Town of New Tecumseh

Sanitary Sewer Master Plan

Virtual Public Information Centre No.1

September 22 to October 6, 2022

Land Acknowledgement

The Town of New Tecumseth is situated upon the traditional territories of the Wendat, Haudenosaunee, and the Chippewa/Ojibwe. We acknowledge this land is covered by the Lake Simcoe-Nottawasaga Purchase (Treaty 18) between the Crown and Chippewa Nation in 1818. Today, descendants of this group make up the Chippewa Tri-Council, with communities based at Georgina Island, Rama, and Beausolei First Nations.

The Town of New Tecumseth acknowledges the role of Indigenous People in its history and their continued contributions to the Town.

Welcome!

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Stay Engaged!

Throughout this presentation, you will see this prompt. This indicates content we are looking for your feedback on!

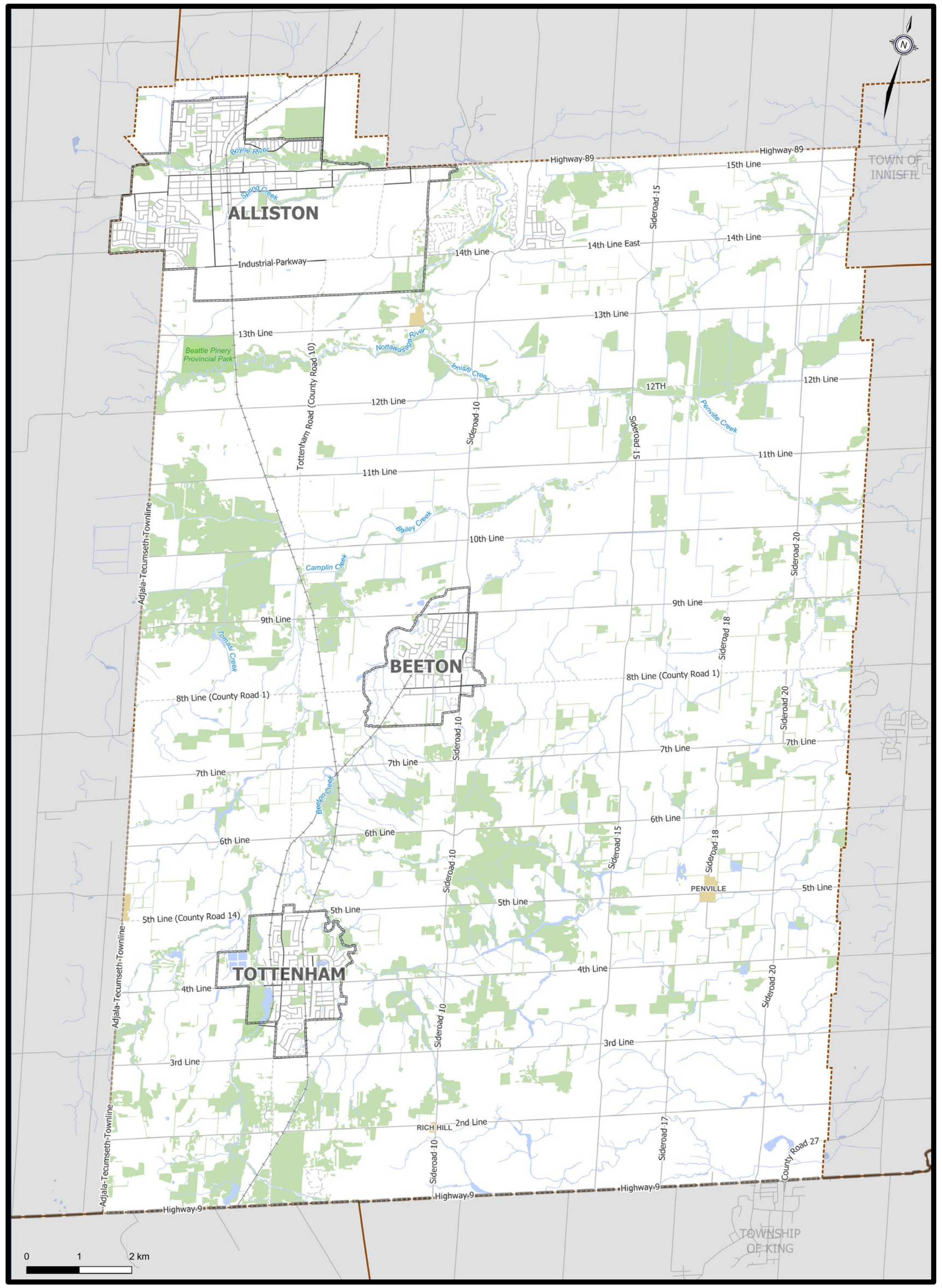
Comments can be submitted via the project website, or you can e-mail the project team ssmp@newtecumseth.ca

Project Introduction

The Town of New Tecumseth has initiated a Sanitary Sewer Master Plan (SSMP), to identify long-term wastewater infrastructure needs and servicing strategies to support growth to 2051.

This Master Plan will:

- Provide a strategic vision for the next 30 years to accommodate future growth.
- Follow the Municipal Class Environmental Assessment (MCEA) process to evaluate and select a preferred servicing strategy.
- Establish an implementable wastewater capital program that will ensure safe, sustainable, and optimized sanitary sewer servicing.



PIC Objectives

Key Dates

September 22, 2022
Project information posted

September 22 to October 6, 2022
Submit questions or comments about the SSMP to the Town of New Tecumseth

October 20, 2022
Responses to questions and comments posted

- **Present the Public and Stakeholders with an opportunity to learn about the Sanitary Sewer Master Plan and provide insight into the future system.**
- **Outline the Sanitary Sewer Master Plan activities and schedule and what steps are being taken to support the decision-making process.**
- **Answer any questions you may have about the project process or potential outcomes.**

Note: this is the first of two PICs for this study.

