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Assessing local mandatory measures to reduce flood risk and inflow & infiltration in existing homes

By Joanna Kyriazis, Laura Zizzo and Dan Sandink

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1. Executive summary

Severe rainfall and associated basement flooding are leading causes of damage to Canadian homes. Over the past decade, residents in municipalities across Canada, including Montreal, Thunder Bay, Winnipeg, Mississauga, Burlington, Toronto, Saskatoon, Edmonton and Calgary, have been affected by severe rainfall events resulting in hundreds of millions of dollars in insured and uninsured losses. Numerous factors, including increasing urbanization, issues associated with age, design and construction of infrastructure and climate change are expected to increase urban flood risk in many parts of Canada over the coming decades. Inflow and infiltration (I&I) is also an ongoing concern in many municipalities, as it both increases sewer backup risk and contributes quantities of excess stormwater to wastewater treatment systems, reducing capacity, increasing operating costs and increasing risk of bypasses.

Many local governments have been taking action to ensure that wastewater and stormwater do not enter and damage private property. Both public-side and lot-level (private-side) measures are important for effective mitigation of urban flood risk. While considerable knowledge exists about the design and management of buildings and infrastructure to reduce the risk of damage from basement flooding and sewer backup, many municipalities have experienced difficulty in encouraging homeowners to engage in measures to reduce basement flood risk. In many cases, fewer than 10% of eligible households take advantage of subsidy programs designed to increase uptake of lot-level urban flood protection measures (notably backwater valves, foundation drain disconnection, sump systems and/or downspout disconnection). A significant body of research has revealed that households frequently fail to engage in risk reduction measures for natural hazards. This finding has been consistent for many decades across a range of hazards.¹

Programs addressing private-side storm and wastewater infrastructure deficiencies are increasingly being implemented throughout North America. Programs range in approach and design, incorporating one or more of the following:

- Mandatory or enforcement-based approach,
- Funding or incentive-based approach, and
- Education or outreach-based approach.

¹ See, for example:

- Brenkert-Smith, H., Champ, P., & Flores, N. (2006). Insights into wildfire mitigation decisions among wildland-urban interface residents. *Society and Natural Resources*, 19, 759-768.
- Laska, S. (1990). Homeowner adaptation to flooding: An application of the general Hazards Coping Theory. *Environment and Behavior*, 22, 320-357.
- Grothmann, T., & Reusswig, F. (2006). People at risk of flooding: Why some take precautionary action while others do not. *Natural Hazards*, 38, 101.
- Lindell, M., & Perry, R. (2000). Household adjustment to earthquake hazard: A review of research. *Environment and Behavior*, 32, 461-501.
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- McGee, T. (2007). Urban residents' approval of management measures to mitigate wildland-urban interface fire risks in Edmonton, Canada. *Landscape and Urban Planning*, 82, 247-256.
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- Winter, G., & Fried, J. (2000). Homeowner perspectives on fire hazard, responsibility, and management strategies at the wildland-urban interface. *Society and Natural Resources*, 13, 33-49.
- Yoshida, K., & Deyle, R. (2005). Determinants of small business hazard mitigation. *Natural Hazards Review*, February, 1-12.

Mandatory measures can serve as a “tool in the toolbox” for municipalities seeking to increase homeowner engagement in urban flood risk reduction and I&I management programs. These measures will become increasingly important as urban flood risk and impacts increase in the coming decades and municipalities seek to increase the application of risk reduction measures on private properties. These measures may include downspout and foundation drain disconnection from municipal wastewater (sanitary) sewer systems, repair and replacement of sanitary laterals that contribute to I&I and installation of lot-level flood protection measures, among other lot-level measures.

This report focuses on mandatory or enforcement-based approaches adopted by North American municipalities. It explores legal tools that could be used to require private property owners in existing developments to better manage stormwater and protect against flood risk, and it examines the legal implications of applying these tools in the Canadian municipal context. Findings and discussion in this report may also be of interest to officials concerned with managing I&I, Combined Sewer Overflow and other related issues, even if they have not engaged in basement flood risk reduction programs.

Mandatory measures explored in this report include:

- Disconnection of improper connections to sanitary systems (including downspouts and foundation drains),
- Requirements to maintain private sewer laterals and remedy defects,
- Requirements to allow city officials onto private property for the purposes of inspections and recommendations for remediation of private-side infrastructure,
- The conducting of remediation work at the expense (or partial expense) of homeowners,
- Time of sale requirements for inspection and repair of sewer laterals, and
- Time of renovation or redevelopment requirements for inspection and repair of sewer laterals.

Enforcement mechanisms for mandatory measures were also explored in this study. These include:

- Termination of water service for instances of non-compliance,
- Property liens,
- Collection of fines via sewer/utility bills and municipal tax bills, and
- Application of penalties that run with the land.

Key findings of this study include:

- Municipalities explored in this study have a broad range of authorities related to requiring homeowners to implement basement flood and I&I reduction actions on private properties,

Private-Side Vulnerability Factors, Drainage Practices and Standards Vary by Municipality, Subdivision and Lot

The reader should note that factors affecting private-side basement flood vulnerability and I&I vary considerably between municipalities, subdivisions and individual lots. For example, municipalities may have applied by-law wording that prohibited foundation drainage and/or downspout connections to sanitary sewer systems in the early 20th century, while others may have restricted these types of connections within the last 20–40 years, or possibly more recently.

Thus, some I&I and flood risk reduction measures discussed in this report, including foundation drain and downspout disconnection, may apply only to specific municipalities. Other measures, including means to address degraded private-side sewer laterals, are more widely applicable.

The reader should further note that this report does not discuss an exhaustive list of measures that may be applied to reduce private-side I&I and basement flood risk. Selection of measures will depend on drainage practices, by-laws, policies, etc. in individual municipalities and construction and maintenance practices in subdivisions and individual lots and homes. Home and property owners should always consult with municipalities before conducting basement flood risk and I&I reduction work.

- These powers have been used for relatively invasive measures, including requirements for foundation drainage disconnection, remediation of sanitary sewer connections, and disconnection of downspouts, and
- Mandatory measures have been reported as having an important impact on reducing basement flood risk through reduction of I&I in municipal waste water systems.

With respect to the application of mandatory measures, the study revealed:

- Municipalities have two specific concerns about legal liability associated with application of mandatory measures for basement flood protection:
 - Fear of liability for not taking sufficient action to reduce flood risk, and
 - Fear of liability for taking action to reduce flood risk, whether related to the potential for private property damage or the lack of capacity to implement and enforce mandatory measures,
- Lack of opportunity, time, staff, financial resources and political willingness are key factors limiting capacity to monitor and enforce mandatory requirements,
- Despite the existence of clear by-law wording as it relates to access to private property, by-law wordings may not be clear about what types of actions may be performed once access is gained, whether homeowner consent is required for private property action, and whether there exists a difference in authority related to access to lots (outside of buildings) and access to the interior of private residential buildings, and
- Municipalities are reluctant to apply enforcement mechanisms that are unpopular among homeowners.

This research further shows that measures are most effective at encouraging specific lot-level measures for existing developments when they:

- Are coupled with political support,
- Are backed by provincial or regional mandates and funding,
- Fit into existing administrative systems, such as the building permit system,
- Are based on a clear understanding of jurisdiction, particularly with respect to access rights and municipal authority to assist with the required work when necessary, and
- Are supported by strong enforcement provisions.

Municipalities can learn from existing measures in other jurisdictions and consider aspects of the model by-law set out in Appendix 1, as appropriate, for their specific jurisdiction and requirements.

A Word on Partially Separated/ Semi-Combined Sewers

Municipal representatives consulted in the preparation of this report noted a lack of clarity with respect to the definition of “separated” sewer systems. In many Canadian municipalities, it was common practice to connect foundation drainage to sanitary sewers in separated sewer areas until the mid-to-late 20th century. While sewer systems in these areas included separate underground pipes for sanitary sewage and stormwater, sanitary systems in these instances convey significant amounts of rainfall and groundwater-derived I&I as a result of foundation drain connections. Thus, these types of systems cannot be accurately described as fully separated systems.

The terms “partially separated” and “semi-combined” have been applied to describe these types of systems. As reported by Metro Vancouver’s Liquid Waste Services Department (2016):

“Semi-combined sewer systems were once common in new construction across Canada as a means to provide foundation and basement drainage without requiring the construction of storm sewers. As a result, semi-combined sewers are sanitary sewers receiving combined private sewer laterals or that have extensive private-side cross-connections. They are believed responsible for chronic elevated I&I rates in many neighbourhoods serviced before their prohibition.”

Source: Liquid Waste Services Department (2016). Private Lateral Foundation Drains and Semi-Combined Sewers as an Inflow and Infiltration Source. Burnaby: Metro Vancouver. <http://www.metrovancouver.org/services/liquid-waste/LiquidWastePublications/InflowInfiltrationFoundationDrainCrossConnectionsReport.pdf>

2. The need for private-side flood risk reduction measures

Severe rainfall and associated basement flooding is a leading cause of damage to Canadian homes. Over the past decade, homeowners in municipalities across Canada, including Montreal, Thunder Bay, Winnipeg, Mississauga, Burlington, Toronto, Saskatoon, Edmonton and Calgary, have been affected by severe rainfall events resulting in hundreds of millions of dollars in insured and uninsured losses. Numerous factors, including increasing urbanization, issues associated with age, design and construction of infrastructure and climate change are expected to increase urban flood risk in many parts of Canada over the coming decades.

Inflow² and infiltration³ (I&I) is an ongoing concern in many municipalities. Sanitary sewer systems have been designed to transport sewage to wastewater treatment plants. They are not designed with the capacity to handle large volumes of groundwater or rainwater entering into the system. Surcharging occurs when these systems are overloaded beyond their capacity as a result of I&I. Sewer surcharges can cause sewage from sanitary sewer lines to back up into houses through drain pipes. Sanitary sewer surcharges can lead to detrimental impacts, including:⁴

- Property damage (for example, as a result of basement flooding from sewer backup),
- Environmental and ecosystem contamination (as a result of sanitary sewer overflows),
- Public health issues (sewage backups into basements),
- Increased maintenance and water treatment costs, and
- Expensive infrastructure upgrades.

Some of these risks may be more prevalent in older subdivisions, where, for example, foundation drain and downspouts are connected to public sanitary sewer systems (partially separated systems). Further, the potential for combined sewer⁵ surcharges adds to the urgency to reduce private contributions of excess stormwater and groundwater to municipal sewer systems.

Local governments can take action to keep groundwater and rainwater out of sanitary sewers and ensure that wastewater and stormwater do not enter and damage private property. Both public-side and private-side measures are often necessary, as some municipalities have indicated that a considerable portion of I&I occurs on private property. While municipalities are aware of design and management-related measures to significantly reduce urban flood risk, they express challenges in addressing private-side issues. This challenge has led municipalities to take a variety of approaches to engage homeowners and ensure that they understand and address flood risk. Programs range from public engagement and voluntary programs to amendments to sewer use by-laws and other legal mechanisms that require positive actions to maintain private-side infrastructure and help reduce flood risk and limit I&I. Homeowners have shown low levels of participation in voluntary lot-level urban flood protection measures, even when incentive structures and subsidy programs are in place to facilitate action. As a result, programs with more mandatory elements should be explored.⁶

² The Region of Peel provides the following definition of inflow (<http://www.peelregion.ca/pw/water/sewage-trtmt/basement-flooding.htm>): “Sources of water flowing into the sanitary sewer system, other than wastewater, are called **inflow sources**. Inflow enters a sanitary sewer from sources such as roof drains, land drains and manhole covers”.

³ The Region of Peel provides the following definition of infiltration (<http://www.peelregion.ca/pw/water/sewage-trtmt/basement-flooding.htm>): “Sources of indirect flow of water into the sanitary sewer system are called **infiltration sources**. Infiltration is water that enters a sanitary sewer from cracks, joints, broken pipe and defects in the sanitary pipes or defective connections between pipes. Infiltration is usually based on the height of the groundwater table at a given time”.

⁴ Metro Vancouver. (2008). Private Sewer Lateral Programs: A Study of Approaches and Legal Authority for Metro Vancouver Municipalities. Burnaby: Metro Vancouver.

⁵ Combined sewer systems convey both sanitary sewage and stormwater.

There is a range of legal mechanisms available to local governments to require private-side, lot-level participation in flood risk reduction measures. This report explores potential mandatory measures available to local governments and insights for those seeking to implement or enhance legal requirements to reduce urban flood risk.

Figure 1: Private-side water infrastructure and flood risk⁷

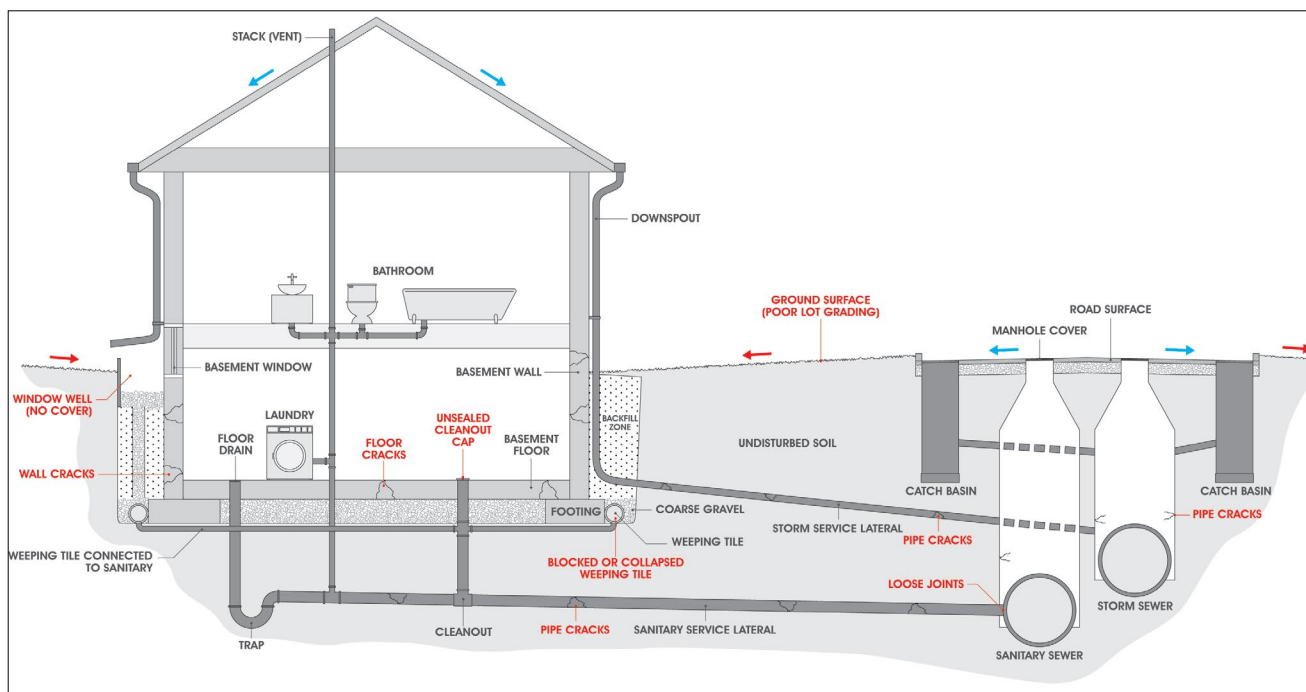


Figure 1 illustrates private-side I&I and flood vulnerability issues experienced in many Canadian homes and subdivisions. These vulnerabilities include poor lot grading, uncapped backfill areas, poor downspout discharge practice, lack of sewer backflow protection, degraded sewer laterals, among other vulnerabilities.

In this example, foundation drain systems have been connected to the sanitary system. The home's sanitary sewer lateral has also degraded, increasing private-side contribution of excess water to the public sanitary sewer system.

It is important to note that this image illustrates particular I&I issues faced by many Canadian municipalities; however, foundation drain connections to sanitary are not present in all homes and subdivisions. For example, other common approaches include gravity discharge to storm sewer connections, using sump pumps to discharge foundation drainage over the lot, using a sump system to pump foundation drainage to the storm system via a riser placed outside of the home, use of Foundation Drain Collector systems, among other potential approaches.

Connection of foundation drainage to sanitary systems presents a particular challenge, however, as expensive and potentially technically complex retrofits in the form of foundation drain disconnection and sump system installation are often required. This cost and complexity serves to reduce the likelihood that homeowners will engage in this often critical approach to private-side I&I reduction.

⁶ While much of this report focusses on sanitary surcharge and I&I issues, it should be noted that excess water discharged to storm systems (associated with, for example, downspout connections to storm) also has flood risk implications for homes with private drain connections to storm systems.

⁷ Sandink, D. (2009). Handbook for reducing basement flooding. Toronto: Institute for Catastrophic Loss Reduction.

3. Do local governments have authority to require action?

Efforts by local governments to involve property owners are constrained by legal issues such as limits to the power of municipal officials to compel action on private property. Discussions with municipal staff suggested that municipalities are often reluctant to require specific measures at the lot level or access private property for the purposes of evaluating lot-level risk factors (e.g., conducting sewer lateral inspections) and enforcing existing requirements. The variability in interpretation and perception of municipal authority has led to a diversity of approaches. On the one hand, certain municipalities are more risk averse, reluctant to invoke powers that are explicitly granted to them through statute or by-laws for fear of being exposed to liability and backlash from voters/ratepayers. In contrast, other municipalities are confidently moving forward with mandatory measures despite a lack of clarity in the law.

In Canada, municipalities receive their legal authority (or jurisdiction) from the provinces via statute. Ontario municipalities are empowered by the Ontario *Municipal Act*. In British Columbia, the *Community Charter* is the source of municipal jurisdiction. Enabling legislation varies in each province and U.S. state, and, even within provinces certain municipalities may have broader or narrower powers than others.

Furthermore, regional and municipal structures vary – as do the relationships between municipalities and water users. Some provinces break municipalities into upper- and lower-tier (Ontario), while others do not (Alberta). As such, one of the challenges with addressing private-side flood risk reduction measures is that different legal contexts and jurisdictional natures mean that each jurisdiction must, to some extent, create a tailored solution, and broad-based model approaches may not be appropriate in all cases.

