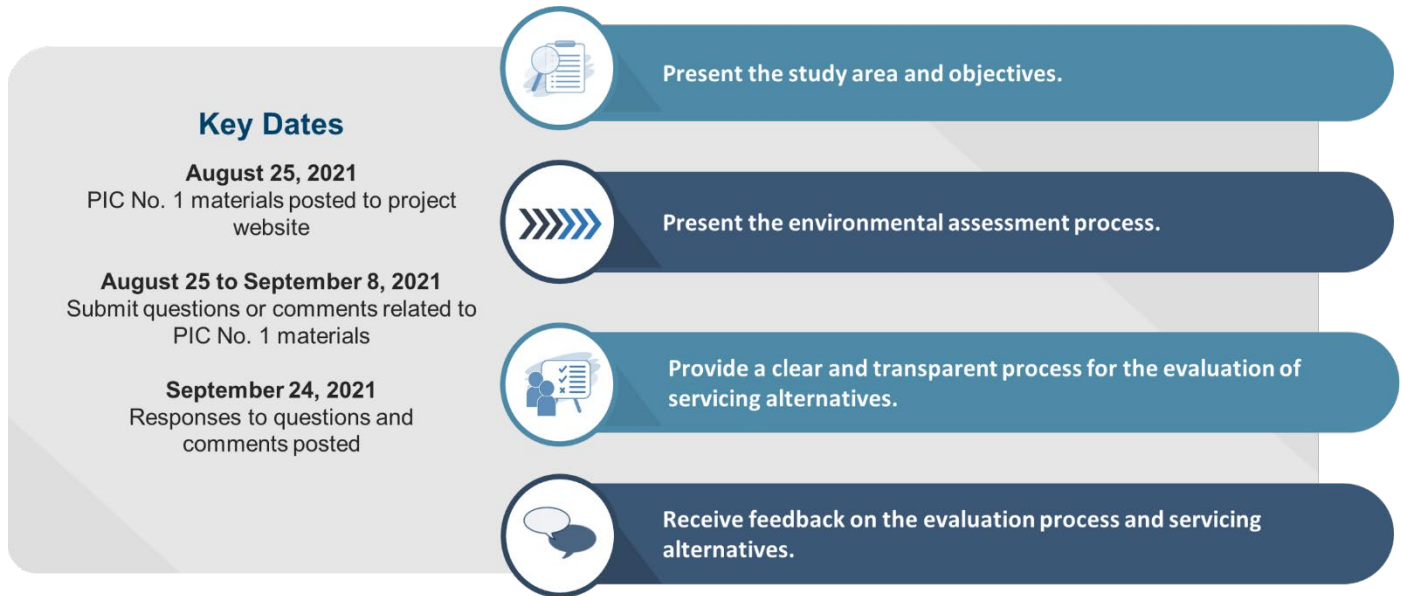


This document is provided as an alternative format that is originally hosted using ESRI StoryMaps. It is provided for those who may not have the compatible browser to view the original virtual public information materials online.

Public Information Centre (PIC) Objectives



The objectives of virtual PIC No. 1 are to:

1. Present the study area and objectives.
2. Present the environmental assessment process.
3. Provide a clear and transparent process for the evaluation of servicing alternatives.
4. Receive feedback on the evaluation process and servicing alternatives.

Please note this is the first of three PICs for this study.

How Can You Help?

Provide your input! After reviewing the PIC materials, please [click here](#) to submit your comments. The comment form will be available from **August 25 to September 8, 2021**. All feedback will be taken into consideration as the study progresses

[Visit the Project Website](#)

Project Introduction

As the Region of Peel continues to grow, level of service expectations on existing and future infrastructure continue to be top priority. The Elmwood, Hiawatha, and Rosemere sewage pumping stations (SPS) are facing condition, maintenance and performance issues, location conflicts, and will face further issues as communities evolve.



This study will investigate alternative wastewater optimization strategies for the Port Credit East area including the Elmwood and Hiawatha SPS servicing areas, vicinity of the Rosemere SPS, and Lakeshore Road East from the Port Credit Library to Seneca Avenue. The study area boundary and SPS locations are shown in the figure above.

Study Background

The Region has completed supporting studies and assessments of the Elmwood, Hiawatha and Rosemere SPSs to identify issues, accommodate future growth, create redundancy, assess the impact of climate change, and maximize efficiencies in the system:



- In 2015, SPS Condition Assessments identified several upgrade recommendations for the Elmwood, Hiawatha and Rosemere SPSs to address compliance issues, minor retrofits, and several maintenance items.
- In 2018, SPS Feasibility Studies concluded that the Elmwood and Hiawatha SPSs and associated linear infrastructure have some limitations and post future challenges in accommodating anticipated ultimate flow conditions and providing the redundancy required in the wastewater system.
- In 2019, the Rosemere SPS Class Environmental Assessment (EA) identified the preferred solution as replacement of the Rosemere SPS with a new pumping station at the existing site location.
- Following completion of the Front Street SPS Wastewater Diversion Class EA (2020), the Feasibility Study concluded benefits for the proposed deep trunk sewer along Lakeshore Road to extend further east from Jack Darling SPS to the G.E. Wastewater Treatment Plant.

These previous works bring us to this current study, which is an essential servicing component to identify, develop and implement an integrated wastewater optimization strategy for Port Credit East to support existing servicing needs and projected growth in the area.

Ongoing Regional Studies and Initiatives

There are several Region of Peel projects and initiatives running concurrently within or close to the study area. The numbers below showcase this local work.



1. Overflow removal and sea wall construction south of Carlis Place (2020)
2. Completed emergency work at Elmwood SPS (2021)
3. Addendum to Front Street SPS Environmental Assessment (2021)
4. Forcemain along Wanita Road and Wenonah Drive maintenance hole rehabilitation work (2021/2022)
5. Watermain extension across Credit River to Hurontario (2022)
6. Claredale Road to Beechwood SPS: abandon siphon under Cooksville Creek, upsize sewer, EA completed in 2020 (construction 2021-2022).
7. Indian Road SPS upgrade and gravity sewer to Lakeshore Road, EA completed in 2020 (2021-2024)
8. Pinetree SPS upgrade

In addition to these location specific studies and initiatives, there are various other Region-wide ones:

- Real Time Control (RTC) implementation assessment of existing sanitary trunk sewer system (ongoing)
- Regional Flow Monitoring Program: includes 5 flow monitors within the study area (ongoing)

Study Purpose

This study investigates alternative wastewater optimization strategies for the Port Credit East area including the Elmwood and Hiawatha SPS servicing areas, the vicinity of the Rosemere SPS and Lakeshore Road East from the Port Credit Library to Seneca Avenue.

This EA will confirm the preferred wastewater servicing solution including any routes, sites, conceptual design elements, and construction timing.

The study problem and opportunity statement is as follows:

Develop an integrated wastewater optimization strategy for Port Credit East including the Elmwood, Hiawatha, and Rosemere sewage pumping stations and vicinity to support existing servicing needs and projected growth.

Key Study Objectives:

