Etobicoke Creek Trunk Sewer Improvements and Upgrades Schedule C Municipal Class Environmental Assessment

Online Public Engagement

November 26, 2020

Region of Peel
working with you

Jacobs
Challenging today.
Reinventing tomorrow.

Welcome!

The Purpose of this Online Public Engagement is to:

Project Overview

Provide a project overview and explain why the project is being undertaken.

Receive Feedback

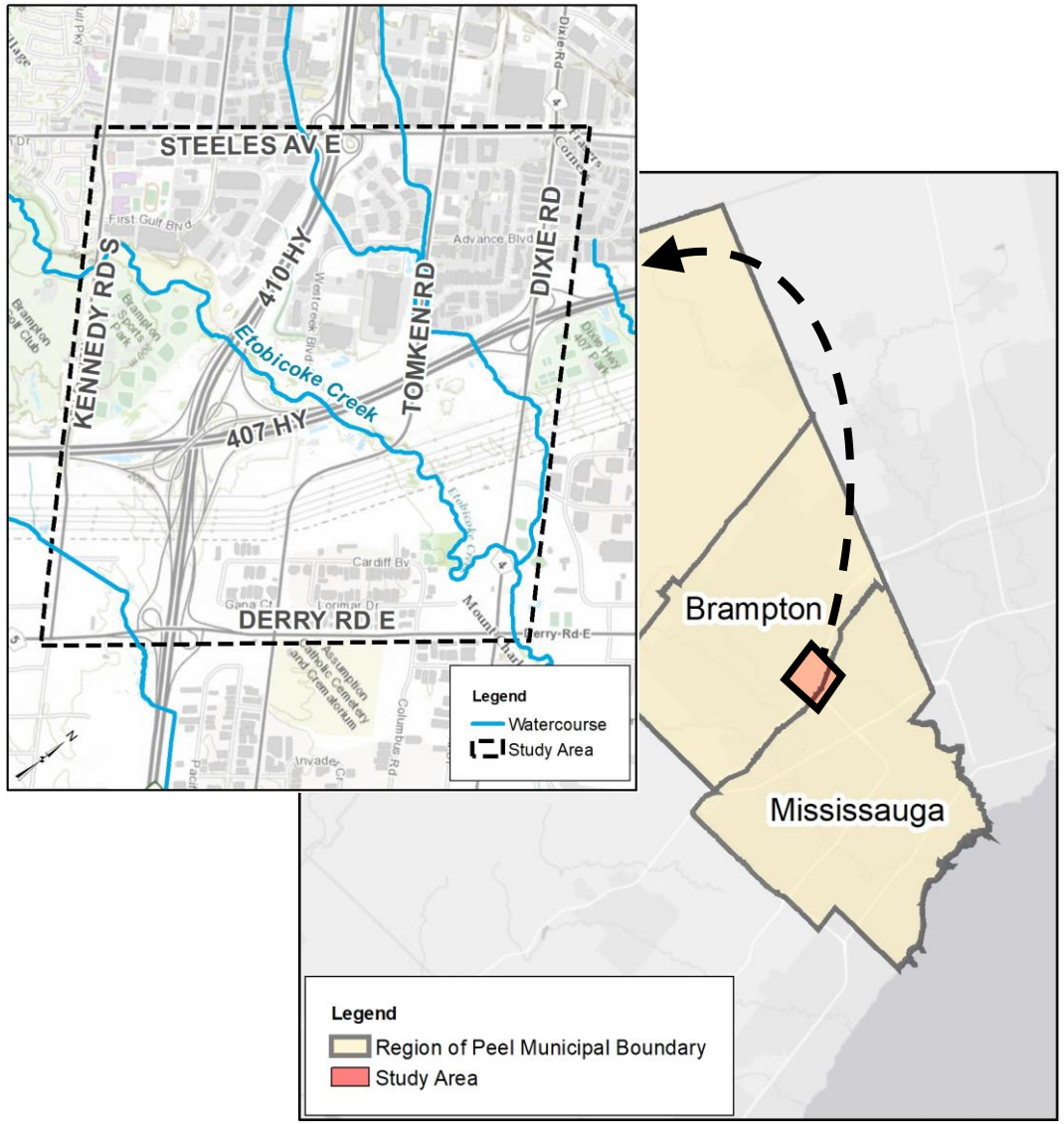
Provide details and seek input on the alternative solutions developed

