

The Town of Lakeshore

Basement Flooding Information to Residents

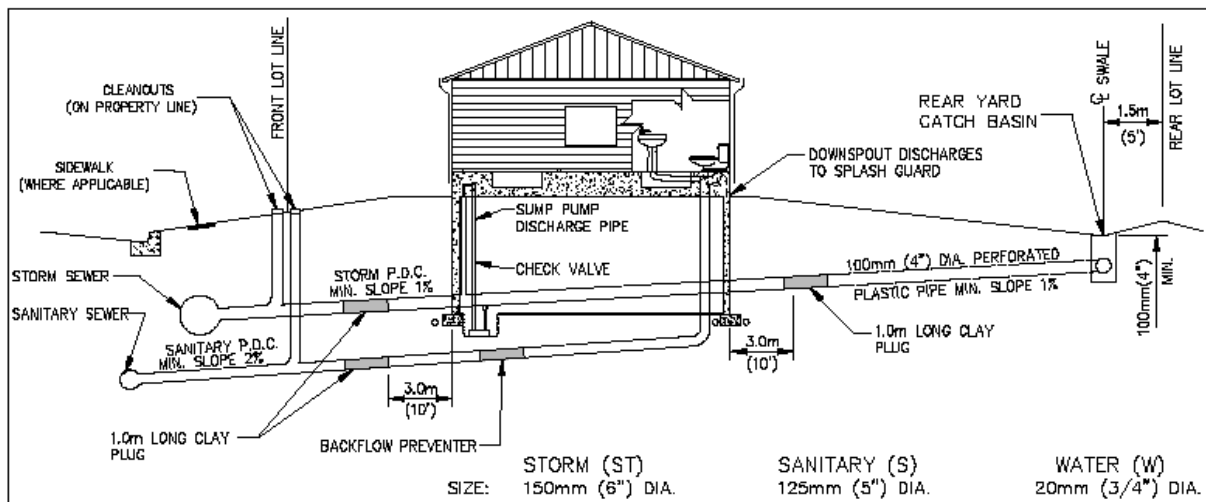
The following information is intended for residents that have homes connected to Municipal storm and sanitary sewers. However, rural residents with septic tanks may find some of the proceeding information useful in guarding against basement flooding.

Sewer Basics

There are typically two types of sewers connecting to your home: storm and sanitary sewers. Older houses may have a sanitary sewer connection and no storm sewer connection.

Your home's plumbing is connected to the Town's sewer main by a service lateral pipe, called a Private Drain Connection (or PDC). Typically each PDC on your property will have a cleanout. The cleanout is an access port that is used to clear blockages in your PDC. The cleanouts typically are covered with a square metal plate or white round plastic cap, and will be located at/near your street property line or near your home. The portion of the PDC that is on your property (including the cleanout) is the homeowner's responsibility to maintain and clean. The trunk sewers and the portion of the PDC from the cleanout to the main are maintained by the Town.

- 1) Storm PDC's collect stormwater runoff from your home (gutters) and property and discharge it to Town storm water management ponds, storm sewers, municipal drains, or ditches. In general, flows eventually are transported to Lake St. Clair.
- 2) Sanitary PDC's collect wastewater (sewage) from your home's plumbing (toilets, sinks, tubs/showers, washing machines and floor drains) and discharge to a Town sanitary sewer. The sewer carries the sewage to one of the Town's sewage treatment plants.