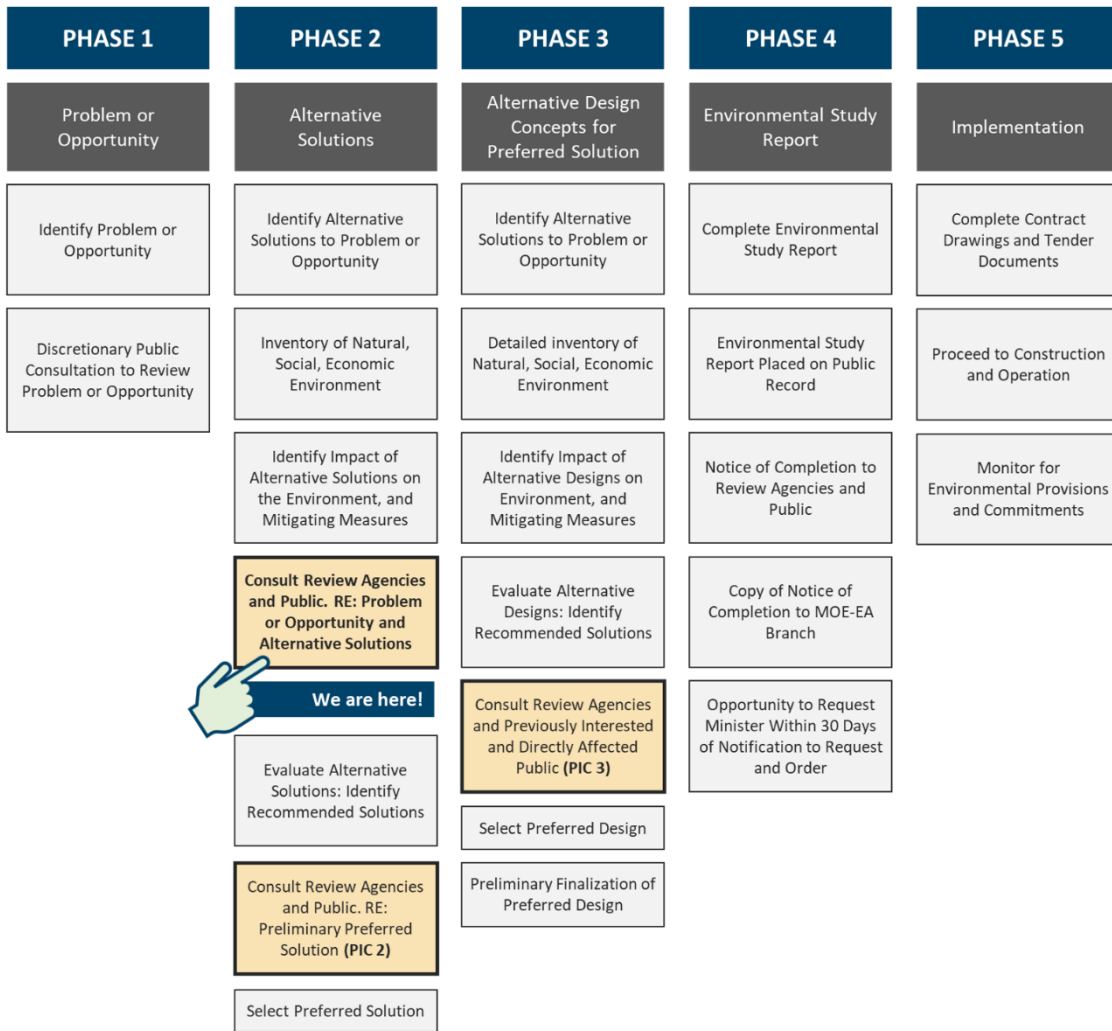
- Satisfying the Schedule C Class EA process.
- Providing effective consultation with Stakeholders, Agencies, Indigenous Communities and the Public.
- Reviewing previous study recommendations.
- Considering unique opportunities and challenges for each SPS in the study area.
- Providing servicing solutions for the existing community and projected growth to 2041 and beyond.
- Ensuring a balanced and informed decision-making process.
- Ensuring solution supports a long-term servicing strategy.
- Protecting the environment.

Project Approach

The Municipal Class Environmental Assessment Process

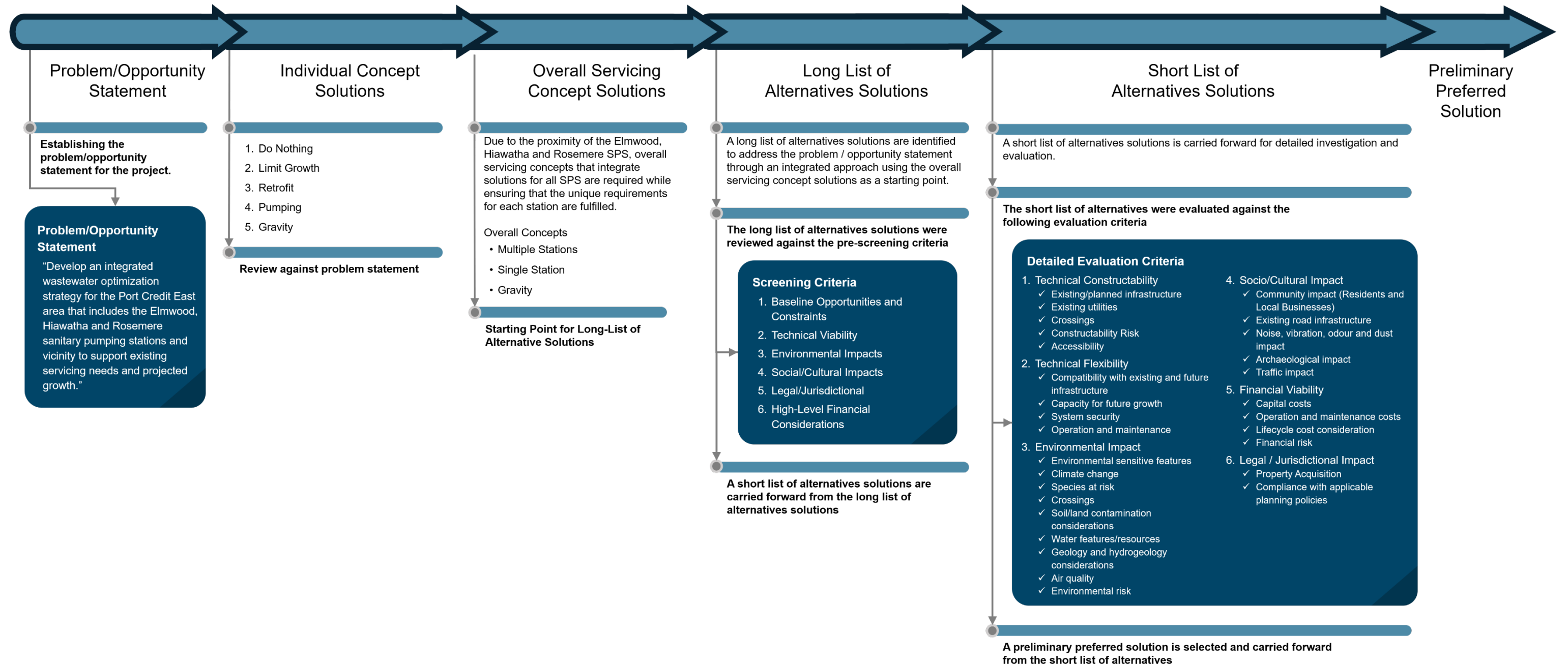
The Port Credit East Wastewater Servicing Optimization Strategy is being undertaken as a Schedule C Class EA, satisfying all five (5) phases in accordance with the Municipal Class Environmental Assessment process (October 2000, as amended in 2007, 2011 and 2015), which is an approved process under the Ontario Environmental Assessment Act.

We are currently within Phase 2 of the study, with the primary focus on developing a list of servicing alternatives to evaluate and select a preliminary preferred solution. This study will hold three (3) Public Information Centres.



MEA Mandated Requirements: <https://municipalclassea.ca/manual/page10.html>

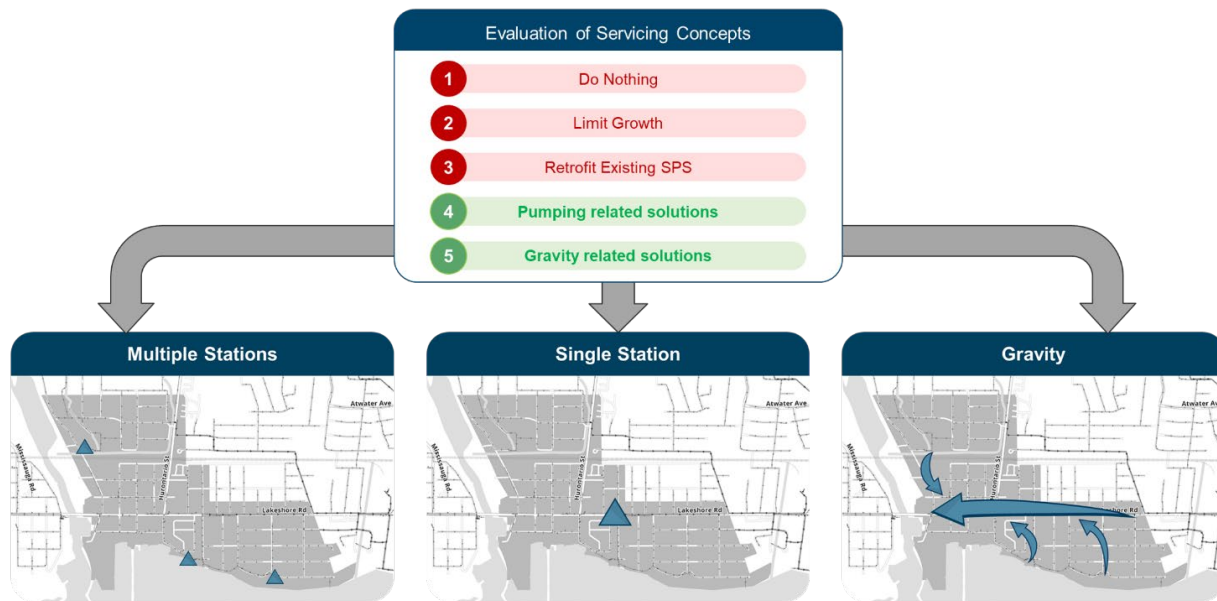
Phase 1 and 2 Class Environmental Assessment Process Overview



Evaluation of Servicing Concepts

Individual servicing concept solutions were reviewed against the problem and opportunity statement to meet the goals of this study. The individual concepts solutions identified are:

1. **Do Nothing:** This concept represents the status quo. This concept was **screened out** as it denotes the absence of new infrastructure or improvements to solve the problems identified.
2. **Limited Growth:** This concept limits growth within the pumping station service areas. This concept was **screened out** because limiting growth does not solve existing infrastructure conditions and is not feasible as a long-term solution.
3. **Retrofit:** This concept involves improvements to the existing pumping station and associated linear infrastructure to meet current Regional standards. This concept was **screened out** as it does not address the problem/opportunity statement and is not feasible as a long-term solution.
4. **Pumping:** This concept involves continuing to pump wastewater flows from the service areas. This concept was **carried forward** as new pumping stations and forcemain alignments would be explored.
5. **Gravity:** This concept aims for gravity solution(s) instead of continuing to pump wastewater flows from the service areas. This concept was **carried forward** as new linear infrastructure would be explored that could allow for existing pumping stations to be decommissioned (removed).