Next Steps

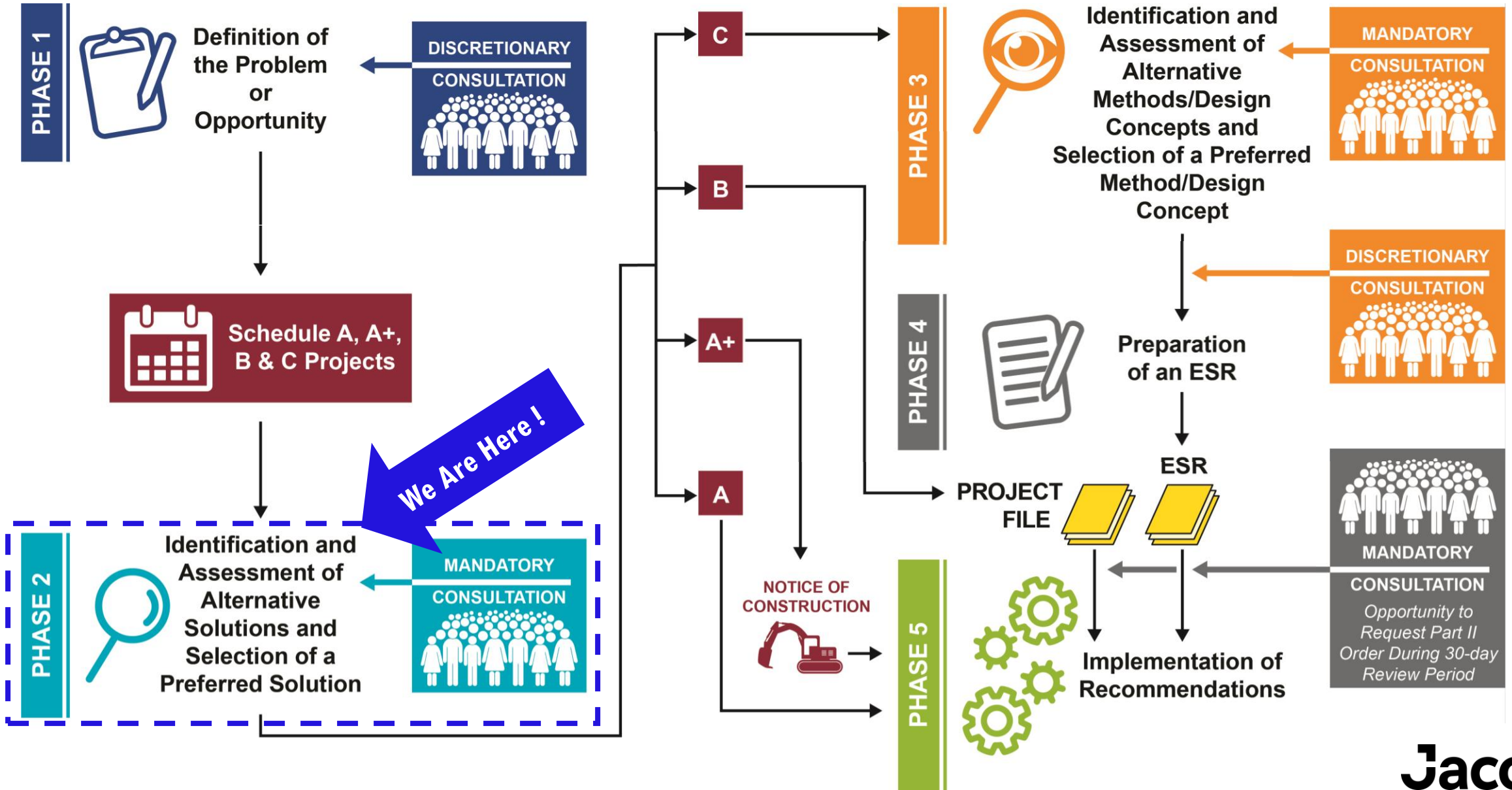
Provide information on the next stages of the project.

Project Overview: What, why and how?

- The Etobicoke Creek Trunk Sanitary Sewer, from Kennedy Road to Derry Road in the City of Brampton, provides service to a large area extending north of Mayfield Road
- Upgrades are required to address issues with the existing sanitary sewers and provide reliable sanitary service to future growth forecasted for the area.
- A Schedule ‘C’ Municipal Class Environmental Assessment (EA) Study is being undertaken to identify the preferred means to implement these upgrades.



