



SHEDDEN & FINGAL MASTER SERVICING PLAN
Township of Southwold
Municipal Class Environmental Assessment

PUBLIC INFORMATION CENTRE
APRIL 3, 2018



WELCOME!



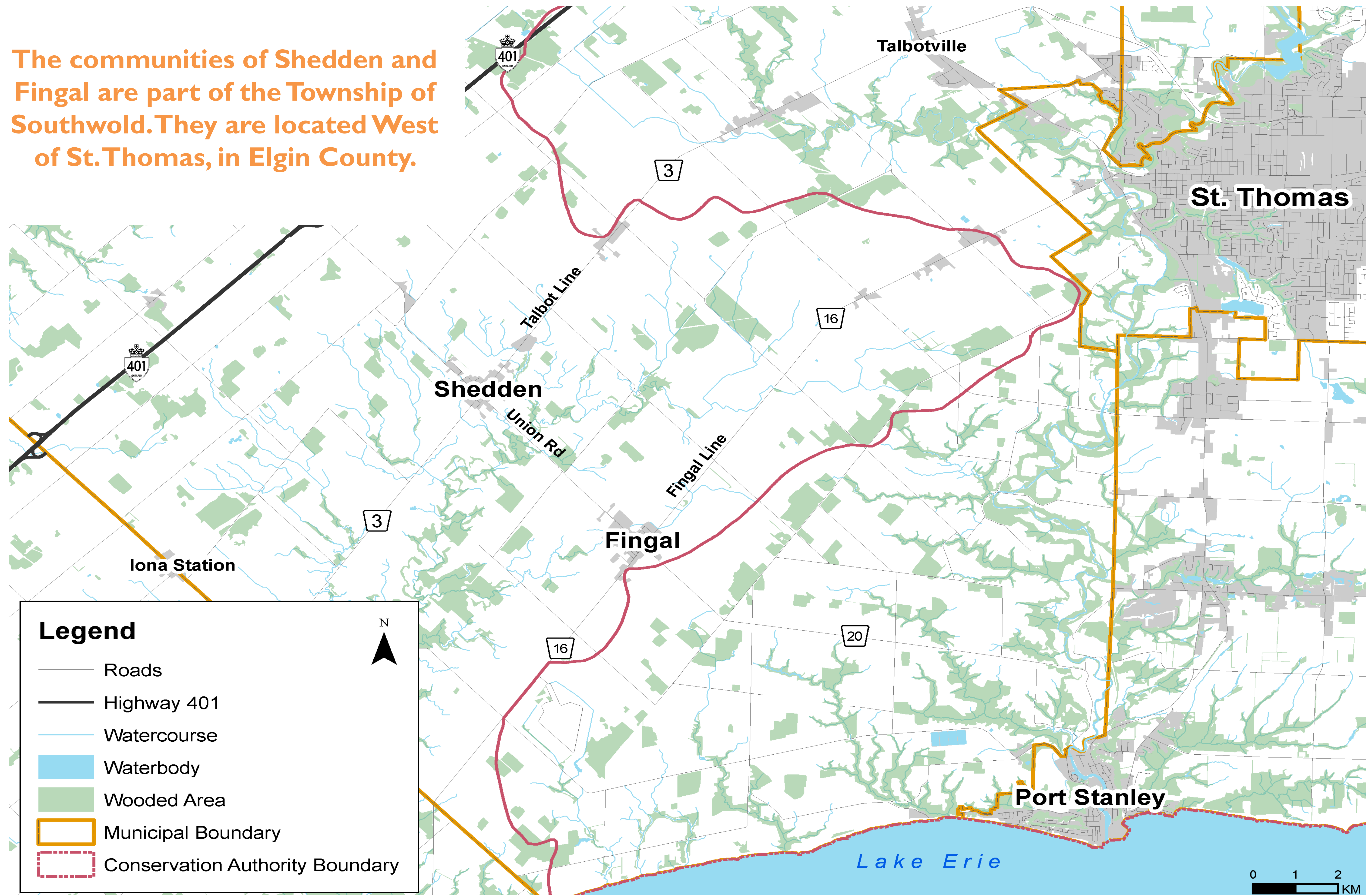
Currently the communities of Shedden and Fingal do not have municipal sanitary services, which limits the extent of future development within the communities.