Overall Servicing Concept Solutions

Due to the proximity of the Elmwood, Hiawatha and Rosemere SPSs, overall servicing concepts that integrate solutions for all SPSs are required while ensuring that the unique requirements for each station are fulfilled. Some of the concepts that are being explored include:

- Multiple Stations: New pumping stations to replace existing SPSs (Elmwood, Hiawatha, and/or Rosemere).
- Single Station: Decommissioning existing SPSs and consolidating flows into a single new SPS.
- Gravity: Decommissioning existing SPSs and installing new gravity sewers.

Alternatives Evaluation

Following the overall servicing concept solutions, each SPS are then screened based on its existing opportunities/constraints, technical viability, environmental impacts, social/cultural impacts, legal/jurisdictional impact and financial considerations.



Screening Criteria of Long List of Alternative Solutions

Opportunity to divert flows from the Beechwood SPS and G.E. Booth Wastewater Treatment Plant catchments.

- Utilization of proposed deep trunk sewer along Lakeshore Road for gravity solutions and opportunity to decommission existing SPS.
- Avoidance of route/site considered "unreasonable" that unnecessarily impacts existing and future land uses where possible.
- Ability to service via gravity (preference over pumped flow solutions).
- Minimize potential impacts on the environment and system overflows.
- Address community concerns for existing and future residents, local businesses and traffic.
- Minimize capital costs and operation and maintenance needs.

After screening the long list of alternative solutions, a short list of alternatives is identified for further detailed evaluation. The evaluation of alternative solutions for this study has been split into two categories (Rosemere SPS and the combined Elmwood and Hiawatha SPSs) based on location and service catchment areas.

The following sections provide an overview of study area features followed with a review of the SPSs opportunities and constraints, and then present the evaluation of long-list to short-list servicing alternatives.

Study Area Features

The study area features were reviewed to better define local opportunities and constraints. To establish this baseline inventory, both desktop and field investigations have been completed. The baseline results are highlighted below.

Natural and Hydrological Investigation

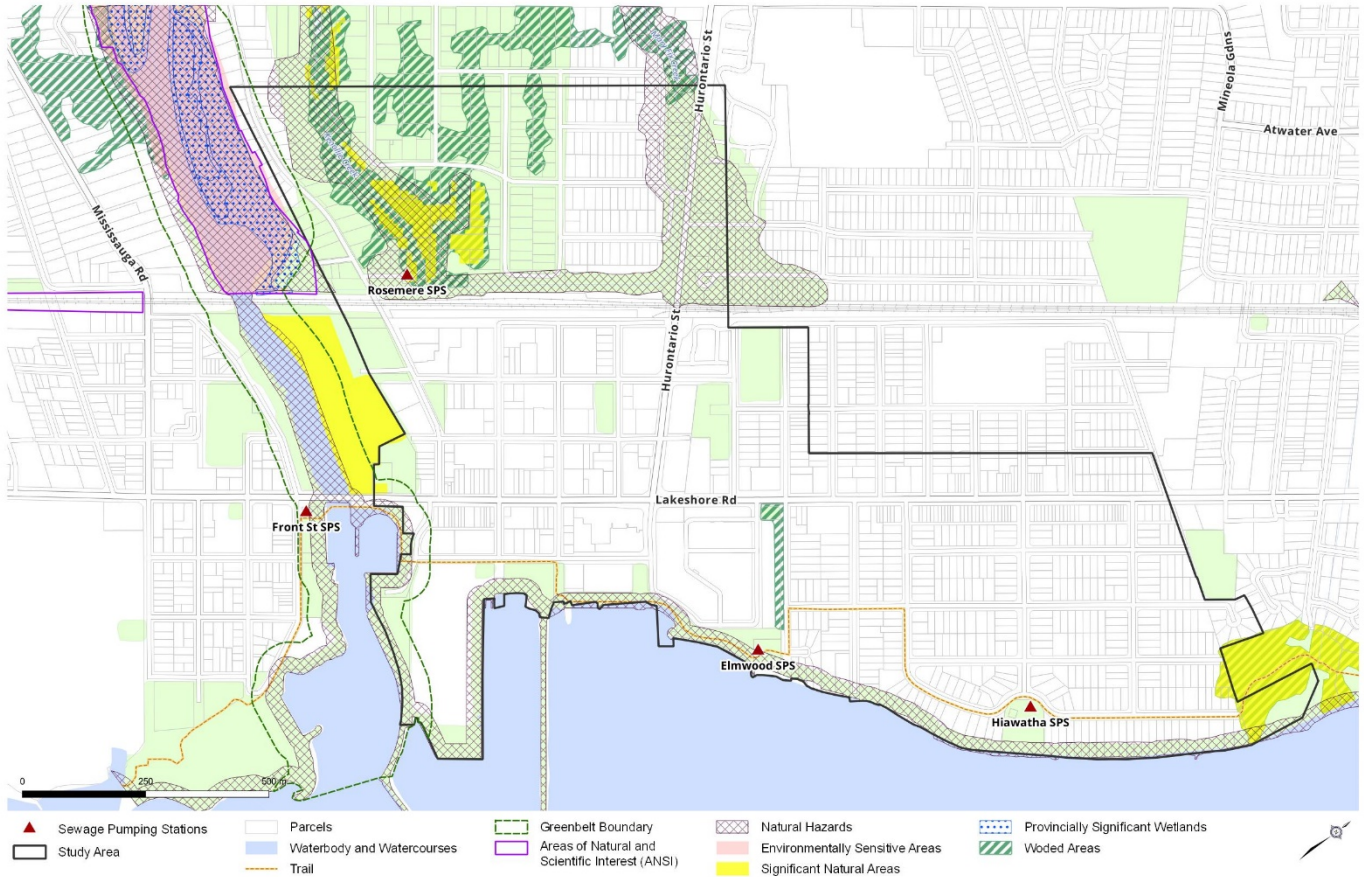


Figure 1: Natural and Hydrogeological features within the study area

Natural Environment:

The baseline study area review identified the following natural environmental features:

- 7 threatened and/or endangered species identified as moderate to high potential within the study area (2 birds, 1 amphibian, 3 mammals, 1 vascular plant).
- Majority of suitable species habitat focused in treed areas in parks and shoreline.
- Sensitive natural features were identified (wetlands, significant woodlots/valleylands/wildlife, surface water, fish habitat, and features specific to Official Plans). No ANSI were identified (see Figure).
- Next Steps: conduct site investigations along preferred alignments and/or sites to determine potential impacts and develop mitigation measures to address any impacts.

Hydrogeological:

- Desktop review was completed to characterize subsurface hydrogeological conditions within the study area to support evaluation of alternatives.
- Next Steps: baseline hydrogeological report will be conducted on preferred alignments and/or sites which will include field investigations and impact assessment.