Class EA Process

The Municipal Class Environmental Assessment (MCEA) process is a decision-making process that all Ontario municipalities follow for rehabilitating and building new public infrastructure.

This project is following the Municipal Engineers Association (MEA) Class Environment Assessment (EA) process for Master Plans and will satisfy Phases 1 and 2 of the Class EA process.

Phase 1 of the MCEA process focuses on the development of a problem/opportunity statement to be addressed by the project. **This is where we are now!**

Phase 2 addresses important technical questions that will culminate in the recommendation of a preferred sanitary sewer servicing strategy.

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
Problem or Opportunity	Alternative Solutions	Alternative Design Concepts for Preferred Solution	Environmental Study Report (ESR)	Implementation
Identify Problem or Opportunity	Identify Alternative Solutions to Problem or Opportunity	Identify Alternative Solutions to Problem or Opportunity	Complete Environmental Study Report (ESR)	Complete Contract Drawings and Tender Documents
Discretionary Public Consultation to Review Problem or Opportunity	Inventory Natural, Social, Economic Environment	Detail Inventory Natural, Social, Economic Environment	Environmental Study Report (ESR) Placed on Public Record	Proceed to Construction and Operation
We are here!	Identify Impact of Alternative Solutions on the Environment, and Mitigating Measures	Identify Impact of Alternative Designs on Environment, and Mitigating Measures	Notice of Completion to Review Agencies and Public	Monitor for Environmental Provisions and Commitments
	Evaluate Alternative Solutions: Identify Recommended Solutions	Evaluate Alternative Designs: Identify Recommended Solutions	Copy of Notice of Completion to MOE-EA Branch	
	Consult Review Agencies and Public. RE: Problem or Opportunity and Alternative Solutions	Consult Review Agencies and Previously Interested and Directly Affected Public.	Opportunity to Request Minister Within 30 Days of Notification to Request and Order*	
	Select Preferred Solution	Select Preferred Design		
		Preliminary Finalization of Preferred Design		

Problem and Opportunity Statement

New Tecumseth
Alliston · Beeton · Tottenham

The Town of New Tecumseth Sanitary Sewer Master Plan problem and opportunity statement considers the following strategic goals:

- Create a hydraulic model of the sanitary network to analyze existing and future capacity opportunities and constraints;
- Fill data gaps through field investigation and surveys, incorporate any noted deficiencies in the existing sanitary network and identify any required upgrades to the system;
- Provide recommendations based on current and future growth demands and operational requirements;
- Recommend Capital Improvement Projects focused on sanitary reliability and flexibility within the system, based on current and future demands;
- Define a Capital Implementation Plan that lists projects, timing, and costs to inform future development charge rate studies; and
- Provide system capacity to meet existing and projected growth needs to 2051 and beyond.

> **The Sanitary Sewer Master Plan has been initiated to update the Town's long-term wastewater servicing strategy by incorporating future wastewater demands based on projected growth to 2051 and beyond.**
>
> **The Plan will also identify Capital Improvement Projects to promote economic vitality through residential, commercial, and industrial expansion.**

Planning for Growth

The Simcoe County Municipal Comprehensive Review (MCR) is currently in progress and will provide the Town of New Tecumseth with:

- Population and employment forecasts;
- Potential boundary expansions; and
- Density / intensification targets.

Significant growth requires proactive infrastructure planning to ensure sustainable service delivery, now and in the future.

The SSMP will be based on the latest MCR and define a servicing strategy that will enhance infrastructure resiliency, considering a changing climate.

Stay Engaged!

Do you have any comments on <u>growth</u> in and around your community?

New Tecumseth is **GROWING!**

2021	2051
44k People	**82k** People
21k Jobs	**36k** Jobs

82% increase

+38,000 People
+15,000 Jobs

Solutions for sanitary servicing will be based on projected population and employment growth areas.

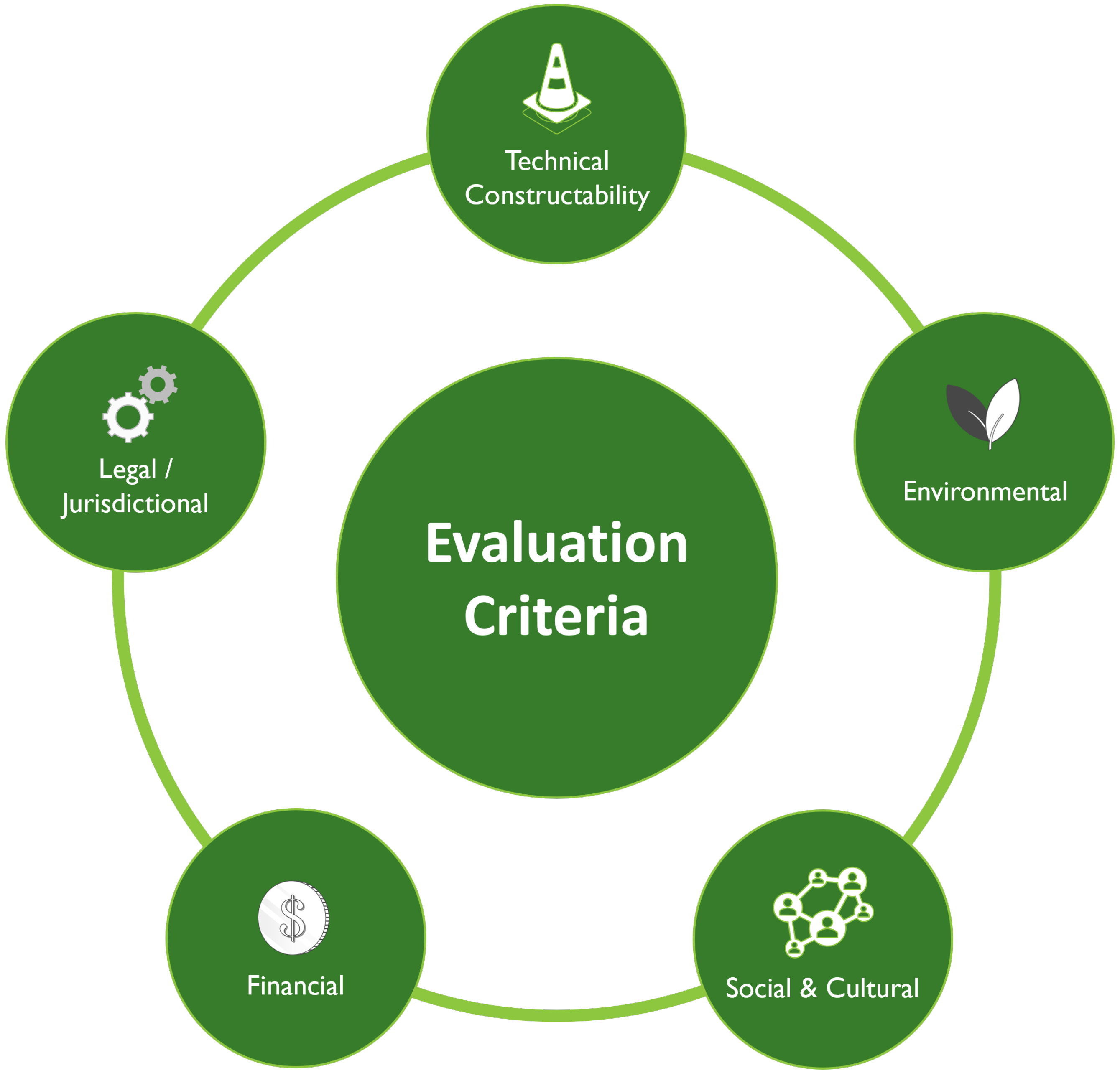
Source: Draft Municipal Comprehensive Review (2022)