Today's Objectives

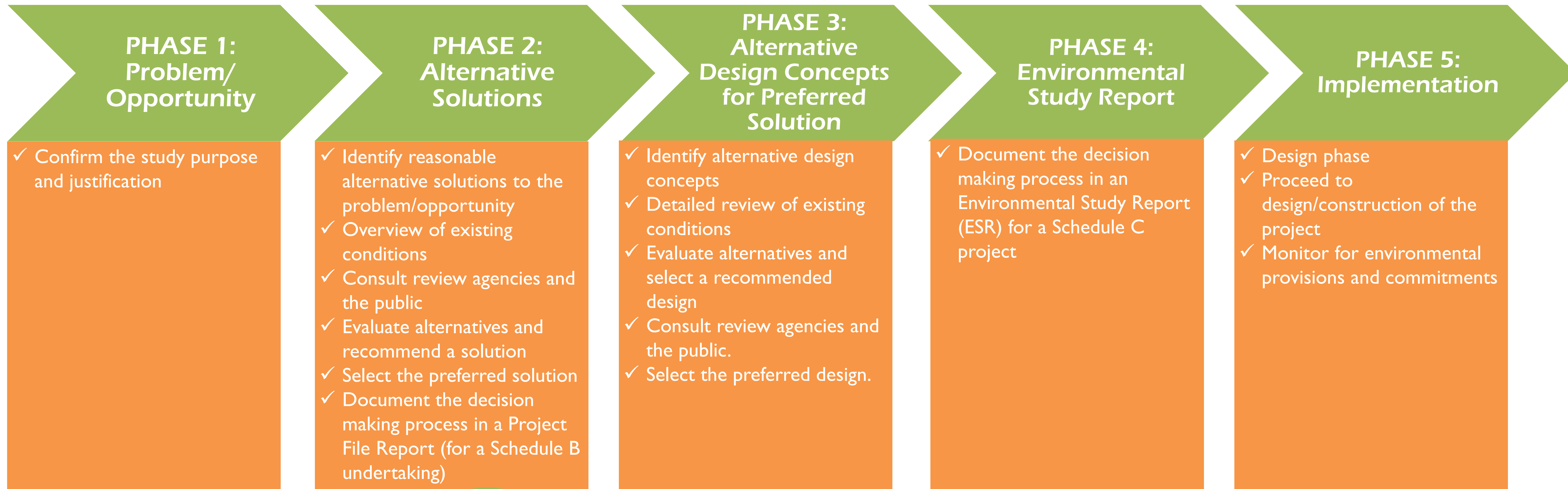
- ✓ **OUTLINE** the project need and justification
- ✓ **PROVIDE** background information
- ✓ **PRESENT** alternatives considered, including the evaluation completed
- ✓ **SUMMARIZE** the next steps in the study

STUDY AREA

The communities of Shedden and Fingal are part of the Township of Southwold. They are located West of St. Thomas, in Elgin County.



STUDY PROCESS



The Study is following the requirements of the Municipal Class Environmental Assessment (EA) (October 2000, as amended).



★ WE ARE HERE

Based on the level of complexity, projects follow a prescribed project “schedule” from Schedule A (minor improvements) to Schedule C (major improvements)

The Class EA process ensures:

- ✓ All relevant social, environmental and engineering factors are considered in the planning and design process
- ✓ Public and agency input is integrated into the EA process

The Class EA project schedule will be confirmed when the preferred alternative is selected:

- **Schedule B follows Phases 1, 2 and 5**
- **Schedule C follows Phase 1 through 5**

STUDY FOCUS

PROBLEM / OPPORTUNITY STATEMENT:

Recognizing the importance of growth within its communities, the Township of Southwold has initiated a Class EA to determine the best way to provide municipal services for Shedden and Fingal. The goal of the Master Servicing Plan is to develop a plan that is:

- Economically sustainable for residents and the Township
- Environmentally responsible
- Provides opportunities for growth within the communities.

The study has two primary objectives:

1. WASTEWATER SERVICING:

- Identify the preferred alternative for providing municipal sanitary servicing to allow for future development in the communities.