Case studies from U.S. jurisdictions are even more diverse and offer little in direct legal applicability to Canadian local governments. For instance, certain jurisdictions have municipal utility districts (e.g., East Bay Municipal Utility District (East Bay MUD), Milwaukee Metropolitan Sewerage District (MMSD)) – a relationship structure that is solely based on the provision of utilities. While these are less common in Canada, the core elements of successful legal measures could be successfully adopted in various local contexts and are worth studying and mining for applicable learnings.

The example measures and case studies reviewed in this report are meant to demonstrate practical, workable solutions. However, in light of the above, it is important to note that these sample measures are merely illustrative and may not be applicable in all jurisdictions.

The sample measures discussed in the sections below will detail how municipalities are approaching these issues and administering effective programs. For each example, the report will point to the statutory provision, by-law language or other form of legal authority the showcased municipalities are relying on to go forward with their measures. While all Canadian examples are from Ontario and British Columbia, it is likely that other Canadian provinces operate under similar municipal structures and authority. For more detail, charts outlining the enabling provisions of Ontario and British Columbia statutes are provided in Appendix 3.

4. About this study: Methodology




The Institute for Catastrophic Loss Reduction (ICLR) and Zizzo Strategy conducted a literature review and engaged in one-on-one interviews with representatives from 13 local jurisdictions across North America to assess measures that have been considered and implemented to reduce basement flood risk on private property and/or limit I&I rates in municipal wastewater systems through application of measures on private properties. These measures relate to overland stormwater flow and sanitary and/or storm sewer backup protection, among other things, and focused on mandatory requirements or enforcement mechanisms. Fiscal tools such as sewer rates or stormwater fees were not considered as part of this study.

With guidance from the ICLR Municipal Advisory Committee, researchers selected the jurisdictions and measures to review and developed assessment criteria against which to assess each measure's effectiveness. This research was intended to provide a representative sampling and targeted insights into interesting experiences in various jurisdictions. It is not intended to be a comprehensive review of all measures related to flood risk reduction.

In order to assess the various measures reviewed, the following criteria were developed and applied:

- **Uptake by homeowners:** How has the measure been received by the public and are homeowners adopting and implementing it as required?
- **Political will:** Was there any political resistance to pushing the measure through, from city council or any other party?
- **Administrative ease:** What are the time and resource commitments needed for the jurisdiction to roll out the measure and how much follow-up is required?
- **Opportunities for enforcement:** Are there natural opportunities or existing processes set up to ensure that homeowners are complying with measurement requirements?
- **Cost:** How high are the costs of implementing the measure and how much will the municipality be responsible for?
- **Technical complexity:** How much technical expertise would one need to implement the measure? Can homeowners implement without specific technical knowledge? Can municipalities implement the measure without specific technical knowledge?
- **Level of invasiveness:** How is the measure carried out? Is entrance onto private property and into dwellings by municipalities or private contractors required to complete the work? Is the infrastructure at issue underground?
- **Effectiveness at reducing flood risk/I&I:** Has the measure been effective at reducing normal and peak flows? What metrics and assumptions are available to determine the measure's effectiveness?

Each measure was assessed against the criteria to evaluate the effectiveness of the various legal mechanisms identified at improving stormwater management, reducing I&I and protecting against flood risk. In this report, the measure is assigned a coloured shape of either a green circle, yellow triangle or red square, representing its effectiveness, in accordance with the following legend. A grey 'X' indicates that the criterion was not applicable or discussed.

Criterion			
Uptake by homeowners	High	Medium	Low
Political will	High	Medium	Low
Administrative ease	High	Medium	Low
Opportunities for enforcement	High	Medium	Low
Cost effective (for municipality)	High	Medium	Low
Technical simplicity ⁸	High	Medium	Low
Non-invasiveness	High	Medium	Low
Effectiveness at reducing flood risk/I&I	High	Medium	Low

Additional legal and other research was conducted to supplement interviews and develop a more detailed understanding of various measures. Through practical examples of how legal tools could be used to require specific lot-level mitigation measures and a model tool that could be tailored and applied by municipalities, the report offers helpful guidance for municipalities interested in pursuing these types of measures, but it should not be considered legal advice. Each municipality must seek legal advice to implement legal measures within its jurisdiction.

⁸ It should be noted that the complexity of implementing many of the measures discussed in this report, including downspout and foundation drain disconnections, are highly dependent on local factors (for example, lot-level building and drainage circumstances).

5. Assessment of legal measures to address flood risk

Programs addressing private-side stormwater infrastructure deficiencies are increasingly being implemented throughout North America. Programs range in approach and design, incorporating mandatory or enforcement-based approaches, as well as financial incentives and educational outreach approaches. The mandatory measures discussed in section 5.1 below are used to require private property owners in existing subdivisions to better manage stormwater, maintain private-side infrastructure, reduce I&I and protect against flood risk. The enforcement measures discussed in 5.2 below show how some municipalities have chosen to enforce various mandatory measures.

Though the measures are being explored and evaluated separately, it is important to note that regions and municipalities can (and do) use a combination of measures to address private-side stormwater management. Indeed, each measure described below could be elements of a single sewer use by-law.

See Appendix 2 for examples of by-law language associated with each measure.

5.1 Requirements

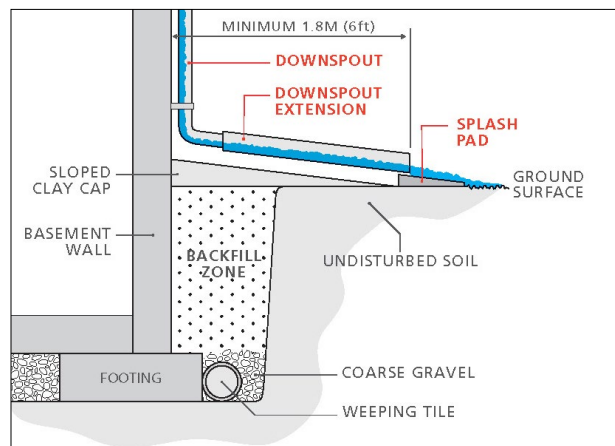
5.1.1 Mandatory disconnections of improper connections to sanitary systems

Prohibition of connections of weeping tile/foundation drains, downspouts and sump pumps to sanitary sewer laterals

Rationale: Sanitary sewer systems are designed to transport sewage to wastewater treatment plants but do not have the capacity to handle large volumes of groundwater or rainwater that may enter these systems. Stormwater should therefore be discharged to the surface or to appropriate infrastructure, depending on local drainage conditions. Disconnecting downspouts, foundation drains and sump pumps from sanitary drains can help to direct excess water away from the sanitary sewer system, reduce I&I and mitigate flood risk.

Description of measure: Downspout and foundation drain connections to sanitary sewer laterals are often considered improper or illegal connections. In most cases, the only connection to sanitary sewers should be the home's sewer lateral and foundation drains should discharge via a sump pump to a storm private drain connection or the home's yard where the water can be drained over the ground. Where illegal connections are identified, municipalities will require homeowners to disconnect – often at their own expense – or be subject to a fine.

Figure 2: Downspout disconnection example



Evaluation criteria	Score
Uptake of homeowners ⁹	▲
Political will	●
Administrative ease	▲
Opportunities for enforcement	▲
Cost effective (for municipality)	●
Technical simplicity	▲
Non-invasiveness	●
Effectiveness at reducing flood risk/I&I ¹⁰	▲

⁹ Uptake may be low if not strictly enforced by municipality.

¹⁰ Effectiveness is high if strictly enforced by municipality.

Sometimes municipal officials will perform the disconnections to assist and educate the homeowner. But to ensure that the homeowner understands that maintaining the disconnection is his or her responsibility going forward, a municipality might then have the homeowner sign a release form indicating an understanding that the homeowner is responsible for any future work.

Example surveyed municipalities considering or implementing measure: Thorold, Port Colborne, Fort Erie, Surrey, Kingston.

Advantages

Downspout disconnection relatively low-cost and non-invasive.

Downspout disconnection engages homeowner in flood risk reduction, requiring relatively limited technical expertise.

High visibility such that it may start neighbourhood trends and positive "peer pressure."

Program costs may be recovered through water treatment savings.

Administrative costs to monitor and enforce broadly potentially significant (may lead to more limited enforcement targeting higher-risk areas or more ad hoc monitoring approaches).

Requires property owner to take a positive action (expend resources on their own).

Foundation drain disconnects and sump installations typically far more complex than downspout disconnects.

Downspout disconnection has the potential to be complicated, expensive depending on local/lot drainage characteristics.

If municipalities help, owners may mistakenly think private infrastructure has become a municipal responsibility, leading to potential political challenges.

Challenges

5.1.2 Requirements to maintain private sewer laterals and remedy defects when identified

Require private property owners to maintain private sewer laterals and repair or replace them when defects are identified

Rationale: Private sanitary sewer laterals are often relatively significant sources of excess I&I in municipal wastewater systems. It is therefore important to keep sewer laterals in good condition. This section discusses requirements that mandate homeowners to take responsibility for keeping private-side sewer connections in a state of good repair.



Description of measure: This measure has some overlap with the mandatory disconnection measure described above, as a “defect” could refer to an improper cross-connection between storm sewers and sanitary sewers or a lateral that is identified as being in poor condition. Where a municipality identifies a defect (for instance, while inspecting public sewer main lines), it will send a notice to the homeowner requiring that the defect be addressed within a prescribed period of time (e.g. 30-90 days from the time the homeowner was notified). Those who fail to maintain a private lateral or remedy defects within the prescribed periods may be faced with fines. Many jurisdictions that have this requirement will offer homeowners financial assistance for qualified work. Some may also offer technical assistance, either by performing the work itself, monitoring the work of a contractor or directing homeowners themselves to a list of recommended contractors.

Aside from requiring that sewer connections be repaired, required work incorporated into these programs may include disconnection of foundation drainage from municipal sanitary sewer systems or the installation of sump pumps and discharge piping, which can be fairly invasive because whomever is completing the work must actually enter into the home and install these items in a homeowner’s basement.

Example surveyed municipalities considering or implementing measure: Thorold, Port Colborne, Fort Erie, Kingston.

Evaluation criteria	Score
Uptake of homeowners ¹¹	■
Political will	■
Administrative ease	▲
Opportunities for enforcement	■
Cost effective (for municipality)	▲
Technical simplicity	▲
Non-invasiveness	■
Effectiveness at reducing flood risk/I&I	▲



Advantages

- Clearly indicates that the homeowner is responsible for private-side maintenance.
- Often municipalities offer cost-sharing or technical assistance to ensure homeowners can complete necessary work.
- Potential to be very effective at reducing flood risk/I&I if levels of uptake are good.

- Municipalities have delayed emphasizing the mandatory nature of this measure and have instead launched programs that encourage homeowners to let the city do the work.
- Most municipalities with this requirement have focused on disconnections and not repairs.
- Repair and maintenance work potentially costly, intrusive and technically complex.
- Difficult and costly to monitor and enforce.
- Requires property owner to take a positive action versus requiring them to allow the municipality to do work.

Challenges

¹¹ Medium to low uptake, depending on municipal enforcement efforts.

5.1.3 Requirement to allow city officials onto property

Requirement to allow city officials onto private property to maintain, repair, disconnect or reinstall private-side infrastructure

Rationale: In many cases, I&I and basement sanitary backup flood risk can be significantly reduced by completing plumbing improvement works on private residential properties. Municipalities often require information about the state of repair of private sewer connections, whether foundation drains are connected to sanitary laterals, the existence of sump pumps in basements, and so on. Frequently, homeowners are unwilling or uninterested in allowing municipal representatives access to their properties to conduct inspections or complete work. Therefore, some municipalities have been relatively aggressive when it comes to accessing private property to conduct inspections or complete work that relates to I&I and basement flood risk. Others are more risk averse and adopt a position that access to private property must be based on the voluntary approval of property owners.

The divergence in approaches to accessing private property reflects the complexity and variety of views and approaches related to the right to access property. In some cases, a municipality may only access (or require access to) private property at reasonable times or upon reasonable notice. In other cases, a municipality may only access property with the homeowner's consent. While municipal authority to require access to private land is fairly clear, municipal authority to require access to a private dwelling or a home is less clear, as such access may be contingent on the homeowner's consent or an inspection order from a judge or Justice of the Peace.

Including explicit language around access rights in municipal by-laws can help provide comfort to more risk-averse municipalities and allow them to complete work and inspections while limiting potential liability. Given the uncertainty around this area and differences among jurisdictions, each municipality should ensure that the access rights it articulates in its by-laws are consistent with applicable law.

Description of measure: The nature and specifics of this requirement vary across jurisdictions. In some of the jurisdictions interviewed, homeowners are required to allow city personnel onto their property to inspect, maintain, repair, disconnect or reinstall a sewer service connection or a drainage service connection.

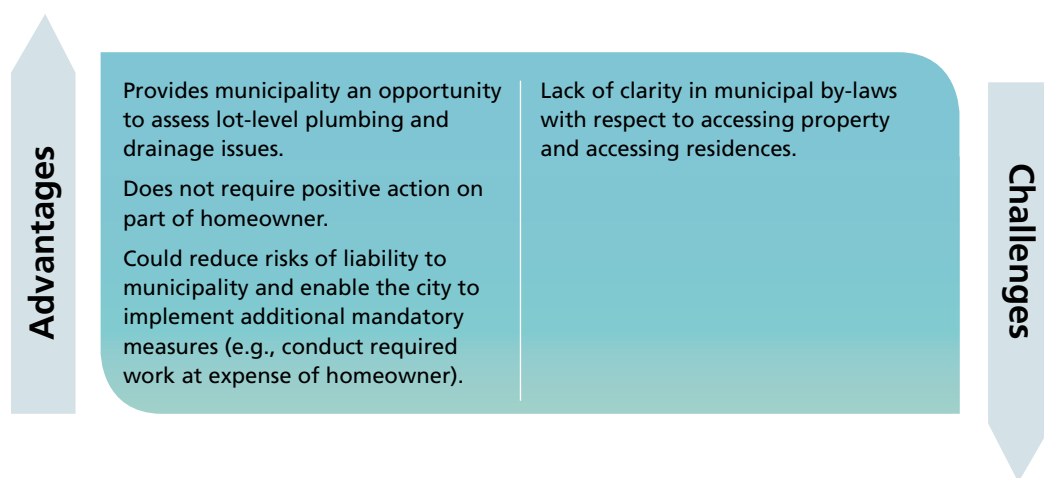
Certain interviewees indicated that their jurisdiction may send letters to homeowners asking them to book an inspection. In these cases, if homeowners failed to comply, a follow-up letter would be sent by a by-law enforcement officer with a threat to impose fines. Other jurisdictions sent by-law enforcement officers directly to non-compliant homes. Fines could be applied for failure to provide access to private property for inspection, maintaining,

Evaluation criteria	Score
Uptake of homeowners	▲
Political will	▲
Administrative ease	▲
Opportunities for enforcement ¹²	●
Cost effective (for municipality)	▲
Technical simplicity	●
Non-invasiveness	■
Effectiveness at reducing flood risk/I&I	●

¹² Training for by-law enforcement officers on plumbing matters or plumbing inspectors on by-law matters may be required.

repairing, modifying or replacing a service connection or for failure to provide access to private property to ensure compliance with the applicable by-law. Again, it is unlikely that such fines could be imposed on homeowners for refusing access to private dwellings, as municipal authority to access private dwelling is much more limited.

Example surveyed municipalities considering or implementing measure: Thorold, Port Colborne, Surrey, Kingston, Fort Erie, District of North Vancouver.



5.1.4 Authority to conduct required work at expense of homeowner

Requirement to allow municipality to access private property, complete necessary work and charge the homeowner for the work completed

Rationale: This authority allows a municipality to act in times of heightened risk to the homeowner or public, knowing that the costs of the necessary work will be covered by the homeowner. It also allows municipalities to spend staff time and resources on remedying the problem as opposed to continued failed attempts at requiring the homeowner to take necessary steps.

Description of measure: Where action is required for a private sewer lateral to comply with a by-law and the homeowner fails to take the required action, some by-laws provide that the municipality may enter onto private property, complete the necessary work and charge the homeowner for the work completed. In these cases, the entire cost of providing, installing, maintaining, repairing, relocating or renewing any private sewer lateral, drainage lateral, sewer collection system or stormwater management system could be the responsibility of the homeowner. Penalties may be applied if the homeowner prevents this work or does not reimburse the municipality, including the termination of the homeowner’s water supply or fines in the range of \$300 for each day the private sewer lateral is in violation of the by-law.

Evaluation criteria	Score
Uptake of homeowners	▲
Political will	▲
Administrative ease	▲
Opportunities for enforcement	●
Cost effective (for municipality)	▲
Technical simplicity	●
Non-invasiveness	■
Effectiveness at reducing flood risk/I&I	●

Example surveyed municipalities considering or implementing measure: Thorold, Fort Erie, King Township, Kingston, District of North Vancouver.



5.1.5 Time of sale requirements

Requirement to inspect private sewers or laterals connected to the municipal system at time of property transfer

Rationale: The sale of property transaction already requires a number of steps and is a costly process for both property sellers and purchasers; therefore, adding another requirement only provides marginal additional effort or expense. The transfer of title window also provides a natural opportunity for enforcement of private-side measures, while still placing the onus on the property buyer (or private-side seller) for the cost of implementing private-side measures, including private side lateral replacements. Finally, from the perspective of the private-side property purchaser, understanding the state of the private sewer lateral allows for a more informed investment decision.



The municipalities explored in this report focused on private sewer lateral issues; however, it is possible that municipalities could also use the time of sale window to impose other requirements, such as downspouts and foundation drain disconnections, backwater valve installations or inspection and repair of other aspects of private water management systems. Future research exploring the potential authority to implement such measures and the likely success of such measures may be warranted.

