a drinking water system and any other water system without the consent of the Director.

Persons Permitted to Carry Out Work

11. No person shall carry out any backflow prevention functions except in accordance with the functions listed in the Authorized Functions List of the CSA Standard.
12. Any person permitted to carry out work, shall produce, upon request by the Township or representative, a current tester's certificate, and a copy of the backflow prevention assembly test certification of calibration.

Application of CSA Standard

13. Except as otherwise set out in this by-law, the selection, maintenance and field testing of backflow prevention devices shall be in accordance with the CSA Standard and the *Building Code*.
14. Wherever the CSA Standard and this by-law are in conflict, the provisions of this by-law shall prevail where the CSA Standard is not incorporated as a part of the *Building Code*.

Selection of Backflow Prevention Devices

15. Every owner of a building type set out in Section 3 and 4 of this by-law, shall ensure that backflow prevention device(s) are installed for premise isolation, individual isolation, zone and area isolation in every building where a Township water supply or other potable water exists pursuant to the provisions of this by-law.

16. Backflow prevention devices for premise, individual, zone or area isolation shall be determined:
 - a. By using the CSA Standard and/or the *Building Code*; or,
 - b. When the type of cross connection is not identified in the CSA Standard or in the *Building Code*, by a professional engineer using the CSA Standard.
17. Notwithstanding Section 16 of this by-law, the Township may require or permit particular backflow prevention device(s) or form of protection be used in respect of any cross connection, including premise, zone, area and individual protection.
18. Notwithstanding Section 16 of this by-law, where the manufacturer of equipment has installed a backflow prevention device, the cross connection is required to be reviewed to determine if the backflow prevention device meets the requirements of the CSA Standard. These cross connections are to be indicated on the Cross Connection Survey Form when a Survey is required.
19. Every owner shall ensure that every backflow prevention device required for premise isolation on their property is a testable device and is the proper device to be used pursuant to Section 16 of this by-law.

Required Surveys

20. Upon inspection and/or notification of the Chief Building Official, or when otherwise ordered, every owner of a building of a type set out in Section 3 and 4 shall cause to be carried out a survey, at the owner's expense, of each of their buildings and structures to determine the presence of any existing backflow prevention systems and/or cross connections, corrective measures, recommendations and a date for which each device will be installed and:
 - a. Shall ensure such survey is carried out by a person permitted to do so pursuant to the Authorized Functions List;
 - b. Shall ensure that the completed Cross Connection Survey Form is complete and includes the current testers certificate number; and,
 - c. Shall ensure that the completed Cross Connection Survey Form, is provided to the Chief Building Official within the specified time period.
21. A Cross Connection Survey Form shall be completed:
 - a. Upon inspection and/or notification or when otherwise ordered;
 - b. Upon change of use, changing of machinery, fixtures or alteration of the piping; and/or,
 - c. Construction of a new building type set out in Section 3.

Installation of Backflow Prevention Devices

22. Every person installing a backflow prevention device shall ensure that:
- a. Such device is installed by a licensed plumber in accordance with acceptable engineering practices, the requirements of the *Building Code*, manufacturer's specifications, this by-law and the CSA Standard, as amended;
 - b. Such device is installed in a building;
 - c. Such device is located in such a manner so that, in the event of backflow, the device prevents contamination of the water system and any other potable water system;
 - d. Such device is installed in respect of premise isolation, such device is located within a maximum of 2.0 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 Chief Building Official;
 - e. Where such device is installed in respect of premise isolation, all piping between the water meter and such device is clearly labeled "no connection permitted"; and,
 - f. Where such device is installed in respect of individual, area, or zone isolation, all piping between the point of contamination or potential contamination and the point at which the device is located is labeled "non-potable water."
23. Connections to potable water systems shall be designed and installed so that non-potable water or substances that may render the water non-potable cannot enter the system.
24. Once the Chief Building Official has conducted an inspection and determined that a backflow prevention device(s) is required, the installation of a backflow prevention device(s) shall occur within the timelines outlined below, depending upon the degree of hazard:

Degree of Hazard	Compliance Date
"Severe", as defined by The CSA Standard	Within sixty (60) calendar days from the date of the Building Official's inspection
"Moderate" to "Minor", as Defined by the CSA Standard	Within ninety (90) calendar days from the date of the Building Official's inspection.