2. WATER SERVICING:

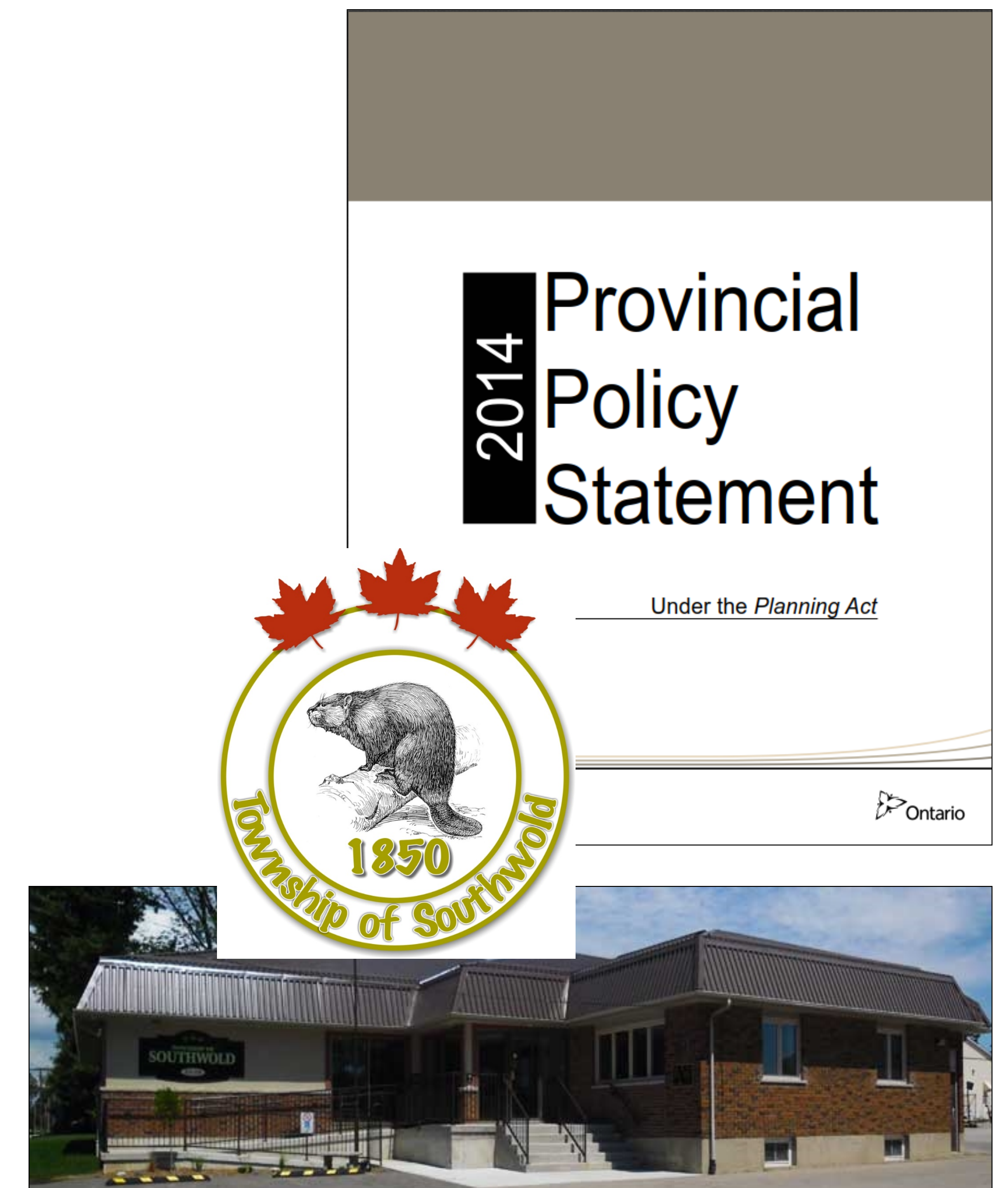
- Identify existing concerns with the municipal water service and identify upgrades to accommodate future development in the communities.

PROJECT BACKGROUND

The Provincial Policy Statement (PPS) provides direction on land use planning and development within the Province. The PPS emphasizes that municipal water and wastewater servicing be considered prior to new development to promote ‘building strong healthy communities’.

Providing a solution for servicing is integral to the future development in the communities of Shedden and Fingal.

A 2013 Township of Southwold *Small Settlement Servicing Study* (Zelinka Priamo Ltd.) identified the need for water supply and municipal servicing reviews for Shedden and Fingal to accommodate development.