Socio-Economic, Archaeological and Cultural Heritage Investigation

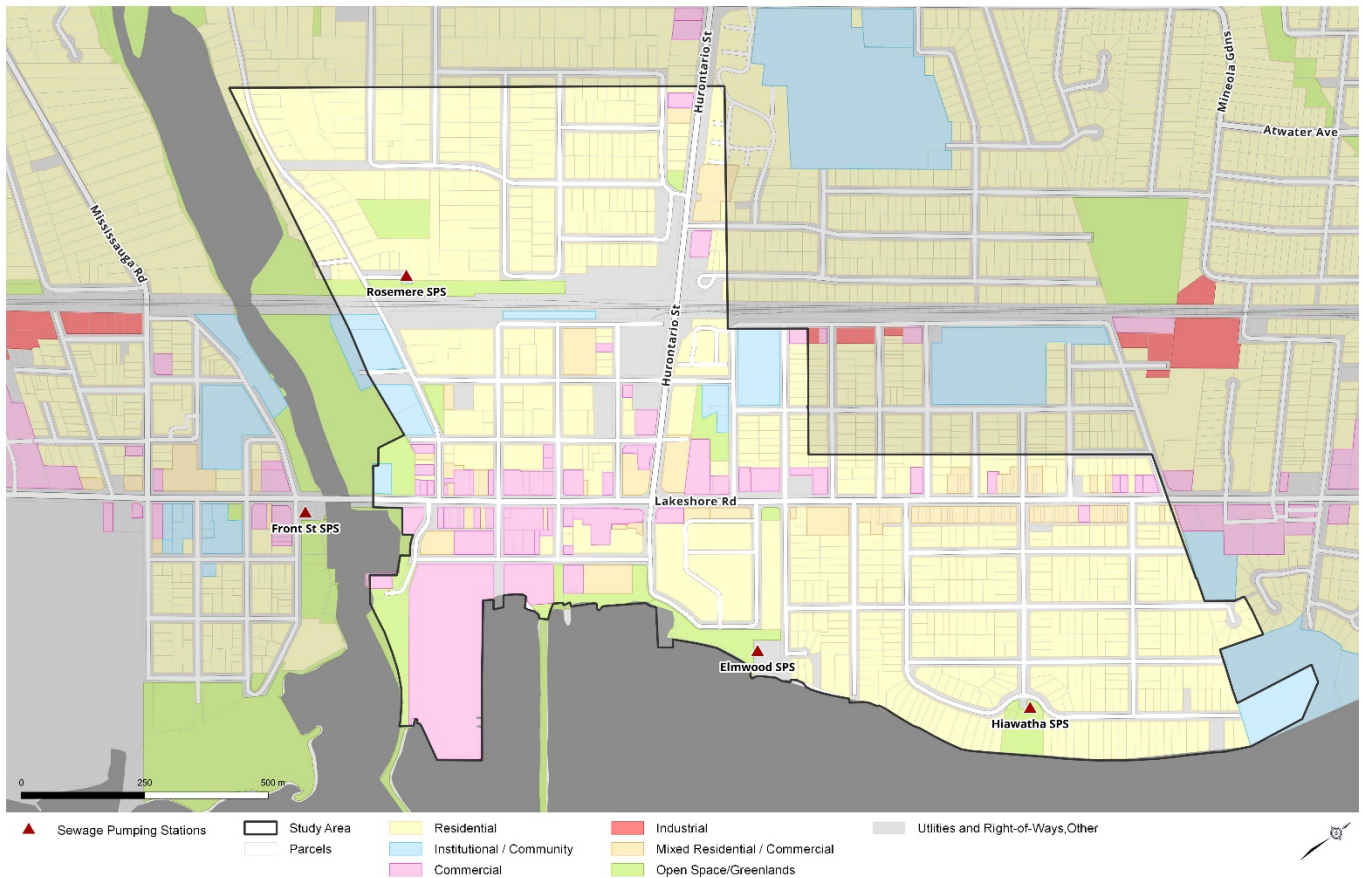


Figure 2: Existing Landuse within the Study Area (City of Mississauga, 2019)

Socio-Economic:

- The study area has established residential neighbourhoods with pockets of commercial land use and open spaces.
- Existing SPSs are located within public parks and open green spaces with anticipated temporary impacts during construction.
- Next Steps: impacts will be considered during alternatives evaluation and mitigation measures will be identified for the preferred alignments and/or sites.

Archaeological:

- Stage 1 Archaeological Assessment (AA) identified specific areas requiring Stage 2 AA.
- Previous Stage 2 AA (2018) was completed for the Rosemere SPS site indicating no further assessment required on surrounding lands.
- Next Steps: further AA's will be completed depending on preferred alignments and/or sites.

Cultural Heritage:

- Cultural screening identified properties within the study area with heritage classification or potential, their constraints, and recommendations for further investigations or studies.
- Next Steps: further cultural impact assessments will be completed depending on preferred alignments and/or sites.

Rosemere SPS

There are two concept solutions being evaluated. This includes constructing a new SPS or decommissioning (removing) the existing SPS. Below are opportunities and constraints considered for each concept solution:



Opportunities

New SPS

- Would be built in accordance with new Regional SPS Standards.
- Would provide significant improvements to SPS operations and maintenance.

OR





Decommission of existing SPS

- Would provide feasible gravity connection to the proposed deep trunk sewer along Lakeshore Road.
- Would eliminate risk for system overflows.
- Would minimize long-term operation and maintenance needs.

Constraints

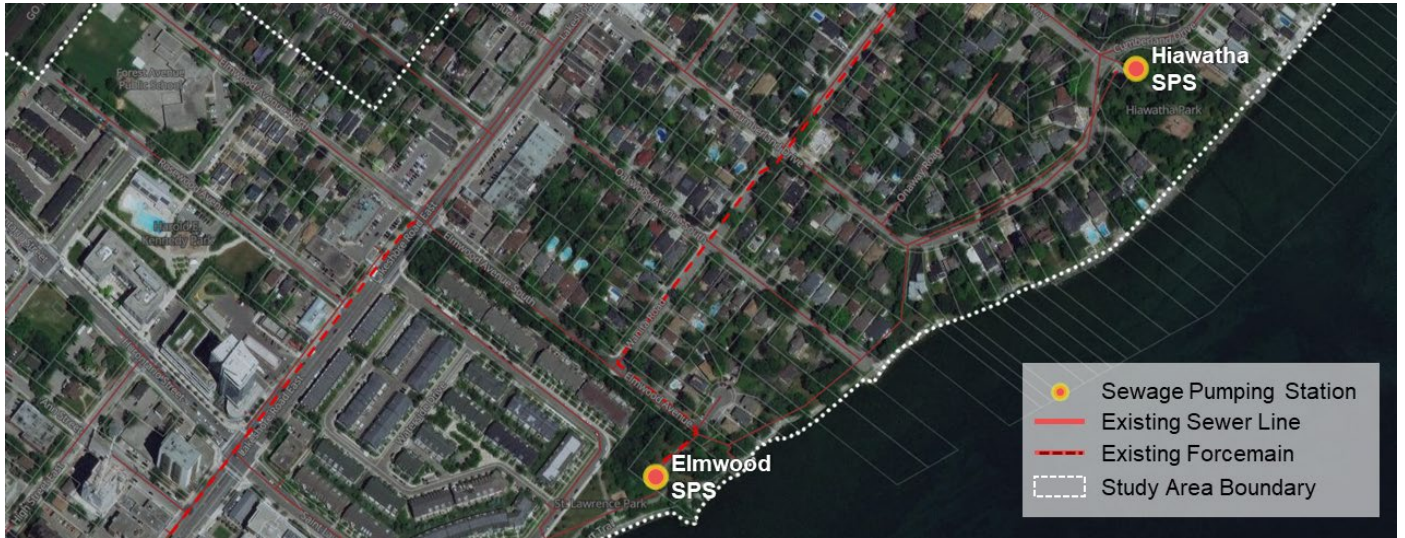
- Existing SPS located in significant natural hazard and wooded area.
- Proximity to the Mary Fix Creek and Railway.
- Anticipated traffic impacts along local roads.
- Maintaining operation of the existing SPS during construction.
- Additional property and/or easements required. If a new SPS is constructed, a larger SPS footprint would be required.
- Impacts to mature trees.
- Limited available space for shaft locations, construction compounds, and deep open cut construction.
- Potential temporary impacts to properties in the vicinity of the station and linear infrastructure alignments during construction.

Long-List Alternatives

#	Servicing Alternative Description	Screening Result	
1	Pumping solution discharging towards existing gravity sewers along Mona Rd		Existing (current) servicing strategy
2	Pumping solution discharging towards new deep trunk sewer along Lakeshore Rd via Stavebank Rd		Utilizes proposed Lakeshore deep trunk sewer
3	Gravity solution towards new deep trunk sewer along Lakeshore Rd via Stavebank Rd		Maximizes benefit use of proposed Lakeshore deep trunk sewer and decommissions Rosemere SPS
4	Gravity solution towards new deep trunk sewer along Lakeshore Rd via various roads and Hurontario St		Unnecessarily long route for gravity sewers with potential impacts to residential neighbourhoods and busy Hurontario St

Elmwood and Hiawatha SPS

There are two concept solutions being evaluated. This includes constructing new Elmwood and/or Hiawatha SPSs or decommissioning (removing) the Elmwood and/or Hiawatha SPSs. Below are opportunities and constraints considered for each concept solution:



Opportunities

New SPS

- Would be built in accordance with new Regional SPS Standards.
- Would provide significant improvements to SPS operations and maintenance.

OR







Decommission of existing SPS

- Would provide feasible gravity connection to the proposed deep trunk sewer along Lakeshore Rd.
- Would eliminate risk for system overflows.
- Would minimize long-term operation and maintenance needs.
- Would provide public park space enhancement.

Constraints

- Proximity to Lake Ontario.
- Anticipated traffic impacts along local roads.
- Maintaining operation of the existing SPSs during construction.
- Additional property and/or easements required. If new SPSs are constructed, larger SPS footprints would be required.
- Potential impacts to waterfront trail, parks, mature & memorial trees.
- Limited available space for shaft locations, construction compounds, and deep open cut construction.
- Potential temporary impacts to properties in the vicinity of the station and linear infrastructure alignments during construction.