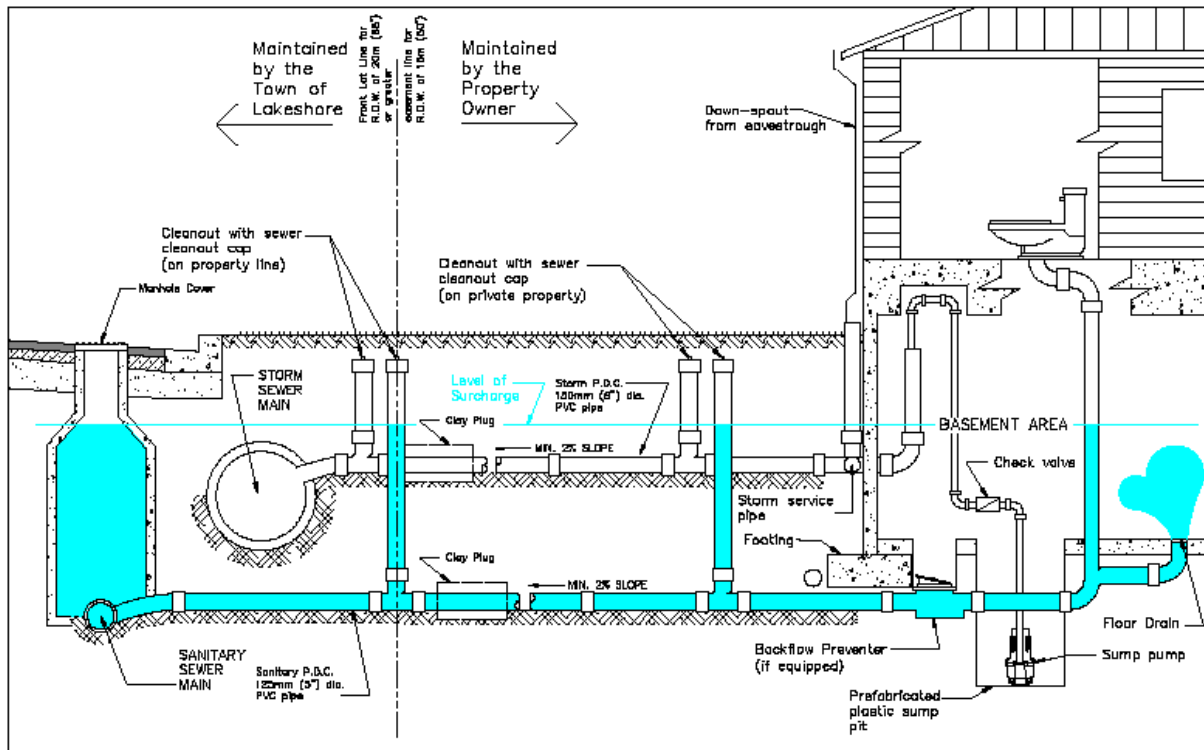
Common Causes of Basement Flooding

Sanitary Sewers:

- 1) Private Drain Connection (PDC) is blocked restricting the flow of sewage from your home. Common causes of blockages are:
 - accumulated grease, paper, waste, or other foreign object
 - a collapsed or crushed pipe
 - tree roots intruding into the pipe.
- 2) A back-up of wastewater in the sewer system, or a combination of wastewater and rainwater from sanitary sewers.

Storm Sewers:

- 1) Private Drain Connection (PDC) is blocked restricting the flow of storm water from your home. Common causes of blockages are:
 - a collapsed or crushed pipe
 - tree roots intruding into the pipe.
- 2) Failure of sump pump (mechanical or electrical).
- 3) Leaks/cracks in basement foundation walls.
- 4) Poor lot drainage.
- 5) High water levels in receiving waterways.
- 6) Storm service perimeter pipe is broken and directing rain water to footing weeping tile and sump pit.



My Basement is Flooded

Flooded basements can present danger if water levels are above electrical outlets or baseboard heaters. Contact an electrical contractor if unsure about the hazards.

Document the damage by taking photos and video, if possible. Contact your insurance agent.

For information on recommended clean up procedures, visit the following Canada Mortgage and Housing website:

http://www.cmhc-schl.gc.ca/en/co/maho/em/em_001.cfm

To assist the Town in determining areas of flooding concern, please fill out the Residential Home Flood Data Sheet and return to the Town. The Residential Home Flood Data Sheet is attached to the end of this document

How Can I Lower Flood Risks?

The following tips will help reduce your risk of a flood in your home;

- Ask your insurance broker if your home insurance covers basement flooding/sewer back-up damage.
- Install a backflow or back-water valve on your sanitary PDC. The valve prevents sewage from an overloaded sewer main from backing up into your basement. All newer homes should have a backflow preventer already installed. The Town recommends that this work be done by a qualified plumber or contractor.
- Have your backflow preventer checked regularly to remove any obstructions that may prevent the valve from operating properly. The Town recommends that this work be done by a qualified plumber or contractor.
- Disconnect house downspouts from storm sewers. Install splash pads to direct runoff to landscaped areas away from your home. The Town does not recommend discharging downspouts directly onto driveways or walkways.
- Install a backup sump pump system, including a battery back-up in case of a power failure. Ideally the sump pump should discharge to your yard, in an area that will drain away from your house and not adversely impact any neighboring homes or walkways.
- Seal cracks in foundation walls and basement floor.
- Ensure that the storm service pipe which surrounds your home which is typically strapped to the perimeter of the foundation wall is fully intact and that there are no broken or disconnected sections. This is a common reason for sump pits to be quickly inundated by water during a rain event.

- During significant rain events try to minimize the amount of wastewater you add to the system (i.e. do not do laundry, have showers etc.). **Any water or sewage sent down your plumbing will likely end up in your basement.** Additionally, if water is backing up into your basement, **do not** attempt to pour flood waters into your sewage system (laundry tubs, tubs etc.). During flood events, the sewer system may be surcharged and not able to accept additional flows. Water from your basement should be brought outside and poured in an area that will drain away from your home.
- **Do not** pour kitchen fat, oils, or grease down the sink. Pour excess oils and fat into a re-sealable container and dispose of in the garbage when full.

How can the Town Help?

If you are experiencing, or suspect a problem with your sanitary or storm PDC you may contact the Town for assistance identifying the cause. Locate your PDC cover typically found in your front yard at the property line, and the Town will dispatch a crew to camera inspect your connection(s). There is an administrative fee of \$113.00 for this service. **Any repair costs to pipes on your property, including any exploratory digging required to determine cause, will be paid by the home owner.**

Additional Information

The above information is a brief overview of some of the possible causes and solutions for sewer backups. For additional information, please visit the following websites:

- Backwater valve installation can stop water flooding to your basement during stormy weather. This YouTube video illustrates importance of backwater valves and their function <https://www.youtube.com/watch?v=nV8WYdu9nZQ>
- The Institute for Catastrophic Loss Reduction <http://www.iclr.org/>
Review the report titled "Handbook for Reducing Basement Flooding".
- Canada Mortgage and Housing Corporation, Avoiding Basement Flooding
http://www.cmhc-schl.gc.ca/en/co/maho/gemare/gemare_002.cfm

Contact Information

For questions regarding flooding issues you have experienced, please contact:

The Town of Lakeshore
Engineering and Infrastructure Services Department
(519) 728-2488