Key Issues and Considerations

The project will evaluate technical, environmental, socio-cultural, and financial components to select the preferred sanitary sewer servicing strategies.

Key issues that will be addressed in this study include:

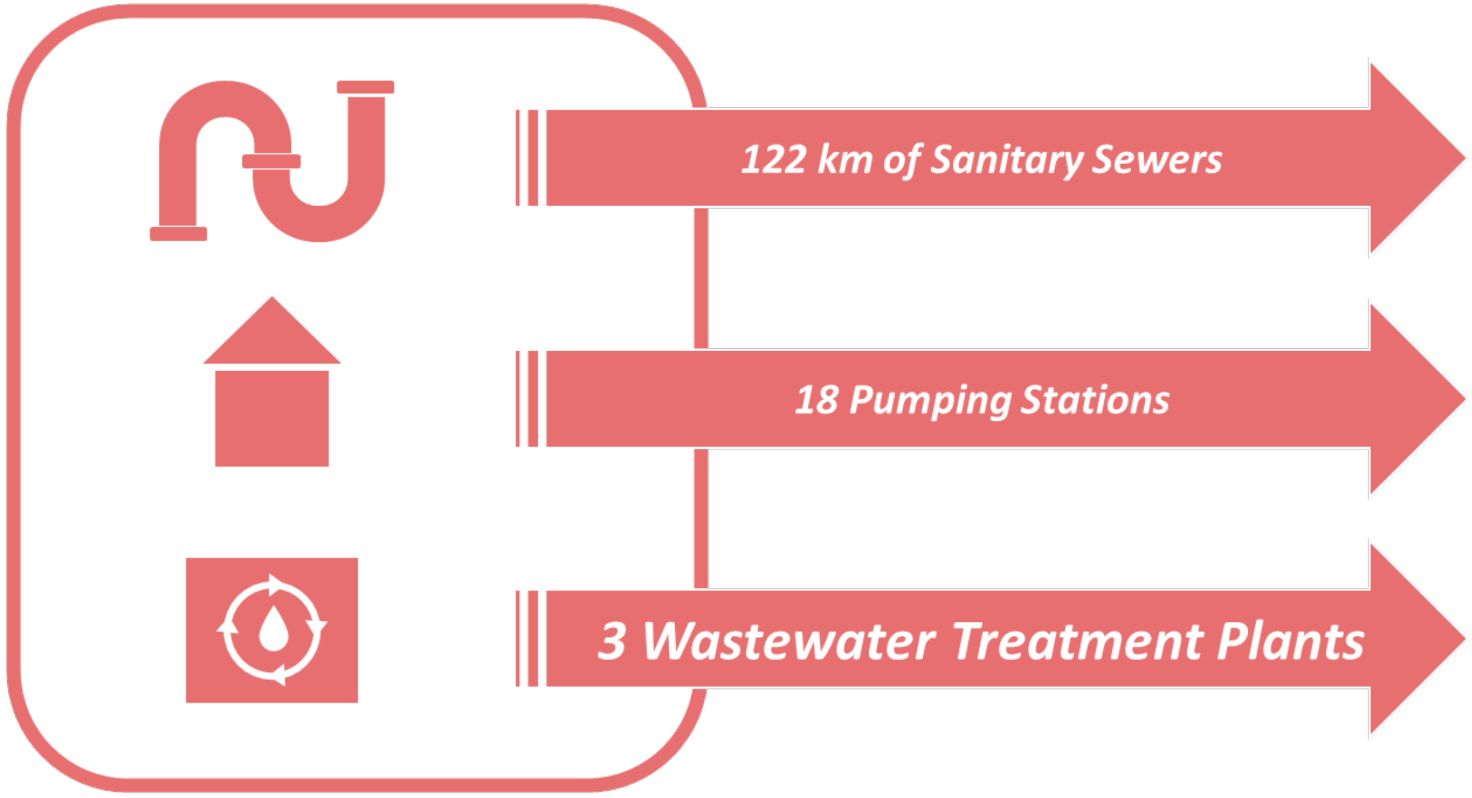
- Existing sanitary conditions and constraints;
- Growth projections and anticipated impacts;
- Stakeholder input;
- Capital planning and life cycle costing;
- Development charges; and
- Physical and natural environment.