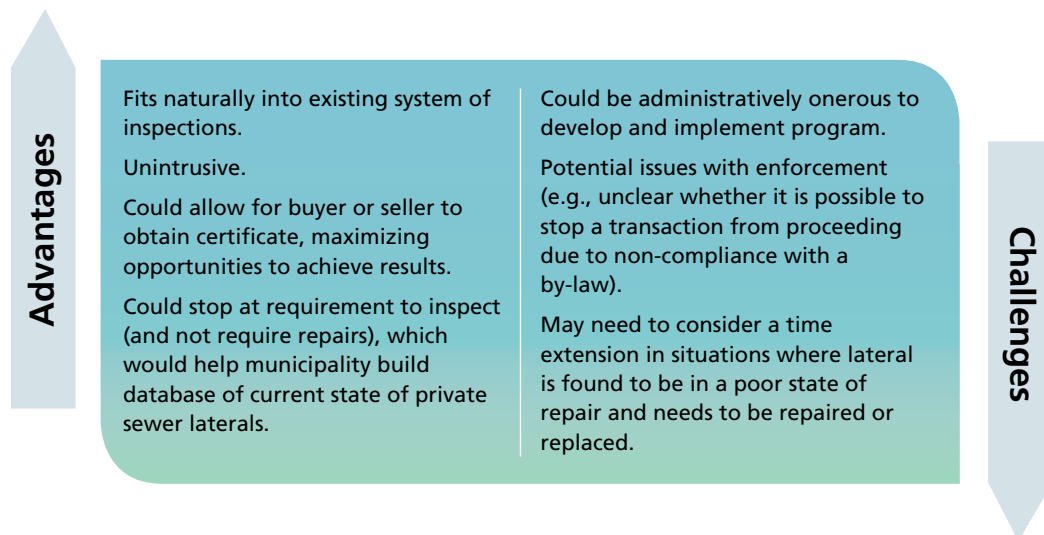
Description of measure: Some municipalities have introduced regulatory programs that require all property owners to obtain a certificate certifying that their private sewer laterals are in acceptable condition at the time of property sale. Often, the transaction must be arm's length for the requirement to come into play (e.g., certain familial transactions may be exempt). Some programs of

this nature allow for either the purchaser or the seller to obtain the certificate, providing greater flexibility. The parties would determine who would take responsibility between themselves. If the purchaser is to take on this responsibility, the municipality might provide a “time extension certificate” that allows the purchaser additional time from the date of purchase to obtain the certificate. This time extension certificate may also be needed if the lateral is not in a good state of repair and either the purchaser or the seller needs time to repair the lateral before they can obtain the required certificate. In this case, a municipality may require a deposit and would monitor the lateral until it is repaired, at which time the deposit would be returned. To enforce this requirement, some municipalities use third-party software that aggregates property transaction lists from various areas and rolls them up.

Any property that shows up in the non-compliance group receives a courtesy notice. East Bay MUD (based in Orinda, California) is a well-known example of having applied this measure. The utility reports that this is an effective tool and captures a sufficient number of properties, as a recent historical review indicated that 80% of properties had turned over in the course of 30 years. While there are still legal questions concerning a Canadian municipality’s ability to impose a condition on the sale of property and hold up a transaction, there are also other approaches available to achieve similar results, such as property sale checklists and time of renovation requirements.

Evaluation criteria	Score
Uptake of homeowners	▲
Political will	▲
Administrative ease	■
Opportunities for enforcement	▲
Cost effective (for municipality)	●
Technical simplicity	▲
Non-invasiveness	▲
Effectiveness at reducing flood risk/I&I	▲

Example surveyed municipalities considering or implementing measure: East Bay MUD municipalities, Metro Vancouver.¹³



¹³ Metro Vancouver is currently exploring a similar program. In 2008 and 2013, Metro Vancouver commissioned research to explore whether it would be feasible to implement a regulatory private sewer lateral certificate program in the local government. Both the 2008 and the 2013 studies generally concluded that using the time of sale of a home or a property transfer as a triggering circumstance for requiring the rehabilitation of private sewer laterals could be a feasible option for long-term management of I&I from private properties. At the time of writing, the program was still in the development phase.

5.1.6 Time of renovation requirements

Requirement to inspect or replace a private sewer lateral at the time of “major” renovation

Rationale: Using time of renovation as a trigger for lateral inspection and repair allows for better monitoring and enforcement opportunities because the requirement is built into the building permitting system. Also, a threshold before the requirement is triggered ensures that those who are subject to this requirement would likely be in a position to shoulder the costs of inspection or repair.

As noted above, it is possible that the time of renovation could be used as a trigger for imposing other requirements, such as downspout or foundation drain disconnections, backwater valve installation or mandatory inspections of aspects of private water management systems other than the private sewer lateral. While none of the municipalities explored in this report used or were formally contemplating using the time of renovation trigger to impose these requirements, it would be worth exploring the viability of such measures, particularly at time of renovation.

Description of measure: In addition to time of sale, private lateral inspection and upgrade requirements, this requirement could also be triggered by major redevelopment or major renovations (e.g., >\$100,000). This requirement is built into the building permitting system. When a person applies for a permit for redevelopment or renovation, the system will automatically be triggered and the requirement to inspect or replace the private sewer lateral will become part of the application process. The determination of “renovation” or “redevelopment” would therefore likely align with the relevant building code. Exact requirements may depend on the age of the connection. For instance, if the service connection or building drain is less than 30 years old, the owner may be required to provide a video showing that the connections are in a good state of repair for the city to review. Where a service connection is found to have excessive damage, the owner will be required to repair or replace it. If the service connection or building drain is 30 years or older, lateral replacement may be required. If a homeowner fails to obtain the necessary approvals, the building permit may be withheld and they may face fines in addition to the service connection being disconnected and the service pipe capped or closed.

Example surveyed municipalities considering or implementing measure: Surrey, East Bay MUD.

Evaluation criteria	Score
Uptake of homeowners	▲
Political will	●
Administrative ease	●
Opportunities for enforcement	●
Cost effective (for municipality)	●
Technical simplicity	▲
Non-invasiveness	▲
Effectiveness at reducing flood risk/I&I	▲



Advantages

- Fits naturally into existing system of inspections and approvals.
- Relatively unintrusive.
- Clear opportunities for enforcement.
- Administrative systems already in place.
- Good record keeping because requirement is part of building permitting process.

- May not engage a sufficient number of homeowners if renovations/redevelopments are infrequent.
- Onerous for property owners in terms of cost and technical requirements.
- Additional item to add to already tight renovation budgets, causing political challenges.

Challenges

5.2 Specific enforcement mechanisms

5.2.1 Termination of water service

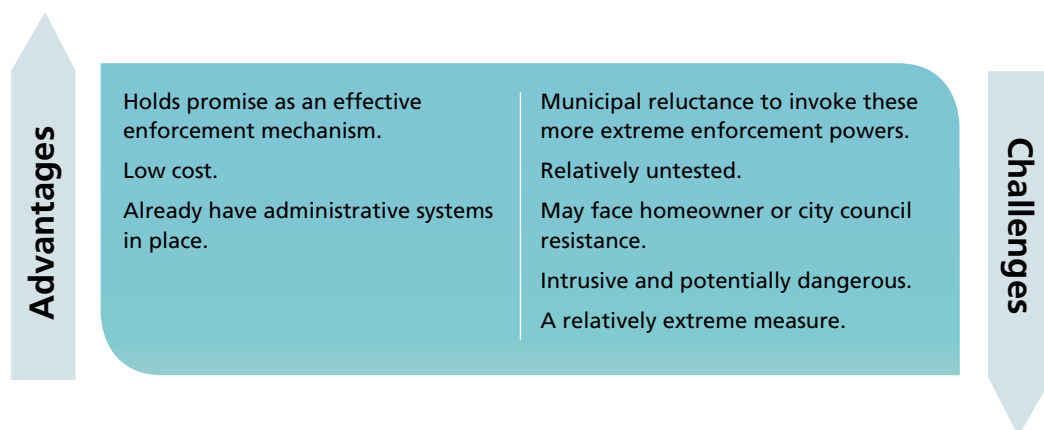
Terminate or restrict water service if not compliant with sewer use by-law

Rationale: Termination of water supply or service could arguably be more effective at enforcing compliance than other less intrusive monitoring and enforcement approaches, such as “drive-by” visual inspections of houses and door-to-door conversations. This measure also encourages acknowledgement that municipal water service is contingent on mutual responsibilities.

Description of measure: Some municipalities have the authority to enforce compliance with a by-law or non-payment of fines by shutting off the provision of stormwater drainage or sewer services, as well as by discontinuing the non-compliant homeowner’s water supply. Often the homeowner will have between seven and 30 days to remedy a defect identified by the municipality before such enforcement measures are taken. Examples of non-compliance that could lead to the suspension or termination of water services include: (i) refusing entry to property for inspection or repair; (ii) failing to remedy improper connection within the notice period; or (iii) failing to repair a defect within the notice period.

Evaluation: It was not possible to apply the evaluation criteria to this measure due to lack of information; however, it was suspected that this enforcement measure may only be used in worst-case scenarios. Perhaps having the ability to disconnect water service on the books will provide an effective deterrent. It appears unlikely that municipalities will actively utilize this measure for a number of practical and political reasons.

Example surveyed municipalities considering or implementing measure: Fort Erie, Surrey, Kingston, King Township.



5.2.2 Ability to collect fines on sewer bills or municipal taxes

Unpaid costs or fines are added to a non-compliant property owner’s sewer services bill or collected via municipal taxes

Rationale: Allowing for the collection of unpaid expenses or fines via a property owner’s sewer services bill or property taxes provides municipalities with the opportunity to take advantage of administrative systems that are already in place and ensures that they are properly reimbursed for work completed.

Description of measure: Several municipal by-laws allow for unpaid costs or fines to be added to a non-compliant property owner's next sewer services bill or collected via municipal taxes. For instance, in one municipality, where (i) a homeowner fails to disconnect, maintain, repair or replace private-side infrastructure as required under the sewer use by-law, (ii) the municipality has completed the work itself at the owner's expense, and (iii) the homeowner fails to pay for these costs, such costs may be added to the tax roll for the property and collected in the same manner and with the same priorities as municipal taxes. Similarly, where a homeowner is charged a fine for violating a by-law provision and fails to pay the fine within 30 days, the unpaid fines may be added to the homeowner's next sewer services billing and may be collected in like manner and with the same priority as fees or charges for sewer services.



Evaluation: It was not possible to apply the evaluation criteria to this measure due to lack of information; however, it was suspected that this enforcement measure will become more common as private-side maintenance continues to be prioritized by municipalities.

Example surveyed municipalities considering or implementing measure: Fort Erie, Kingston, King Township.

5.2.3 Penalties run with the land

Penalties for non-compliance with sewer by-law attach to the land, not the property owner

Rationale: Attaching penalties for non-compliance to the land ensures that the defect can be remedied and the municipality can be properly compensated for work completed, even where land ownership changes. After all, the requirements are related to the private infrastructure itself (including improper connections to sanitary sewers and condition of private sewer laterals). Moreover, the requirements are designed to reduce risks for the current property owner, making it a reasonable approach to transfer the onus with the transfer of title.

Description of measure: Some municipalities attach penalties for non-compliance to the land itself and not the property owner. For instance, where (i) a homeowner fails to disconnect, maintain, repair or replace private-side infrastructure as required under the sewer use by-law, (ii) the municipality has completed the work itself at the owner's expense, and (iii) the homeowner fails to pay for these costs, such costs may remain a lien on the property. Similarly, in certain instances, if charges are added to a water bill and the supply of water to the premises has been turned off due to non-compliance, such measures could continue to be enforced until all charges have been paid – even where ownership of the property has changed.

Evaluation: It was not possible to apply the evaluation criteria to this measure due to lack of information; however, it was suspected that this enforcement measure will become more common as private-side maintenance and improvements continue to be prioritized by municipalities. It appears that it would be reasonable to impose this measure, although there may be political hurdles and technical challenges in doing so.

Example surveyed municipalities considering or implementing measure: King Township, Kingston, District of North Vancouver.

6. Key issues related to mandatory measures

There are various recurring issues related to legal measures aimed at requiring private-side management of water-related infrastructure and reducing flood risk. Below is a discussion of some of the recurring implementation issues routinely identified in municipal interviews.

- **Potential liability.** Municipalities have expressed concerns about liability, both related to *taking* action to reduce flood risk and I&I (e.g., risks of going onto private property, risks of plumbing measures failing and leading to property damage) as well as to *not* taking action (e.g., class action lawsuits following major floods¹⁴, negligence claims for failure to enforce a by-law¹⁵). These concerns highlight the need to gain as much clarity on legal risks and responsibilities as possible before designing and implementing mandatory measures. Indeed, many municipalities have specifically indicated that their by-laws need more “teeth”.
- **Uncertainty around access to private property.** A number of municipalities are unclear about their rights to access private property to address flood risk and I&I. Even where by-laws contain explicit language granting city inspectors the authority to access private property, opinions differ as to when and how such access is allowed. For instance, is the access allowed for the purposes of inspecting private laterals, repairing them, or both? Is notice and/or consent of the homeowner required before access is allowed? Is entering onto a property different than entering into a dwelling? By-law language should seek to provide as much clarity around access rights as possible to enable municipalities to comfortably carry out important work.
- **Ability to require repairs (versus merely to inspect).** Certain municipalities require a homeowner to allow access for city inspection, but requiring a homeowner to conduct repairs goes a step further. That said, several by-laws discussed in this report include requirements for homeowners to take positive steps, from disconnecting improper connections to upgrading laterals that are in poor condition. A balance must be struck between encouraging homeowners to take responsibility and ensuring that the necessary work is completed in a timely and effective manner.
- **Questions around imposing conditions on the sale of property.** Time of sale requirements are a relatively new measure that have yet to be fully tested in the Canadian context. While there are still legal questions concerning a municipality’s ability to impose a condition on the sale of property, there are also other approaches available to achieve similar results, such as property sale checklists and time of renovation requirements.
- **Difficulties related to monitoring and enforcement.** Lack of opportunities, time, staff and financial resources to monitor and enforce are major concerns. In almost all cases reviewed, enforcement was carried out in an ad hoc manner. For instance, some municipalities would have co-op students go door to door during summer internships; others would identify private-side defects inadvertently while carrying out public sewer main inspection and maintenance work or capital projects; while others still would rely on homeowners to call in with sewer backup problems before conducting inspections. Finding key triggers and natural windows for enforcement, such as the building permit process during major renovations or possibly aligning private-side work during installation of new sewer infrastructure as part of infrastructure renewal programs, appears to be a crucial program element.

¹⁴ *Farmers Insurance Group (2013); McLaren v. Stratford (City)*, 2005 CanLII 19801; <http://www.theglobeandmail.com/news/toronto/muskoka-residents-seek-900-million-from-ontario-in-water-damages/article31918744/>

¹⁵ *Oosthoek v Corporation of Thunder Bay*, 1996 CanLII 1530 (ONCA)

- **Reluctance to invoke enforcement powers.** Certain municipalities have strong enforcement powers in their sewer use by-laws, including the ability to terminate a non-compliant homeowner's water service or place a lien on a property for fines owed. But even supported by clear by-law provisions, most municipalities are reluctant to use these enforcement powers – or to focus on the mandatory elements of their flood risk reduction programs at all. Instead, most municipalities are rolling out voluntary programs wherein the city helps homeowners do the required work and subsidizes the cost of such work. Voluntary approaches may be useful in the short term for education and outreach purposes; however, the long-term goal should be to ensure homeowners understand that they are ultimately responsible for private-side issues. Strong enforcement powers will help to achieve this goal.
- **Distribution of responsibility for private sewer laterals.** Municipalities are torn as to whether they should be emphasizing that private sewer laterals are the responsibility of the homeowner or simply taking on the responsibility themselves. Taking on the responsibility themselves would ensure that the work is completed in an effective and timely manner. However, it would also require municipalities to shoulder the costs and hire more staff. As noted above, some municipalities have decided on programs wherein they first complete the work for the homeowner, as part of an education and outreach campaign, and subsidize the costs. The plan is to then transfer the responsibility to the homeowner by emphasizing the mandatory elements of the program. To this end, some municipalities have had homeowners sign an explicit agreement that they understand the responsibility is theirs going forward.
- **Conflicting interests in city council and on city staff.** Finally, city councils and city staff may have conflicting interests that further complicate the concerns described above. For instance, city councils may be resistant to bringing in measures that are onerous for voters and have been more likely to support programs in which the city shoulders a higher proportion of responsibility and costs. In contrast, city staff have indicated that their financial resources and enforcement capacity are limited, making it difficult for them to effectively carry out the measures that city council votes on. Where a municipality opts to take on more responsibility for private-side work, it is important that a sufficient number of staff are hired and efficient systems are put into place to allow for proper administration and enforcement.

7. Recommendations and conclusion

This study revealed the diversity in approaches and jurisdiction among municipalities that currently exists across North America in developing and applying legal requirements for private-side flood reduction measures. Some municipalities are more certain about access rights than others. In particular, the B.C. municipalities interviewed for this report appeared more confident in access rights than Ontario municipalities. In California, municipalities stand on even firmer ground because the federal regulator (the U.S. Environmental Protection Agency (EPA)) is supporting and providing a mandate for addressing I&I.

Innovative legal tools are popping up and they are thoughtfully focusing on “trigger events” such as time of sale and renovation, where requirements can fit into existing systems of checklists or permits. Despite having “good law on the books”, our study emphasizes the importance of education and outreach activities. Additionally, the most developed programs appear to be in municipal environments with regional cost-sharing.

Many municipalities use ad hoc approaches for monitoring and enforcement. It appears most municipalities are in the beginning stages of offering their programs and are not focusing on mandatory elements or using their full powers. Therefore, it is difficult to provide a full evaluation of how some of those powers would operate if fully implemented and integrated into municipal practice (for example, termination of water, requiring property owners to do their own repairs). To be most effective, by-laws must combine clear access rights and strong enforcement regimes.

It is clear that provincial, state and federal government involvement in driving these measures results in higher levels of success. For instance, U.S. jurisdictions, which have the backing of the applicable EPA, have successfully silenced previously experienced pushback. Similarly, in Ontario, jurisdictions subject to provincial requirements to improve combined sewer systems are noticeably moving forward more collaboratively and purposefully. Strong coordination across orders of government is therefore highly recommended to achieve the best results regardless of measures implemented.

