

Hamilton

Ainslie Wood Neighbourhood Creek Separation Municipal Class Environmental Assessment

Virtual Public Information Centre No.1
February 24th – March 10th, 2023



Virtual Public Information Centre (PIC)




Welcome to PIC No. 1 for the City of Hamilton's Ainslie Wood Neighbourhood Creek Separation Municipal Class Environmental Assessment (EA). This is a narrated presentation instead of a traditional face-to-face public meeting.

This presentation is available through the City's project website. A PDF copy of the presentation slides is also available should you wish to print a hard copy or view the presentation with no narration.

If you have any questions or comments regarding this study, please complete the Comment Form available on the project website, or email your comments on or before **March 10th, 2023** to: Sharon.MacPherson-Nemeth@hamilton.ca

There is an opportunity at any time during the Class EA process to provide your input. Any comments received will be collected under the authority of the *Environmental Assessment Act* and, with the exception of personal information, will become part of the public record.



HAMILTON
PUBLIC WORKS DEPARTMENT
Hamilton Water Division
Water & Wastewater Systems Planning

COMMENT SHEET – PIC #1

**Municipal Class Environmental Assessment for the
Ainslie Wood Neighbourhood Creek Separation**

The City of Hamilton is interested in hearing the community's comments, questions, concerns, and suggestions regarding the Ainslie Wood Neighbourhood Creek Separation Municipal Class Environmental Assessment (EA). Please take a few minutes to complete this brief comment sheet. All comments will be carefully considered during the Class EA process.

1. What is your interest in this study? Are you a:

Resident	<input type="radio"/>	
Local Business Owner	<input type="radio"/>	
Member of an Interest Group (Please specify)	<input type="radio"/>	<input style="width: 100%;" type="text"/>
Agency Representative (Please specify)	<input type="radio"/>	<input style="width: 100%;" type="text"/>
Other (Please specify):	<input type="radio"/>	<input style="width: 100%;" type="text"/>

2. Do you have any questions or comments related to the project background information presented?

Purpose of PIC No.1

The City of Hamilton has initiated this Schedule 'B' Municipal Class EA study to determine the preferred solution for the Ainslie Wood Neighbourhood Creek Separation from the Municipal Combined Sewer System.

The purpose of this PIC is to:

- Provide an overview of the Municipal Class EA process
- Provide project background information
- Present potential alternatives for separating Chedoke Creek from the City's combined sewer system
- Present preliminary evaluation criteria for feedback
- Provide a first opportunity to obtain input and address stakeholder comments



The study consists of two phases:

Phase 1: Problem or Opportunity Statement

Phase 2: Identification and Evaluation of Alternative Solutions



This presentation is divided into four main sections:

