

Welcome!

South Niagara Falls Wastewater Solutions Schedule C Class Environmental Assessment

Public Information Centre No. 1

Tuesday, May 28, 2019

5 to 8 p.m.

Boys and Girls Club of Niagara

Please sign in and take a comment sheet.

Meeting is a “drop-in” format with display materials.

Take an information bulletin and review the display materials.

Members of the study team are available to answer questions.

We welcome your feedback as your opinion will influence this study.

Please place comment sheets in the box provided.

Themes for today’s materials

 Project Background and Introduction

 Study Process

 Information and Understanding

 Consultation and Engagement

Please note that photos and videos will be taken during this event. If you have any issues, please speak to a member of the project team.

Foundation for this Study: The Niagara Region Water and Wastewater Master Servicing Plan Update (MSP 2017)

Key issues addressed by the MSP (2017):

- Accommodating growth
- Improving and increasing capacity in the existing sanitary and combined stormwater systems
- Managing wet weather flows

Preferred Solution from the MSP (2017):

- Build a new wastewater treatment plant in South Niagara Falls
- Improve the existing sewer system and connect it to the new plant

The Master Servicing Plan Update was adopted by Niagara Region Council in 2017.

The purpose of the South Niagara Falls Wastewater Solutions Class EA is to determine:

- Where to locate the new wastewater treatment plant in South Niagara Falls
- Which body of water will receive the clean, treated water from the new plant
- How best to integrate the wastewater network to address growth, make the system as efficient as possible, and manage wet weather

This is defined as the Problem Opportunity Statement under the Class EA process

Protect the Environment

- Reduce pollution into rivers and the environment
- Minimize flooding

Provide Flexibility for the Future

- Ensure the facility has the ability to respond to changing regulations and needs
- Free up capacity in existing infrastructure such as the Stanley Ave. Wastewater Treatment Plant

Accommodate Growth

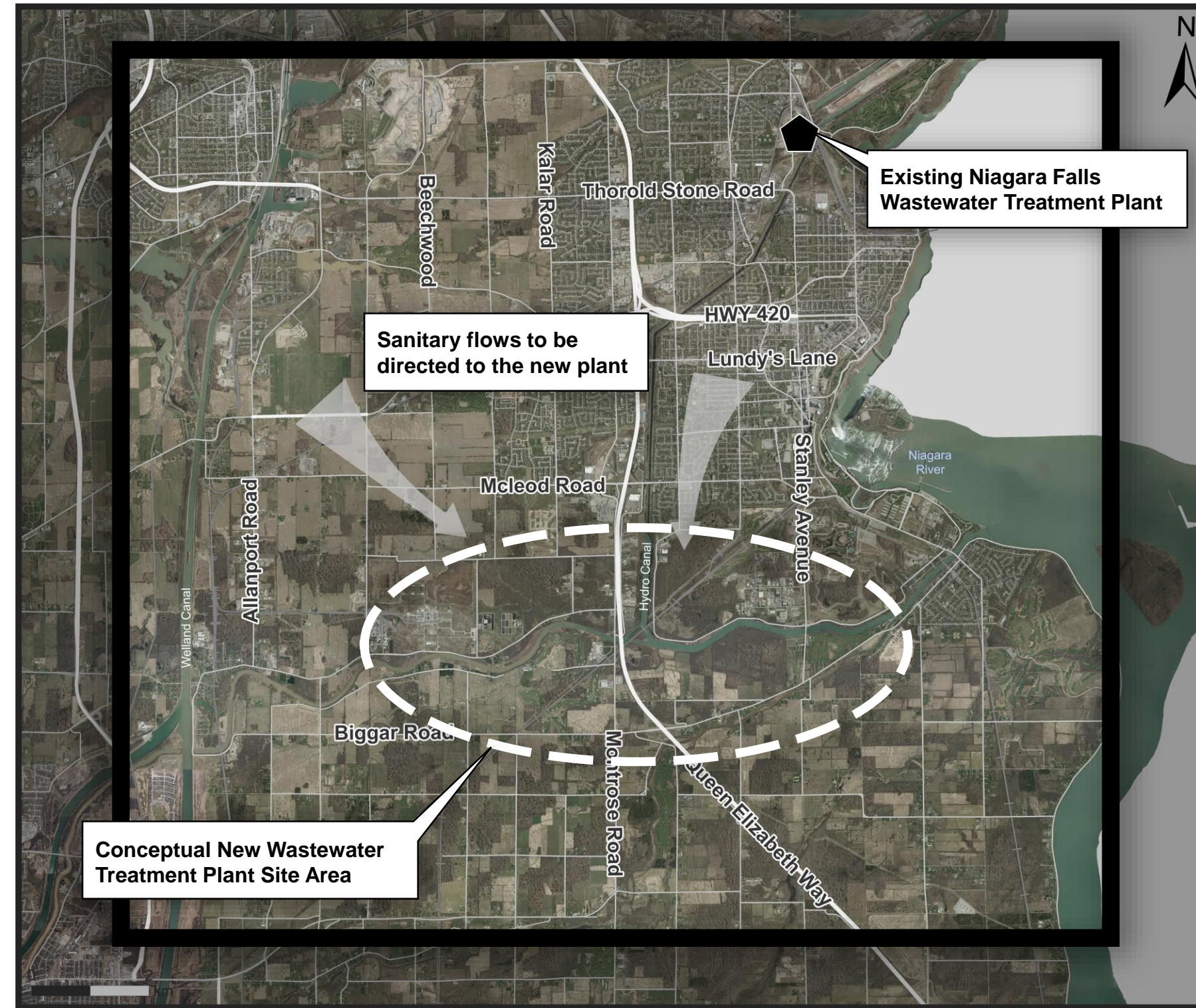
- Increase system capacity
- Support economic development