Long-List Alternatives

#	Servicing Alternative Description	Screening Result
1	Multiple New Sewage Pumping Stations – new Elmwood SPS and new Hiawatha SPS discharging towards Beechwood SPS	 Existing (current) servicing strategy
2	Multiple New Sewage Pumping Stations – new Elmwood SPS and new Hiawatha SPS discharging towards new trunk sewer along Lakeshore Rd	 Does not maximize benefit use of proposed Lakeshore deep trunk sewer and requires new Elmwood and Hiawatha SPSs
3	Multiple New Sewage Pumping Stations – new Elmwood SPS discharging towards new trunk sewer along Lakeshore Rd, and new Hiawatha SPS discharging towards Beechwood SPS	 Does not maximize benefit use of proposed Lakeshore deep trunk sewer and requires new Elmwood and Hiawatha SPSs
4	Single New Sewage Pumping Station – new gravity sewer from Elmwood to new Hiawatha SPS discharging towards Beechwood SPS	 Does not benefit use of proposed Lakeshore deep trunk sewer and requires a new larger Hiawatha SPS
5	Single New Sewage Pumping Station – new gravity sewer from Elmwood to new trunk sewer along Lakeshore Rd, and new Hiawatha SPS discharging towards Beechwood SPS	 Utilizes proposed Lakeshore deep trunk sewer and decommissions largest SPS in the area
6	Single New Sewage Pumping Stations – new gravity sewer from Elmwood to new Hiawatha SPSs discharging towards new trunk sewer along Lakeshore Rd	 Does not maximize benefit use of proposed Lakeshore deep trunk sewer and requires a new larger Hiawatha SPS
7	Single New Sewage Pumping Station – new gravity sewer from Elmwood to new trunk sewer along Lakeshore Rd, and new Hiawatha SPS discharging towards new trunk sewer along Lakeshore Rd	 Utilizes proposed Lakeshore deep trunk sewer and decommissions largest SPS in the area
8	Single New Sewage Pumping Station – new Hiawatha SPS discharging towards new gravity sewer from Elmwood to new trunk sewer along Lakeshore Rd	 Utilizes proposed Lakeshore deep trunk sewer and decommissions largest SPS in the area
9	Single New Sewage Pumping Station – new gravity sewer from Hiawatha to new Elmwood SPS discharging towards Beechwood SPS	 Does not benefit use of proposed Lakeshore deep trunk sewer and requires a new Elmwood SPS
10	Single New Sewage Pumping Station – new gravity sewer from Hiawatha to new Elmwood SPS discharging towards new trunk sewer along Lakeshore Rd	 Utilizes proposed Lakeshore deep trunk sewer and decommissions Hiawatha SPS
11	Single Sewage Pumping Station – new gravity sewers from Elmwood and Hiawatha to new SPS discharging towards new trunk sewer along Lakeshore Rd	 Not technically feasible
12	Single Sewage Pumping Station – new gravity sewers from Elmwood and Hiawatha to new SPS discharging towards Beechwood SPS	 Not technically feasible
13	Gravity Only Solution West Conveyance 1 – new gravity sewers from Elmwood and Hiawatha to new trunk sewer along Lakeshore Rd	 Maximizes benefit use of proposed Lakeshore deep trunk sewer and decommissions Elmwood and Hiawatha SPSs
14	Gravity Only Solution West Conveyance 2 – new gravity sewer from Hiawatha to new gravity sewer from Elmwood to new trunk sewer along Lakeshore Rd	 Maximizes benefit use of proposed Lakeshore deep trunk sewer and decommissions Elmwood and Hiawatha SPSs
15	Gravity Only Solution East Conveyance – new gravity sewers from Elmwood and Hiawatha to Beechwood SPS	 Not technically feasible
16	Gravity Only Solution East Conveyance – new gravity sewers from Elmwood and Hiawatha to G.E. Booth WWTP	 Not technically feasible

Short List Evaluation

The next step of this study is to conduct a detailed evaluation of the short listed alternatives. The project team will be assessing the following to select a preliminary preferred solution:

Technical Constructability and Feasibility

- Ease of construction
- Accommodates and utilizes existing infrastructure
- Compatibility with existing / planned infrastructure
- Minimize environmental and infrastructure crossings
- Minimize conflicts with existing utilities
- Technical viability through ability to meet existing / future servicing needs
- Ease of access to maintain
- Flexibility of system operations and operational security
- Maximize flow flexibility

Environmental

- Environmental crossing consideration
- Proximity to environmental features, protected areas, and species at risk
- Potential impacts to water features/resources, air quality, natural features and trees
- Geology, hydrogeology, contamination considerations

Socio-Economic and Cultural

- Community and traffic considerations
- Noise, vibration, dust and odour considerations
- Cultural heritage resources
- Archaeological resources

Financial

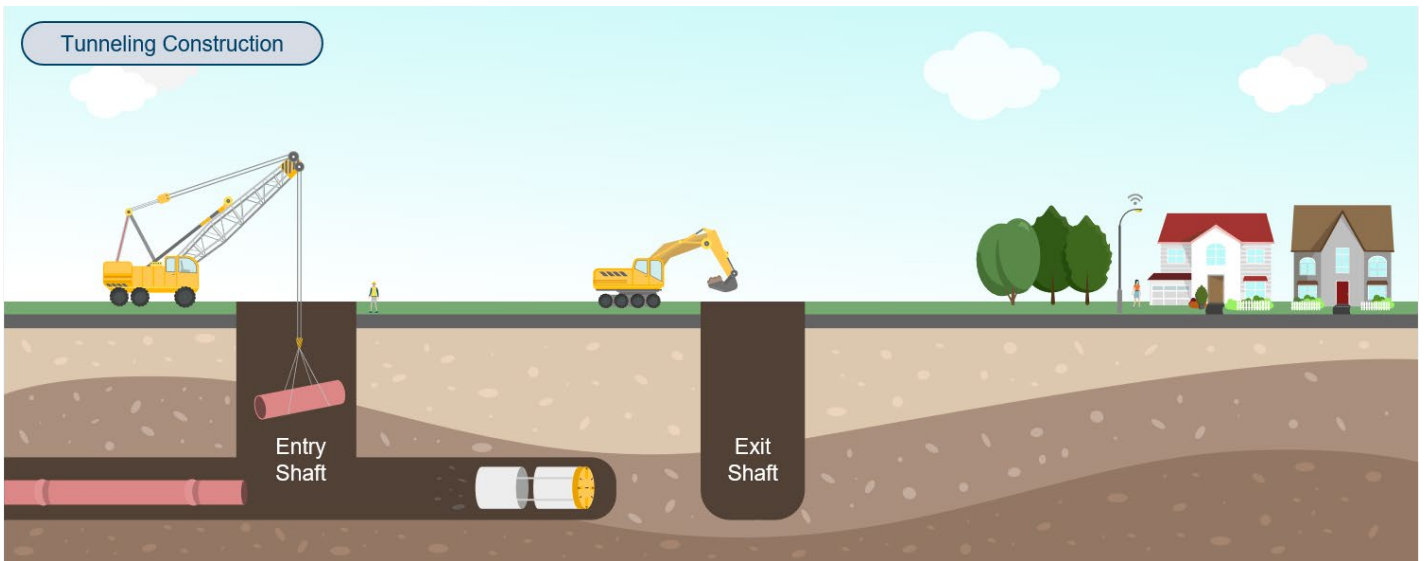
- Capital needs costs
- Operation and maintenance costs
- Lifecycle cost consideration
- Consideration of potential financial risk during construction

Legal / Jurisdictional

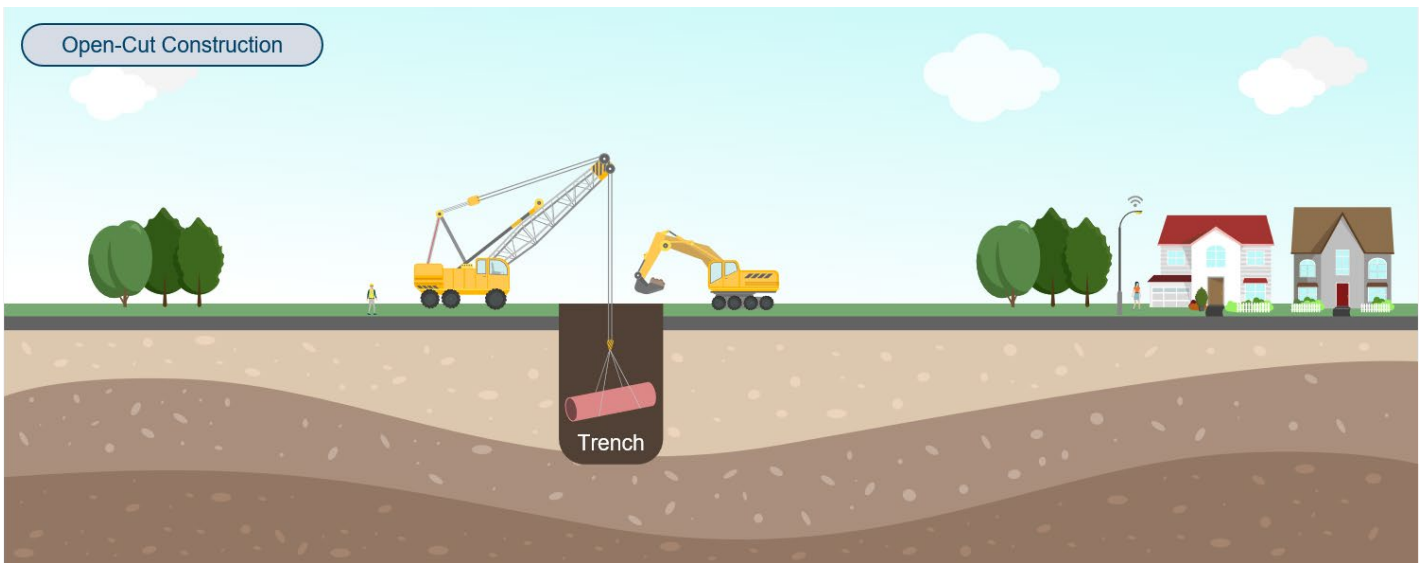
- Land use, land size, availability, and location
- Permit requirements
- Ownership, legal and jurisdictional considerations
- Compliance with applicable planning and special land use policies