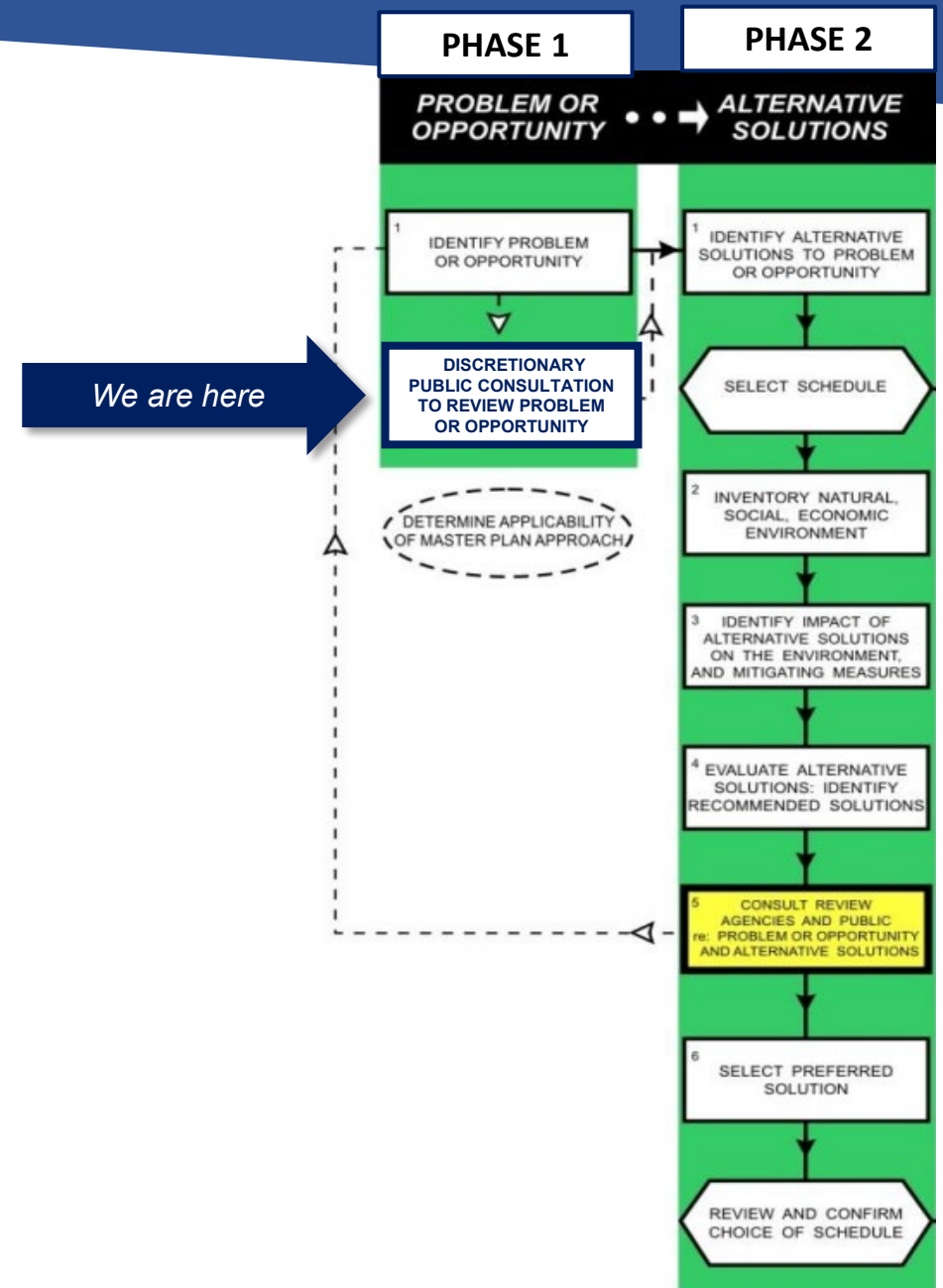
1. Overview of the Municipal Class EA Process
2. Project Background
3. Alternative Solutions
4. Next Steps

We would especially like your feedback on:

- The preliminary evaluation criteria identified for comparatively evaluating the alternative solutions
- Any relevant information on existing conditions within the study area

Municipal Class EA Process

- The Municipal Class EA process is a decision-making and planning process that ensures that potential effects of a project are identified and managed prior to implementation.
- The Class EA process applies to routine public sector projects that have predictable and manageable environmental effects, such as municipal road, water and wastewater projects.
- The process requires the identification and evaluation of alternative solutions, and recommends the best approach based on comparative evaluation.
- The Class EA study is undertaken in accordance with the requirements of the Ontario Environmental Assessment Act, as prescribed by the Municipal Engineers Association Municipal Class Environmental Assessment document (2000, as amended in 2007, 2011 and 2015)
- This study is being undertaken as a **Schedule 'B' project**.



Communications & Consultation

Consultation Overview

Communications and consultation is an important part of the Class EA process. Key elements will include:

- Distribution of public notices at key milestones (**Notice of Study Commencement & PIC No. 1, Notice of PIC No. 2 & Notice of Study Completion**)
- Stakeholder / Agency Engagement
- Indigenous Communities Outreach
- **Public Information Centres (2)** to seek input from local residents and interested parties
- Information posted on the project webpage



Project Information is posted on the City's webpage at: <http://www.hamilton.ca/awcreekEA>

Indigenous Communities Outreach

The following communities have been notified of the project and invited to participate:

- Haudenosaunee Development Institute (HDI) for the Haudenosaunee Confederacy of Chiefs Council (HCCC)
- Department of Consultation and Accommodation (DOCA) of the Mississaugas of the Credit First Nation
- Six Nations Land and Resources Department, Land Use Unit for the Six Nations of the Grand Elected Council (SNEC)
- Huron Wendat First Nation at Wendake
- Metis Nation of Ontario

Recent amendments to Ontario's *Environmental Assessment Act* note that a Section 16 Order or "bump-up" request will only be considered by the Ministry of the Environment, Conservation and Parks (MECP) if the project impacts constitutionally protected Aboriginal or treaty rights. Requests on other grounds will not be considered.

