Appendix E

Community Education and Public Awareness Brochure

BASEMENT FLOODING PREVENTION BROCHURE

The Insurance Bureau of Canada recently stated that for the first time in the country's history, water damage claims have surpassed fire as the leading cause of home insurance payouts. In other words, water is the new fire.

This brochure summarizes the causes of basement flooding, what you can do to mitigate basement flooding, steps the City is taking to address the issue, grant programs available to install flood remedial measures on your property and what to do if your basement floods.

For more information , visit:

https://www.brantford.ca/stormwater,

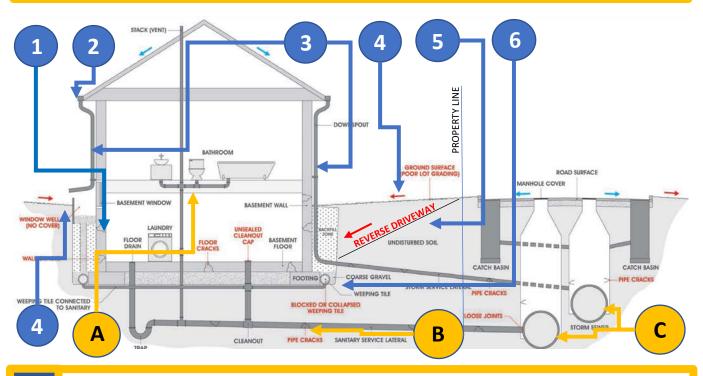
#StormwaterWatch Phone: 519-759-4150



#StormwaterWatch Brantford.ca/stormwater



WHAT CAUSES BASEMENT FLOODING ?



Stormwater or groundwater water seeps into the home due to:

- 1. Crack or leak in your home's foundation, basement walls, or basement windows or door
- 2. Overflowing eavestroughs

PROPERTY

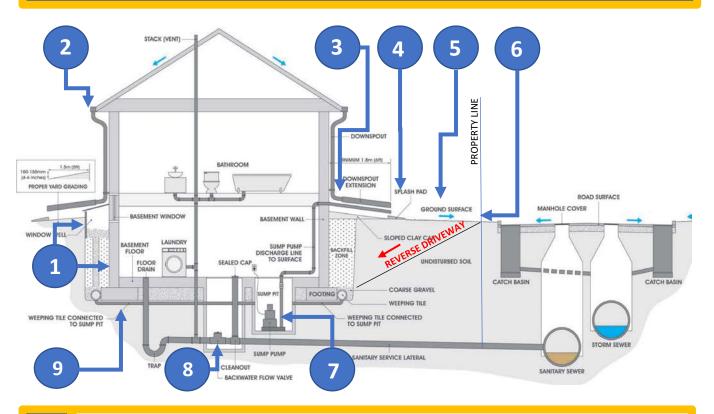
SEWER

- Connected downspouts or downspouts draining too close to the house
- 4. Poor lot grading resulting in drainage towards the house
- 5. Reverse-sloped driveways
- 6. Failure of the weeping tile system (foundation drains) or failure of a sump pump (in some homes) used to pump weeping tile water

Blockages in the sewer are typically caused by:

- A. Items that are incorrectly flushed or poured down the drain
- B. Tree roots and broken or cracked sewer pipes that can also cause blockages.
- C. Sewers fill beyond capacity; water will then travel backward in the sewer pipe and into the home depending on the lateral connections from the house to the storm and sanitary systems.

WHAT CAN I DO TO PREVENT FLOODING IN MY BASEMENT ?



- 1. Seal all cracks or leaks in walls, floors, windows and foundations, and seal all window wells
- 2. Clear eavestroughs and downspouts of leaves and other debris
- 3. Disconnect your downspouts / install rain barrels where feasible
- 4. Make sure your disconnected downspouts are draining properly, ideally two metres from your foundation walls.
- 5. Ensure the grading around your home slopes away from the foundation wall to help drain water away from your home
- 6. If you have a reverse driveway, install a grate before the driveway
- 7. Install a sump pump (if you do not have one) with a battery backup and direct drainage from the weeping tile to the surface
- 8. Install a Backwater Valve on the sanitary (or storm) lateral to stop any backwater from the sewer reaching the house
- 9. Repair or replace damaged weeping tile systems.

WHAT CAN I DO TO PREVENT FLOODING IN MY BASEMENT ?



Disconnect roof downspouts where feasible and direct them to an open area at least two meters away from the house where water can infiltrate into the ground or drain away from the house.



Improve grading and landscaping(rain gardens, permeable pavers, etc.) around the house such that water flows away from the house and infiltrates into the soil or does not pool in other areas.



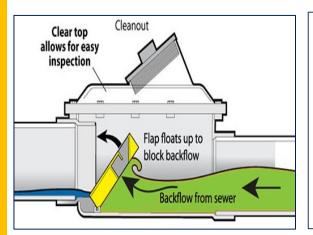
Connect the downspout to a rain barrel to collect stormwater for outdoor use during dry weather. The City provides a subsidy for the purchase of rain barrels for your home.