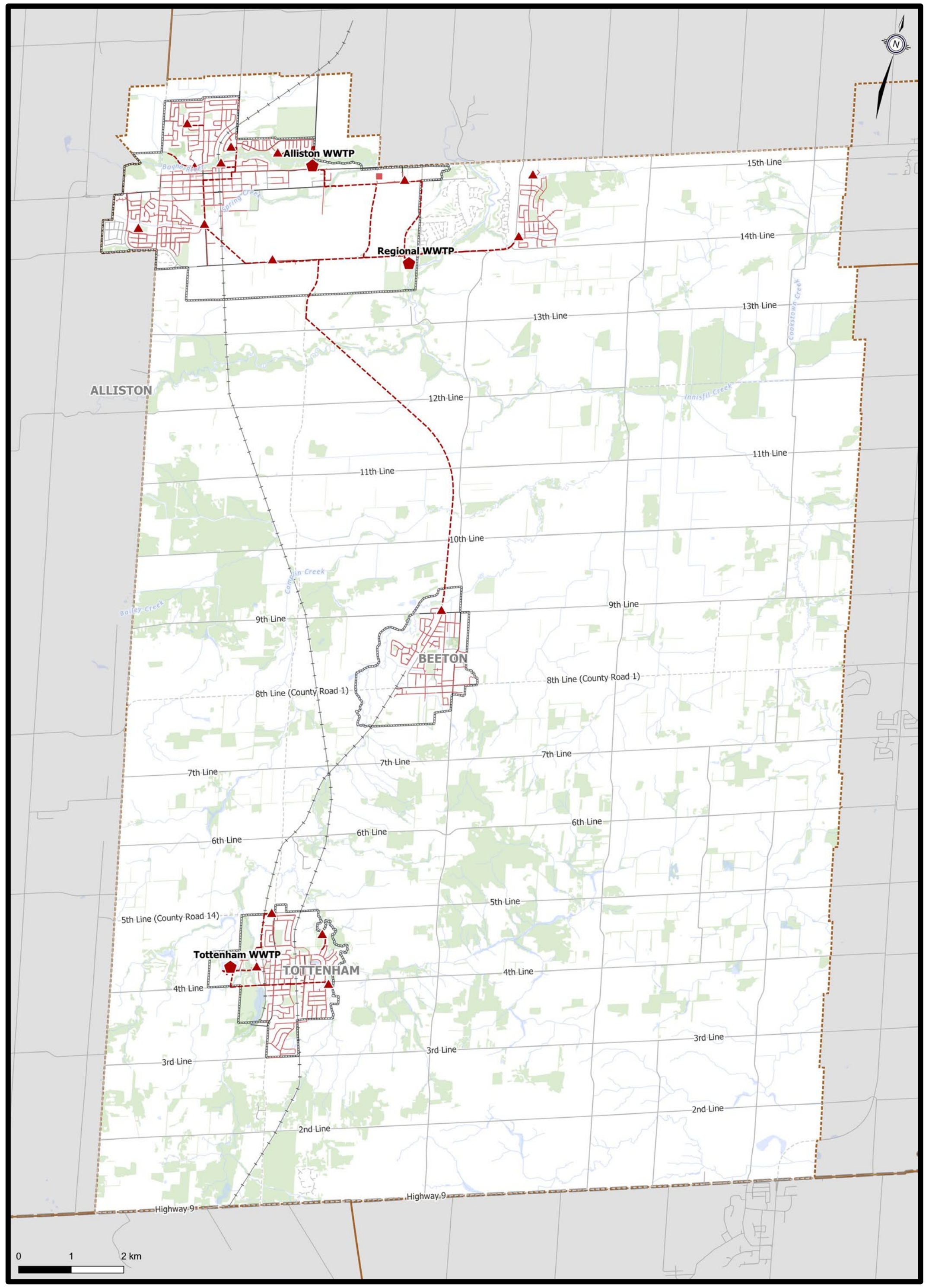


Existing Sanitary System

The Town of New Tecumseth provides municipal sanitary services for each of its three communities: Alliston, Beeton, and Tottenham.