PROJECT NEED

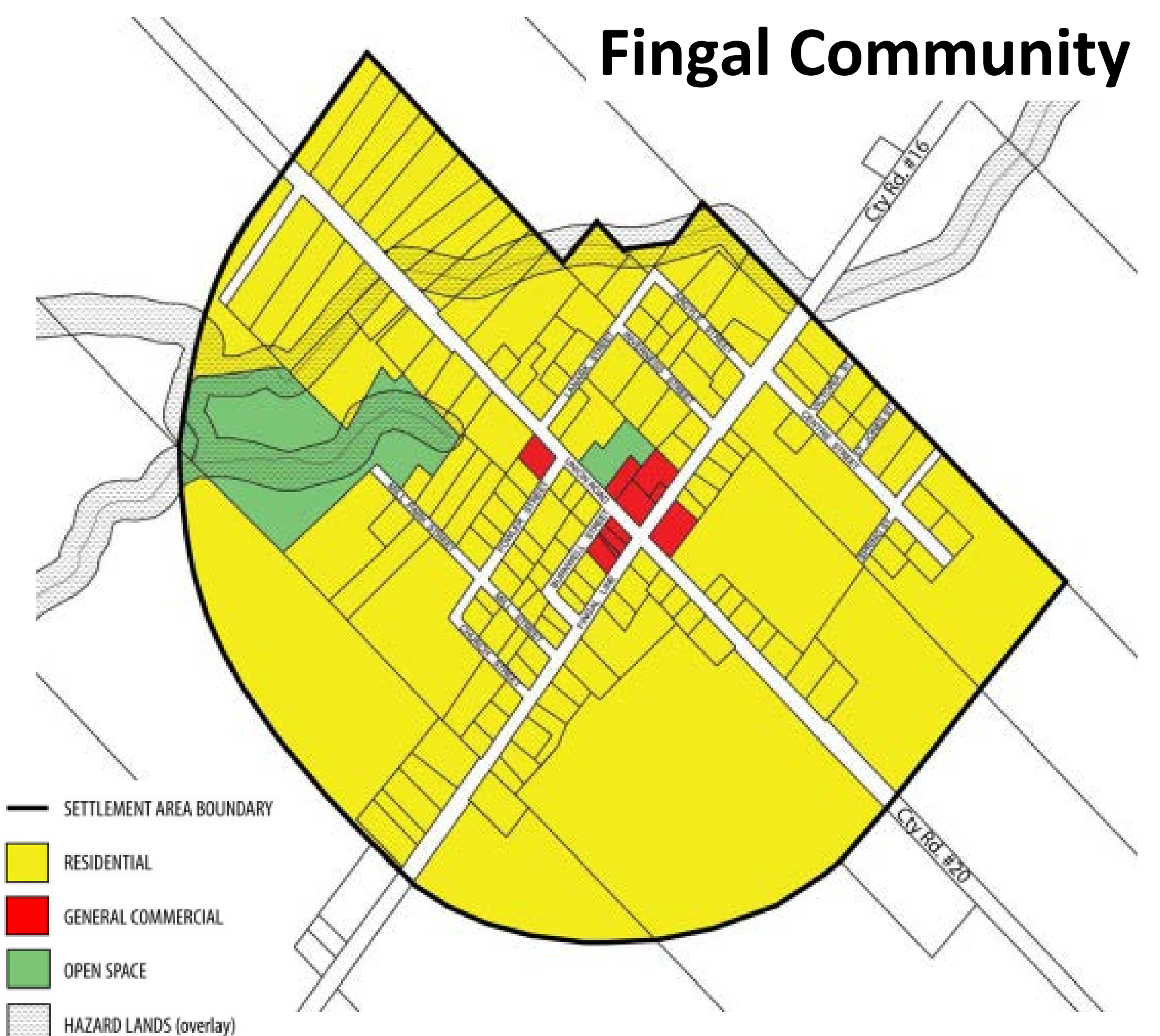
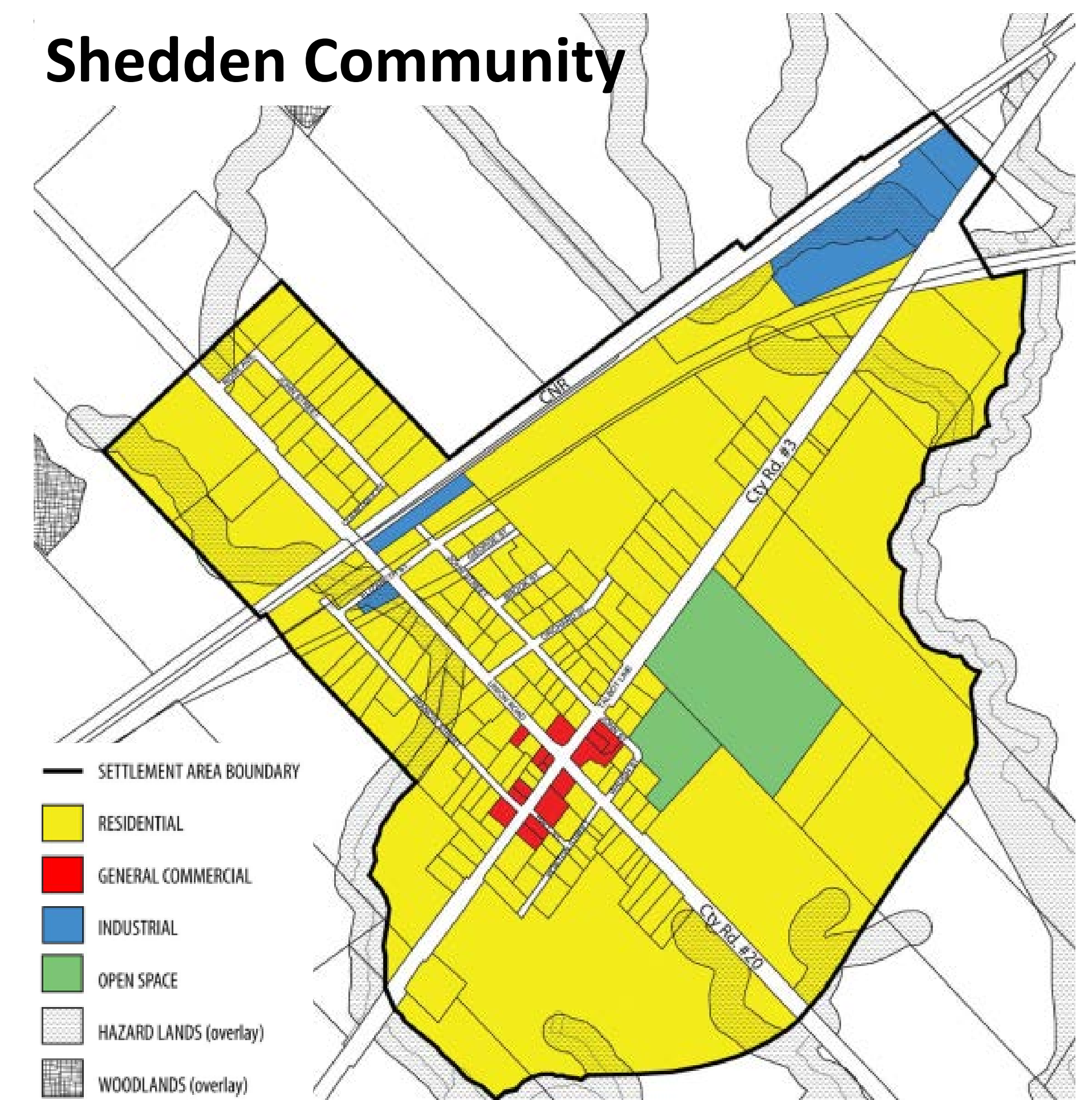
The existing servicing is currently available in the Township of Southwold:

- Water Supply:
 - Township of Southwold is provided via the Regional Water Supply (RWS)
- Existing Sewage Disposal:
 - Properties are serviced by private systems (septic and drainfield systems)
 - Municipal drains provide stormwater collection

	Shedden	Fingal
Settlement Boundary (ha)	182	92
Current Population	406	370
Future Development Population	686	728
Vacant Residential Land Supply (ha)	45.4	41.0

- Both communities are within the Lower Thames Valley Conservation Authority boundary and drain to the Talbot Creek watershed (eventually reaches Lake Erie at Port Talbot).

**The population values were based upon the 2013 Township of Southwold Small Settlement Servicing Study (Zelinka Priamo Ltd.)*



MUNICIPAL WATER REVIEW

Shedden Community Water Servicing



- Valves
- Watermain

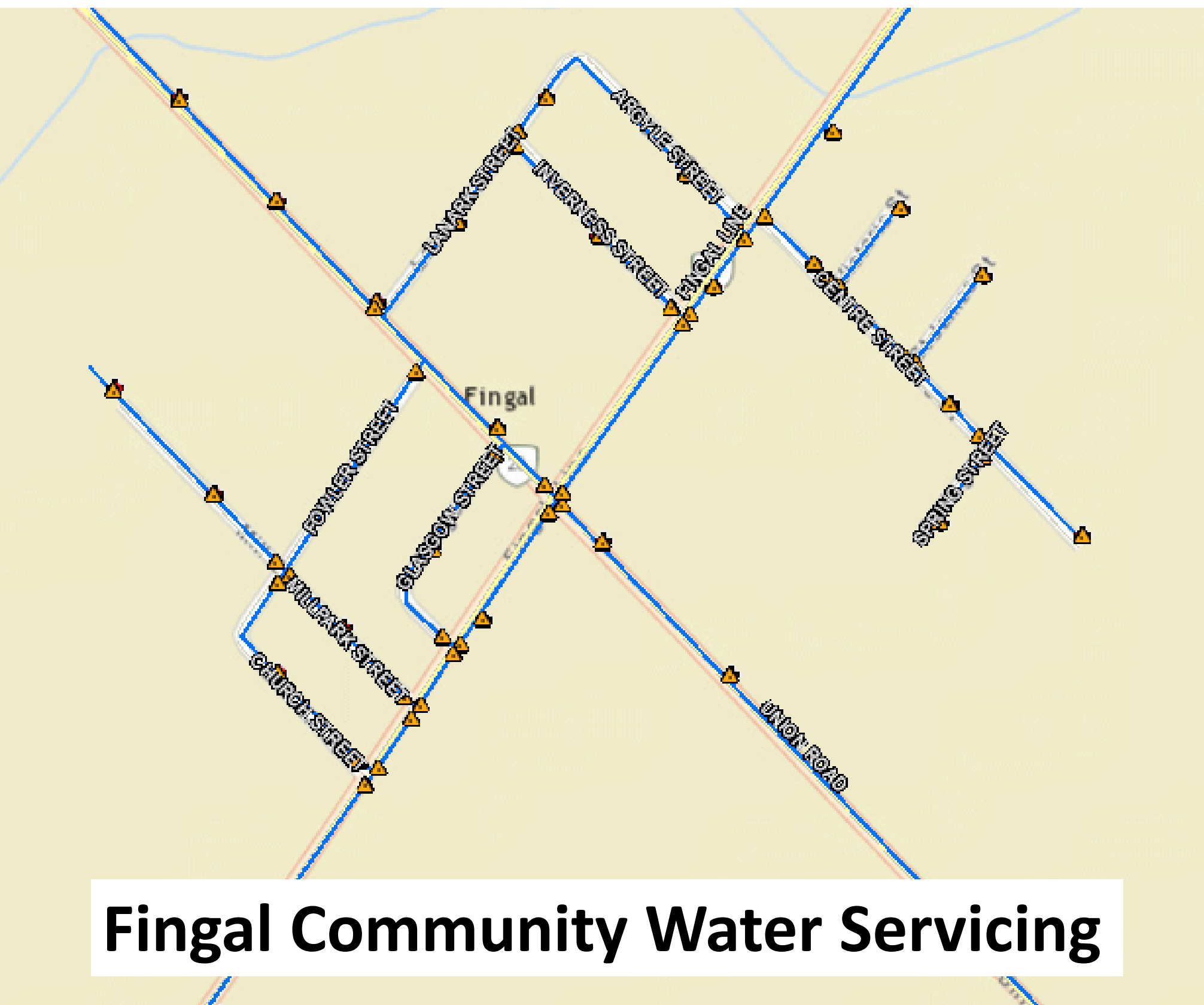
The team is currently reviewing opportunities to improve the existing water servicing for Shedden and Fingal.

IS THERE ANYTHING YOU WANT TO TELL US ABOUT YOUR EXISTING WATER SUPPLY?

Use the post-it notes to provide your comments! i.e.. Smell, colour, pressure, etc.



Fingal Community Water Servicing



ALTERNATIVE SOLUTIONS – Wastewater Management



Three alternatives are being considered for municipal wastewater management:

1. **Do Nothing**
2. **Connect to a neighboring treatment facility**
3. **New Municipal Treatment Facility(s)**

1. Alternative One: Do Nothing (continued servicing on private septic systems with limited future development)

Benefit:

- Low cost alternative

Disadvantage:

- Limits additional growth within the communities
- Cost of upgrading or replacing current systems
- Future environmental impact as a result of failing systems

IS THERE ANYTHING YOU WANT TO TELL US ABOUT YOUR EXISTING SEPTIC SYSTEMS?