If you have a Reverse-Sloped Driveway, consider a grate at the approach to the driveway will improve the capture of storm runoff from the roadway. Contact the City to help evaluate this and other alternatives for your reverse driveway.

Maintain any basement flood prevention measures on your property such that keep their function to drain water away from your house.

WHAT CAN I DO TO PREVENT FLOODING IN MY BASEMENT ?



Access Cover-Check Valve Sump Pump Tank A **Backwater Valve** is designed to close the sewer line during periods of extreme rain to prevent water from entering your home. If you do not have one, contact the City for more information on the installation and maintenance.

A **Sump Pump** helps to pump water collected by the weeping tile system preferably to an area outside. The weeping tiles around the house are connected to the sump pump rather than the sewer system.

Homeowners are responsible for plumbing from the property line into the home. <u>Hire a licensed plumber</u> who conducts specialized testing/ inspections to help you identify the location and condition of the sewer service lateral connecting the plumbing in your home to the main sewer on the street and the storm and sanitary sewer pipes your house connects to and the backwater valve and sump pump if either are installed or you intend on installing them.

For more tips on preventing basement flooding, refer to the Handbook for Reducing Basement Flooding from the Institute for Catastrophic Loss Reduction.

WHAT PROGRAMS DOES THE CITY HAVE TO ASSIST IN BASEMENT FLOODING PREVENTION ?

- The Basement Flooding Prevention Grant Program provides up to \$2,000 to help you lower the risk of basement flooding if you're a homeowner living in the North-East Flood Remediation Study Area. Visit <u>https://www.brantford.ca/en/livinghere/basement-flooding-prevention.aspx</u> for more information of call 519-759-4150.
- 2. The Private Sanitary Sewer Lateral Replacement Grant can help you with the cost of replacing old sanitary sewer laterals on your private property. This helps to stop or reduce sewer blockages. The Grant covers 50% of the paid eligible invoice amount up to a maximum of \$1,500. Visit <u>https://www.brantford.ca/en/livinghere/private-sanitary-sewer-lateral-replacement.aspx</u> for more information or call 519-759-4150.
- 3. The City offers **rain barrels** year-round at the Mohawk Street Landfill. Barrels are \$53 per unit, including tax. The landfill is open Monday to Saturday, 8:00 a.m. to 5:00 p.m. Information can be found at <u>https://www.brantford.ca/en/living-here/rainbarrels.aspx</u>.

WHAT IS THE CITY DOING TO PREVENT HOMES FROM FLOODING IN THE BASEMENTS ?

ON-GOING MONITORING AND MAINTENANCE	 The Public Works Operational Services and Environmental Services departments have a number of functions aimed at protecting the Grand River and as well as maintaining all storm sewers, and catchbasins. These activities include: Flushing of storm sewers on a regular basis CCTV (Closed Circuit Television) of storm to inspect for possible defects, damage and debris. Repair storm maintenance holes as well as catchbasins, Routine maintenance on all Stormwater Ponds, Creeks, Streams, and Outlets within the City. Smoke and dye testing of the sewer system to find cross connections Regular inspection of the dike system and storm outfalls.
CITY FLOOD STUDIEIS	 The City is current undertaking a number of flood remediation studies with experienced consultants to develop comprehensive solutions for flood prone areas within the City. Some of the major studies impacting basement and surface water flooding include: North-East Flood Remediation Study Braneida Stormwater Management Facility Retrofit and Downstream Channel Remediation Mohawk Lake and Mohawk Canal Clean-Up and Rehabilitation Study Master Servicing Plan Update Study Information about these studies can be viewed on-line at https://www.brantford.ca/en/your-government/city-plans-and-projects.aspx.

WHAT DO I DO IF MY BASEMENT HAS FLOODED?

- 1. Check the toilets and sinks for blockages.
- 2. Wearing appropriate protective clothing, clear any blockages to ensure proper flow.
- 3. If this does not resolve the issue, call **519-759-4150**. The City has expert staff on duty at all times who will respond as soon as possible to these situations. If requesting City assistance, ensure someone 18 years or older is at home to meet City staff.
- 4. Check any messaging from **GRCA** via twitter or **1-866-900-4722** for flood warnings that would contribute to basement flooding.
- 5. Disconnect electrical appliances and do not touch electrical equipment if you are wet or standing in water.
- 6. If flood water has risen above the gas appliances (furnace, hot water heater), call **Union Gas** at **1-877-969-0999**.
- 7. Locate the sewer clean-out caps. Do NOT attempt to open. Cleanout caps are usually located in the basement floor at the front of the home (near the water meter). Ensure an area at least one metre on all sides of the clean-out is free from obstructions (boxes, furniture) to provide access to City staff. Note that water must recede or be pumped out before City crews can access the laterals.
- 8. Avoid using fixtures and appliances which require water until after the issue has been resolved, as any water sent down the drain may end up in your basement.
- 9. In the event your basement floods, immediately contact your insurance company or representative. Provided you have coverage, your Insurance company can recommend the services of a qualified contractor experienced in mitigating and restoring the damage sustained.