Construction Methodology

Further considerations when evaluating servicing solutions include constructability and construction methodologies. The two construction methods that will be evaluated include:



Tunnelling Construction - involves digging shafts and using special equipment to tunnel underground between shafts. It can be less intrusive than open cutting minimizing traffic disruptions. The surface works for tunnelled construction are the entry and exit shafts located between tunnel drive lengths that could vary between 0.2 km and 2.1 km apart depending on the technology used.



Open-Cut Construction - involves digging a trench to facilitate the installation of linear infrastructure (e.g., sewers). Because construction occurs on the surface over a stretch of time, open cut construction has the potential to increase temporary traffic impacts and inconvenience to local residents and businesses.

Short List of Alternatives

Rosemere SPS – Option 1



- Pumping solution towards existing gravity sewers along Mona Road.
- New Rosemere pumping station and forcemain discharge to existing sewers on Mona Road.

Rosemere SPS – Option 2



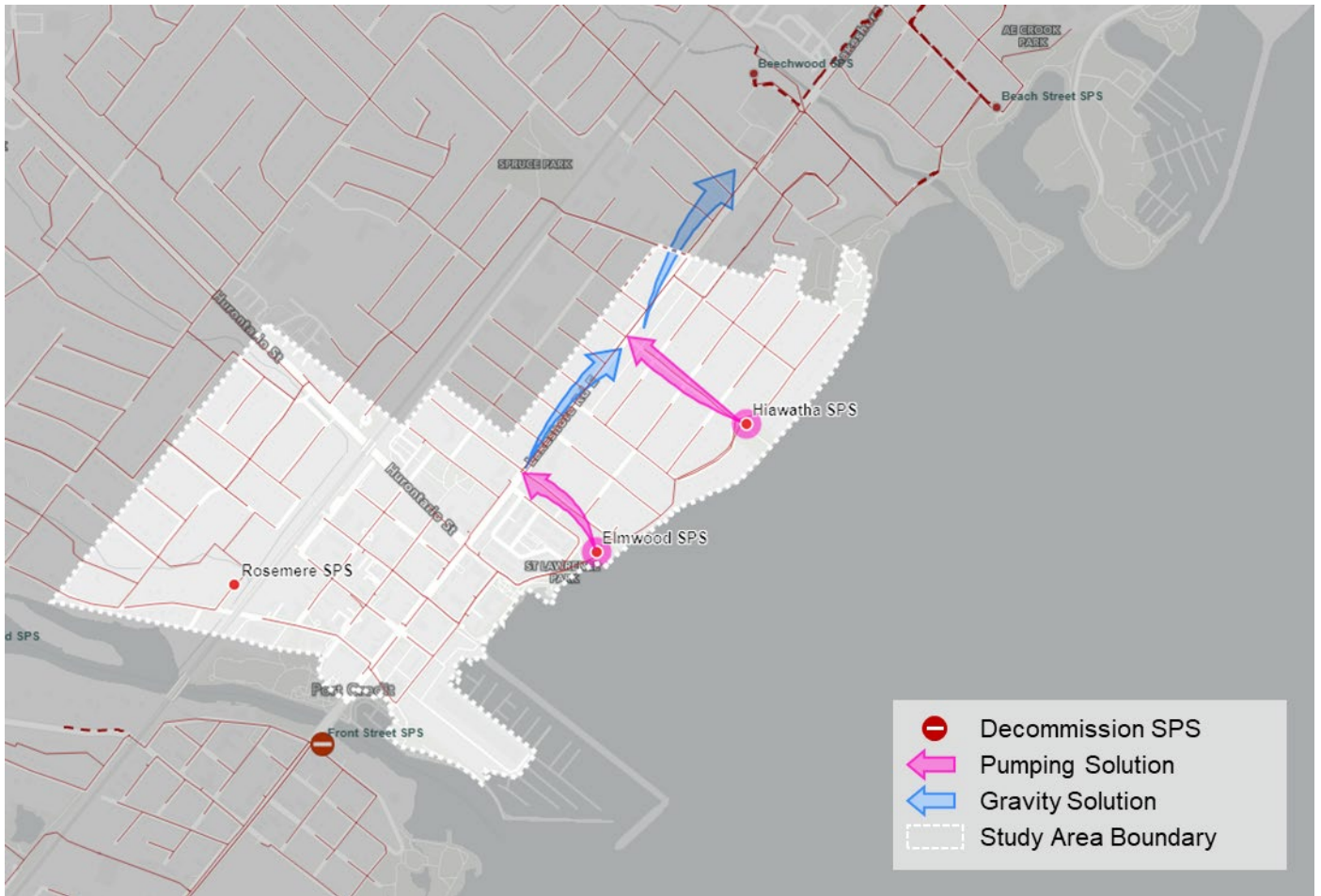
- Pumping solution towards new trunk sewer along Lakeshore Road via Stavebank Road.
- New Rosemere pumping station and forcemain discharging to new gravity sewer along Stavebank Road towards new deep trunk sewer along Lakeshore Road.

Rosemere SPS – Option 3



- Gravity solution towards new trunk sewer along Lakeshore Road via Stavebank Road.
- New gravity sewer from the current Rosemere SPS location to new deep trunk sewer along Lakeshore Road via Stavebank Road.

Elmwood and Hiawatha SPS – Option 1



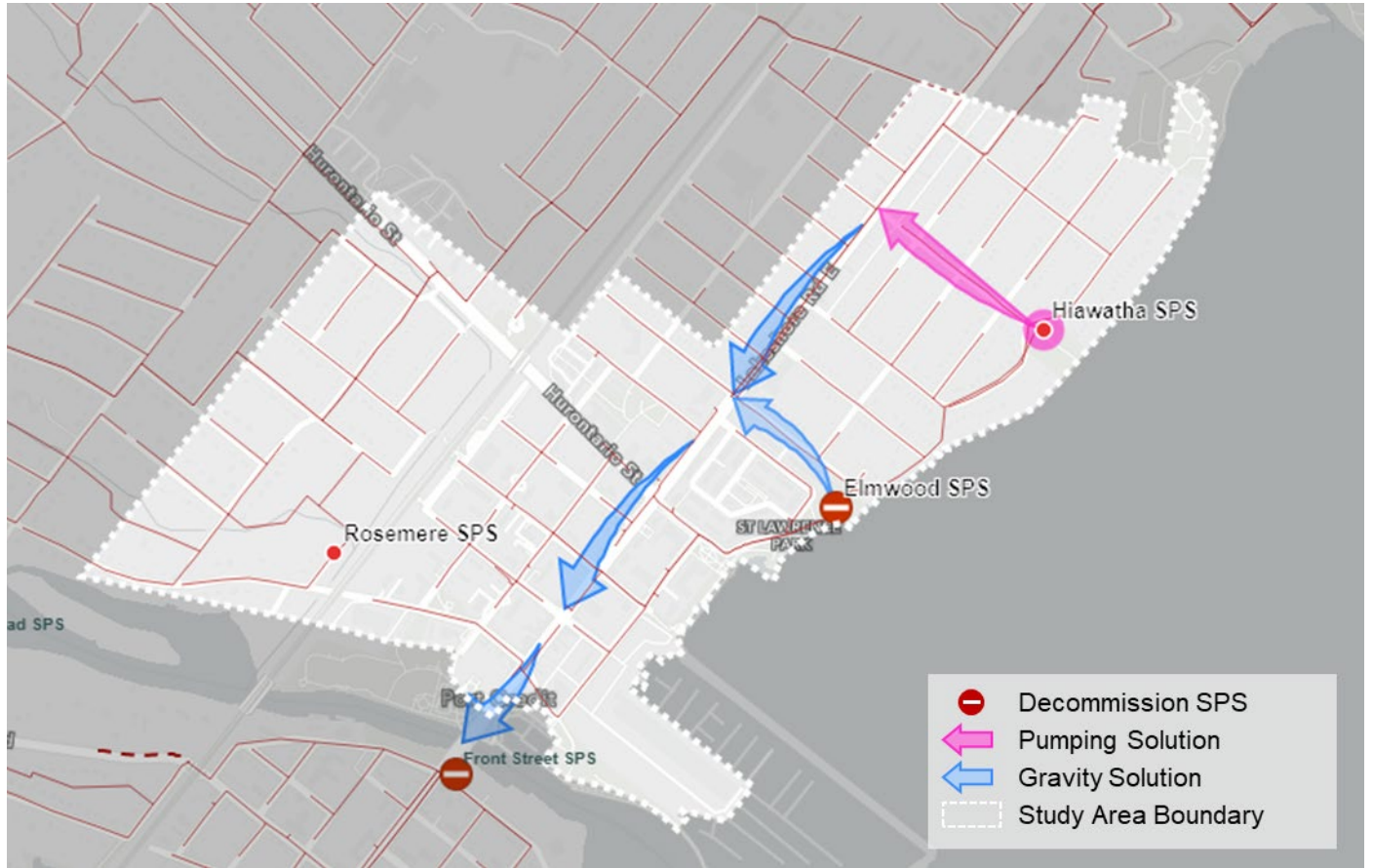
- Multiple New Sewage Pumping Stations – new Elmwood and new Hiawatha SPSs towards Beechwood SPS.
- New Elmwood SPS and forcemain discharging towards Beechwood SPS
- New Hiawatha SPS and forcemain discharging towards Beechwood SPS