Finally, while the use of fiscal tools in stormwater management was outside the scope of this study, it is worth noting that such tools are becoming more prevalent in Canadian jurisdictions. For instance, several Canadian municipalities have implemented or are considering stormwater management charges or “user fees” that appear on property owners’ utility bills. Kitchener, Ontario’s program uses a series of rate tiers, calculated based on property type and size of impervious area to account for the varying degrees of water runoff generated from properties that use the system. Municipalities have pointed to the authority provided under the Ontario *Municipal Act* to impose fees or charges for services or activities provided by the municipality and for the use of the municipality’s property.¹⁶

In addition to legal requirements, municipalities indicated that other voluntary elements were vital to the success of their private-side programs. These include:

- > **Homeowner education and outreach campaigns**, including websites, public meetings and brochures sent out with water bills.
- > **Pilot projects** to test measures at a smaller scale and work out program kinks.
- > **Cost sharing**, sponsored by the municipality, the region or both, to fully or partially cover the work.
- > **Technical assistance** to assist homeowners in finding licensed professionals to conduct the work.
- > **Regional coordination** to facilitate funding support and information sharing across municipalities.
- > **Automated systems** such as data aggregators and automatic notifications to lower the administrative burden of monitoring and enforcement.
- > **Ongoing data collection** via continuous flow monitoring, smoke testing or closed circuit television (CCTV) camera inspection to monitor success and identify issues.

¹⁶ Subsection 391(1) of the *Municipal Act*, 2001 provides that sections 9 and 11 of that Act authorize a municipality to impose fees or charges on any class of persons for services or activities provided or done by or on behalf of the municipality and for the use of the municipality’s property, including property under its control.

Other Canadian municipalities have set up utilities for municipal services, including district energy, water, wastewater and stormwater, that charge fees for services provided. These types of utilities have provided opportunities for improved financing and management of assets. Further research on utility charges or fees linked to private-side I&I may be warranted.

In summary, this research shows that measures are most effective at encouraging specific lot-level measures for existing developments when they:

- Are coupled with political support,
- Are backed by provincial or regional government mandates and funding,
- Fit into existing administrative systems, such as the building permit system,
- Are based on a clear understanding of jurisdiction, particularly with respect to access rights and municipal authority to assist with the required work when necessary, and
- Are accompanied by strong enforcement provisions.

A by-law that allows for multiple approaches, along with administrative resources and enforcement capabilities, can take many forms. Municipal staff buy-in, outreach and administrative organization appear to be the key to the success of measures, regardless of legal form or technical detail.

8. Appendices

8.1 Appendix 1: Model By-law

Municipalities should draw on the lessons learned in this report and consider updating their by-laws to ensure that private-side measures to reduce flood risk are as effective as they can be. The following are recommended components of a by-law that seeks to address private-side flood risk:

- Clear statements of municipal authority, particularly with respect to the right to access private property, conduct work and recover costs, as applicable,
- Clear descriptions of homeowner responsibility to maintain, repair or replace private water management systems and disconnect improper connections,
- Detail concerning the ways in which the municipality intends to communicate with homeowners (e.g., notice and response timelines with homeowners),
- Detail concerning requirements such as:
 - Requirements to fix defects when identified by the municipality or related agency, and
 - Requirements to inspect and upgrade private sewer laterals during times of major redevelopment or renovation, as well as time of sale,
- Details of financial assistance and monetary incentives available to homeowners to conduct the necessary work, and
- Clearly explained enforcement provisions and associated penalties.

The following is a model by-law that incorporates these recommendations. It contains enabling language for each of the measures described in this report. In each case, the by-law adopts best practices for that measure and attempts to address any challenges or weaknesses associated with the measure through improved language and design.

The language in this model by-law is adapted from the by-laws and ordinances of various leading jurisdictions, including but not limited to the cities of Thorold, Port Colborne, Fort Erie, Kingston and Surrey, as well as the East Bay Municipal Utility District. It also incorporates some relevant work of leading organizations, including West Coast Environmental Lawyers, the Sheltair Group and Pinna Sustainability Inc.

City of _____

By-law No. _____

FOR THE MAINTENANCE AND REPAIR OF PRIVATE WATER MANAGEMENT SYSTEMS

Preamble

[TO BE MODIFIED AND ADAPTED FOR EACH MUNICIPALITY BASED ON MUNICIPAL CONTEXT, ENABLING LEGISLATION AND SPECIFIC CONCERNS]

WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that a municipality may provide any service or thing that the municipality considers necessary or desirable for the public interest;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that a municipality may pass by-laws respecting public utilities, drainage and flood control;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that a municipality may, for the purposes of preventing damage to property in the municipality due to flooding, exercise its powers under the "drainage and flood control" sphere of jurisdiction in relation to flood control in the municipality;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that a municipality may enter on land, at reasonable times, to inspect the Private Drainage System of any Person and may conduct tests and remove samples for this purpose;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that if a municipality has the authority under this or any other Act or under a by-law under this or any 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;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* provides that a municipality may recover the cost of doing a matter or thing from the person directed or required to do it by action or by adding the cost to the tax roll and collecting it in the same manner as property taxes;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* 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 or to inspect, repair, replace or alter a public utility meter;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* authorizes a municipality to, for certain purposes set out in such Act, shut off or disconnect the public utility to the land;

AND WHEREAS section *[INSERT]* of *[Local Government/Municipality Act]* authorizes the 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, 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 *[INSERT]* of *[Local Government/Municipality Act]* 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 *[Building Code Act]* regulates and controls the location, construction, repair and renewal or alteration of plumbing and materials to be used in construction thereof and further provides for the inspection of said plumbing work by officers duly appointed by municipal law;

AND WHEREAS it is deemed in the public interest to regulate the maintenance, operation and function of private sewer laterals within the sanitary sewer system;

NOW THEREFORE, the Council of _____ hereby enacts as follows:

PART I – DEFINITIONS

Definitions

1. For the purpose of this by-law:
 - a. "Appurtenance" means the apparatus or equipment that is an accessory to the Sewer Works system or to the Drainage Works system, including Municipal Laterals and their components or an accessory to Private Laterals, or to Private Sewage Collection Systems, or to a Private Drainage System or Storm Water Management system.
 - b. "Building" means any permanent structure, trailer, or other covering, which is located on a parcel of land having frontage or which abuts on a public highway and/or the Sewer Works and/or the Drainage Works, and which:
 - i. contains or is required by any other by-law, regulation or statute to contain any permanent sleeping, eating or food preparation facilities; or
 - ii. contains or is required by any other by-law, regulation or statute to contain any washing or toilet or cleaning facilities; or
 - iii. is connected or is required by any other by-law, regulation or statute to be connected to a water supply system or a sewage collection system, or to the Water Works and/or Sewer Works, and/or the Drainage Works; or
 - iv. is a source of Sewage; or
 - v. is habitable.
 - c. "Building Inspector" means the municipal officer assigned the responsibility of the Chief Building Inspector or Building Inspector appointed by the City to enforce the Building Code Act and any other statutes referred to in this by-law, as well as all Persons authorized at the direction of the Building Inspector for the purposes of exercising the power and duties of the Chief Building Official under this by-law.
 - d. "By-law Enforcement Officer" means the municipal officer or officers assigned the responsibility of by-law compliance and enforcement or his or her duly authorized designate or representative.
 - e. "City" means the City of _____ *[could also be referred to as the "Town", "Region" or "Corporation", depending on the municipal structure];*
 - f. "Council" means the Council of the ___ of ___.

- g. "Downspout" or "Storm Water Leader" means a pipe or system of pipes inside or outside a Building that conveys Storm Water from a roof of a Building or structure to an approved place of discharge.
- h. "Drainage Service" means a system of pipes and/or ditches and/or drains and required Appurtenances of the Drainage Works designed to collect and transmit Storm Water and water to an approved Drainage outlet.
- i. "Drainage Service Connection" means a Municipal Drainage Lateral and connected Private Drainage Lateral including required Appurtenances, connected to and discharging into the Drainage Works; or a pipe connecting a private Storm Water collection or management system or collection system to the Drainage Works.
- j. "Drainage Water" means water originating from rain, storm or ground sources, or from the melting of snow or ice, that is drawn off or away from a building and the lands on which the building is built to the Drainage Works or to an approved outlet.
- k. "Drainage Works" means any and all storm Sewers, Buildings, structures, equipment, Appurtenances, devices, conduits, underground pipelines, Municipal Drainage Laterals, Ditches, watercourses, and municipal drains and outlets and related installations and other works of the City, designed for the collection and transmission of Storm Water or Drainage Water.
- l. "Engineer" means the municipal officer assigned the responsibility of Chief Engineer, Director of Engineering and Operations, Municipal Engineer or City Engineer or his or her duly authorized designate or representative. The Engineer may delegate some or all of his or her powers and duties under this by-law.
- m. "Foundation Drain" means Drainage piping installed below the surface of the ground to collect and convey water away from a Building foundation.
- n. "Inflow and Infiltration" means the undesirable infiltration of groundwater and/or the undesirable, uncontrolled inflow of Drainage or Storm Water into a Sanitary Sewer Service Connection or into a Private Sewage Collection System or into Sewer Works.
- o. "Inspect" or "Inspection" means any physical or visual audit or examination, survey, sampling and testing, test or inquiry.
- p. "Main" means any pipe collecting and transmitting Sewage as part of the Sewer Works or Drainage or Storm Water as part of the Drainage Works, under the jurisdiction of the City, and includes all Appurtenances exclusive of Service Connections.
- q. "Municipal Drainage Lateral" means the pipes and Appurtenances of the Drainage Works situated between the Main and the property line, providing the connection of a Private Sewer Lateral to the Drainage works.
- r. "Municipal Lateral" means the pipes and Appurtenances of a Municipal Sewer Lateral or a Municipal Drainage Lateral.
- s. "Municipal Sewer Lateral" means the pipes and Appurtenances of the Sewer Works situated between the Main and the property line.
- t. "Owner" means any Person or Persons, or any firm, business, corporation or institute that is the registered Owner of land or a Building or Premises under consideration, or any agent or contractor or builder thereof, or a Person entitled to a limited estate in the property, a trustee in whom the property is invested, an executor, an administrator and a guardian, to whom the context applies *[this definition could be expanded to ensure that all applicable parties, including consumer, customer, lessee, operator and occupant are covered as relevant]*.
- u. "Person" means any individual, firm, corporation or partnership.
- v. "Premises" means a Building or facility, including associated lands, within which a Private Drainage System is constructed.
- w. "Private Lateral" means a Private Sewer Lateral or a Private Drainage Lateral.

- x. "Private Drainage Lateral" means the Drainage pipes and Appurtenances providing a connection to the Drainage Works located between the property line and the outer face of the Building foundation, or between the property line and a Private Drainage System.
- y. "Private Drainage System" means a privately owned network of Storm or Drainage Water, ditches, swales, collection pipes, maintenance holes, interceptors and catch basins and Appurtenances, discharging to the Drainage Works or other approved outlet.
- z. "Private Sewage Collection System" means a privately owned network of Sewage collection pipes, maintenance holes, interceptors and Appurtenances, servicing two or more Buildings, discharging to the Sewer Works.
- aa. "Private Sewer Lateral" means the pipes and Appurtenances providing a connection to the Sewer Works located between the property line and the outer face of the Building foundation; or between the property line and a Private Sewage Collection System.
- bb. "Private Water Management Systems" means Private Drainage System, Private Sewage Collection System and Private Laterals.
- cc. "Sanitary Sewer" means a system of pipes, Mains and Appurtenances of the Sewer Works for the collection and transmission of Sewage; and into which Storm Water, Drainage Water and groundwater are not intentionally discharged or admitted.
- dd. "Service Connection" means a Municipal Lateral and the connected Private Lateral and required Appurtenances forming a discharge connection to either the Sewer Works or the Drainage Works.
- ee. "Sewage" means any one of or a combination of domestic sanitary Sewage and/or waterborne waste, and/or non-domestic sanitary Sewage and/or waterborne waste, discharged from residences, businesses, recreational facilities, institutions or industry.
- ff. "Sewer" means a Sanitary Sewer or pipe or Main of the Sewer Works; or a Storm Sewer or a pipe or Main of the Drainage Works.
- gg. "Sewer Lateral Certificate" means a certificate issued by the Engineer evidencing the property's compliance with the by-law.
- hh. "Sewer Service Connection" means the Municipal Sewer Lateral and the connected Private Sewer Lateral, or a pipe connection from a Private Sewage Collection System to the Sewer Works.
- ii. "Sewer Works" means any and all Buildings, structures, equipment, Appurtenances, devices, conduits, underground pipelines, Municipal Sewer Laterals, outlets, and related installations and other works of the City, designed for the collection and transmission of Sewage.
- jj. "Storm Sewer" means a Storm Water and/or Drainage water collection and transmittal Main, pipe, ditch and/or watercourse or combination thereof, including Appurtenances, forming part of the Drainage Works.
- kk. "Storm Water" or "Stormwater" means surface or ground water from rainfall or snowfall or other natural precipitation or from the melting of snow or ice; naturally occurring water collected and carried in the Drainage Works.
- ll. "Storm Water Leader" see "Downspout".
- mm. "Storm Water Management" means drainage control practices and constructed works implemented to protect property and natural or constructed watercourses and receiving waters from Storm Water impacts.
- nn. "Waste Water" or "Wastewater" see "Sewage".
- oo. "Water Works" means any and all Buildings, structures, equipment, Appurtenances, devices, conduits, underground pipelines, municipal water laterals, outlets and related installations and other works so designed for the distribution of water.

PART 2 – PRIVATE WATER MANAGEMENT STANDARDS

Required Maintenance Standard

2.1 All Private Water Management Systems, including Appurtenances connected thereto, shall be maintained in good working order and condition, and adequately protected from blockage and freezing. Private Sewer Laterals and Private Sewage Collection Systems shall be maintained free from Drainage and Storm Water Inflow and Infiltration.

Unauthorized Connections

2.2 Drain, Storm Water Leaders, Downspouts, Foundation Drains and/or sump pumps shall not be connected directly or indirectly to the Sewer Works, unless otherwise approved by the Engineer.

Unauthorized Discharges

2.3 Except as authorized in writing by the Engineer, Storm Water, groundwater or Drainage Water of any kind may not be discharged into the Sewer Works.

2.4 All Storm Water or Drainage Water of any nature or kind, including roof water, surface water, groundwater and water from sump pumps or Foundation Drainage systems must either:

- a) Be discharged into the Drainage Works of the City,
- b) Be allowed to disburse only upon the lands of an Owner of the Building or lands from which such Storm Water or Drainage Water exits,
- c) Be discharged to a Private Drainage System or to a Storm Water Management system,
- d) Be discharged to a Watercourse,
- e) Be discharged to an approved Drainage Outlet, or
- f) Such other place as the City may direct.

2.5 Except as authorized in writing by the Engineer, Sewage of any kind may not be discharged into the Drainage Works.

PART 3 – RESPONSIBILITY OF OWNER

Maintenance and Repair

3.1 Every Owner shall maintain their Private Water Management Systems, including Appurtenances connected thereto, in good working order and condition and adequately protected from blockage and freezing. Private Sewer Laterals and Private Sewage Collection Systems shall be maintained free from Drainage and Storm Water Inflow and Infiltration. An Owner is responsible for maintaining the Private Sewer Lateral from the private property line to the building.

3.2 Where a leak occurs from a Private Sewer Lateral, Private Sewage Collection System, Sewage holding tank, septic tank system or any other private Sewage treatment system, an Owner shall take corrective action to repair the leak, at the Owner's expense.

Disconnection of Drainage Connections to Sewer Works

3.3 An Owner of any Building or Premises that has a Drain, Storm Water Leaders, Downspouts, Foundation Drains and/or sump pumps connected to the Sewer Works shall, at their own expense, disconnect such Drain, Storm Water Leaders, Downspouts, Foundation Drains and sump pumps from the Sewer Works.

Repair When Defect Identified

3.4 Subject to Subsection 3.5, where a Sewer Service Connection, Private Sewer Lateral, Private Sewage Collection System, Drainage Service Connection or Private Drainage System is made by an Owner contrary to the provisions of this by-law, the Engineer may provide the Owner with written notice requiring the Owner to maintain, repair, alter, relocate, or relay any aspect of the Private Water Management System as may be required by the Engineer. The Owner shall repair or replace such defective work as necessary to meet the required maintenance standard described in Part 2 within 60 calendar days after receipt of the written notice from the Engineer requiring the Owner to do so.

3.5 If the identified defect is such that Sewage is exposed on the property or there is an imminent risk to human health, an Owner must:

- (a) Stop the discharge immediately;
- (b) Remediate the site no later than 24 hours after the Owner has notice of the exposed sewage; and
- (c) Within 14 calendar days of receipt of the written notice, repair the defect as necessary to meet the required maintenance standard described in Part 2.

3.6 If an Owner fails to comply with the Engineer's notice sent under Subsection 3.4, the Engineer, or his or her designate, may enter the Building or Premises or upon the lands and undertake such Inspection, maintenance, repair, modification, disconnection, reinstallation or replacement, as required, and the cost thereof shall be paid by the Owner within 90 calendar days of the date the Inspection, maintenance, repair, modification, disconnection, reinstallation or replacement was completed. If the cost is not paid by the Owner, it may be added to the municipal tax roll of the property of which the work was done and collected in like manner and with the same priority as municipal taxes.

3.7 If an Owner fails to comply with the Engineer's notice sent under Subsection 3.4, the City may at its sole discretion exercised by the Engineer, discontinue the supply of water, Storm Water Drainage services or sewer services to the Premises of the Service Connection until such required Inspection and corrective action or required work has been completed to the satisfaction of the City *[consider whether notice of discontinuance of water supply would be included in initial notice under Section 3.4 or additional notice would be required]*.

Access to Private Property for Inspection and Repair

3.8 Every Owner shall, at all reasonable times and upon reasonable notice provided by the City, allow and provide access to a Building or Premises including a dwelling, to the Engineer, Building Inspector or any other Person duly authorized by the City, for the purposes of Inspecting, maintaining, repairing, modifying, disconnecting, reinstalling or replacing any aspect of a Private Water Management System or for taking corrective action, and/or carrying out work required by this by-law.