Class Environmental Assessment Process

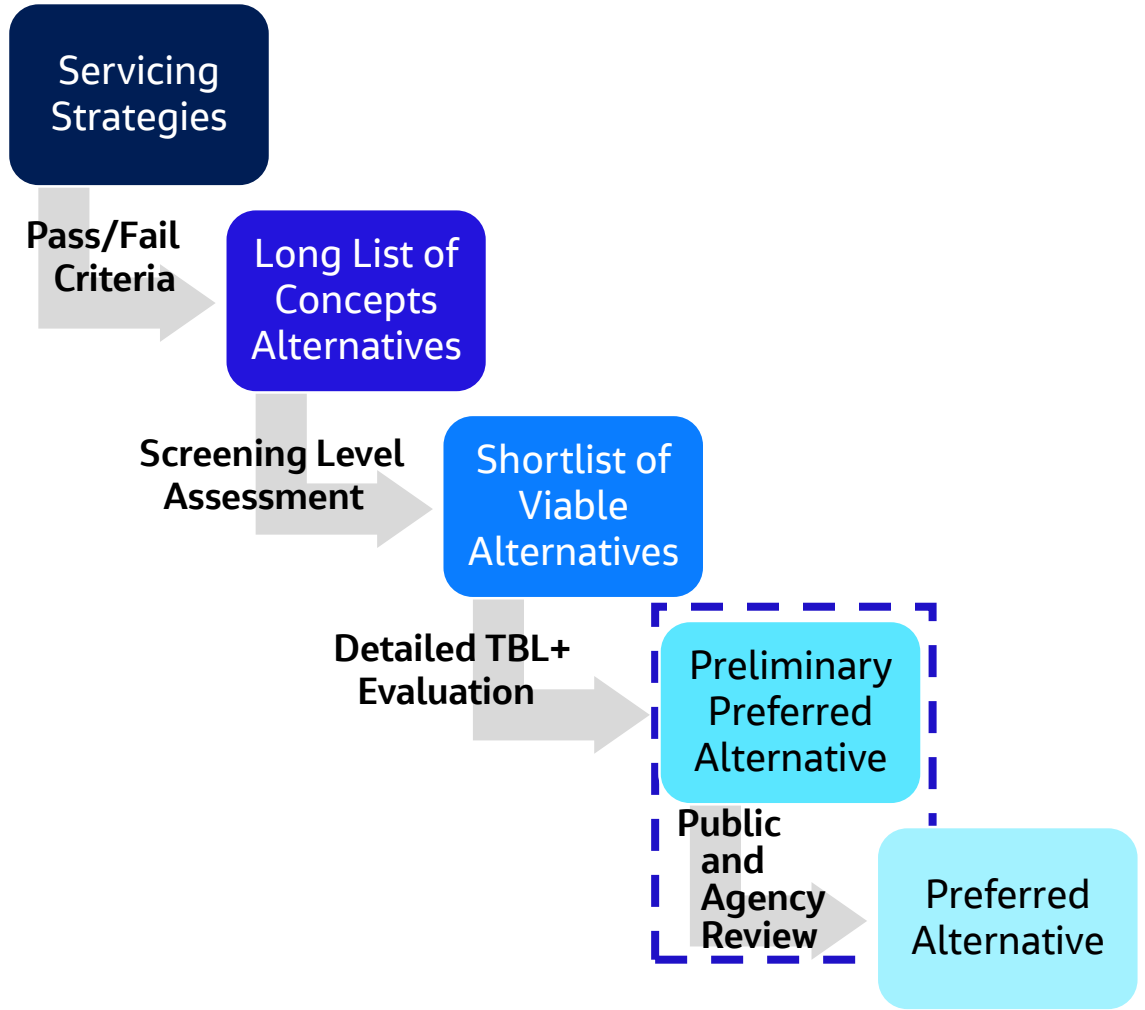


Problem Statement: Why are we doing this?

- “A review of the condition and capacity of the existing Etobicoke Creek Trunk Sewer reveals that while the existing sewer is in relatively good condition with isolated areas requiring structural repair or operational and maintenance attention, repair or rehabilitation would not address the operational challenges posed by deep manholes, access limitations and proximity to Etobicoke Creek.
- The sewer is considered to be constrained conveying existing flows along approximately 28% of its length and would be unable to accommodate the growth forecasts developed in alignment with City of Brampton’s growth plans.“

