

Foundation Drainage Policy

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*All application-specific inquiries should be directed to the City
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1.0 Objective

The objective of this policy is to preserve sewer capacity in the City of Toronto's (City) sewer systems for the conveyance of sanitary sewage and sustain future development growth through an approach that requires that *foundation drainage* be managed on-site rather than being discharged to the City's sewer system.

2.0 Applicability

- 2.1 This policy applies to all development applications under the Planning Act, except for Committee of Adjustment applications, effective January 1, 2022.

3.0 Definitions

Brownfield Property – Vacant or underutilized places where past industrial or commercial activities may have left contamination behind.

Dry Weather Flow – Flow in sewers representing typical day conditions with no rainfall or precipitation events.

Foundation Drainage – Infiltrated stormwater, or groundwater, or both, that may be collected in a drain installed at the foundation of a structure.

Groundwater – Water that exists in the saturated zone in sub-surface soil.

Infiltrated Stormwater – Stormwater that enters the unsaturated zone in sub-surface soil, located above the Maximum Anticipated Groundwater Level, during storm or rainfall events or snow melt.

Long-term Discharge – Discharge of Foundation Drainage for a period of more than 12 months, per application.

Maximum Anticipated Groundwater Level – Estimated upper level of the saturated zone in the sub-surface soil, based on site-specific monitoring and an allowance for seasonal and multi-year fluctuations in groundwater. This estimated value is not intended for use in structural engineering design.

On-site Management – Management of Foundation Drainage on private property, within the boundaries of the development site, without discharging to the City's sewer system. Measures may include watertight construction and/or at-grade discharge for Groundwater recharge.

Qualified Professional – A person with knowledge, training and experience in the pertinent discipline, and who is a qualified expert with expertise appropriate for the relevant critical area or subject matter.

Stormwater – Water from rainfall, other natural precipitation or the melting of snow or ice.

Short-term Discharge – Discharge of Foundation Drainage to the City’s sewer system for a period of no longer than 12 months per application, required for future emergency repair of On-site Management measures.

Temporary Connection – Future connection from Foundation Drainage infrastructure placed on private property line to City’s sewers that may be required to facilitate the Short-term Discharge of Foundation Drainage. Foundation Drainage infrastructure on private property is to be disconnected from City sewers before and after Short-term Discharge has taken place. All associated works and costs to be undertaken by the development applicant/owner.

4.0 Policy Statements

- 4.1 *Long-term Discharge of Foundation Drainage* to the City’s sanitary sewer system will not be permitted.
- 4.2 *Foundation Drainage* from the interception and/or extraction of *Groundwater* from confined aquifers will not be permitted to any of the City’s sewer systems.
- 4.3 *Long-term Discharge of Foundation Drainage* that contains any *Groundwater* will not be permitted to the City’s storm or combined¹ sewer system, unless the *Foundation Drainage* is deemed to contain only *Infiltrated Stormwater*, and if all the following conditions have been met to the satisfaction of the General Manager of Toronto Water:
- a) A *Qualified Professional* deems *Foundation Drainage* to be acceptable for surface water discharge, by confirming that:
 - i. The development site is not considered a *Brownfield Property* for which no Record of Site Condition has been filed², or
 - ii. The development site is a *Brownfield property* where the filing of a Record of Site Condition confirms appropriate risk management measures have been implemented;

¹ Only applicable where no servicing options exist to the City’s storm sewers from the development site

² In accordance with the Part XV.I of the Environmental Protection Act

- b) A *Qualified Professional* with a P.Eng. or P.Geo. has deemed³ that the lowest elevation of any proposed structure will be higher than the *Maximum Anticipated Groundwater Level*, in accordance with Groundwater monitoring requirements in the City's Foundation Drainage Guidelines.
- c) All requirements for a Storm Connection Exemption Application⁴ have been satisfied, including:
 - i. Confirmation from a *Qualified Professional* with a P.Eng. or P.Geo. licence that *On-site Management of Foundation Drainage* is not technologically feasible.
 - ii. A Stormwater Management Report, prepared by a *Qualified Professional* with a P.Eng. license, demonstrates that water management targets of the City's Wet Weather Flow Management Guidelines will be met.
 - iii. A Servicing Report, prepared by a *Qualified Professional* with a P.Eng. license, confirms that applicable sewer capacity criteria will be met in accordance with the City's Design Criteria for Sewer and Watermains, where discharges⁵ are proposed to the combined sewers.