3.9 Every Owner shall, at all reasonable times and upon reasonable notice provided by the City, allow and provide access to a Building or Premises including a dwelling, to the Engineer, Building Inspector or any other Person duly authorized by the City, for the purposes of Inspecting and ensuring compliance with this by-law and taking corrective action as required, including access to a Private Sewer Collection System, or to a Private Drainage System, and Appurtenances thereof.

3.10 Should any Owner of a Service Connection refuse entry to any authorized officer, inspector, employee or agent of the City for the purposes of any compliance Inspection, maintenance, repair, disconnection or reinstallation and/or other corrective action, the City may, at its sole discretion exercised by the Engineer, on the provision of 30 calendar days written notice, discontinue the supply of water, Storm Water Drainage services or sewer services to the Owner of the service connection until such required inspection and corrective action or required work has been completed to the satisfaction of the City.

Costs

3.11 The entire cost of providing, installing, operating, maintaining, repairing, replacing, relocating or renewing any Private Sewer Lateral or Private Sewer Collection System, and Appurtenances connected thereto, shall be the responsibility of and paid for by the Owner.

PART 4 – PRIVATE SEWER LATERAL COMPLIANCE CERTIFICATES

Certificate Required When Defect Identified

4.1 An Owner in receipt of a written notice of a defect pursuant to Subsection 3.4 shall, within 120 calendar days of receipt of the written notice, obtain a Sewer Lateral Certificate in accordance with Part 5.

Certificate Required When Construction, Renovation or New Connection

4.2 Subject to Subsection 4.3, an Owner shall completely replace the existing Private Sewer Lateral with a new Private Sewer Lateral and obtain a Sewer Lateral Certificate in accordance with Part 5 whenever:

- (a) A new house or Building is constructed on the property;
- (b) An existing house or Building that is not already connected to a Private Sewer Lateral requires a connection to the sewer system; or
- (c) An existing house or Building is renovated and the estimated construction value is more than:
 - a. 100% of the latest building assessment, or
 - b. \$100,000 and the work involves:
 - i. Extensive excavation work,
 - ii. Enlargement of the plumbing system by adding two or more fixtures,
 - iii. An increase in the number of bedrooms, or
 - iv. A resulting increased demand upon the existing sewer system after renovations are complete.

4.3 The City may refuse to issue a building or occupancy permit to any Owner who fails to comply with this Part.

Certificate Required When Program Notice from City

4.4 The Engineer may establish a program requiring Owners of real property in neighbourhoods identified by the Engineer to obtain Sewer Lateral Certificates. The purpose of the program will be to proactively reduce Infiltration and Inflow on a neighbourhood priority basis.

4.5 Further to such a program, the Engineer may deliver to an Owner a written notice requiring the Owner to obtain a Sewer Lateral Certificate in accordance with Part 5.

4.6 An Owner who receives a notice pursuant to Subsection 4.5 shall, within 120 calendar days of receipt of the notice, obtain a Sewer Lateral Certificate in accordance with Part 5.

4.7 Any failure on the part of the Engineer to provide a notice pursuant to Subsection 4.5 does not relieve an existing Owner or a new Owner of the obligation to obtain a Sewer Lateral Certificate.

Certificate Required When Change of Property Ownership

4.8 For the purposes of this Part, a Change of Ownership means either:

- (a) The property is sold pursuant to an "arm's length agreement", or
- (b) The property is inherited by someone other than a surviving spouse, who is neither a resident of the property, nor on title.

4.9 This Part applies only to residential use real property containing three or fewer dwelling units.

4.10 Prior to a Change of Ownership, or within 90 calendar days after a change of name associated with a Change of Ownership is entered in the City's property tax records, an Owner shall obtain a Sewer Lateral Certificate in accordance with Part 5.

4.11 On becoming aware of any inquiry, information or evidence that suggests a Change of Ownership may be imminent or may have already occurred, the Engineer shall deliver a written notice to an Owner advising the Owner of his or her requirement under this Part to obtain a Sewer Lateral Certificate in accordance with Part 5.

4.12 Any failure on the part of the Engineer to provide a written notice pursuant to Subsection 4.11 does not relieve an existing Owner or a new Owner of the obligation to obtain a Sewer Lateral Certificate.

PART 5 – CERTIFICATION PROCESS

Qualified Inspection Procedure

5.1 An Owner subject to Part 4 is required to obtain a Sewer Lateral Certificate for the property.

5.2 Unless an Owner is able to produce the evidence described in Subsection 5.8(c)b, the Owner must, in accordance with Subsections 5.3 through 5.11 of this Part, first complete an inspection and any necessary repairs and post-repair inspection by a Qualified Inspector.

5.3 For the purposes of this Part:

- (a) "Qualified Inspector" means a licenced plumber *[insert any training, accreditation or qualifications required by the City. For clarity, the City may wish to create a training or accreditation program that plumbers are required to attend before being granted the authority to conduct an inspection under this Part.]*
- (b) "Inspection Report" means a report in a form prescribed by the Engineer, detailing the results of all inspection, repair work and post-repair inspection on the Private Sewer Lateral, and duly signed by the Qualified Inspector who conducted the inspection and repair work.

5.4 An Owner subject to this Part shall, at his or her own expense, arrange to have the Private Sewer Lateral inspected by a Qualified Inspector in accordance with testing procedures prescribed by the Engineer. The Owner shall provide the Engineer with 48 hours written notice of the date and time any inspection or post-repair inspection will take place.

Sewer Lateral Work – Permit Required

5.5 If an Inspection Report or a notice of defect delivered by the Engineer reveals a defect in a Private Sewer Lateral, an Owner shall, at his or her own expense, repair and/or replace the Private Sewer Lateral as necessary to meet the required maintenance standard described in Part 2.

5.6 An Owner shall first obtain from the City Engineering or Building Department a permit to conduct the repair or replacement work.

5.7 An Owner who has inspected, repaired or replaced a defective Private Sewer Lateral in compliance with Part 5 shall obtain from the Qualified Inspector an Inspection Report to be filed with the City as proof of compliance.

When Certificate Awarded

5.8 The Engineer may issue a Sewer Lateral Certificate to an Owner who provides to the Engineer:

- (a) An application for Sewer Lateral Certificate in the prescribed form;
- (b) The required fee; and
- (c) Either of:
 - a. An Inspection Report, duly signed by the Qualified Inspector who performed the inspection and any repair work in accordance with Subsections 5.3 through 5.7 of this Part, and acceptable to the Engineer; or
 - b. Records of a permit or evidence acceptable to the Engineer, sufficient to prove that the Private Sewer Lateral on the property:
 - i. Was installed less than 20 years before the date of the application, or
 - ii. Sustained significant repairs less than 10 years before the date of the application. For the purposes of this section, “significant repairs” means repairs that the Engineer at his or her sole discretion deems sufficient to reasonably expect the proper functioning of the Private Sewer Lateral for a period of 10 years after issuance of a Certificate.

5.9 The Engineer must consider the Inspection Report or other records or evidence pursuant to Subsection 5.8(c)b, and if the Engineer finds them to be satisfactory evidence of the Owner’s compliance, shall issue a Sewer Lateral Certificate.

5.10 In the event that the Engineer finds the Inspection Report or other records or evidence to not be satisfactory, the Engineer may require City staff to perform an inspection to verify the Private Sewer Lateral’s compliance with the required maintenance standard and may require the Owner to carry out repairs or replacement work to bring the Private Sewer Lateral into compliance with the required maintenance standard.

Certificate Valid Until

5.11 A Sewer Lateral Certificate is effective for the following periods of time:

- (a) A period of 10 years after:
 - a. Acceptance by the Engineer of an Inspection Report, if no repairs were required;
 - b. Acceptance by the Engineer of an Inspection Report, records or evidence pursuant to subsection 5.8(c)b.ii in respect of completed repairs of a Private Sewer Lateral or a connection to a lateral;
 - c. Acceptance by the Engineer of an Inspection Report in respect of completed repairs to a lateral or cleanout ordered by the Engineer.
- (b) A period of 20 years after acceptance by the Engineer of an Inspection Report in respect of replacement of the Private Sewer Lateral.

PART 6 – FINANCIAL ASSISTANCE

Reimbursement for Required Work

6.1 Provided that funds are available, as approved through the City's annual budget deliberations, financial assistance to a maximum reimbursement of \$*[insert appropriate amount]* may be considered to assist Owners with the costs of completing work required under Parts 3 and 5 of this by-law.

6.2 The following works will be eligible for financial assistance:

- (a) Removal of Storm Water Leaders and Downspouts from the Sanitary Sewer
- (b) Removal of Foundation Drains connections from the Sanitary Sewer
- (c) Removal of existing sump pump connections from the Sanitary Sewer
- (d) Repair or replacement of a Private Sewer Lateral
- (e) Installation of approved sewer backflow protection device

6.3 An Owner must apply for reimbursement within 90 calendar days of completing the eligible work. To apply, an Owner must submit to the Engineer:

- (a) An application in the form prescribed by the Engineer;
- (b) A copy of a licensed plumber's invoice, detailing the work performed on the property and listing the cost of work; and
- (c) A copy of the permit from the City Engineering or Building Department for the repair and replacement work.

PART 7 – OFFENCES AND PENALTIES

7.1 No Person shall:

- (a) Without prior written approval of the Engineer, discharge, or cause or permit to be discharged, either directly or indirectly, any Storm Water, ground water or Drainage Water, into or in the Sewer Works;
- (b) Without prior written approval of the Engineer, discharge, or cause or permit to be discharged, either directly or indirectly, any Sewage of any kind in or into the Drainage Works;
- (c) Fail to maintain a Private Water Management System;
- (d) Fail to repair a leak in a Private Sewer Lateral, Private Sewage Collection System, Sewage holding tank, septic tank system or any other private Sewage treatment system;
- (e) Fail to disconnect a Drain, Storm Water Leader, Downspout, Foundation Drain and/or sump pump from the Sewer Works;
- (f) Fail to comply with an Engineer’s notice to maintain, repair, alter, relocate or relay any Private Water Management System within the number of calendar days specified in said notice;
- (g) Having been given appropriate and adequate notice, fail to provide access to a Building or Premises for the purpose of Inspecting, maintaining, repairing, modifying, disconnecting, reinstalling or replacing a Sewer Connection or a Drainage Service Connection or for taking corrective action, and/or carrying out work required by this by-law;
- (h) Having been given appropriate and adequate notice, fail to provide access to a Building or Premises for the purpose of Inspecting and ensuring compliance with this by-law and taking corrective action as required, including access to a Private Sewer Collection System, or to a Private Drainage System, and Appurtenances thereof;

or is guilty of an offence and upon conviction is liable to a fine in accordance with Subsection 7.2 and Schedule I.

7.2 Every Person other than a City who contravenes a provision of this by-law or who consents, allows or permits any act or thing that violates or contravenes a provision of this by-law, or who neglects or refrains from doing anything required to be done by this by-law, commits an offence and is liable to a fine not exceeding \$5,000 for first offence and \$10,000 for any subsequent offence or imprisonment for 6 months, or both *[maximum allowable fines may depend on jurisdiction]*.

7.3 Each day that a violation occurs or continues constitutes a separate offence.

PART 8 – ENFORCEMENT

8.1 The Engineer, Building Inspector and By-law Enforcement Officer are authorized to enforce the provisions of this by-law.

8.2 On becoming aware of an Owner's non-compliance with this by-law, an authorized enforcement officer may deliver a written notice to the Owner advising him or her of the failure to obligation to comply with the by-law and his or her failure to do so ("Notice of Non-Compliance").

8.3 An Owner shall comply with the by-law within the number of calendar days specified in a Notice of Non-Compliance, or be liable to enforcement action.

8.4 Nothing in this by-law shall limit the City from pursuing any and all by-law enforcement or remedial authority available to it pursuant to *[insert applicable Local Government Act, Municipal Act or Community Charter]*, including, but not limited to those set out in sections 8.5 to 8.10.

Powers of Entry

8.5 The Engineer, Building Inspector or any Person duly authorized by the City shall be allowed access to a Building or Premises, including a dwelling, at all reasonable times and upon reasonable notice, for the purposes of Inspecting, maintaining, repairing, modifying, disconnecting, reinstalling or replacing any aspect of a Private Water Management System in accordance with the provisions of this by-law.

Repair at Owner's Expense

8.6 Where an Owner fails to comply with the Engineer's request to remedy a defect within 60 calendar days of the written notice from the Engineer, the Engineer, or his or her designate, may enter the Building or Premises or upon the lands and undertake such installation, repair or replacement and the cost thereof shall be paid by the Owner within 90 days or may be collected by action or in the like manner and with the same priority as municipal taxes as a charge on applicable lands.

Unpaid Costs As Lien on Property

8.7 All costs incurred by the City to perform work required by this by-law shall be charged to the Owner of the property where such work is performed and shall be collected according to law, and until paid, such cost shall remain a lien on such property, and may also be collected in the like manner as taxes. The City shall not be held responsible for the cost of restoration.

Termination of Water Supply

8.8 The City may enforce compliance with the stipulations within this by-law or non-payment of fines by shutting off the supply of water being supplied to the user or discontinuing the service thereof, so long as appropriate and adequate notice has been given.

Termination of Storm Water Drainage Services

8.9 The City may enforce compliance with the stipulations within this by-law or non-payment of fines by shutting off the provision of Storm Water Drainage services being supplied to the user or discontinuing the service thereof, so long as appropriate and adequate notice has been given.

Termination of Sewer Services

8.10 The City may enforce compliance with the stipulations within this by-law or non-payment of fines by shutting off the provision of sewer services being supplied to the user or discontinuing the service thereof, so long as appropriate and adequate notice has been given.

PART 9 – MISCELLANEOUS

Form of Notice

9.1 All notices sent by the City, Engineer or duly authorized designate or representative thereof pursuant to this by-law shall be sent to the Owner by registered mail, to the Owner's last known address.

Municipal Reporting and Review

9.2 The Engineer shall gather data and deliver to Council an annual report summarizing the actions that have resulted from the adoption of the by-law, assessing the effectiveness of those actions, and making recommendations on any other priority actions needed to address Private Water Management Systems and maintenance.

Severability

9.3 In the event any provision, or part thereof, of this by-law is found by a court of competent jurisdiction to be invalid, such provision or part thereof shall be determined to be severed and such decision shall not affect the validity of the remaining provisions of this by-law, which shall remain in full force and effect.

SCHEDULE I – FINES

Fine Schedule *[maximum allowable fines may depend on jurisdiction]*

- Unauthorized discharge to the Sewer Works or Drainage Works – \$200
- Failure to maintain any aspect of a Private Water Management System – \$200
- Failure to repair a leak in a Private Sewer Lateral, Private Sewage Collection System, Sewage holding tank, septic tank system or any other private Sewage treatment system – \$300
- Failure to disconnect a Drain, Storm Water Leader, Downspout, Foundation Drain and/or sump pump from the Sewer Works – \$500
- Failure to comply with the Engineer's notice to maintain, repair, alter, relocate or relay any aspect of a Private Water Management System within the number of calendar days specified in said notice – \$300

8.2 Appendix 2: By-law language for specific tools

Table A2.1: Mandatory Disconnections of Improper Connections to Sanitary Drains

Jurisdiction	By-law provisions
<p>Thorold</p>	<p><i>By-Law No. 22-2011 – Being a By-law to Regulate the Management of a System of Sewer Works and Drainage Works in the City of Thorold</i></p> <ul style="list-style-type: none"> • 3.6.1 – Storm Water pipes, Drainage Service Connections, Drainage water pipes, Drainage sump pump discharge laterals, Foundation Drains, Storm Water leaders or Downspouts shall not be connected directly or indirectly to the Sewer Works, unless otherwise approved by the Engineer. • 4.3.3 – All Storm Water or Drainage water of any nature or kind, including roof water, surface water, ground water and water from sump pumps or Foundation Drainage systems must either: <ol style="list-style-type: none"> a) Be discharged into the Drainage Works of the Corporation, b) Be allowed to disburse only upon the lands of the Owner of the Building or lands from which such Storm Water or Drainage water exits, c) Be discharged to a private Drainage system or to a private Storm Water management system, d) Be discharged to a watercourse, e) Be discharged to an approved Drainage Outlet, or f) Such other place as the Corporation may direct. • 4.3.4 – No Person shall directly or indirectly discharge or deposit, or cause or permit to be discharged or deposited, any Sewage of any kind in or into the Drainage Works. • 4.8.1 – The Owner of any Building or Premises which has a Drain, Storm Water Leaders, Downspouts, Foundation Drains and/or sump pumps connected to the Sewer Works shall, at their own expense, disconnect such Drain, Storm Water leaders, Downspouts, Foundation Drains and sump pumps from the Sewer Works.
<p>Port Colborne</p>	<p><i>By-Law No. 5228-134-08 – Being a By-law to Regulate the Management of A System of Sewage Works and Drainage Works in the City of Port Colborne</i></p> <ul style="list-style-type: none"> • 3.6.1 – Storm Water pipes, Drainage Service Connections, Drainage water pipes, Drainage sump pump discharge laterals, Foundation Drains, Storm Water leaders or Downspouts shall not be connected directly or indirectly to the Sewer Works, unless otherwise approved by the Engineer. • 4.8.1 – The Owner of any Building or Premises which has a Drain, Storm Water Leaders, Downspouts, Foundation Drains and/or sump pumps connected to the Sewer Works shall, at their own expense, disconnect such Drain, Storm Water leaders, Downspouts, Foundation Drains and sump pumps from the Sewer Works. • 4.8.2 – Provided that funds are available, as approved through the Corporation’s annual budget deliberations, financial assistance to a maximum reimbursement of \$2,500.00 may be considered to assist Owners with the costs of the following repairs to disconnect Drainage connections from, and to reduce Extraneous Flow into, the Sewer Works: <ul style="list-style-type: none"> ○ Removal of roof leaders from the Sanitary Sewer ○ Removal of existing sump pump connections from the Sanitary Sewer ○ Repair or replacement of a leaking Private Sewer Laterals ○ Removal of Foundation Drains connections from the Sanitary Sewer

Table A2.1: Mandatory Disconnections of Improper Connections to Sanitary Drains

Jurisdiction	By-law provisions
<p>Fort Erie</p>	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.4.3 – Sump pumps shall connect to and discharge to the Drainage Works by means of a private drainage lateral, at a location and in a manner approved by the Engineer. • 4.8.1 – The Owner of any building or premises which has a drain, storm water leaders, downspouts, foundation drains and/or sump pumps connected into the Sewer Works of the Corporation shall at their expense disconnect such drain, storm water leaders, downspouts, foundation drains and sump pumps from the Corporation’s Sewer Works within ninety (90) calendar days after the Corporation has sent notice to the Owner by registered mail, to the Owner’s last known address, to make such disconnection.
<p>Surrey</p>	<p><i>Surrey Stormwater Drainage Regulation and Charges, By-law, 2008, No. 16610</i></p> <ul style="list-style-type: none"> • 63. No person shall connect any roof drains, tile or conduit collecting surface drainage or rainwater runoff in any way to the <i>sanitary sewerage system</i>, or permit any <i>stormwater</i> or surface water to be drained into the <i>sanitary sewerage system</i>.
<p>Kingston</p>	<p><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <ul style="list-style-type: none"> • 2.16 Cross Connections – prohibited No owner, occupant or person shall use or cause to be used or permit a cross connection to occur. • 3.11 Connections Prohibited – offence No person shall permit the connection of a roof leader or foundation drain to a sanitary sewer or combined sewer.