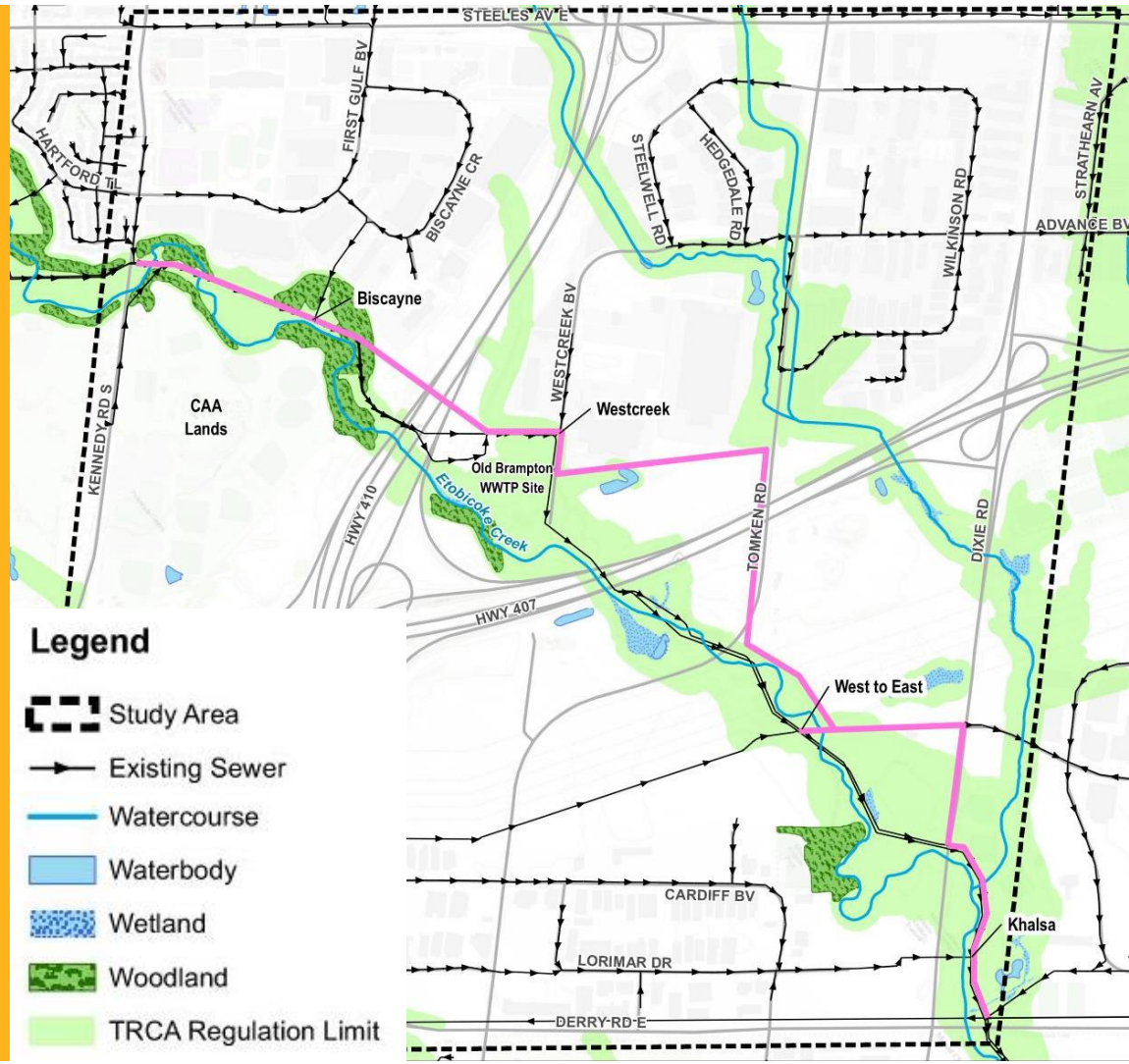
Alternative Development Process: How do we arrive to a solution?

- Step 1: Identify and screen servicing strategies to address the problem statement, using Pass/Fail criteria
- Step 2: Identify and evaluate long list of servicing concepts & routes to achieve the strategy using screening level assessment
- Step 3: Evaluate viability and feasibility of short list of alternatives using detailed triple bottom line (TBL+) evaluation
- Step 4: Consult and receive input to select the preferred alternative.



