

Storm Sewer System

Objectives

- Development of the model for the existing storm sewer system
- Identify storm sewer capacity issues

Study Tasks:

- ✓ A computer Model (PCSWMM) was used to define the capacity of the trunk storm sewer system (sewers that are 600 mm diameter and larger)

Level of Service

The “level of service” or capacity of the storm sewer to convey stormwater runoff is defined in the Official Plan as per the table below:

Road Classification	Design Storm Capacity
Local Road	Less than 2 Year
Rural Arterial / Collector Road	Less than 5 Year
Urban Arterial	Less than 10 Year

- A Less than 2-Year capacity suggests that the capacity of the sewer will be exceeded (“surcharged”) every 2 years
- A Less than 5-Year capacity suggests the sewer will surcharge every 5 years
- A Less than 10-Year capacity suggests the sewer will surcharge every 10 years

Key Findings

- The model provides a baseline to evaluate the storm sewer system capacity
- The accompanying figures to the right show each of the 559 storm sewers modelled and the evaluation of their capacities:
 - 4% surcharge under the 2-yr storm
 - 5% surcharge under the 5-yr storm
 - 7% surcharge under the 10-yr storm