Table A2.2: Requirements to Maintain Private Sewer Laterals and Remedy Defects When Identified

Jurisdiction	By-law provisions
Thorold	<p><i>By-Law No. 22-2011 – Being a By-law to Regulate the Management of a System of Sewer Works and Drainage Works in the City of Thorold</i></p> <ul style="list-style-type: none"> • 3.4.18 <ul style="list-style-type: none"> a) Where a Sewer Service Connection, Municipal Sewer Lateral or Private Sewer Lateral, or Private Sewage Collection System or Drainage Service Connection or private Drainage system is made by an Owner contrary to the provisions of this By-law, the Owner shall repair or replace such defective work or material within seven (7) calendar days after receipt of notice from the Corporation requiring the Owner to do so. b) Where an Owner fails to repair or replace a connection in accordance with Section 3.4.18 (a) above, the Corporation may carry out the repair or replacement at the expense of the Owner and such costs of said repair or replacement shall be paid by the Owner, and if not paid, the costs shall be added to the tax roll for the property and collected in the same manner as property taxes. • 3.8.2 – Every Owner shall maintain their Private Sewer Lateral or Private Sewage Collection System and Private Drainage Lateral or Private Drainage or Storm Water Management Systems, including Appurtenances connected thereto, in good working order and condition, and adequately protected from blockage and freezing. Private Sewer Laterals and Private Sewage Collection Systems shall be maintained free from Drainage and Storm Water Inflow and Infiltration. • 4.4.2 – Every Owner, lessee, Operator or occupant of land shall keep in repair any private Drain on land owned or occupied by them. Every Owner, lessee, Operator or occupant of land shall alter, relay or repair any private Drain as may be required by the Engineer. • 4.4.3 – The Engineer may send to, or serve on, the Owner, lessee, Operator or occupant of any land a notice requiring the Owner, lessee, Operator or occupant, or any of them to maintain, repair, alter, relocate, or relay any private Drain, within a specified number of calendar days, as may be required by the Engineer pursuant to Subsections 4.4.1. • 4.8.2 – Provided that funds are available, as approved through the Corporation’s annual budget deliberations, financial assistance to a maximum reimbursement of \$2,500.00 may be considered to assist Owners with the costs of the following repairs to disconnect Drainage connections from, and to reduce Extraneous Flow into, the Sewer Works: <ul style="list-style-type: none"> i) Removal of roof leaders from the Sanitary Sewer. ii) Removal of existing sump pump connections from the Sanitary Sewer. iii) Repair or replacement of a leaking Private Sewer Laterals. iv) Removal of Foundation Drains connections from the Sanitary Sewer.

Table A2.2: Requirements to Maintain Private Sewer Laterals and Remedy Defects When Identified

Jurisdiction	By-law provisions
<p>Port Colborne</p>	<p><i>By-Law No. 5228-134-08 – Being a By-law to Regulate the Management of A System of Sewage Works and Drainage Works in the City of Port Colborne</i></p> <ul style="list-style-type: none"> • 4.4.2 – Every Owner, lessee, Operator or occupant of land shall keep in repair any private Drain on land owned or occupied by them. Every Owner, lessee, Operator or occupant of land shall alter, relay or repair any private Drain as may be required by the Engineer. • 4.4.3 – The Engineer may send to, or serve on, the Owner, lessee, Operator or occupant of any land a notice requiring the Owner, lessee, Operator or occupant, or any of them to maintain, repair, alter relocate, or relay any private Drain, within a specific number of calendar days, as may be required by the Engineer pursuant to Subsections 4.4.1 and ... • 4.4.4 – If an Owner, lessee, Operator or occupant of any land fails to comply with the Engineer’s notice sent or served under Subsection 4.4.3 the Engineer may cause the required work to be done, and the cost of such work shall be paid by the said Owner, lessee, Operator or occupant; and if not paid may be added to the municipal tax roll of the property of which the work was done and collected in like manner and with the same priority as municipal taxes. • 4.8.2 – Provided that funds are available, as approved through the Corporation’s annual budget deliberations, financial assistance to a maximum reimbursement of \$2,500.00 may be considered to assist Owners with the costs of the following repairs to disconnect Drainage connections from, and to reduce Extraneous Flow into, the Sewer Works: <ul style="list-style-type: none"> ○ Removal of roof leaders from the Sanitary Sewer ○ Removal of existing sump pump connections from the Sanitary Sewer ○ Repair or replacement of a leaking Private Sewer Laterals ○ Removal of Foundation Drains connections from the Sanitary Sewer
<p>Fort Erie</p>	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.4.8 – Private sewer laterals from and including the inspection tee and private sewage collection systems, and private drainage laterals and private drainage systems shall be provided by and maintained by and at the expense of the Owner, as set out in this Schedule including Appendices “1” and “2” attached hereto. • 3.8.2 – Every Owner shall maintain their private sewer lateral or private sewage collection system and private drainage lateral or private drainage or storm water management systems, including appurtenances connected thereto, in good working order and condition, and adequately protected from blockage and freezing. Private sewer laterals and private sewage collection systems shall be maintained free from drainage and storm water inflow and infiltration.

Table A2.2: Requirements to Maintain Private Sewer Laterals and Remedy Defects When Identified

Jurisdiction	By-law provisions
Kingston	<p data-bbox="422 436 1323 499"><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <ul style="list-style-type: none"> <li data-bbox="422 514 933 541"> <p data-bbox="422 514 933 541">• 3.2 Maintenance of sewer lateral – Owner</p> <p data-bbox="422 546 1421 1018">Every Owner of a property to which sewer service is provided shall be responsible for the maintenance, repair, and replacement of the sewer lateral from the building to the property line. Any and all structural defects of a sewer lateral shall be repaired by the Owner of the property being serviced. Should the City become aware of any such structural defect, and upon written notification to the Owner, the said structural defect is not repaired within thirty (30) days of the date of the notification or within such time as the Operating Authority may deem necessary, then the City may turn off the municipal water supply to the property. If the City is ordered to restore the water supply, then the City may repair the structural defect in the sewer lateral pipe at the Owner’s expense. In so doing the City of Kingston shall only reinstate the property to a safe condition and all final restoration shall be the Owner’s responsibility. The City of Kingston shall not be held responsible for any damages to the Owner’s property arising from such work such as damage to root systems or other landscaping features located along the sewer lateral. If flushing or rodding of a sewer lateral is required to remove an obstruction located anywhere between the building and the sewer lateral stub, the Owner or occupier shall be solely responsible for the cost of removing the obstruction.</p>

Table A2.3: Requirement to Allow City Officials onto Property

Jurisdiction	By-law provisions
<p>Thorold</p>	<p><i>By-Law No. 22-2011 – Being a By-law to Regulate the Management of a System of Sewer Works and Drainage Works in the City of Thorold</i></p> <ul style="list-style-type: none"> • 3.8.6 – Every Owner and occupant shall, at all reasonable times and upon reasonable notice provided by the Corporation, allow and provide access to a Building or Premises including a dwelling, to the Engineer, Chief Building Official or any other Person duly authorized by the Corporation, for the purposes of Inspecting, maintaining, repairing, disconnecting or reinstalling a Sewer Connection or a Drainage Service Connection or for taking corrective action, and/or carrying out work required by this By-law. • 3.9.1 – The Engineer, Chief Building Official or any Person duly authorized by the Corporation, shall be allowed access to a Building or Premises, including a dwelling, at all reasonable times and upon reasonable notice, for the purpose of Inspecting, maintaining, repairing, disconnecting or reinstalling a Sewer Service Connection or a Drainage Service Connection in accordance with the provisions of this By-law.
<p>Port Colborne</p>	<p><i>By-Law No. 5228-134-08 – Being a By-law to Regulate the Management of A System of Sewage Works and Drainage Works in the City of Port Colborne</i></p> <ul style="list-style-type: none"> • 3.9.1 – The Engineer, Chief Building Official or any Person duly authorized by the corporation shall be allowed access to a Building or Premises, including a dwelling, at all reasonable times and upon reasonable notice, for the purposes of Inspecting, maintaining, repairing, disconnecting or reinstalling a Sewer Service Connection or a Drainage Service Connection in accordance with the provisions of this By-law.
<p>Surrey</p>	<p><i>Surrey Stormwater Drainage Regulation and Charges, By-law, 2008, No. 16610</i></p> <ul style="list-style-type: none"> • 70. Every owner of real property and every occupier of premises to which a service connection has been provided must allow, suffer and permit, the <i>General Manager, Engineering</i> to enter into or upon the <i>real property</i> and premises for the purpose of inspecting the premises including building drain, inspection chamber, fixtures and any other apparatus used with the <i>service connection</i> or plumbing system, as well as to observe, measure, sample and test the quantity and nature of water being discharged into the <i>stormwater drainage system</i>, and to ascertain whether the terms of this By-law are being upheld. • 92. The <i>General Manager, Engineering</i>, an authorized designate, or any <i>City By-law Enforcement Officer</i> may enter upon any land or premises to conduct inspections as are reasonably necessary to ascertain whether there is compliance with the provisions of this By-law. If the property owner or occupant is present during the inspection, they must identify themselves when requested by the <i>General Manager, Engineering</i>, an authorized designate, or any <i>City By-law Enforcement Officer</i>. <p><i>Surrey Sanitary Sewer Regulation and Charges By-law, 2008, No. 16611</i></p> <ul style="list-style-type: none"> • 90. Every owner of real property and every occupier of premises to which a <i>service connection</i> has been installed must allow, suffer and permit the <i>General Manager, Engineering</i> and all associated inspection equipment, to enter into or upon the <i>real property</i> and premises for the purpose of inspecting the premises including <i>building sanitary sewer, drains</i>, fixtures and any other apparatus used with the service connection or plumbing system, as well as to observe, measure, sample and test the quantity and nature of <i>sewage</i> being discharged into the <i>sanitary sewerage system</i>, to ascertain whether the terms of this By-law are being complied with.

Table A2.3: Requirement to Allow City Officials onto Property

Jurisdiction	By-law provisions
Kingston	<p data-bbox="423 436 1321 499"><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <p data-bbox="423 514 862 541">2.11 Installation – access for inspection</p> <ul data-bbox="456 548 1409 638" style="list-style-type: none"> • The City and persons authorized by the City for inspection shall be, at all times, entitled to enter upon any lands or any buildings for the purposes of examining pipes, connections and fixtures which are used in connection with the sewer service pipe and/or sewer lateral. <p data-bbox="423 655 683 682">14.1 Inspection powers</p> <ul data-bbox="456 688 1419 1045" style="list-style-type: none"> • The Operating Authority or any person designated by it as inspector for purposes of this by-law may, at reasonable times enter onto any land on which the City supplies sewer services for the following purposes: <ul data-bbox="488 793 1419 1045" style="list-style-type: none"> a) to inspect, repair, alter, or disconnect the sewer lateral or storm sewer lateral, machinery, equipment and other works used to supply sewer services to the building or land; b) to inspect, install, repair, replace or alter any related metering equipment; c) to inspect the discharge of any matter into the sewage system of the City or into any other sewage system the contents of which ultimately empty into the municipal sewage system and may conduct tests, measure flow and take samples for this purpose; or d) to investigate or determine if this by-law, an order, or condition to any permit or agreement is being complied with. <p data-bbox="423 1062 699 1089">14.3 Access to dwellings</p> <ul data-bbox="456 1096 1403 1383" style="list-style-type: none"> • An inspector shall not enter a place being used as a dwelling unless: <ul data-bbox="488 1138 1403 1383" style="list-style-type: none"> a) the consent of the occupier is first obtained, ensuring the occupier is first advised that entry may be denied and in such circumstance, entry can only occur thereafter under authority of a warrant; b) a warrant under section 158 of the Provincial Offences Act is obtained; c) the delay necessary to obtain a warrant or the consent of the occupier would result in the immediate danger to the health or safety of any person; or d) the entry is for the purpose of section 4.1 and the notice provisions of this by-law have been complied with. <p data-bbox="423 1400 878 1428">14.4 Entry on land – notice requirements</p> <ul data-bbox="456 1434 1419 1755" style="list-style-type: none"> • Whenever an inspector exercises a power of entry pursuant to this By-law, the inspector shall: <ul data-bbox="488 1507 1419 1755" style="list-style-type: none"> a) provide reasonable notice of the proposed entry to the occupier of the land by personal service or prepaid mail or by posting the notice on the land in a conspicuous place for three consecutive days prior to entry; b) where the proposed entry is an inspection to determine compliance with this By-law the inspector must provide reasonable notice by means of personal service only; c) in so far as is practicable, restore the land to its original condition where any damage is caused by the inspection; and d) provide compensation for any damage caused and not remedied.

Table A2.3: Requirement to Allow City Officials onto Property

Jurisdiction	By-law provisions
<p>Fort Erie</p>	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.8.7 – Every Owner shall, at all reasonable times and upon reasonable notice given and request made, allow and provide access to their building or premises to the Engineer and/or Chief Building Official, and/or any person duly authorized by the Corporation, for the purpose of conducting a compliance inspection and taking corrective action, and/or to carry out work, all as permitted under this Schedule, the Ontario Building Code, or the Municipal Act 2001. • 3.9.1 – The Engineer and/or Chief Building Official or any person duly authorized by the Corporation shall be allowed access to a building or premises, at all reasonable times, and upon reasonable notice given and request made to the Owner, Operator or Customer, for the purpose of inspecting, maintaining, repairing, disconnecting or reinstalling a sewer service connection or a drainage service connection as permitted by this Schedule or by the Ontario Building Code or by the Municipal Act 2001. • 3.9.3 – Should any Owner or Operator or Customer of a service connection refuse entry to any authorized officer, inspector, employee or Agent of the Corporation for the purposes of any compliance inspection, maintenance, repair, disconnection or reinstallation and/or other corrective action, under the provisions of this Schedule or the Ontario Building Code, or the Municipal Act, 2001; the Corporation may, at its sole discretion exercised by the Engineer, on the provision of seven (7) calendar days notice, discontinue the supply of water to the Owner or Operator or Customer of the service connection until such required inspection and corrective action or required work has been completed to the satisfaction of the Corporation.
<p>District of North Vancouver</p>	<p>22. Right of Entry</p> <ul style="list-style-type: none"> • The Director and District Employees designated by the Director to inspect the sanitary drainage system or the storm drainage system may enter, at all reasonable times, on any property subject to this by-law, to ascertain whether the provisions of the by-law and the terms of any permit or order issued pursuant to this by-law by the Director are being observed.

Table A2.4: Authority to Conduct Required Work at Expense of Homeowner

Jurisdiction	By-law provisions
Thorold	<p><i>By-Law No. 22-2011 – Being a By-law to Regulate the Management of a System of Sewer Works and Drainage Works in the City of Thorold</i></p> <ul style="list-style-type: none"> • 3.8.1 – The entire cost of providing, installing, operating, maintaining, repairing, replacing, relocating or renewing any Private Sewer Lateral or Private Sewer Collection System, and any Private Drainage Lateral or private Drainage or Storm Water Management System, and Appurtenances connected thereto including Inspection Tees, shall be the responsibility of and paid for by the Owner. • 4.4.4 – If an Owner, lessee, Operator or occupant of any land fails to comply with the Engineer’s notice sent or served under Subsection 4.4.3 the Engineer may cause the required work to be done; and the cost of such work shall be paid by the said Owner, lessee, Operator or occupant; and if not paid may be added to the municipal tax roll of the property of which the work was done and collected in like manner and with the same priority as municipal taxes.
Fort Erie	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.4.12 – If any sewer service connection, municipal sewer lateral or private sewer lateral, or private sewage collection system or drainage service connection or private drainage system is made by an Owner or the Owner’s Agent, contrary to the provisions of this Schedule, the Owner shall repair or replace such defective work or material within seven (7) calendar days after receipt of a notice from the Corporation requiring the Owner to do so; and if the Owner fails to repair or replace such work, the Corporation may at its sole discretion exercised by the Engineer, discontinue the supply of water from the Water Works. In addition, the Corporation may repair or replace the work, including the right to enter the building or premises or upon the lands; and the costs of such repairs shall be paid by the Owner, and if not paid, the costs shall be added to the tax roll for the property and collected in the same manner and with the same priorities as municipal taxes. • 4.4.4 – If an Owner, Lessee, Operator or Occupant of any land fails to comply with the Engineer’s notice sent or served under Subsection 4.4.3 the Engineer may cause the required work to be done; and the cost of such work shall be paid by the said Owner, Lessee, Operator or Occupant; and if not paid may be added to the municipal tax roll of the property of which the work was done and collected in like manner and with the same priority as municipal taxes.
King Township	<p><i>By-Law Number 2014-72 – A By-law to Regulate the Discharges and Connections to the Municipal Sewage System Hereafter Known as the Sewer Use By-law</i></p> <ul style="list-style-type: none"> • 16.2: Where the Director requires that any action shall be taken in respect of any private sewer line that discharges into the sewage works or any private sewer line that does not conform to the provisions of this by-law, if such requirement is not complied with within thirty (30) days written notice from the Director, the Director, or his or her designate may enter upon the premises and undertake such installation, repair or replacement and the cost thereof shall be paid by the owner forthwith and may be collected by action or in like manner as municipal taxes as a charge on applicable lands.