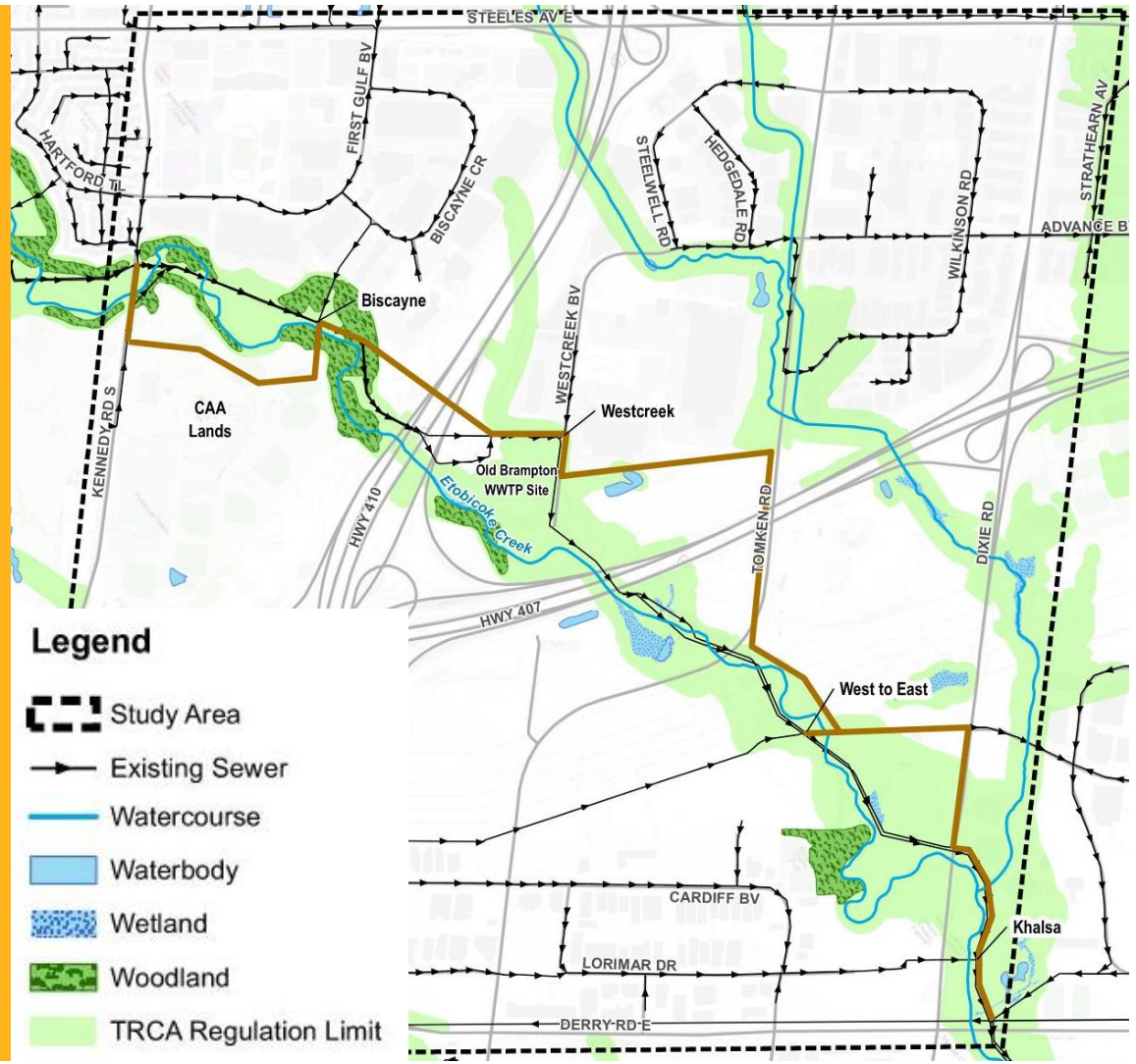
Etobicoke Creek Alignment

- Approximately 0.5 km of 1350 mm diametre pipe and 4.1 km of 1500 mm diametre pipe
- Mainly open-cut
- Crossings of Highways 407 and 410 to be tunneled
- First and last segments follow existing alignment in the creek valley with remainder routed outside the valley, requiring private property negotiation
- Diversion chamber at Biscayne
- Connects to existing Etobicoke Creek trunks at Derry Rd to maintain conveyance to Eastern Sanitary Trunk System