Use the post-it notes to provide your comments!



ALTERNATIVE SOLUTIONS

Alternative 2: Connect to a neighboring treatment facility

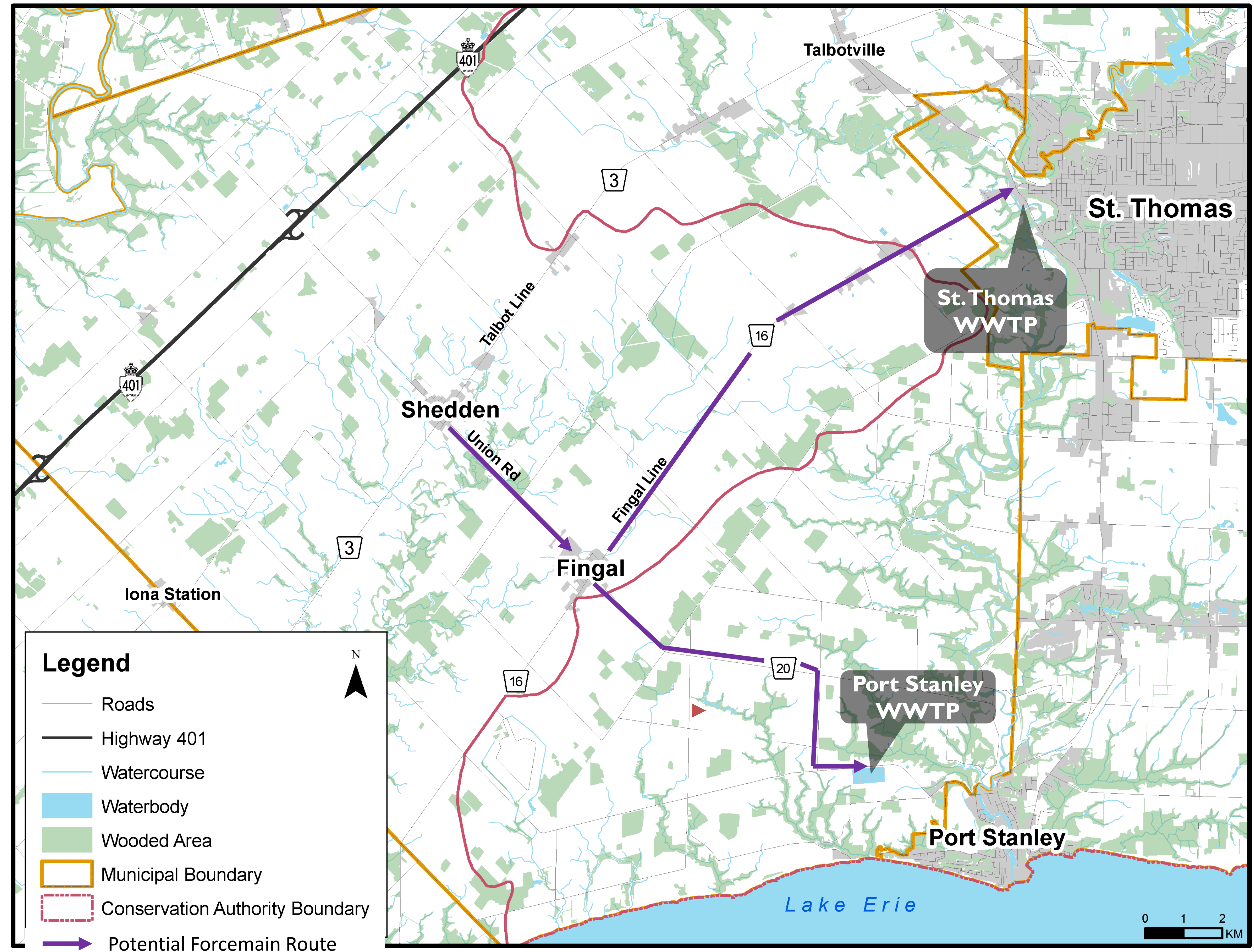
The potential to send sewage from Shedden and Fingal to the St. Thomas WWTP or Port Stanley WWTP was considered. This would include local sewers and pumping to a central pump station at Fingal and long distance pumping (between 8 and 12 km) from one location through a new forcemain to an existing treatment facility.