Table A2.4: Authority to Conduct Required Work at Expense of Homeowner

Jurisdiction	By-law provisions
<p>Kingston</p>	<p><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <p>14.5 City expenses</p> <ul style="list-style-type: none"> All costs incurred by the City to perform work required by this by-law shall be charged to the Owner of the property where such work is performed and shall be collected according to law, and until paid, such cost shall remain a lien on such property, and may also be collected in the like manner as taxes. The City shall not be held responsible for the cost of restoration.
<p>District of North Vancouver</p>	<p>20. Default</p> <ul style="list-style-type: none"> If the terms of an Order to Comply are not fulfilled by the date prescribed in the order, the District may have District Employees enter the real property and do the work necessary to bring the property into compliance with the Order to Comply and the District may recover the cost of such work from the owner or occupier of the property together with interest at the rate for overdue accounts as set by Council. <p>21. Costs</p> <ul style="list-style-type: none"> The Director shall certify to the Director of Financial Services all costs incurred by the District in performing or causing to be performed any work under Section 20, upon receipt of which the Director of Financial Services shall demand payment by issuing an invoice in the amount of the costs to the person named in the Order to Comply, and to the owner of the real property, if different from such person, and such invoice may be served in accordance with section 18.

Table A2.5: Time of Sale Requirements

Jurisdiction	By-law provisions
<p>East Bay MUD</p>	<p><i>East Bay Municipal Utility District Regional Private Sewer Lateral Ordinance, Adopted by Ordinance No. 359-13 Amended by Ordinance No. 362-14</i></p> <ul style="list-style-type: none"> • SECTION 6 – WHEN A COMPLIANCE CERTIFICATE IS REQUIRED (East Bay MUD) <ul style="list-style-type: none"> (a) All Property Owners must obtain a Compliance Certificate at the time and in the manner required by this Section, except for the following: <ul style="list-style-type: none"> (1) Property Owners entitled to an Exemption Certificate under Section 10; (2) Property Owners within certain Common Interest Developments governed by Section 11; and (3) Property Owners of any parcel or Parcel Group with Private Sewer Laterals totaling greater than 1000 feet, which are governed by Section 12. (b) Title Transfer. Before completing a Title Transfer associated with a parcel containing any Structure, either the transferor or the transferee, as negotiated between them, shall obtain a Compliance Certificate under Section 7, unless a Time Extension Certificate is obtained as provided in Section 9. After the Title Transfer is complete, the transferee is solely responsible for obtaining a Compliance Certificate. The requirement to obtain a Compliance Certificate before Title Transfer in no way affects the legality of the transfer of title in the underlying property transaction.

Table A2.6: Time of Renovation Requirements

Jurisdiction	By-law provisions
Surrey	<p><i>Surrey Stormwater Drainage Regulation and Charges, By-law, 2008, No. 16610</i></p> <ul style="list-style-type: none"> • 36. When an application for a <i>service connection</i> accompanies a building permit with the construction value greater than \$100,000 or where a <i>parcel</i> is being redeveloped, the following shall apply to the <i>service connection</i> and the <i>building drain</i>. <ul style="list-style-type: none"> (a) if the <i>service connection</i> or <i>building drain</i> is less than 30 years old, the owner must provide a video inspection for the City to review. The <i>owner</i> shall repair or replace the connection if the connection has excessive damage as determined by the <i>General Manager, Engineering</i>; (b) if the <i>service connection</i> or <i>building drain</i> is 30 years old or older a replacement or new service is required; (c) all no-corrode, asbestos cement or clay service pipes of any age or condition shall be replaced; (d) any shared <i>service connection</i> or <i>building drain</i> shall be replaced; and (e) all costs associated with the above are the responsibility of the <i>owner</i>. <p><i>Surrey Sanitary Sewer Regulation and Charges By-law, 2008, No. 16611</i></p> <ul style="list-style-type: none"> • 39. When an application for a <i>service connection</i> accompanies a building permit with the construction value greater than \$100,000 or where a <i>parcel</i> is being redeveloped, the following shall apply to the <i>service connection</i> and the <i>building sanitary sewer</i>: <ul style="list-style-type: none"> a) if the <i>service connection</i> and <i>building sanitary sewer</i> is less than 30 years old, the <i>owner</i> must provide a video inspection and recommendation for the <i>City</i> to review. The <i>owner</i> shall repair or replace the connection if the <i>City</i> determines that the connection is not adequate for service or has excessive damage; b) if either the <i>service connection</i> or the <i>building sanitary sewer</i> is 30 years old or older, a replacement or new service is required; c) all no-corrode, asbestos cement or clay service pipes of any age or condition shall be replaced; d) any shared <i>service connection</i> or the <i>building sanitary sewer</i> shall be replaced; and e) all costs associated with the above are the responsibility of the <i>owner</i>.
East Bay MUD	<p><i>East Bay Municipal Utility District Regional Private Sewer Lateral Ordinance, Adopted by Ordinance No. 359-13 Amended by Ordinance No. 362-14</i></p> <ul style="list-style-type: none"> • SECTION 6 – WHEN A COMPLIANCE CERTIFICATE IS REQUIRED (East Bay MUD) <ul style="list-style-type: none"> (a) All Property Owners must obtain a Compliance Certificate at the time and in the manner required by this Section, except for the following: <ul style="list-style-type: none"> (1) Property Owners entitled to an Exemption Certificate under Section 10; (2) Property Owners within certain Common Interest Developments governed by Section 11; and (3) Property Owners of any parcel or Parcel Group with Private Sewer Laterals totaling greater than 1000 feet, which are governed by Section 12. ... (c) Construction or Remodeling. Whenever a Property Owner submits an application to a Permitting Authority for any permit or other approval needed for new construction upon a parcel, or for Remodeling of an existing or previously existing Structure, the Property Owner shall obtain a Compliance Certificate under Section 7 before obtaining a final permit or approval from the Permitting Authority. This paragraph applies to construction and Remodeling if the cost of the permitted work exceeds \$100,000.00.

Table A2.7: Termination of Water Service

Jurisdiction	By-law provisions
<p>Fort Erie</p>	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.4.12 – If any sewer service connection, municipal sewer lateral or private sewer lateral, or private sewage collection system or drainage service connection or private drainage system is made by an Owner or the Owner’s Agent, contrary to the provisions of this Schedule, the Owner shall repair or replace such defective work or material within seven (7) calendar days after receipt of a notice from the Corporation requiring the Owner to do so; and if the Owner fails to repair or replace such work, the Corporation may at its sole discretion exercised by the Engineer, discontinue the supply of water from the Water Works. In addition, the Corporation may repair or replace the work, including the right to enter the building or premises or upon the lands; and the costs of such repairs shall be paid by the Owner, and if not paid, the costs shall be added to the tax roll for the property and collected in the same manner and with the same priorities as municipal taxes. • 3.8.5 – Should a leakage occur from a private sewer lateral or private sewage collection system, or from a sewage holding tank, or from a septic tank system or any other private sewage treatment system; the Owner shall be bound to take corrective action and to complete repairs of the said leakage, at the Owner’s expense, within seven (7) calendar days after being duly notified by the Corporation of such leak detected. In the event of non-compliance with this provision by the Owner, the Corporation may, at its sole discretion exercised by the Engineer, discontinue the supply of water from the Water Works until the Owner has made the necessary repairs. All repairs are to be inspected and approved by the Chief Building Official prior to backfill. • 3.9.3 – Should any Owner or Operator or Customer of a service connection refuse entry to any authorized officer, inspector, employee or Agent of the Corporation for the purposes of any compliance inspection, maintenance, repair, disconnection or reinstallation and/or other corrective action, under the provisions of this Schedule or the Ontario Building Code, or the Municipal Act, 2001; the Corporation may, at its sole discretion exercised by the Engineer, on the provision of seven (7) calendar days notice, discontinue the supply of water to the Owner or Operator or Customer of the service connection until such required inspection and corrective action or required work has been completed to the satisfaction of the Corporation. • 6.3.3 – The failure of such person to pay the said set fine or fines as set forth in Appendix “3” annexed hereto, subjects him or her to the penalties hereinbefore provided for the violation of the provisions of this Schedule; and at the sole discretion of the Corporation, on the provision of seven (7) calendar days notice, water supply to said person may be discontinued.
<p>Surrey (Stormwater Drainage and Sewer Services)</p>	<p><i>Surrey Stormwater Drainage Regulation and Charges, By-law, 2008, No. 16610</i></p> <ul style="list-style-type: none"> • 97. The City may enforce compliance with the stipulations within this By-law or non-payment of fines by shutting off the provision of <i>stormwater</i> drainage services being supplied to the user or discontinuing the service thereof. This may be done without notice on an emergency basis if deemed necessary by the <i>General Manager, Engineering</i>. (Surrey) <p><i>Surrey Sanitary Sewer Regulation and Charges By-law, 2008, No. 16611</i></p> <ul style="list-style-type: none"> • 116. The City may enforce compliance with the stipulations within this By-law or non-payment of fines by shutting off the provision of <i>sewer</i> services being supplied to the user or discontinuing the service thereof.

Table A2.7: Termination of Water Service

Jurisdiction	By-law provisions
<p>Kingston</p>	<p><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <ul style="list-style-type: none"> <p>• 3.2 Maintenance of sewer lateral – Owner Every Owner of a property to which sewer service is provided shall be responsible for the maintenance, repair, and replacement of the sewer lateral from the building to the property line. Any and all structural defects of a sewer lateral shall be repaired by the Owner of the property being serviced. Should the City become aware of any such structural defect, and upon written notification to the Owner, the said structural defect is not repaired within thirty (30) days of the date of the notification or within such time as the Operating Authority may deem necessary, then the City may turn off the municipal water supply to the property. If the City is ordered to restore the water supply, then the City may repair the structural defect in the sewer lateral pipe at the Owner’s expense. In so doing the City of Kingston shall only reinstate the property to a safe condition and all final restoration shall be the Owner’s responsibility. The City of Kingston shall not be held responsible for any damages to the Owner’s property arising from such work such as damage to root systems or other landscaping features located along the sewer lateral. If flushing or rodding of a sewer lateral is required to remove an obstruction located anywhere between the building and the sewer lateral stub, the Owner or occupier shall be solely responsible for the cost of removing the obstruction.</p>
<p>King Township</p>	<p><i>By-Law Number 2014-72 – A By-law to Regulate the Discharges and Connections to the Municipal Sewage System Hereafter Known as the Sewer Use By-law</i></p> <ul style="list-style-type: none"> <p>• 6.1. If charges for investigations or removal of blockages are not paid as and when they become due, the charges will be added to the water bill pursuant to the <i>Municipal Act</i> 2001, Part XIV. Pursuant to Sections 79, 80 and 81 of the <i>Municipal Act</i>, S.O. 2001, c. 25, as amended, the supply of water to the premises to which such charges apply may be turned off by the Corporation as for non-payment of water rates and may not be turned on until all charges have been paid, notwithstanding that the ownership of the said premises has changed.</p> <p>• 16.3. Where the Director requires that any action shall be taken in respect of any private sewer line that discharges into the sewage work or any private sewer line that does not conform to the provisions of this by-law, if such requirement is not in compliance within thirty (30) days of written notice from the Director, the Director shall be authorized to stop connection to the municipal sewer line in relation to the private sewer line.</p>

Table A2.8: Ability to Collect Fines on Sewer Bills or Municipal Taxes

Jurisdiction	By-law provisions
<p>Fort Erie</p>	<p><i>By-Law No. 68-06 – Being A By-law to Regulate the Management of A System of Sewer Works and Drainage Works in the Town of Fort Erie</i></p> <ul style="list-style-type: none"> • 3.4.12 – If any sewer service connection, municipal sewer lateral or private sewer lateral, or private sewage collection system or drainage service connection or private drainage system is made by an Owner or the Owner’s Agent, contrary to the provisions of this Schedule, the Owner shall repair or replace such defective work or material within seven (7) calendar days after receipt of a notice from the Corporation requiring the Owner to do so; and if the Owner fails to repair or replace such work, the Corporation may at its sole discretion exercised by the Engineer, discontinue the supply of water from the Water Works. In addition, the Corporation may repair or replace the work, including the right to enter the building or premises or upon the lands; and the costs of such repairs shall be paid by the Owner, and if not paid, the costs shall be added to the tax roll for the property and collected in the same manner and with the same priorities as municipal taxes. • 4.4.4 – If an Owner, Lessee, Operator or Occupant of any land fails to comply with the Engineer’s notice sent or served under Subsection 4.4.3 the Engineer may cause the required work to be done; and the cost of such work shall be paid by the said Owner, Lessee, Operator or Occupant; and if not paid may be added to the municipal tax roll of the property of which the work was done and collected in like manner and with the same priority as municipal taxes. • 6.3.4 – Unpaid set fines may, following a thirty (30) calendar day period, at the sole discretion of the Corporation, be added to the person’s next sewer services billing, and shall be collected in like manner and with the same priority as fees or charges for sewer services.
<p>Kingston</p>	<p><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <p>14.5 City expenses</p> <ul style="list-style-type: none"> • All costs incurred by the City to perform work required by this by-law shall be charged to the Owner of the property where such work is performed and shall be collected according to law, and until paid, such cost shall remain a lien on such property, and may also be collected in the like manner as taxes. The City shall not be held responsible for the cost of restoration.
<p>King Township</p>	<p><i>By-Law Number 2014-72 – A By-law to Regulate the Discharges and Connections to the Municipal Sewage System Hereafter Known as the Sewer Use By-law</i></p> <ul style="list-style-type: none"> • 16.2: Where the Director requires that any action shall be taken in respect of any private sewer line that discharges into the sewage works or any private sewer line that does not conform to the provisions of this by-law, if such requirement is not complied with within thirty (30) days written notice from the Director, the Director, or his or her designate may enter upon the premises and undertake such installation, repair or replacement and the cost thereof shall be paid by the owner forthwith and may be collected by action or in like manner as municipal taxes as a charge on applicable lands.

Table A2.9: Penalties Run with the Land

Jurisdiction	By-law provisions
<p>King Township</p>	<p><i>By-Law Number 2014-72 – A By-law to Regulate the Discharges and Connections to the Municipal Sewage System Hereafter Known as the Sewer Use By-law</i></p> <ul style="list-style-type: none"> • 16.1. If charges for investigations or removal of blockages are not paid as and when they become due, the charges will be added to the water bill pursuant to the <i>Municipal Act</i> 2001, Part XIV. Pursuant to Sections 79, 80 and 81 of the <i>Municipal Act</i>, S.O. 2001, c. 25, as amended, the supply of water to the premises to which such charges apply may be turned off by the Corporation as for non-payment of water rates and may not be turned on until all charges have been paid, notwithstanding that the ownership of the said premises has changed. • 16.2: Where the Director requires that any action shall be taken in respect of any private sewer line that discharges into the sewage works or any private sewer line that does not conform to the provisions of this by-law, if such requirement is not complied with within thirty (30) days written notice from the Director, the Director, or his or her designate may enter upon the premises and undertake such installation, repair or replacement and the cost thereof shall be paid by the owner forthwith and may be collected by action or in like manner as municipal taxes as a charge on applicable lands.
<p>Kingston</p>	<p><i>By-law No. 2008-192 – A By-law to Provide the Regulation of Waste Water Services and Discharges to Municipal Sewers for the City of Kingston</i></p> <p>14.5 City expenses</p> <ul style="list-style-type: none"> • All costs incurred by the City to perform work required by this by-law shall be charged to the Owner of the property where such work is performed and shall be collected according to law, and until paid, such cost shall remain a lien on such property, and may also be collected in the like manner as taxes. The City shall not be held responsible for the cost of restoration.
<p>District of North Vancouver</p>	<p>21. Costs</p> <ul style="list-style-type: none"> • The Director shall certify to the Director of Financial Services all costs incurred by the District in performing or causing to be performed any work under Section 20, upon receipt of which the Director of Financial Services shall demand payment by issuing an invoice in the amount of the costs to the person named in the Order to Comply, and to the owner of the real property, if different from such person, and such invoice may be served in accordance with section 18.

8.3 Appendix 3: Sources of legal authority (British Columbia and Ontario)

Issue	Legislation	Potentially relevant provisions
Imposing Regulatory By-law (Requirements to Disconnect, Maintain, Install, Repair)		
B.C. Municipalities	<i>Community Charter</i> ¹⁷	<p>Power to Regulate Sanitary Sewage, Storm Water, Drainage and Flood Control</p> <p>Subsections 8(2) and (3) provide that a municipality may provide any service that the council considers necessary or desirable, including, by bylaw, regulate, prohibit and impose requirements in relation to: municipal services; public places; the health, safety or protection of persons or property in relation to matters referred to in section 63 [<i>protection of persons and property</i>]; the protection and enhancement of the well-being of its community in relation to the matters referred to in section 64 [<i>nuisances, disturbances and other objectionable situations</i>]; public health; protection of the natural environment; and buildings and other structures.</p> <p>Section 69 provides that municipalities have specific authority in relation to drainage, sewage and dikes and a council may, by bylaw, do one or more of the following:</p> <ul style="list-style-type: none"> (a) in relation to drainage and sewerage works provided by persons other than the municipality, <ul style="list-style-type: none"> (i) regulate their design and installation, and (ii) require property owners to connect their buildings and structures to the works in the manner specified in the bylaw; (b) impose requirements on persons undertaking the construction of works to <ul style="list-style-type: none"> (i) maintain the proper flow of water in a stream, ditch, drain or sewer in the municipality, or (ii) reclaim or protect part of the land mass of the municipality from erosion by any cause; (c) impose requirements on the owners of dikes or persons undertaking the construction of dikes; (d) make a watercourse part of the municipal drainage system, whether the watercourse is on municipal land, private land or a highway.