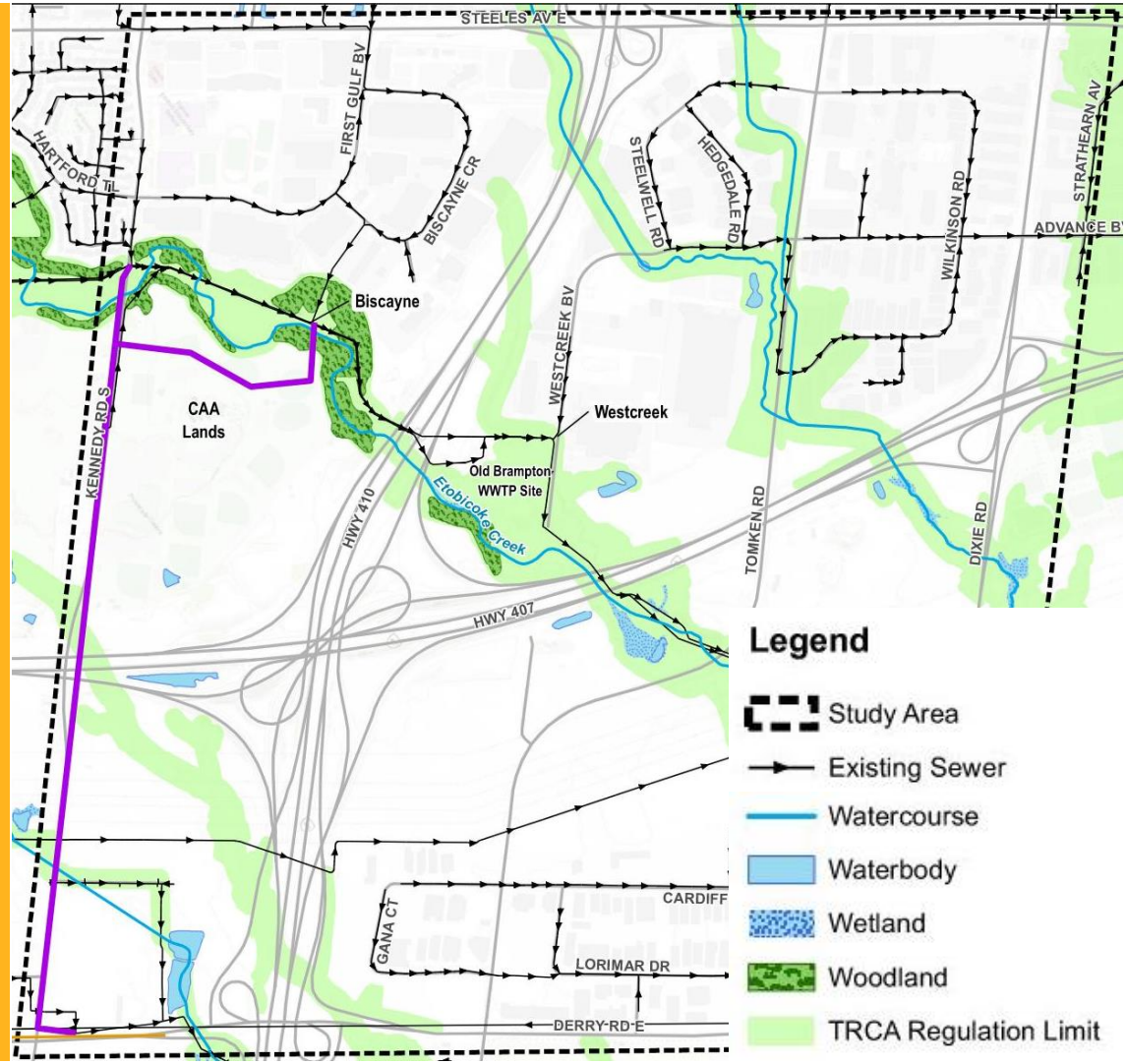
CAA Alignment

- Approximately 0.7 km of 1350 mm diametre pipe and 4.1 km of 1500 mm diametre pipe
- Mainly open-cut
- Crossings of Highways 407 and 410 to be tunneled
- First segment is routed on future north road of CAA Development
- Majority of remaining alignment is routed out of creek valley, requiring private property negotiation
- Diversion chamber at Biscayne
- Connects to existing Etobicoke Creek trunks at Derry Rd to maintain conveyance to Eastern Sanitary Trunk System



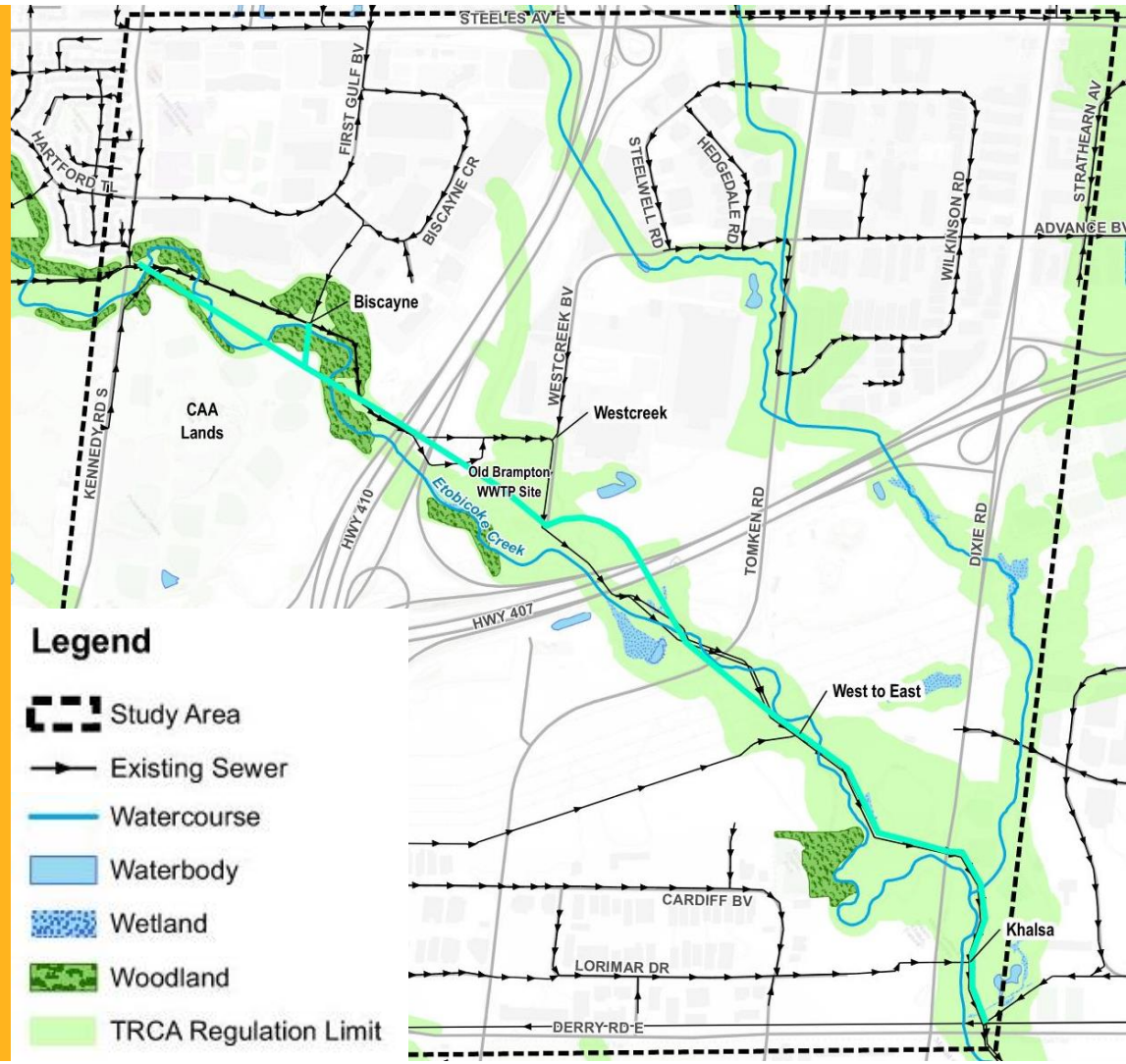
Kennedy Road Alignment

- Approximately 2.5 km of 1500 mm diametre pipe
- Mainly tunneled; small section to be open cut for Biscayne connection
- Approx. 800 m connection from Biscayne to Kennedy Rd to provide solution to existing flow constraints
- Main trunk to be within Right of Way of Kennedy Road
- Minimizes construction in Toronto Region Conservation Authority (TRCA) regulated areas
- Will connect downstream to East-West Diversion Sanitary Trunk Sewer