Establish the new Wastewater Treatment Plant as a Community Asset

- Ensure the new facility fits well within the local community
- Engage the local technical & academic community in the solution
- Mitigate and manage issues such as odour, noise and traffic

(Find out more about what this EA plans to achieve at: www.niagararegion.ca/projects/south-niagara-falls-treatment-plant)



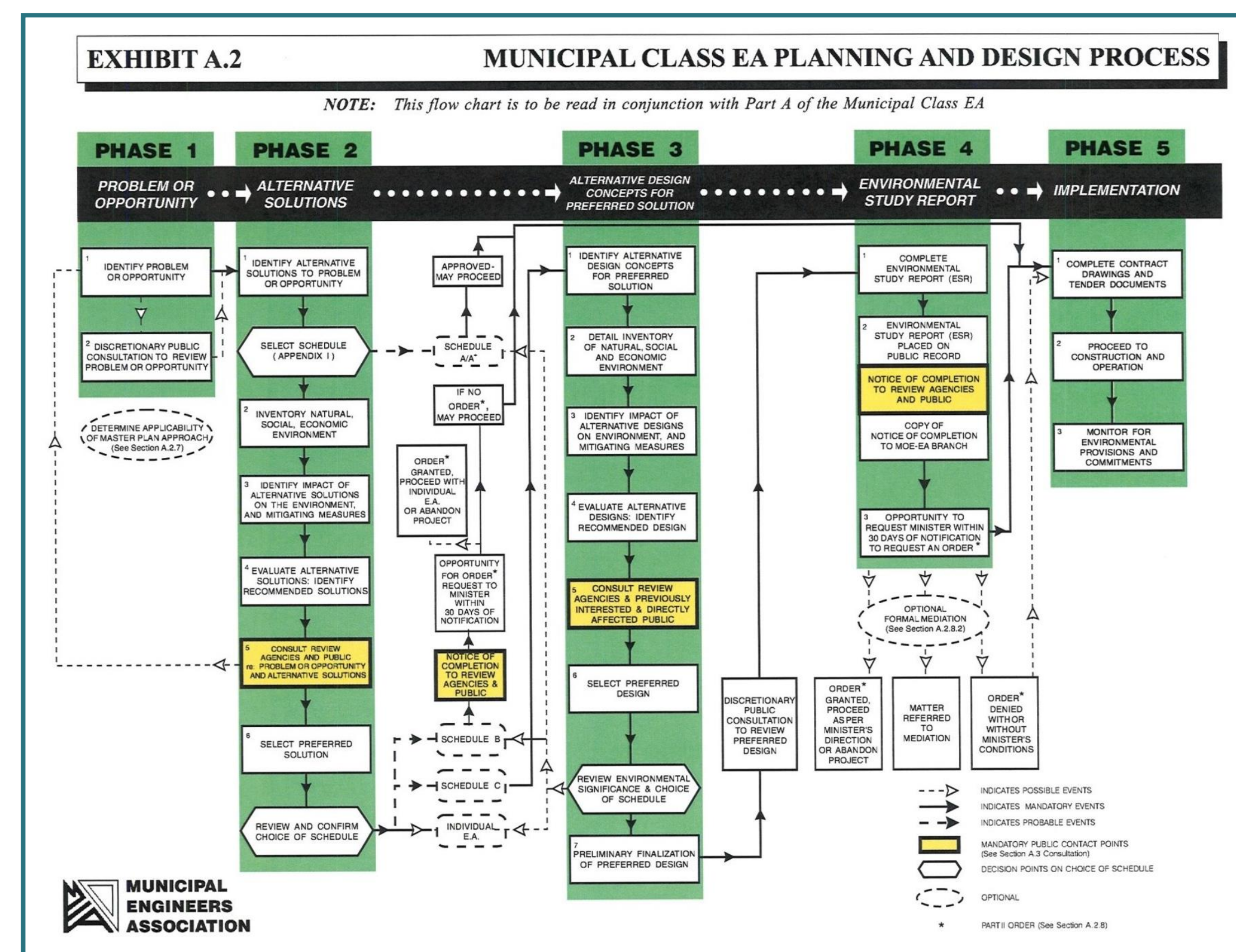
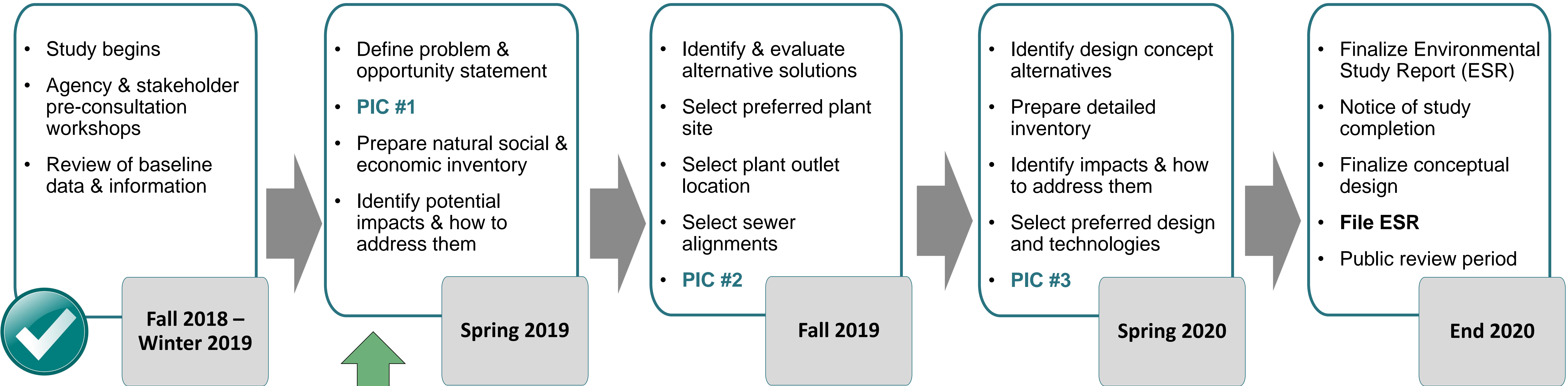


full EA study area

conceptual new plant site area

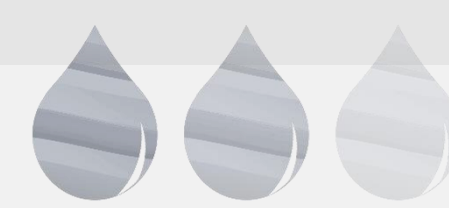


Environmental Assessment Process and Timeline



Provincial Process

This project is following the **Class Environmental Assessment** process, which is a decision-making process that all Ontario municipalities follow for building new infrastructure.



Environmental impacts

- Proximity to environmental features and protected areas.
- Potential effects on water resources and natural features.
- Geology, hydrogeology, contamination considerations.



Social and cultural impacts

- Existing and surrounding land use.
- Noise and odour considerations.
- Cultural heritage resources.
- Archeological resources.