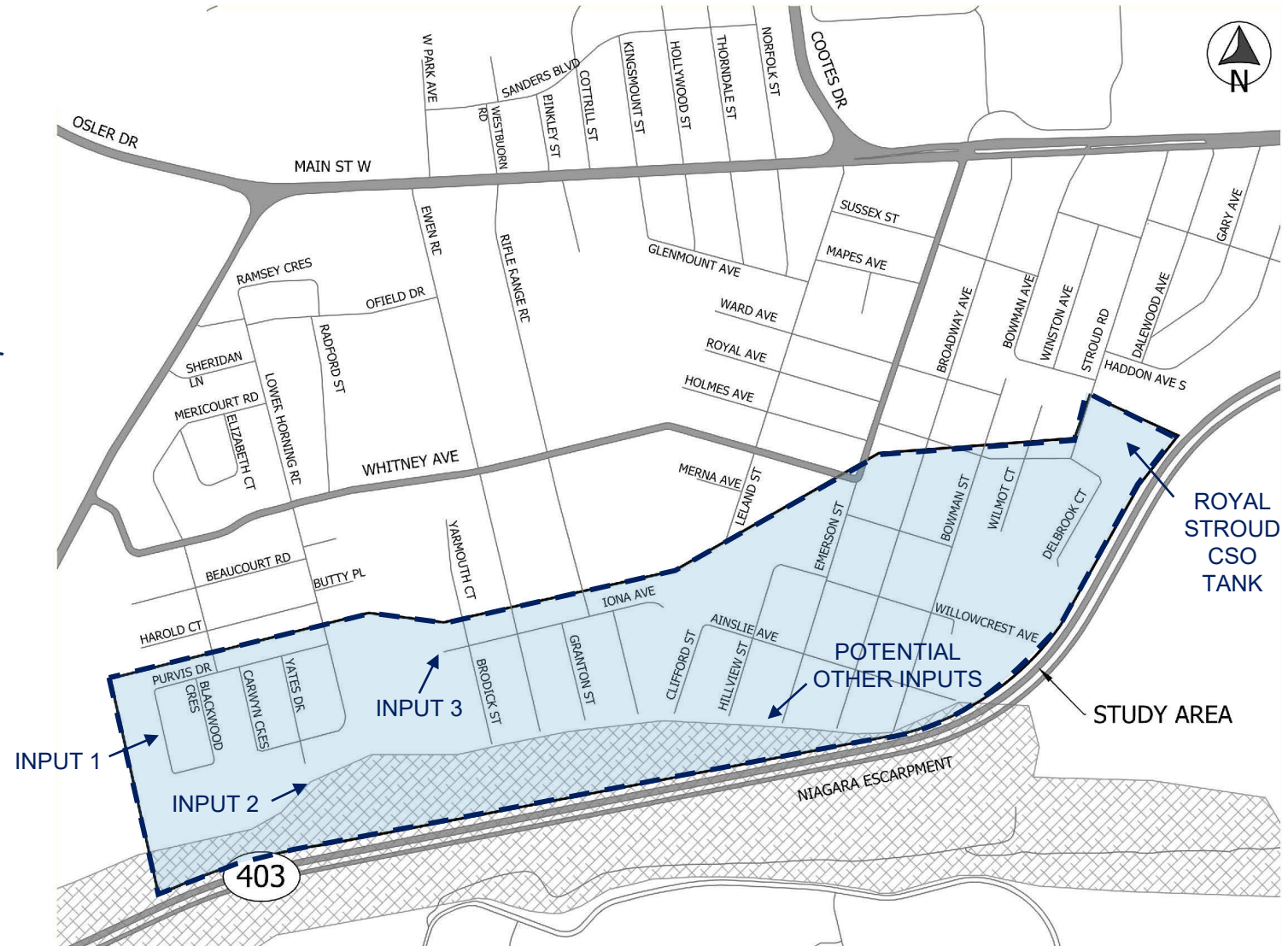
Project Background

- Chedoke Creek is a historic watercourse that conveys flows from the Niagara Escarpment through the City of Hamilton, and ultimately to Cootes Paradise and Hamilton Harbour.
- During the City's early development, much of the creek downstream of the Niagara Escarpment was diverted underground into the City's combined sewer system.
- This is problematic because clean stormwater inputs from relatively large drainage areas are entering the combined sewer system rather than flowing into Chedoke Creek as would occur if the storm sewer system was separate from the sanitary sewer system.
- The City's Chedoke Creek Water Quality Improvement Study (2021) identified the need to separate Chedoke Creek inputs from the Ainslie Wood Neighbourhood combined sewer system.



Study Area

- The study area includes the southern portion of the Ainslie Wood neighbourhood.
- There are three main input locations where Chedoke Creek drainage areas are conveyed through the City's combined sewer system to the Royal Stroud Combined Sewage Overflow (CSO) tank:
 - 1) At Purvis Drive and Blackwood Crescent;
 - 2) At the end of Yates Drive; and
 - 3) At the west extent of Iona Avenue.
- There may be more inputs at the south end of various streets adjacent to Highway 403.
- The Royal Stroud CSO tank is located in Stroud Park, on the southwest corner of Royal Avenue and Stroud Road.