Deep Trunk Alignment

- Approximately 3.7 km of 1500 mm diametre pipe
- Mainly tunneled; small open cut section for Biscayne connection (135 m)
- Within TRCA regulated area but tunneled to minimize impact on creek
- Opportunity to have tunneling compound on the Old Brampton Wastewater Treatment Plant site
- Tunnel compound needed between Tomken Rd and Dixie Rd
- Connects to existing Etobicoke Creek trunks at Derry Rd to maintain conveyance to Eastern Sanitary Trunk System



Evaluation of Alternatives

Evaluation of Alternatives

Category	Evaluation Criteria	Etobicoke Creek	CAA Lands	Kennedy Road	Deep Trunk
Technical Considerations	• Implementation Feasibility • Permits and Approvals • Reliability • Effectiveness • Compatibility with Existing Infrastructure • Maximize Lifecyle Investment • Flexibility • Operational Accessibility	○	◑	◑	●
Natural Environment	• Terrestrial Systems • Aquatic Systems • Soil Contamination • Hydrogeology and Surface and Groundwater • Soil, Bedrock and Geology	○	◑	●	◑
Socio-Cultural Environment	• Recreational Land Uses and Visual Landscape • Future Planning Policies/Initiatives • Disruption During Construction • Archaeological and Cultural Resources	◑	○	◑	●
Economic Factors	• Capital Cost • Operation and Maintenance	●	◑	○	◑
Alternative Ranking		4	3	2	1