Your Sanitary System at a Glance





Hydraulic Summary - Alliston

Alliston and Treetops Subdivision

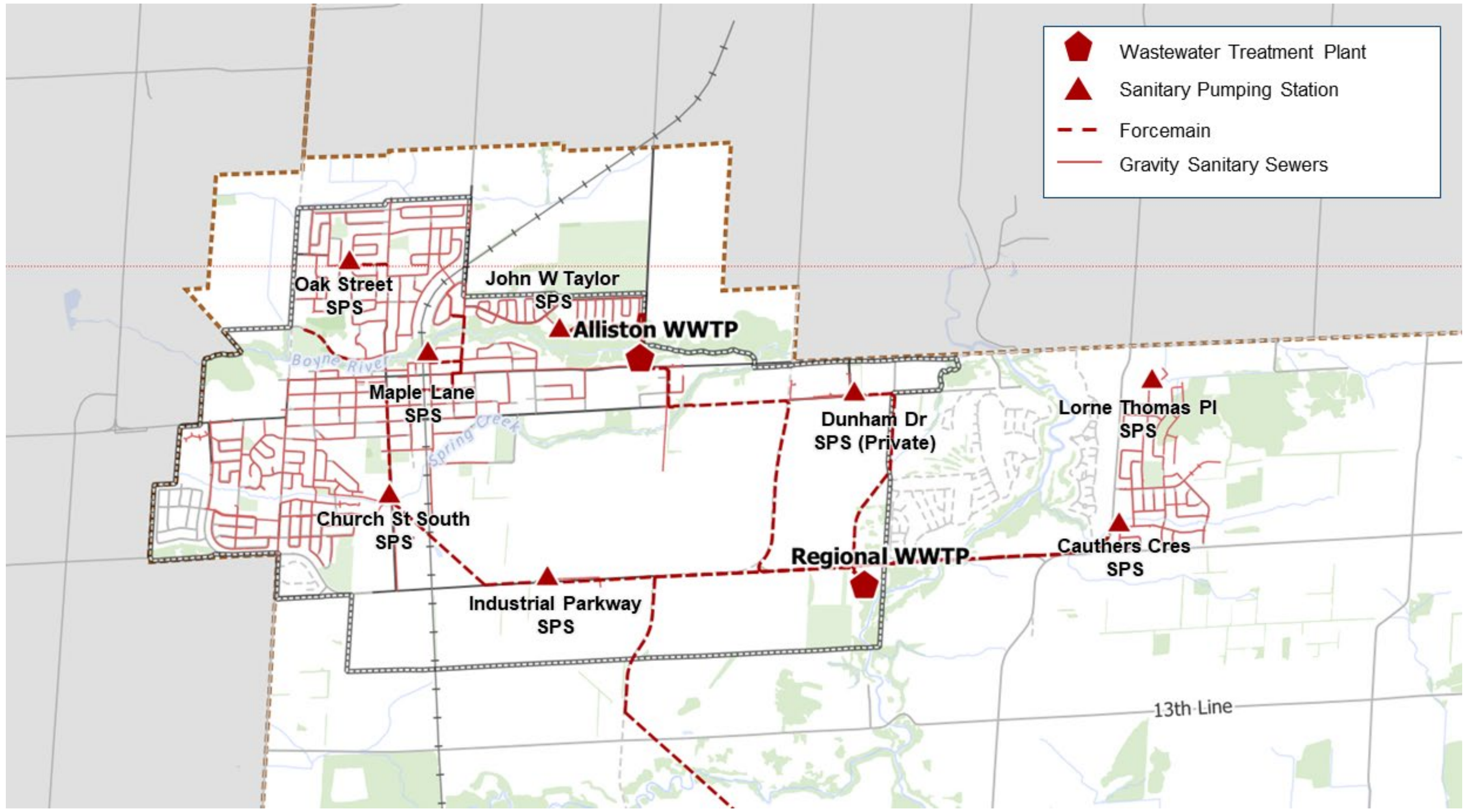
Wastewater flows to the Alliston Wastewater Treatment Plant or the Regional Wastewater Treatment Plant (WWTP).

Opportunities and Constraints

- Alliston WWTP is reaching capacity.
- Regional WWTP has capacity. Large Industrial, Commercial, and Institutional (ICI) customers to consider.
- Aging infrastructure in Downtown Alliston requires consideration.
- Boyne River, Spring Creek, and Nottawasaga River features may present servicing difficulties.
- Significant growth is planned for Alliston, both greenfield and intensification.
- Some developable land may require a new pumping station to provide sanitary servicing.

Stay Engaged!

Do you have any concerns or noticed any issues in Alliston?



Quick Facts	
	~ 74 km of Gravity Sanitary Sewers
	~ 20 km of Sanitary Forcemains
	1,190 Maintenance Holes
	2 Wastewater Treatment Plants
	11 Pumping Stations

Hydraulic Summary - Beeton

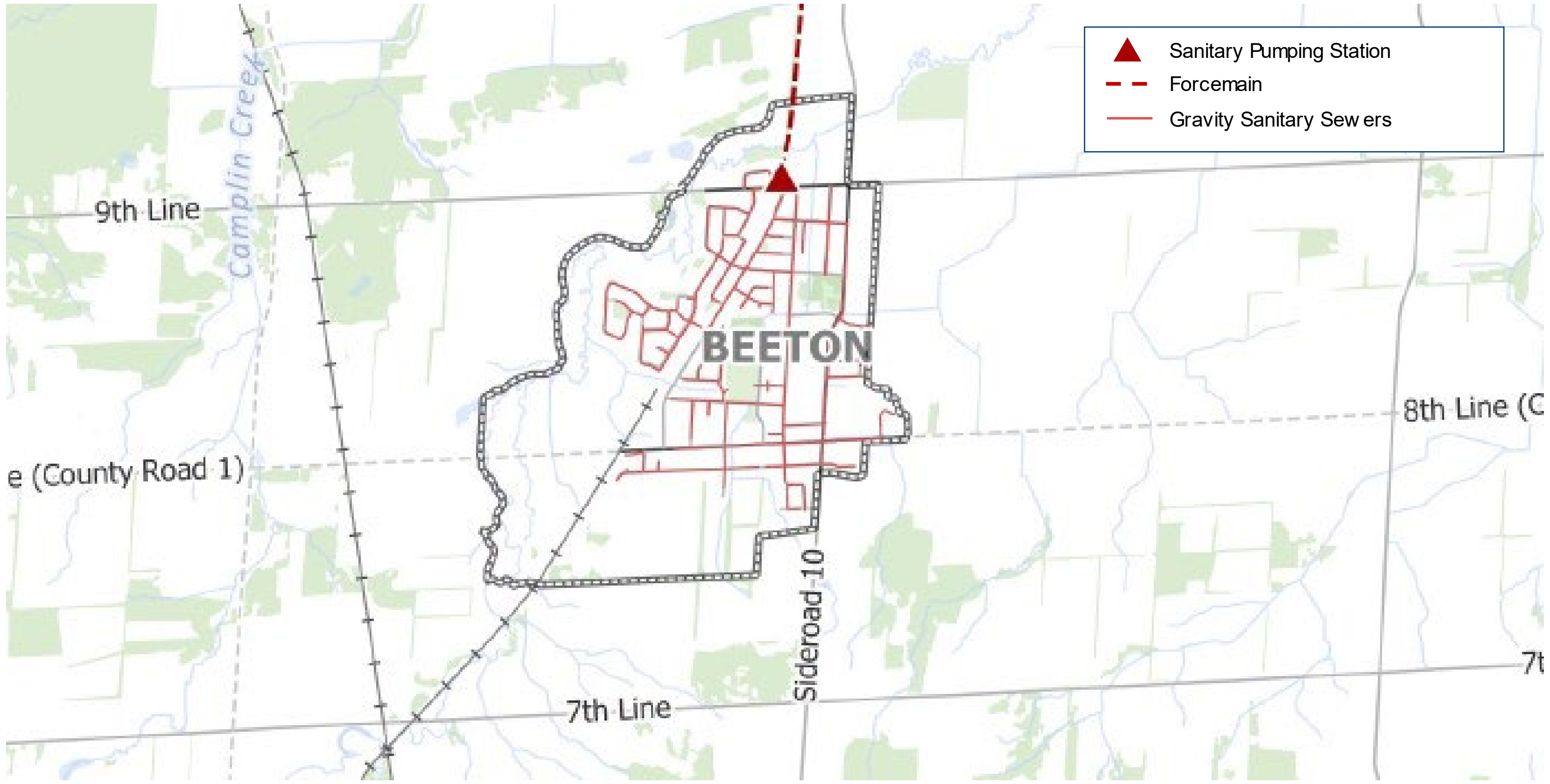
New Tecumseth
Alliston · Beeton · Tottenham