Evaluating the Options

With input from the public, key stakeholders and review agencies (Ministries), the project team will develop and use criteria to evaluate options for: the new plant site, plant outlet location and connecting body of water, and sewer alignments.

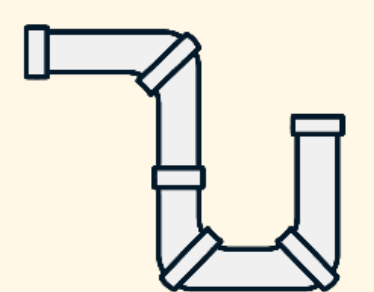
Site suitability

- Land use, land size, availability and location.
- Existing infrastructure.
- Potential impact on neighbouring properties.
- Ownership, legal and jurisdictional considerations.



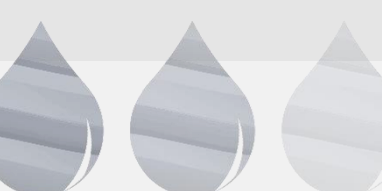
Technical servicing considerations

- Ability to meet future needs.
- Minimize need for system upgrades.
- Ease of integration with existing system.
- Ease of construction and operation.



Economic

- Cost effective solution.
- Operation and maintenance costs.
- Lifecycle considerations.
- Funding and finance.



Typical Wastewater Treatment Process



1. Wastewater from our sinks, tubs and toilets drains through sewers to a wastewater treatment plant.

2. Screens remove materials such as branches, plastics, rags and other untreatable debris.

3. The wastewater flows into clarifiers, which allow remaining solids to settle or float to the surface over several hours.

4. These solids are pumped to a set of digesters where they are further broken down before being sent to a biosolids storage facility for fertilizer production. Bio-gas is produced during the digestion process and used within the plant.

5. Liquid wastewater flows from the clarifiers into aeration tanks where air is added and bacteria “eat” any dissolved solids.

6. Ferric chloride is added to remove phosphorous from the wastewater. Too much phosphorous can promote algae growth in our lakes and rivers.