Benefit:

- Treatment facility does not need to be sited within the community

Disadvantage:

- Costly construction of pump station and forcemain to nearby facility.
- Treatment facilities are not owned by the Township
- Lack of agreements with neighbouring municipalities to accept sewage and limited control over servicing for future needs
- Neighbouring municipalities have indicated capacity is not available at their facilities to service Shedden and Fingal



ALTERNATIVE SOLUTIONS

Alternative 3: New Municipal Treatment Facility(s)

Construct a new municipal sewage treatment facility in Shedden and/or Fingal. A location for the facility has not yet been selected. The facility would be owned and operated by the Township.

Benefit

- Facility would be planned to meet current and future needs
- New plant could be designed to be an enclosed building with a relatively small footprint (similar to the new Talbotville WWTP)
- Provides flexibility for the timing of future development
- Township has recent experience with the approach and technology
- No major obstacles to permitting are anticipated
- Community in control
- Managed growth
- Effluent managed by MOECC

Disadvantage

- Facility site must be located near water
- Design must consider proper setbacks from adjacent properties
- On-going operating and maintenance cost



DECISION MAKING PROCESS





















An evaluation of the alternatives was completed to identify the recommended solution to carry forward for municipal wastewater. As required by the Class EA process, the evaluation considered the natural environment, cultural and socio-economic environment, technical performance, feasibility, and relative cost.

The evaluation criteria are grouped into the following primary categories:

- 1. Cultural and Socio-Economic Environment**
 - Impact on residents, land uses and heritage features
- 2. Natural Environment**
 - Impacts on Air Water and Soil
- 3. Technical Performance**
 - Ability of the alternative to meet treatment needs
- 4. Feasibility**
 - Practicality of alternative to meet needs
- 5. Relative Cost**
 - Relative capital and operating cost for the alternative
- 6. Meets Study Objectives**
 - Consistent with project objectives

STEP 2: EVALUATION RESULTS

Evaluation Criteria	ALTERNATIVE 1 Do Nothing	ALTERNATIVE 2 Connect to a neighbouring WWTP	ALTERNATIVE 3 New Municipal Treatment Facility(s)
Minimize negative impacts to Cultural and Socio-Economic Environment			
Minimize negative impacts to Natural Environment			
Technical Performance			
Feasibility			
Relative Cost – lower cost preferred			
Addresses Problem / Opportunity Statement			

LEGEND: SUMMARY OF EVALUATION



DOES NOT MEET EVALUATION CRITERIA



SOMEWHAT MEETS EVALUATION CRITERIA



MEETS EVALUATION CRITERIA

EVALUATION SUMMARY

Alternative 1 is not considered feasible as it does not provide servicing for future development.

Alternative 2 is not feasible as the Township does not presently have agreements to obtain treatment capacity at either the Port Stanley and St. Thomas facilities and capacity is not anticipated to be allocated in the near future. As a result, potential development is restricted to what an adjacent municipality may allow.

Based on the evaluation completed, **Alternative 3 – Construct a New Treatment Facility(s)** is technically recommended based on the following:

- ✓ Meets the objectives outlined in the Problem / Opportunity Statement
- ✓ New treatment facility(s) will be designed to meet or exceed the treatment requirements for local receivers
- ✓ Meets current best practices for treatment and is not reliant on the future permission of nearby municipality

NEXT STEPS

- **Review feedback from this meeting**
- **Confirm preferred solution**
- **Identify the preferred number of treatment facilities:**
 - One facility each for Shedden and Fingal or one shared facility for both communities
- **Identify potential location(s) for the facility(s) and evaluate**
- **Identify preferred treatment technology**
- **Develop a timing or phasing strategy for servicing existing users**
- **Review alternatives for conveyance:**
 - A strategy is required to collect wastewater from individual properties and convey it to a central location for treatment. Selection of an appropriate strategy is needed to provide effective servicing to as many residences as possible and limit cost. Septic tank effluent pump (STEP) or septic tank effluent gravity (STEG) systems are suitable for small sewage conveyance and will be evaluated alongside conventional gravity sewers. STEP and STEG systems may be constructed with less roadway disturbance and at lower cost than conventional gravity systems.



Example of a STEP Low Pressure Sewer

THANK YOU FOR ATTENDING!

Your input is important to the outcome of this project. Please complete a comment form and return it by: **April 20, 2018**

A second public meeting may be held later this year to present recommendations related to the above items and solicit feedback