Elmwood and Hiawatha SPS – Option 5



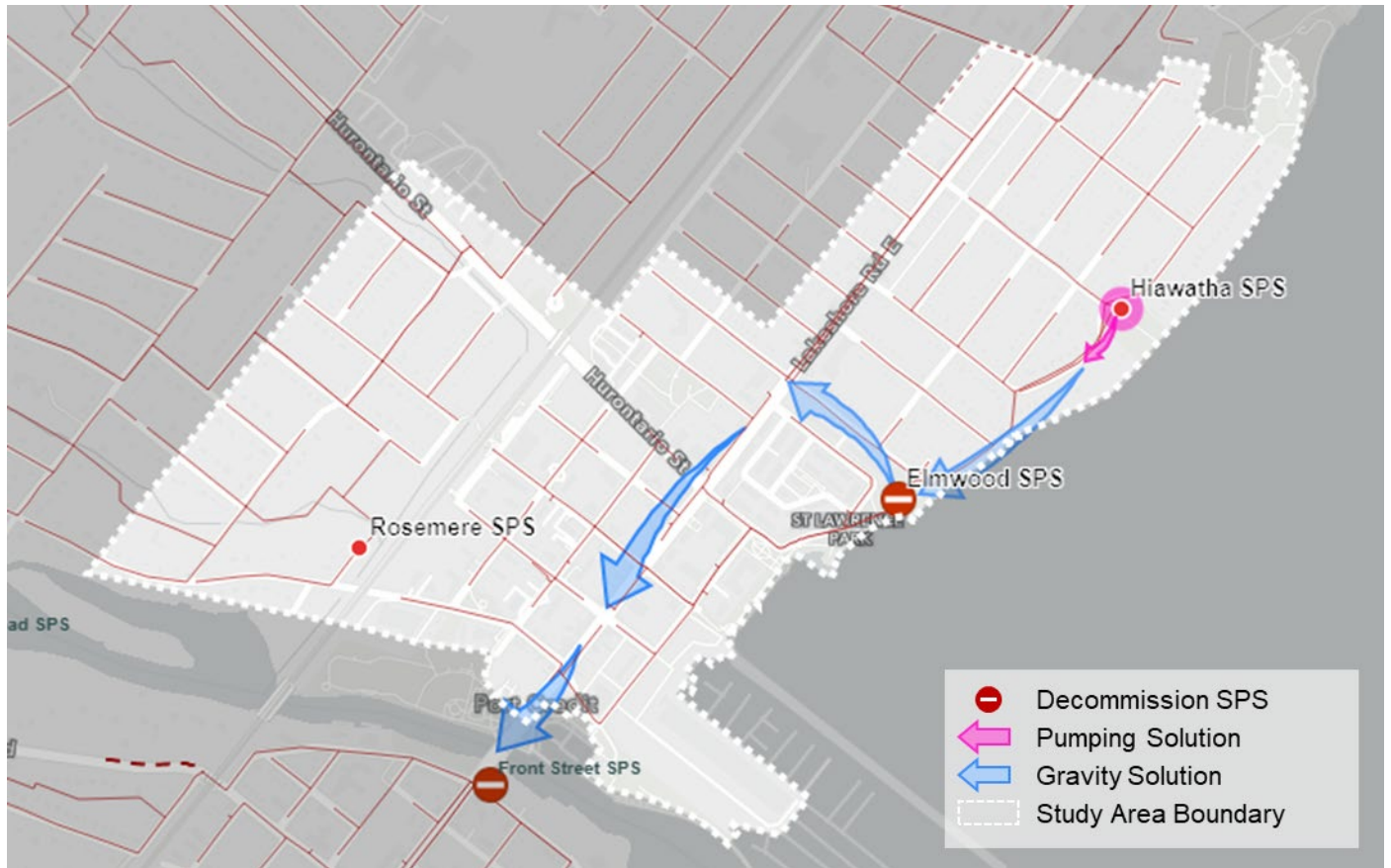
- Single New Sewage Pumping Stations – new gravity sewer from Elmwood to new trunk sewer along Lakeshore Road, and new Hiawatha SPS towards Beechwood SPS.
- New gravity sewer from current Elmwood SPS towards new deep trunk sewer at Lakeshore Road
- New Hiawatha SPS and forcemain discharging towards Beechwood SPS

Elmwood and Hiawatha SPS – Option 7



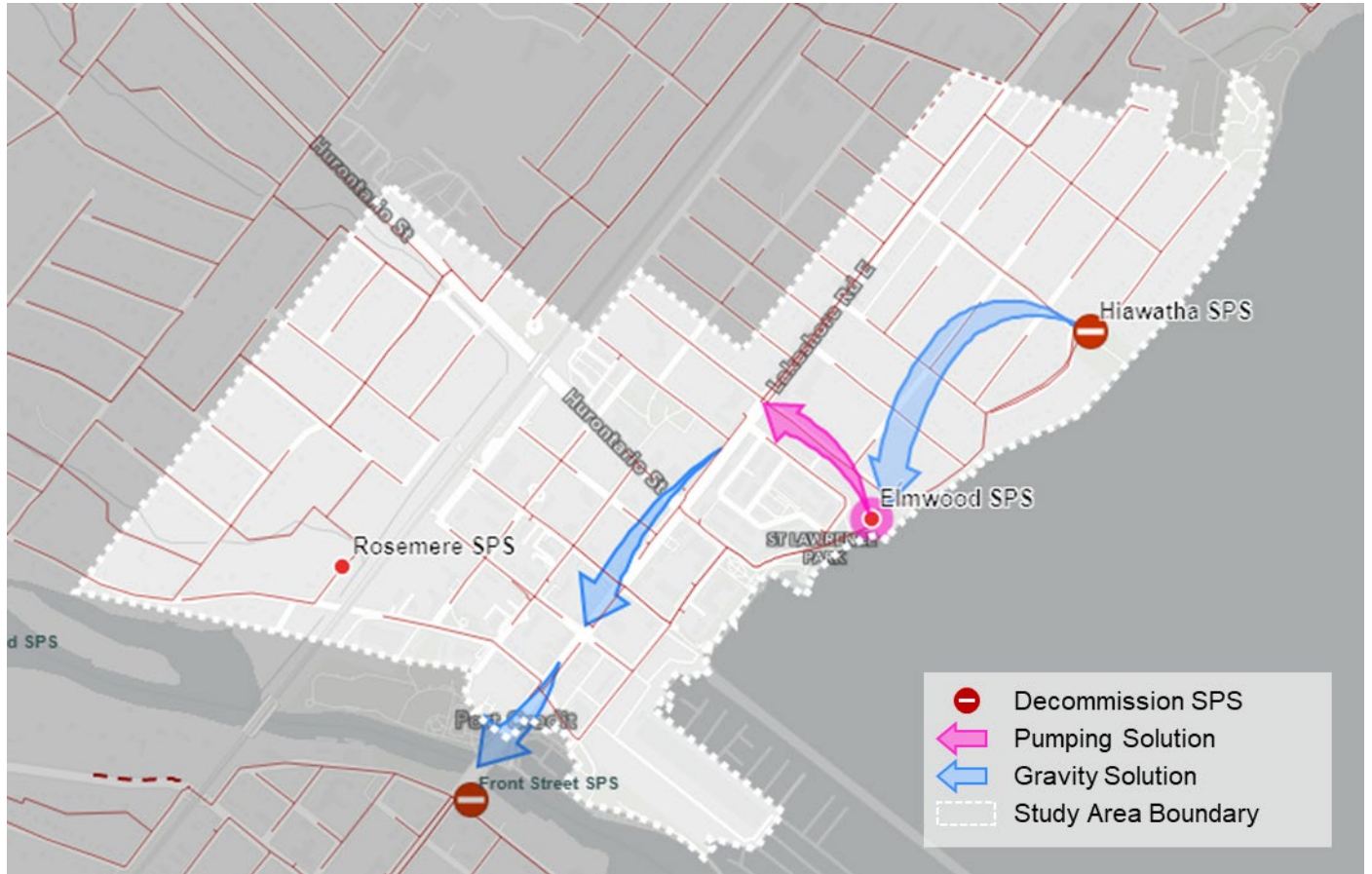
- Single New Sewage Pumping Stations – new gravity sewer from Elmwood to new trunk sewer along Lakeshore Road, and new Hiawatha SPS towards new trunk sewer along Lakeshore Road.
- New gravity sewer from current Elmwood SPS location to new deep trunk sewer at Lakeshore Road
- New Hiawatha SPS and forcemain discharging towards new trunk sewer along Lakeshore Road