7. The wastewater is sent to the final clarifiers where the wastewater and bacteria-mixture separates.

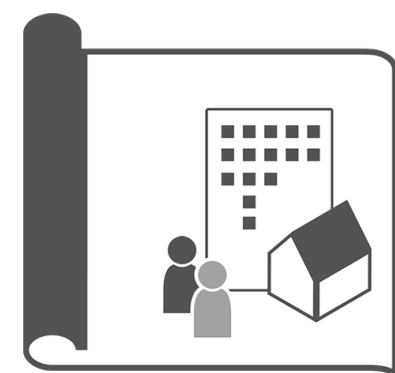
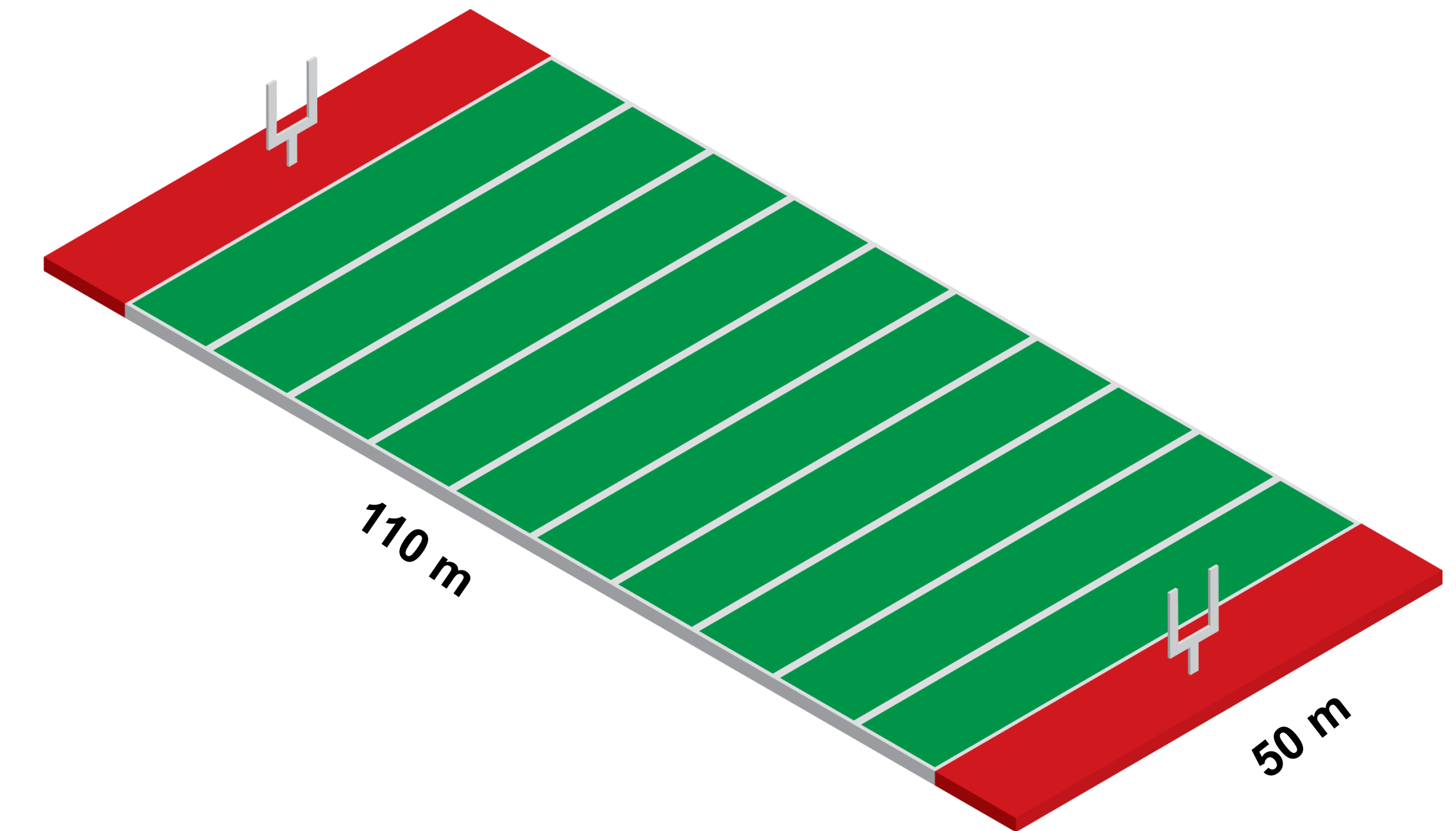
8. Chlorine is added to disinfect the wastewater, killing bacteria and viruses. The chlorine is removed before being safely returned to the nearest lake or river.

What does a Wastewater Treatment Plant Site Need?



Appropriate Land Size

The site must have suitable land size for a new plant. The potential size is approximately 400m x 400m (16 hectares). Equal to almost 30 Canadian football fields.

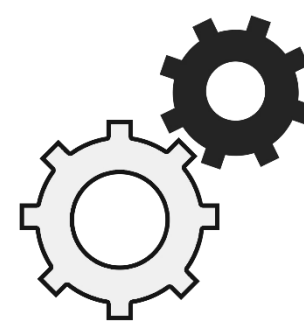


Positive Integration into Surroundings

The existing and surrounding land use is an important factor for a new plant site.

The team will consider potential impacts to the local environment and community, and how they will be addressed.

These measures include how we deal with noise, visual impact, odour, traffic and construction.



Proximity to the Region's Wastewater System and Future Growth Areas

The site ideally needs to be close to the existing wastewater system and close to future service areas.



Proximity to a Natural Water Body

The site must be close to a nearby river or lake where the clean, treated water can be released.

Studies are underway to review environmental features, wildlife habitats, and water quality.



How to Stay Involved

- Sign up for project updates
- Attend a future Public Information Centre
- Submit an online feedback form or future survey
- Visit our website
www.niagararegion.ca/projects/south-niagara-falls-treatment-plant
- Follow us on social media
www.facebook.com/niagararegion and
www.twitter.com/niagararegion

Today

- Fill out the questionnaire and comment sheet
- We want to know if you are interested in active involvement or prefer to participate through project information updates

Next Six Months

- Provide input on evaluation criteria used
- Public Information Centre 2 in **Fall 2019**: provide your feedback on the preliminary preferred solutions including the new plant site location

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 received will become part of the public record and may be included in the study documentation prepared for public review.



Get Engaged! What do you believe is the most important outcome of this study? Using the sticky notes provided, please let us know your thoughts. Your feedback will be used to help inform the decision making process.