¹⁷ Note that the City of Vancouver is not governed under the B.C. Community Charter; rather, it is governed under a separate *Vancouver Charter*. A full scan of potentially relevant provisions of the *Vancouver Charter* was not conducted for the purposes of this report.

Issue	Legislation	Potentially relevant provisions
Enforcement (Termination of Water Services, Recovery of Costs)		
B.C. Municipalities	<i>Community Charter</i>	<p>Conducting Work When Homeowner Fails to Do So Section 17 provides that the authority of a council under this or another Act to require that something be done includes the authority to direct that, if a person subject to the requirement fails to take the required action, the municipality may (a) fulfill the requirement at the expense of the person, and (b) recover the costs incurred from that person as a debt.</p> <p>Terminating Municipal Utility or Other Service Section 18 provides that a municipality has the authority to, upon reasonable notice, discontinue providing a municipal utility or other service to a specific property or person because of unpaid fees or taxes in relation to the service, or because of non-compliance with the rules established by bylaw or contract respecting the use of the service.</p> <p>Remedial Action Requirements Section 72 provides that a council may impose remedial action requirements on the homeowner, occupier or lessee in certain instances and section 75 allows for time limits for compliance.</p> <p>Collecting Fees Owed to Municipality Via Property Taxes Section 258 provides that amounts that a municipality is entitled to recover for work done or services provided to land or improvements under any other provision of this Act or the <i>Local Government Act</i> that authorizes the municipality to recover amounts in the event of default by a person may be collected as property taxes.</p> <p>Costs as Lien on Land Section 260 provides that amounts that a municipality is entitled to recover for work done or services provided to land or improvements under any other provision of this Act or the <i>Local Government Act</i> that authorizes the municipality to recover amounts in the event of default are liens against property and has priority over any claim, lien, privilege or encumbrance of any person except the Crown.</p>

Issue	Legislation	Potentially relevant provisions
Enforcement (Termination of Water Services, Recovery of Costs)		
ON Municipalities	<i>Municipal Act</i>	<p>Conducting Work When Homeowner Fails to Do So Subsection 446(1) provides that if a municipality has the authority under this or any other Act or under a by-law under this or any 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.</p> <p>Collecting Costs Owed Via Municipal Taxes Subsection 446(3) provides that a municipality may recover the cost of doing a matter or thing from the person directed or required to do it by action or by adding the cost to the tax roll and collecting it in the same manner as property taxes.</p> <p>Costs as Lien on Land Subsection 446(6) provides that the amount of costs owed by the homeowners to the municipality, including interest, constitutes a lien on the land upon the registration in the proper land registry office of a notice of lien.</p> <p>Terminating Municipal Utility or Other Service Section 80(1) 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 or to inspect, repair, replace or alter a public utility meter; Section 80(2) authorizes a municipality to, for the purposes of s. 80(1), shut off or disconnect the public utility to the land; Section 80(3) of the <i>Municipal Act</i> authorizes the 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, 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; Section 82(1) 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.</p>

Issue	Legislation	Potentially relevant provisions
Transfer of Title (Time of Sale Requirements)		
B.C. Municipalities	<p><i>Land Title Act</i></p> <p><i>Community Charter</i></p> <p><i>Vancouver Charter</i></p>	<p>Generally, the province governs the transfer of land title.</p> <p>Subsection 23(2)(c) provides that fee simple title is subject to municipal charges, rates and assessments.</p> <p>Section 57 provides the authority to make a note against land title that building regulations, including those found in municipal bylaws, were contravened. Specifically, subsection 57(1) provides that a building inspector may recommend to the council that it consider a resolution under subsection (3) if, during the course of carrying out duties, the building inspector</p> <ul style="list-style-type: none"> (a) observes a condition, with respect to land or a building or other structure, that the inspector considers <ul style="list-style-type: none"> (i) results from the contravention of, or is in contravention of, <ul style="list-style-type: none"> (A) a municipal bylaw, (B) a Provincial building regulation, or (C) any other enactment that relates to the construction or safety of buildings or other structures, and (ii) that, as a result of the condition, a building or other structure is unsafe or is unlikely to be usable for its expected purpose during its normal lifetime, or (b) discovers that <ul style="list-style-type: none"> (i) something was done with respect to a building or other structure, or the construction of a building or other structure, that required a permit or an inspection under a bylaw, regulation or enactment referred to in paragraph (a) (i), and (ii) the permit was not obtained or the inspection not satisfactorily completed. <p>Subsection 57(2) provides that a recommendation under subsection (1) must be given in writing to the corporate officer, who must</p> <ul style="list-style-type: none"> (a) give notice to the registered owner of the land to which the recommendation relates, and (b) after notice under paragraph (a), place the matter before the council. <p>(3) After providing the building inspector and the owner an opportunity to be heard, the council may confirm the recommendations of the building inspector and pass a resolution directing the corporate officer to file a notice in the land title office stating that</p> <ul style="list-style-type: none"> (a) a resolution relating to that land has been made under this section, and (b) further information about it may be inspected at the municipal hall. <p>Subsection 336D provides that the City of Vancouver may place notice of a bylaw contravention on land title if the contravention would cause an unaware purchaser significant loss or expense if the bylaw were enforced.</p>

Issue	Legislation	Potentially relevant provisions
Building Permits (Time of Renovation Requirements)		
B.C. Municipalities	<i>Community Charter</i>	<p>Subsection 8(3) provides that a municipality may provide any service that the council considers necessary or desirable, including, by bylaw, regulate, prohibit and impose requirements in relation to: buildings and other structures.</p> <p>Section 15 states that a council may, in regulating under this Act or the <i>Local Government Act</i> , provide for a system of licences, permits or approvals, including by doing one or more of the following:</p> <ul style="list-style-type: none"> (a) prohibiting any activity or thing until a licence, permit or approval has been granted; (b) providing for the granting and refusal of licences, permits and approvals; (c) providing for the effective periods of licences, permits and approvals; (d) establishing <ul style="list-style-type: none"> (i) terms and conditions of, or (ii) terms and conditions that must be met for obtaining, continuing to hold or renewing a licence, permit or approval, or providing that such terms and conditions may be imposed, the nature of the terms and conditions and who may impose them; (e) providing for the suspension or cancellation of licences, permits and approvals for <ul style="list-style-type: none"> (i) failure to comply with a term or condition of a licence, permit or approval, or (ii) failure to comply with the bylaw; (f) providing for reconsideration or appeals of decisions made with respect to the granting, refusal, suspension or cancellation of licences, permits and approvals. <p>Section 53 limits a municipality's authority in relation to buildings and other structures to the following:</p> <ul style="list-style-type: none"> (a) the provision of access to a building or other structure, or to part of a building or other structure, for a person with disabilities; (b) the conservation of energy or water; (c) the reduction of greenhouse gas emissions; (d) the health, safety or protection of persons or property. <p>Subsection 54(2) provides that, if a municipal permit is required before a building or part of a building is occupied, in addition to any conditions established under section 15 [licensing and standards authority], the permit may be withheld until the building or part of it complies with the following:</p> <ul style="list-style-type: none"> (a) the Provincial building regulations; (b) bylaws under section 8 (3) (l) [spheres of authority – buildings and other structures]; (c) any other health and safety requirements established by bylaw; (d) any other federal or Provincial enactment in relation to health or safety. <p>Section 57 provides the authority to make a note against land title that building regulations, including those found in municipal bylaws, were contravened.</p>

Issue	Legislation	Potentially relevant provisions
Building Permits (Time of Renovation Requirements)		
ON Municipalities	<i>Building Code Act</i>	<p>Generally regulates and controls the location, construction, repair and renewal or alteration of plumbing and materials to be used in construction thereof and further provides for the inspection of said plumbing work by officers duly appointed by municipal law;</p> <p>Section 1(1) states that the definition of “building” includes,</p> <ul style="list-style-type: none"> (a) a structure occupying an area greater than ten square metres consisting of a wall, roof and floor or any of them or a structural system serving the function thereof including all <u>plumbing</u>, works, fixtures and service systems appurtenant thereto, (b) a structure occupying an area of ten square metres or less that contains plumbing, including the <u>plumbing</u> appurtenant thereto, (c) <u>plumbing</u> not located in a structure, <ul style="list-style-type: none"> (c.1) a <u>sewage system</u>, or (d) structures designated in the building code; <p>Subsection 7(1) provides that the council of a municipality or of an upper-tier municipality that has entered into an agreement under subsection 3 (5) may pass by-laws or the Lieutenant Governor in Council may make regulations, applicable to the matters for which and in the area in which the municipality, upper-tier municipality, board of health, planning board, conservation authority or the Province of Ontario, respectively, has jurisdiction for the enforcement of this Act,</p> <ul style="list-style-type: none"> (a) <u>prescribing classes of permits under this Act, including permits in respect of any stage of construction or demolition;</u> (b) <u>providing for applications for permits and requiring the applications to be accompanied by such plans, specifications, documents and other information as is prescribed;</u> <ul style="list-style-type: none"> (b.1) subject to the regulations made under subsection 34 (2.1), establishing and governing a program to enforce standards prescribed under clause 34 (2) (b), in addition to any programs established under subsection 34 (2.2); (b.2) subject to the regulations made under subsection 34 (2.2), governing a program established under subsection 34 (2.2); (c) requiring the payment of fees on applications for and on the issuance of permits, requiring the payment of fees for maintenance inspections, and prescribing the amounts of the fees; <ul style="list-style-type: none"> (c.1) requiring the payment of interest and other penalties, including payment of collection costs, when fees are unpaid or are paid after the due date; (d) providing for refunds of fees under such circumstances as are prescribed; (e) requiring a person specified in the building code to give notice to the chief building official or an inspector or to a registered code agency if one is appointed, of any of the stages of construction specified in the building code, in addition to the stages of construction prescribed under subsection 10.2 (1) and prescribing the period of time after such notice is given during which an inspection may be carried out; <p>...</p> <ul style="list-style-type: none"> (g) <u>enabling the chief building official to require that a set of plans of a building or any class of buildings as constructed be filed with the chief building official on completion of the construction under such conditions as may be prescribed in the building code;</u> <p>... continued on next page</p>

Issue	Legislation	Potentially relevant provisions
Building Permits (Time of Renovation Requirements)		
ON Municipalities <i>... continued</i>	<i>Building Code Act</i>	<p>Section 10.1 provides that no person shall operate or maintain a sewage system or permit a sewage system to be operated or maintained except in accordance with this Act and the building code.</p> <p>Section 107 provides that, despite any special provisions in the <i>Municipal Act</i>, or in any other general or special act, relating to the making of grants or granting of aid by the council of a municipality, the council of a municipality may, subject to Section 106 of the Act, make grants on such terms and conditions, as to security and otherwise, as the council may consider expedient to any Person, institution, business, association, group or body of any kind for any purpose that in the opinion of the council is in the interests of the municipality.</p>

Issue	Legislation	Potentially relevant provisions
Access to Private Property		
B.C. Municipalities	<i>Community Charter</i>	<p>Access on and into Property</p> <p>Section 16 provides that a municipality, including officers or employees of the municipality or by other persons authorized by the council, enter on property, and to enter into property, without the consent of the owner or occupier. Except in the case of an emergency, a person (a) may only exercise the authority at reasonable times and in a reasonable manner, and (b) must take reasonable steps to advise the owner or occupier before entering the property.</p> <p>Subsection 16(6) provides that a municipality may enter on property for any of the following purposes:</p> <ul style="list-style-type: none"> (a) to inspect and determine whether all regulations, prohibitions and requirements are being met in relation to any matter for which the council, a municipal officer or employee or a person authorized by the council has exercised authority under this or another Act to regulate, prohibit and impose requirements; (b) to take action authorized under section 17 (1) [<i>municipal action at defaulter's expense</i>]; (c) in relation to section 18 [<i>authority to discontinue providing a service</i>], to disconnect or remove the system or works of the service; (d) to assess or inspect in relation to the exercise of authority under section 8 (3) (c) [<i>spheres of authority – trees</i>]. <p>Access into Private Dwelling</p> <p>Subsection 16(5) provides that the authority may only be used to enter into a place that is occupied as a private dwelling if any of the following applies:</p> <ul style="list-style-type: none"> (a) the occupier consents; (b) the municipality has given the occupier at least 24 hours written notice of the entry and the reasons for it; (c) the entry is made under the authority of a warrant under this or another Act; (d) the person exercising the authority has reasonable grounds for believing that failure to enter may result in a significant risk to the health or safety of the occupier or other persons; (e) the entry is for a purpose referred to in subsection (6) (a) in relation to regulations, prohibitions or requirements applicable to the place that is being entered.

Issue	Legislation	Potentially relevant provisions
Access to Private Property		
ON Municipalities	<i>Municipal Act</i>	<p>Access to Land</p> <p>Section 80(1) 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 or to inspect, repair, replace or alter a public utility meter;</p> <p>Section 80(3) authorizes the 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, 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;</p> <p>Section 87 provides a municipality may enter on land, at reasonable times, to inspect the discharge of any matter into the sewage system of the municipality or into any other sewage system the contents of which ultimately empty into the municipal sewage system and may conduct tests and take samples for this purpose.</p> <p>Section 97 provides that a municipality may enter on land, at reasonable times, to inspect the discharge of any matter into a land Drainage system of any Person and may conduct tests and remove samples for this purpose;</p> <p>Subsection 436(1) provides that a municipality has the power to pass by-laws providing that the municipality may enter on land at any reasonable time for the purpose of carrying out an inspection to determine whether or not the following are being complied with:</p> <ol style="list-style-type: none"> 1. A by-law of the municipality passed under this Act. 2. A direction or order of the municipality made under this Act or made under a by-law of the municipality passed under this Act. 3. A condition of a licence issued under a by-law of the municipality passed under this Act. <p>Subsection 446(1) provides that if a municipality has the authority under this or any other Act or under a by-law under this or any 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. Subsection 446(2) provides that the municipality may enter upon land at any reasonable time for the purposes of taking this remedial action.</p> <p><i>... continued on next page</i></p>

Issue	Legislation	Potentially relevant provisions
Access to Private Property		
ON Municipalities	<i>Municipal Act</i>	<p>Access to Buildings/Dwellings</p> <p>Subsection 79(1) provides that, if a municipality has the consent of an owner or occupant to connect a public utility to a part of a building and other parts of the building belong to different owners or are in the possession of different occupants, the municipality may, at reasonable times, without consent, enter on their land and install, construct and maintain pipes, wires, equipment, machinery and other works necessary to make the connection.</p> <p>Subsection 437 provides that, despite any provision of this Act, a person exercising a power of entry on behalf of a municipality under this Act shall not enter or remain in any room or place actually being used as a dwelling unless,</p> <ul style="list-style-type: none"> (a) the consent of the occupier is obtained, the occupier first having been informed that the right of entry may be refused and, if refused, may only be made under the authority of an order issued under section 438, a warrant issued under section 439 or a warrant under section 386.3; (b) an order issued under section 438 is obtained; (c) a warrant issued under section 439 is obtained; (d) a warrant issued under section 386.3 is obtained; (e) the delay necessary to obtain an order under section 438, to obtain a warrant under section 439 or to obtain the consent of the occupier would result in an immediate danger to the health or safety of any person; or (f) the municipality has given notice of its intention to enter to the occupier of the land as required under subsection 435 (2) and the entry is authorized under section 79, 80 or 446. <p>... continued on next page</p>


Issue	Legislation	Potentially relevant provisions
Access to Private Property		
ON Municipalities	<i>Building Code Act</i>	<p>Access to Land and Buildings</p> <p>Subsection 15.9(1) provides that an inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of inspecting a building to determine whether the building is unsafe; or whether an order made under subsection (4) has been complied with.</p> <p>Subsection 15.9(2) provides that a building is unsafe if the building is,</p> <ul style="list-style-type: none"> (a) structurally inadequate or faulty for the purpose for which it is used; or (b) 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 whose access to the building has not been reasonably prevented. <p>Subsection 15.9(3) provides that a sewage system is unsafe if it is not maintained or operated in accordance with this Act and the building code.</p> <p>Subsection 15.9(4) provides that an inspector who finds that a building is unsafe may make an order setting out the reasons why the building is unsafe and the remedial steps necessary to render the building safe and may require the order to be carried out within the time specified in the order.</p> <p>Subsections 15.9(6) and (7) provide that if an order of an inspector under subsection (4) is not complied with within the time specified in it, or where no time is specified, within a reasonable time, the chief building official,</p> <ul style="list-style-type: none"> (a) may by order prohibit the use or occupancy of the building; and (b) may cause the building to be renovated, repaired or demolished to remove the unsafe condition or take such other action as he or she considers necessary for the protection of the public and, for these purposes, the chief building official, an inspector and their agents may enter upon land and into buildings at any reasonable time without a warrant. <p>Subsection 15.10.1(1) provides that an inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of conducting a maintenance inspection.</p> <p>Section 16 provides that, despite sections 8, 12, 15, 15.2, 15.4, 15.9 and 15.10.1, an inspector or officer shall not enter or remain in any room or place actually being used as a dwelling unless,</p> <ul style="list-style-type: none"> (a) the consent of the occupier is obtained, the occupier first having been informed that the right of entry may be refused and entry made only under the authority of a warrant issued under this Act; <ul style="list-style-type: none"> (a.1) a warrant issued under this Act is obtained; (b) the delay necessary to obtain a warrant or the consent of the occupier would result in an immediate danger to the health or safety of any person; (c) the entry is necessary to terminate a danger under subsection 15.7 (3) or 15.10 (3); or (d) the requirements of subsection (2) are met and the entry is necessary to remove a building or restore a site under subsection 8 (6), to remove an unsafe condition under clause 15.9 (6) (b) or to repair or demolish under subsection 15.4 (1). <p>And that the inspector or officer shall serve the occupier with notice of his or her intention to enter it a reasonable time before entering the room or place for a purpose described in (d) above.</p>



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