Elmwood and Hiawatha SPS – Option 8



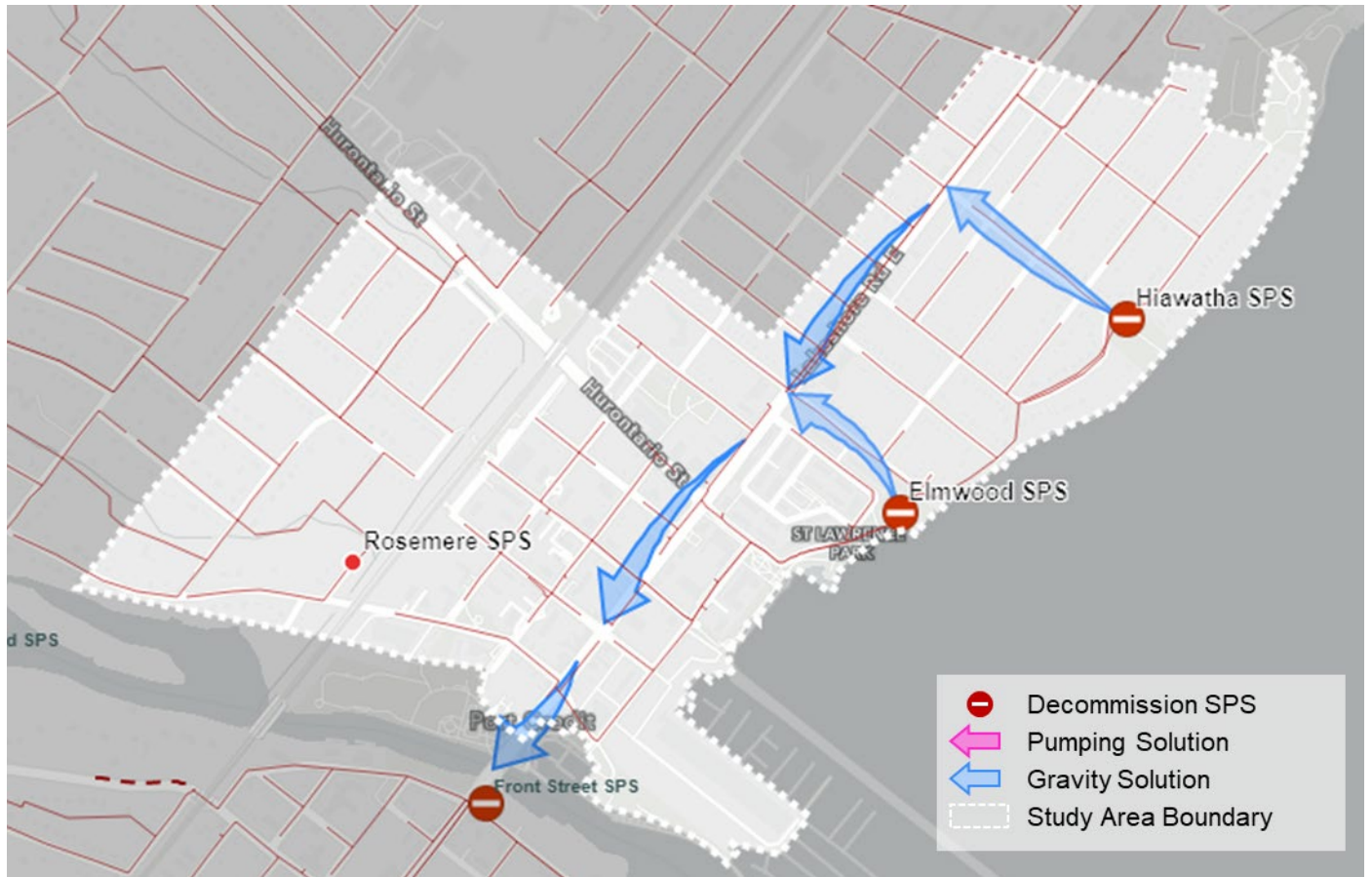
- Single New Sewage Pumping Stations – new Hiawatha SPS towards new gravity sewer from Elmwood to new trunk sewer along Lakeshore Road.
- New gravity sewer from current Elmwood SPS towards new deep trunk sewer at Lakeshore Road
- New Hiawatha SPS, forcemain and gravity sewers discharging towards new sewer along Elmwood Avenue

Elmwood and Hiawatha SPS – Option 10



- Single New Sewage Pumping Stations – new gravity sewer from Hiawatha to new Elmwood SPS towards new trunk sewer along Lakeshore Road.
- New gravity sewer from current Hiawatha SPS location to Elmwood SPS
- New Elmwood SPS and forcemain discharging towards new deep trunk sewer along Lakeshore Road

Elmwood and Hiawatha SPS – Option 13



- Gravity Only Solution West Conveyance 1 – new gravity sewers from Elmwood and Hiawatha to new trunk sewer along Lakeshore Road
- Decommission of existing SPSs
- Gravity sewers from current SPS locations to new deep trunk sewer along Lakeshore Road

Elmwood and Hiawatha SPS – Option 14



- Gravity Only Solution – West Conveyance 2
- Decommission of existing SPSs
- Gravity sewer from Hiawatha SPS to Elmwood Avenue
- Gravity sewer from Elmwood SPS to new deep trunk sewer along Lakeshore Road
- Trunk sewer along Lakeshore Road towards new deep trunk sewer along Lakeshore Road

Project Next Steps

The project team will be working on a number of tasks outlined below following this virtual PIC:

- Review Comments from PIC No. 1
- Evaluate and select the preliminary preferred strategy
 - We will review SPS servicing strategies, sewer alignments and property requirements
- Prepare for PIC No. 2
- Complete additional technical studies
 - This will be conducted on the preferred solution / design concept which may include a stage 2 archaeological assessment, natural features assessment, agricultural impact assessment, a geotechnical study, and/or a phase one environmental site assessment.
- Continue to consult various review / approval agencies and other key stakeholders.

Project Timeline

Fall 2020 - Completed

A Notice of Commencement and Phase 1 of the Class EA process was completed in November 2020.

Summer 2021 - We are here!

Review of baseline and alternatives. Due to the current public gathering restrictions regarding Covid-19, the first public information centre is being held via a virtual platform. This is currently where the project is, with this virtual PIC as a key component.

Fall 2021

Public Information Centre No. 2 is anticipated to be held in Fall of 2021 to review the Phase 2 Preliminary Preferred Servicing Solution. The Preferred Solution is anticipated to be confirmed following the second PIC.

Winter 2021

Public Information Centre No. 3 is anticipated to be held in Winter of 2021 to review the Phase 3 Preliminary Preferred Design for the Preferred Solution.

Early 2022

A detailed costing, phasing and implementation plan are anticipated to be developed and completed.

Spring 2022

A notice of project completion is anticipated to be sent out.

Stay Involved

Following this virtual PIC, the project team will review and consider the input received and evaluate the short listed servicing alternatives to select a Preliminary Preferred Solution.

We encourage you to get involved by filling out the [comment sheet](#) by September 8, 2021 to provide any feedback on the study and/or if you would like to receive project information updates. Responses to all comments received will be posted on September 24, 2021.

Please contact the Project Manager, Italia Ponce, P.Eng, at any point during the study if you have any questions or comments.

10 Peel Centre Drive, Brampton, ON, L6T 4B9 | 905-791-7800 | italia.ponce@peelregion.ca

Visit the Project
Website

Privacy and Accessibility

The Region of Peel is committed to ensuring that persons of all abilities are able to access our programs and services without encountering barriers. Tell us how we are doing on accessibility at the Region of Peel by [providing your feedback on accessible customer service here](#).

Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments related will become part of the public record and may be included in the study documentation prepared for public review.

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