Beeton

Flows to Lilly Street Pumping Station and pumped north to Alliston via forcemain to be processed.

Opportunities and Constraints

- Aging infrastructure within older areas of Beeton
- Flows delivered to the Regional Treatment Plant from Lilly Street Pumping Station through a single forcemain.
- History of inflow/infiltration issues
- Railway and Beeton Creek features may present servicing difficulties.
- Greenfield and intensification growth expected
- Some developable land may require a new pumping station to provide sanitary servicing.



Quick Facts	
	~ 18 km of Gravity Sanitary Sewers
	~ 10 km of Sanitary Forcemains
	278 Maintenance Holes
	1 Pumping Station

Stay Engaged!

Do you have any concerns or noticed any issues in Beeton?

Hydraulic Summary - Tottenham

Tottenham

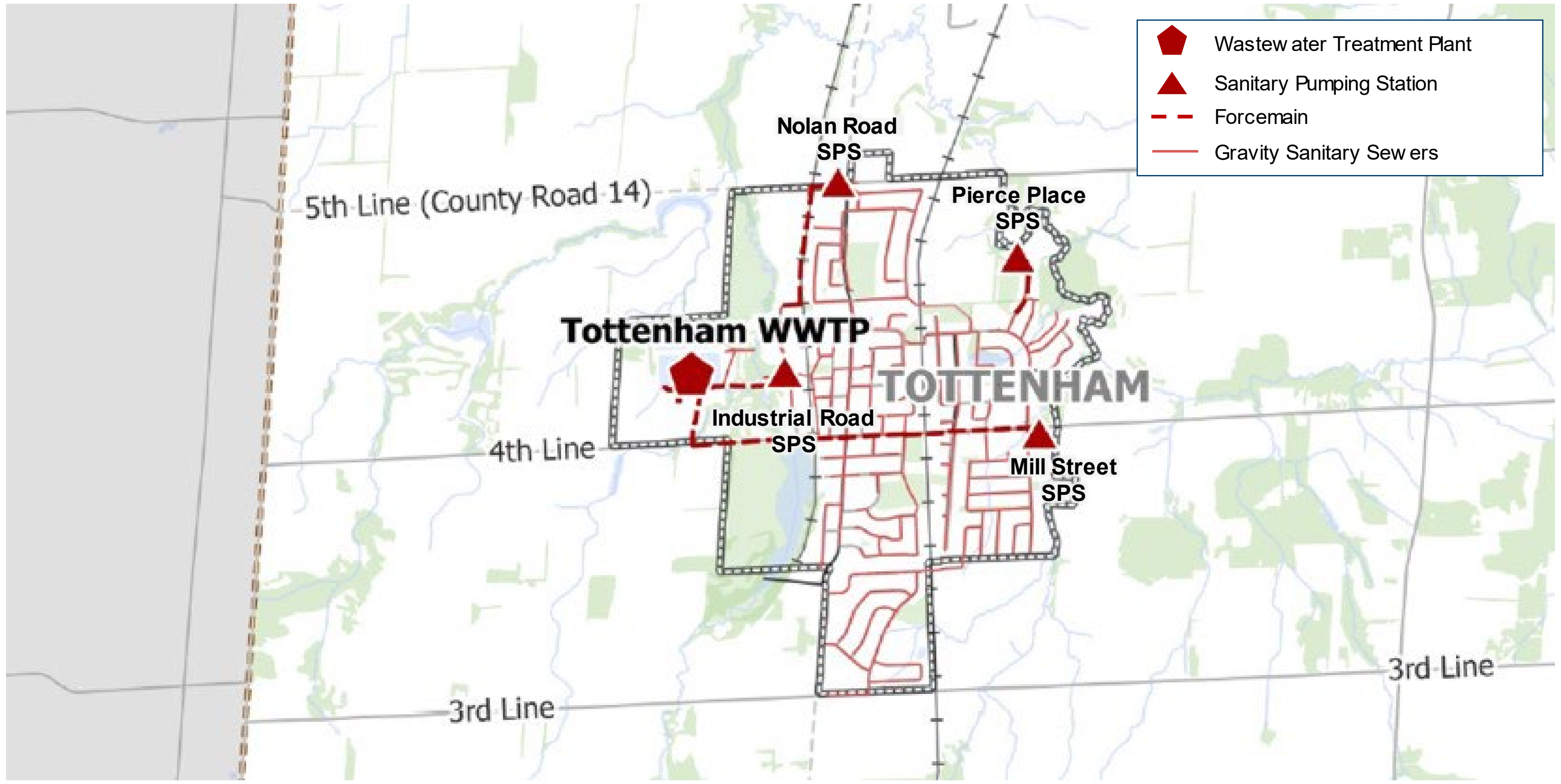
Independent system supported fully within Tottenham.