Testing of Devices

25. Every owner who has a testable backflow prevention device located on their property shall ensure that:

- a. A tester tests the device when it is first installed and annually thereafter or as required by the CSA Standard or earlier if requested by the Chief Building Official and also when it is cleaned, repaired, overhauled or relocated;
 - b. When the device is first installed and tested, that the results, of such test be submitted electronically, within fourteen (14) days of the test being conducted;
 - c. When the device is tested annually thereafter, that the test results, of such test be available on site for review and submitted electronically to third-party service provider;
 - d. When the device is tested as a requirement for maintenance or as required by the CSA Standard, that the test results, of such test be available on site for review and submitted electronically to third-party service provider;
 - e. When the device is tested as requested by the Chief Building Official, that the test results, of such test be submitted electronically to third-party service provider; within fourteen (14) days of the test being conducted;
 - f. When a device is tested and test results submitted, said results are retained on site for a period of not less than seven (7) years;
 - g. Whenever a device is tested, the tester shall ensure that the device is clearly tagged with the testers tag and clearly state all applicable information; and,
 - h. All test information shall be submitted electronically to the Township's third-party backflow service provider.
26. Every person who tests a backflow prevention device shall carry out such testing in accordance with this by-law and the CSA Standard and be licensed by OWWA or AWWA.
27. In addition to the testing methods set out in Section 6 of the CSA Standard, test procedures established by the ASSE or AWWA for testing backflow prevention devices may be employed.
28. Every person who tests a backflow prevention device shall upon finding that such device is malfunctioning or otherwise not in good repair, shall immediately make repairs or replace the device and notify the Chief Building Official.
29. Authorized persons undertaking a survey shall ensure that they report to the Chief Building Official immediately any cross connections.
30. Where required by the *Building Code* and the CSA Standard, all equipment used to test a backflow preventer shall be verified or calibrated for accuracy.

Fire Protection Systems

31. Potable water connections to fire protection systems (standpipe and sprinkler systems) shall be protected against backflow in accordance with the CSA Standard and the *Building Code*.

Inspections

32. Given reasonable notice The Chief Building Official may at any time enter onto the property of any owner to inspect for compliance with this by-law.
33. No person shall hinder or obstruct, or attempt to hinder or obstruct, the Chief Building Official in the exercise of a power or performance of a duty under this by-law.
34. For the purposes of conducting an inspection the Chief Building Official 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 purposes of making copies or extracts;
 - c. Require information from any person concerning a matter related to the inspection; and,
 - 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.

Contraventions and Orders

35. Where the Township is satisfied that a contravention of this by-law has occurred, the Chief Building Official may make an order, requiring that the person who contravened this by-law, or who caused or permitted the contravention, or the owner or occupier of the land on which the contravention occurred to do work to correct the contravention.
36. An order shall set out:
 - a. Reasonable particulars of the contravention adequate to identify the contravention and the location of the land on which the contravention occurred; and,
 - b. The work to be done and the date by which the work must be done.
37. An order may require work to be done even though the facts which constitute the contravention of the by-law were present before the by-law, making them a contravention when the by-law came into place.
38. Where an owner fails to comply with an order within the prescribed period of time, the Chief Building Official may cause the required work to be done at the person's expense.
39. For the purposes of Section 37 the municipality may enter upon land and/or into building at any reasonable time.
40. The municipality may recover the costs of doing a matter or thing under Section 37 from the person directed or required to do it by action or by adding the costs to the tax roll and collecting them in the same manner as the property taxes.

41. Where an owner of a building contravenes, or allows the contravention of, a provision of this by-law which could or would endanger the health or safety of any person, as determined by the Chief Building Official or the Director, the Township may shut off the water supply to the building or property of that owner, or any portion thereof, until the real or potential danger to health or safety ceases to exist.

Removal of backflow Prevention Devices Prohibited

42. No person shall remove a backflow prevention device or part thereof after it has been installed and no owner of a building 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 the by-law.

Offences

43. Every person who contravenes any of the provisions of this bylaw or fails to comply with an order, direction or other requirement of this bylaw is guilty of an offense and, upon conviction, is liable to a fine pursuant to the *Provincial Offences Act*, R.S.O. 1990, c. P.33, as amended.
44. If this bylaw is contravened and a conviction entered, in addition to any other remedy and to any penalty imposed by the bylaw, the Court in which the conviction has been entered and any court of competent jurisdiction thereafter may make an order prohibiting the continuation or repetition of the offence by the person convicted.
45. Failure to comply with any of the provisions of this bylaw may result in the immediate loss of the provision of potable water which may include water supplied fire protection.

Fees and Charges

46. Certain fees and charges related to backflow prevention installation and testing are set out by private service providers and are subject to change without notice.

Severability

47. If a Court of competent jurisdiction should declare any section or part of a section of this bylaw 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 bylaw and it is hereby declared that the bylaw shall be valid and shall remain in full force and effect.

By-law read a first, second and third time and finally passed in Open Council in The Township of Woolwich on this 31st day of October, 2022.

This By-law shall come into force and take effect on the 31st day of October, 2022.

Mayor

Clerk