Most Impacts/ Least Benefits

○

Least Preferred

Moderate Impacts/
Moderate Benefits

◑

Moderately Preferred

Least Impacts/ Most Benefits

●

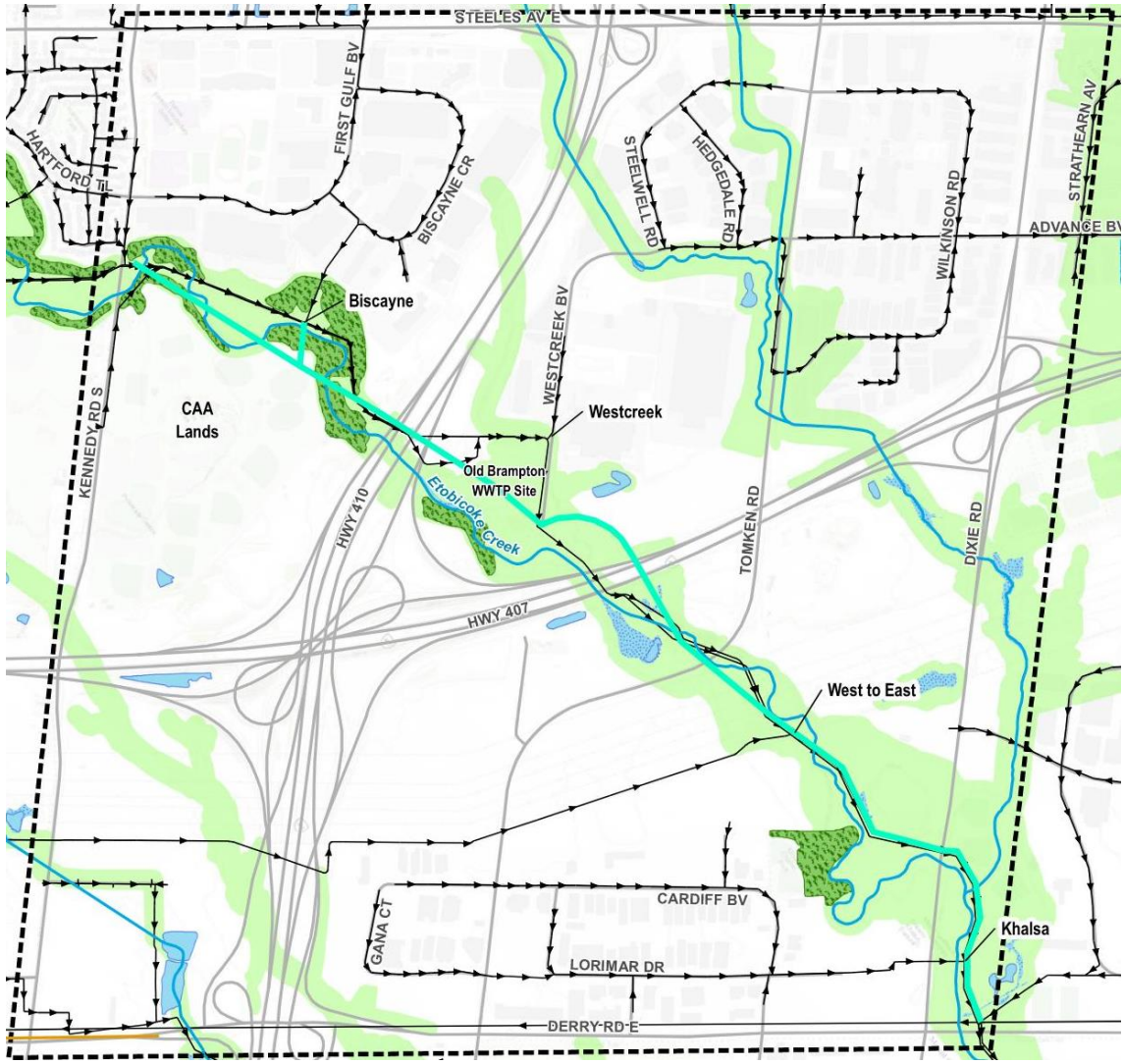
Most Preferred

Summary Score of Alternatives

Alternatives	Etobicoke Creek	CAA Lands	Kennedy Road	Deep Trunk
Overall Score	Least Preferred 	Least Preferred 	Less Preferred 	Most Preferred 
Key Factors	• Most limited access for construction & O&M • Integrates with existing sewers • Pumping stations required to service growth • Most impact on natural environment through construction • Temporary impact to the paved multiuse trail in valley and King's Park during construction • May impact archaeological resources • Lowest cost	• Integrates with existing sewers • Pumping stations required to service growth • Most impact on natural environment through construction • Temporary impact to the paved multiuse trail in valley and King's Park during construction • Impacts existing sports field on CAA Lands • May impact archaeological resources • Longest alignment leads to moderate cost	• Most accessible for both construction and O&M • Able to service future growth without pumping stations • Does not integrate well with existing sewers • Impacts available capacity for Region's diversion strategy • Tunneled construction results in least impact on natural environment • Temporary traffic disturbance during construction at tunnel shaft locations • Shortest alignment but tunneled construction leads to highest cost	• Some improvement to access for construction and O&M • Able to service future growth without pumping stations • Integrates with existing sewers • Tunneled construction limits impact to natural features and archaeological and cultural heritage resources • Trenched construction required at south end of alignment • Tunneled construction leads to higher cost

Preliminary Preferred Alternative - Deep Trunk Alignment

- Services future growth via gravity and integrates with the East to West diversion strategy
- Provides more connections to the existing trunk sewer system
- Tunneling in creek valley will help mitigate impact to the natural environment
- Access to majority of alignment will remain challenged due to location in valley
- Least disturbance to community uses in the study area as Region vacant property can be used for construction staging



Project Progress – Where are we?

Phase 1

- Assessment of Existing Conditions
- Natural Features Assessment
- Archaeological/Cultural Resources Assessment
- Identify the Problem Statement

Phase 2

- Establish Evaluation Criteria
- Evaluate Alternative Solutions
- Incorporate Community and Stakeholders Inputs
- Confirm Preferred Alternative

Spring 2019	June 29 2019	Summer 2019	Fall 2019	October 2019	Winter 2019	Spring 2020	Fall 2020	November 2020	December 2020
	Notice of Study Commencement		Hydraulic Analysis		Identify Alternative Solutions	We Are Here !		Present Preliminary Preferred Alternative	

Project Progress – Next Steps?

Phase 3			Phase 4		Phase 5	
Undertake additional Archaeological Assessment			Document Study Outcomes in Environmental Study Report (ESR) for Review and Comment		Initiate Field Investigations for Preferred Design	
Winter 2020	**December 2020**	**March 2021**	**May 2021**	**May 2021**	**April 2021**	**August 2021**
Identify and evaluate alternative means to implement preferred alternative		2nd Online Public Engagement to seek Impacts of Implementation		Issue Notice of Completion: Opportunity to review overall project and ESR		Complete Preliminary Design

Based on comments received, the project can then proceed through design and anticipate construction in Fall 2024.

How to Stay Connected and Involved?

Send your feedback or your questions on this project to the email below before December 11, 2020

Italia Ponce, P.Eng.
Project Manager
10 Peel Centre Drive, 4th Floor, Suite A
Brampton, ON, L6T 4B9
905-791-7800 Ext. 4583
Italia.ponce@peelregion.ca

- If you would like to be kept updated on this project:

https://www.peelregion.ca/pw/water/environ-assess/etobicoke-creek-sewer-imorovement.asp

https://twitter.com/peelpublicworks?lang=en

https://www.facebook.com/regionofpeel

*Feedback collected on this study will conform with the *Freedom of Information and Protection of Privacy Act*. It will be documented as part of this study and may be publicly available.