4.4 *Foundation Drainage* infrastructure⁶ may be installed on private property to facilitate future emergency repairs to *On-site Management* measures. At the time of emergency repair, *Short-term Discharge* of Foundation Drainage via a *Temporary Connection* may be permitted to the City's sewer system, under the following conditions:

- a) All requirements for obtaining a Private Water Discharge Permit will be satisfied for *Short-term Discharge*.
- b) *Short-term Discharge* meets the applicable quality limits of the Toronto Municipal Code - Chapter 681, Sewers.
- c) *Short-term Discharge* to the City's sewer system will occur only under *Dry Weather Flow* conditions and a Servicing Report, prepared by a *Qualified Professional* with a P.Eng. license, confirms adequate sewer capacity⁷ will be available in the receiving sewer system.

³ The City reserves the right to undertake a peer-review of the study to confirm findings and conclusions

⁴ In accordance with the provisions in the *Toronto Municipal Code*, Chapter 681, Sewers

⁵ Including peak flow estimations for *Foundation Drainage* for all applicable flow conditions (e.g., design and extreme wet weather flow)

⁶ *Foundation Drainage* infrastructure on private property is to be disconnected from City sewers before and after *Short-term Discharge* has taken place.

⁷ No sewer surcharge under *Dry Weather Flow*

5.0 Exemption Authority

5.1 At the written request of the development applicant/owner, where a *Qualified Professional* has demonstrated, to the satisfaction of the General Manager of Toronto Water, that *On-site Management of Foundation Drainage* is not technologically feasible and *Long-term Discharge of Foundation Drainage* is required to avoid hazardous impacts, the General Manager of Toronto Water, in their sole discretion, may exempt provisions of this policy to allow the development site owner to apply for *Long-Term Discharge of Foundation Drainage*.

5.2 Upon the receipt of an exemption:

- a) *Long-Term Discharge of Foundation Drainage* to the City's storm or combined⁸ sewer system may be permitted, under the following conditions:
 - i. All requirements for obtaining a *Private Water Discharge Agreement* will be satisfied for *Long-term Discharge*.
 - ii. A Hydrological Report, prepared by a *Qualified Professional* in accordance with the Hydrological Review Terms of Reference, deems that the *Foundation Drainage* will meet applicable quality limits of Toronto Municipal Code - Chapter 681, Sewers, via reasonable and practical measures that are operationally and financially sustainable.
 - iii. A Stormwater Management Report, prepared by a *Qualified Professional* with a P.Eng. license, demonstrates that water management targets of the City's Wet Weather Flow Management Guidelines will be met.
 - iv. A Servicing Report, prepared by a *Qualified Professional* with a P.Eng. license, confirms that all applicable sewer capacity criteria will be met in accordance with the City's Design Criteria for Sewer and Watermains, where discharges⁹ are proposed to the combined sewers.

- b) *Long-term Discharge of Foundation Drainage* to the City's sanitary system may be permitted, under the following conditions:
 - i. All requirements for obtaining a *Private Water Discharge Agreement* will be satisfied for *Long-term Discharge*.
 - ii. A Hydrological Report, prepared by a *Qualified Professional* in accordance with the Hydrological Review Terms of Reference, deems that the *Foundation Drainage* will meet applicable quality limits of Toronto Municipal

⁸ Where storm sewers do not exist to service the development site

⁹ Including peak flow estimations for *Foundation Drainage* for all applicable flow conditions (e.g., design and extreme wet weather flow)

Code - Chapter 681, Sewers, via reasonable and practical measures that are operationally and financially sustainable.

- iii. A Servicing Report, prepared by a *Qualified Professional* with a P.Eng. license, confirms that all applicable sewer capacity criteria will be met in accordance with the City's Design Criteria for Sewer and Watermains, for all proposed discharges¹⁰ to the sanitary sewers.

¹⁰ Including peak flow estimations for *Foundation Drainage* for all applicable flow conditions (e.g., design and extreme wet weather flow)