Opportunities and Constraints

- Available capacity at Tottenham Wastewater Treatment Plant (approximately 65% used)
- Parts of Tottenham are within the Greenbelt and Oak Ridges Moraine.
- History of inflow/infiltration issues.
- Railway and Beeton Creek features may present servicing difficulties.
- Greenfield and intensification growth expected
- Some developable land may require a new pumping station to provide sanitary servicing.

Stay Engaged!

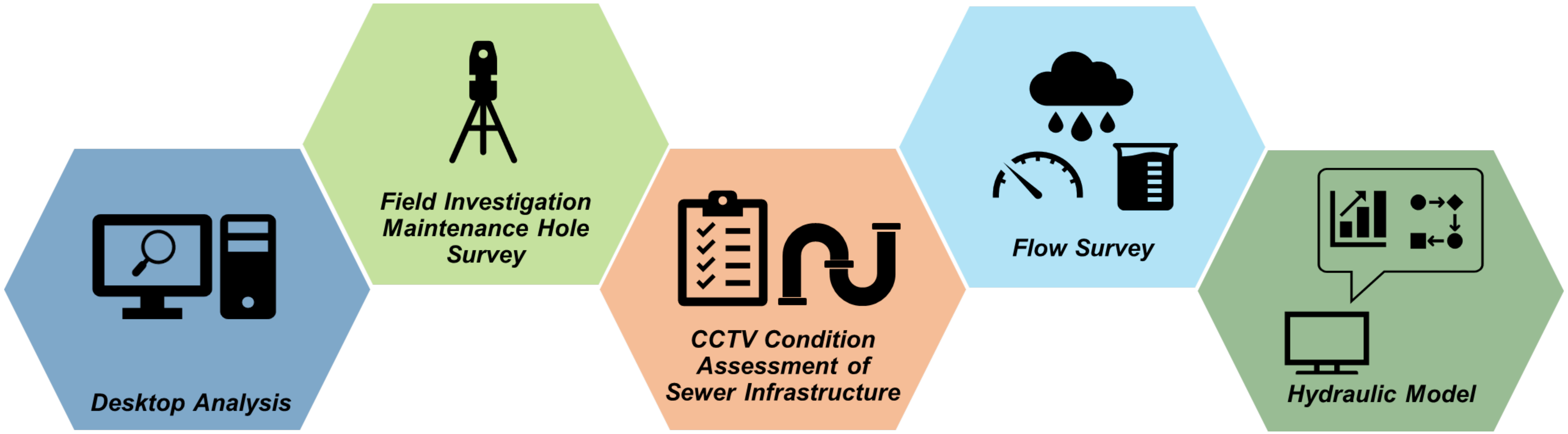
Do you have any concerns or noticed any issues in Tottenham?



Quick Facts	~ 30km of Gravity Sanitary Sewers
	~ 6 km of Sanitary Forcemains
	462 Maintenance Holes
	1 Wastewater Treatment Plant
	4 Pumping Stations

System Analysis Approach

The Town is investing in data collection to enhance their understanding of the sanitary sewer infrastructure through field investigations and data gap analysis, including:



Information gathered through this study will be used to generate the Town's first ever computerized hydraulic model which will be used to identify sanitary system issues, provide further clarity on system operations, and test new servicing solutions.

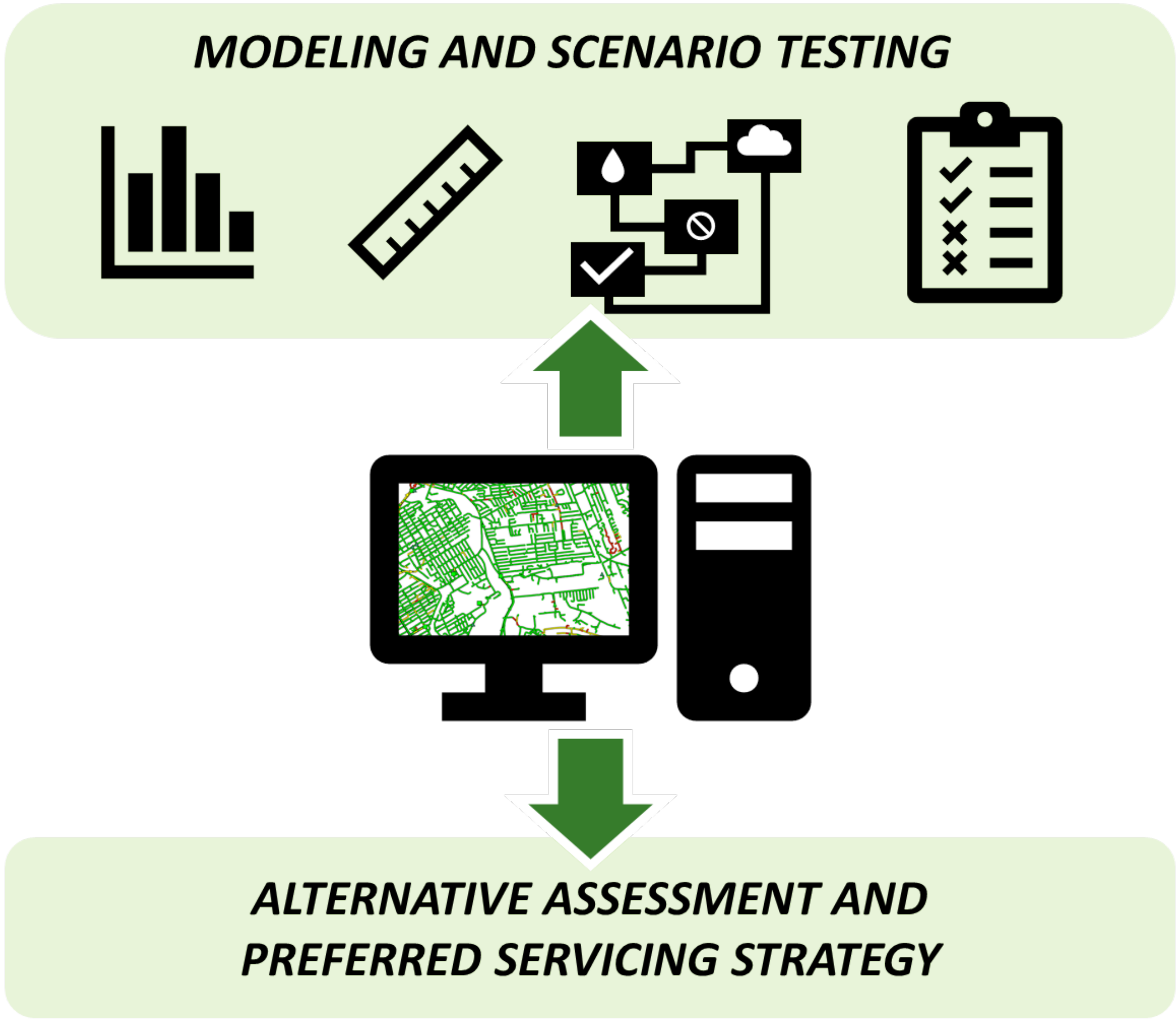
What is a Hydraulic Model?