“I believe this study will be a success if _____.”



Thank you for Participating, Please Stay Engaged!

Do you have any questions, comments, or want to stay up to date? Please contact us anytime:

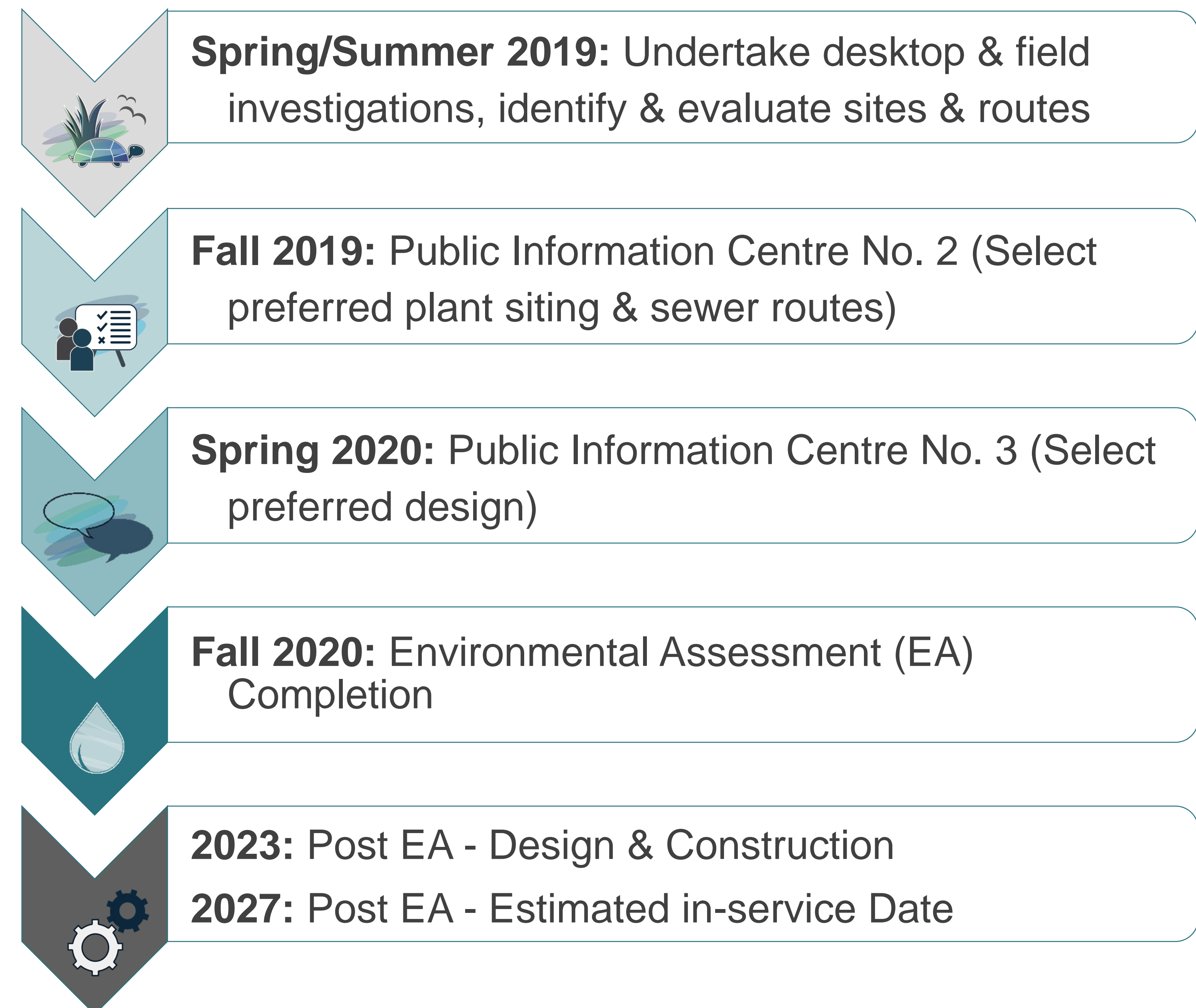
Lisa Vespi, P.Eng., PMP

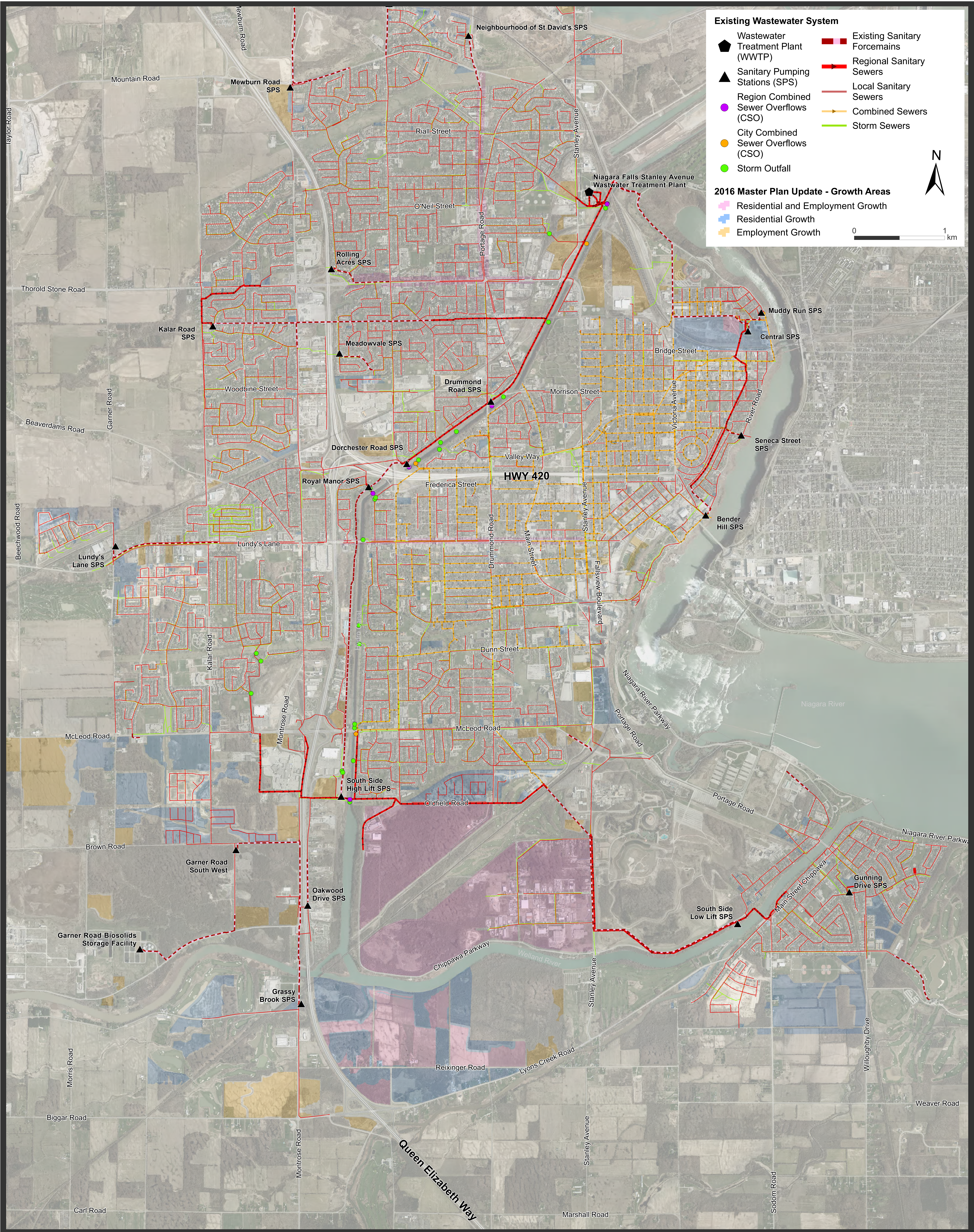
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Schedule:





Existing Wastewater System

- Wastewater Treatment Plant (WWTP)
- Sanitary Pumping Stations (SPS)
- Region Combined Sewer Overflows (CSO)
- City Combined Sewer Overflows (CSO)
- Storm Outfall
- Existing Sanitary Force mains
- Regional Sanitary Sewers
- Local Sanitary Sewers
- Combined Sewers
- Storm Sewers

2016 Master Plan Update - Growth Areas

- Residential and Employment Growth
- Residential Growth
- Employment Growth

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