A hydraulic model is a computerized representation of infrastructure operations, calibrated with existing asset information gathered from surveys.

What can we do with it?

The model can be used to address various scenarios such as growth, climate change resilience, emergency servicing, and system sensitivities.

Results from the hydraulic model analysis will feed into the development of a sanitary sewer capital plan to ensure timely implementation infrastructure upgrades.



Project Overview

Phase 1: Identify Problem or Opportunity

Phase 2: Selection of Alternative Solution

Background Review and Assessment of Existing Infrastructure

Model Build and Calibration

Identification and Assessment of Alternatives

Capital Program Implementation Program

Optimize Program Delivery and Financial Sustainability

Sanitary Sewer Master Plan

August 2022 – Winter 2023

- Technical and Level of Service Review
- Sustainability Strategy Review
- Flow Survey and Data Collection
- CCTV and Condition Assessment of Infrastructure
- Field Investigation and Maintenance Hole Surveys

August 2022
Notice of Study Commencement and PIC No. 1

September 2022
Virtual Public Information Centre No. 1
We are Here!

Winter – Summer 2023
Review and Incorporate

- Background Review
- Sanitary Design Criteria
- Planning Projections
- Capacity Projections
- Stakeholder Comments and Feedback

Spring 2023
Develop Alternative Servicing Strategies

- Update Hydraulic Model
- Develop Risk-Based Evaluation

Spring – Summer 2023
Develop Capital Plan

- Run Hydraulic Model under various scenarios to identify appropriate program integration
- Incorporate Project Costing

Summer 2023
Identify Preliminary Preferred Strategy

- Apply Risk-Based Evaluation to Alternatives

Summer 2023
Virtual Public Information Centre No. 2

Summer – Winter 2023
Review and Incorporate

- Financial Analysis
- Stakeholder comments and Feedback

Fall 2023

- **Develop Optimized Program**
- **Development Charge Program Review**
- **Phasing Plan**

Winter 2023
Issue Notice of Study Completion and Commence Public 30-Day Review

Next Steps

Following this virtual PIC, the project team will:

- Review and consider your input through the **Project Survey**
- Develop and evaluate the wastewater servicing strategy alternatives using all available information (**including your survey feedback**)
- Select the best servicing strategies based on a variety of factors
- Present the preliminary preferred strategies in **PIC No. 2**
- Prepare final project report for submission to Town Council (followed by a 30-day review period)

Stay Engaged!

We encourage you to provide input on the Town's growth plans, future servicing strategies, and other information regarding the sanitary network that is important to you. Comments received during both PICs may play a direct role in the final SSMP.

Potential outcomes from the Master Plan:

- Recommendation for new or upsized sewers;
- New or upgraded pumping stations;
- Reconfiguration of existing system to maximize capacity at facilities;
- Provide recommendations based on current and future growth demands and operational requirements;
- Provide system capacity to meet existing and projected growth needs to 2051 and beyond.

How will these outcomes impact you?

- Inform development charges;
- Enhance resiliency to climate change; and
- Advance servicing security of the system for long-term sustainability.

Contact Us

Stay Engaged!

We encourage you to get involved by completing the project survey, to provide any feedback on the study and/or to sign up for project updates, available at the project website:

Visit the Project Website

https://www.newtecumseth.ca/en/business-and-development/sanitary-sewer-master-plan.aspx

The survey will be available until **October 6, 2022**. Responses to all comments received will be posted on the project website on **October 20, 2022**.

An **interactive version of PIC 1** is also available, and includes all information provided in this presentation, links to the project website and project survey, and project team contacts:

View the interactive StoryMaps

https://arcg.is/1GaHXL1

Project Team Contact

General Inquiry
ssmp@newtecumseth.ca

Ben DeGroot
Project Manager of Development Engineering
Town of New Tecumseth
10 Wellington Street East
Alliston, ON L9R 1A1
bdegroot@newtecumseth.ca

James Jorgensen, C.WEM, C.Env, MIAM, AMP
Infrastructure Planning, Partner
GM BluePlan Engineering Limited
Royal Centre, 3300 Highway 7, Suite 402
Vaughan ON L4K 4M3
james.jorgensen@gmblueplan.ca

Thank you for participating!