Problem Statement

At least three identified inputs to Chedoke Creek, carrying clean stormwater within the Ainslie Wood neighbourhood, are contributing baseflow and wet weather flows to the City's combined sewer system, rather than flowing into Chedoke Creek.

These inputs contribute to increased flows through the City's sewer system to the Woodward Avenue Wastewater Treatment Plant, resulting in reduced treatment capacity and increased treatment costs.

During significant wet weather events, these inputs increase the frequency and volume of overflow events at the Royal Stroud CSO tank and discharges to Chedoke Creek north of Highway 403 and south of the railway overpass.

A solution is required to separate these flows from the combined sewer system to reduce the frequency of CSOs and increase the natural flow of water that reaches Chedoke Creek.



Stroud Park (April 2022)

Study Purpose & Objectives

Intent of the Study:

- Identify and evaluate potential design alternatives for the capture, conveyance, and outlet of Chedoke Creek inputs within the study area and determine a preferred solution for the separation of these flows from the City's combined sewer system.

Project Objectives / Opportunities:

- Reduce the frequency and volume of CSOs during wet weather events.
- Reduce the load on the City's wastewater treatment infrastructure and optimize the capacity of the City's existing sewer system.
- Increase baseflow to Chedoke Creek, potentially enhancing both its aquatic environment and riparian habitat.
- Potentially improve the water quality that will reach Chedoke Creek and ultimately Cootes Paradise and Hamilton Harbour.



Chedoke Creek (City of Hamilton)

Alternative Solutions Part 1 of 5

The following long-list of alternatives were developed through a high-level conceptual design process and will be further developed in accordance with Phase 2 of the Municipal Class EA process:

Alternative #1: Do Nothing

Alternative #2: Overland Flow Capture and Surface Diversion

Alternative #3: Overland Flow Capture and Piped Diversion

Alternative #4: New Storm Sewer in Utility Corridor

Alternative #5: Open Channel in Utility Corridor

Alternative #6: Upstream Diversion

Alternative #7: Infiltration / Low-Impact Development Diversion

Alternative #8: North Diversion



Input 2 Inlet Grate (April 2022)

Alternative Solutions Part 2 of 5

Alternative #1 'Do Nothing'

- No changes to the existing channel
- Required for comparison with the other alternatives



Alternative #2 Overland Flow Capture and Surface Diversion

- Divert inputs to a new surface channel
- Possible location for new channel shown below

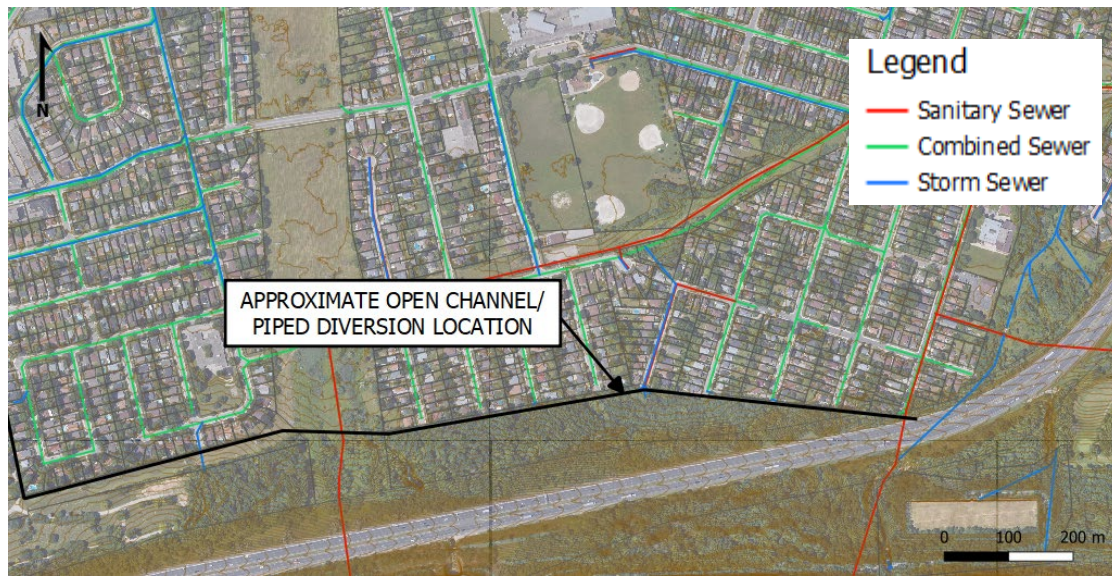


Alternative Solutions Part 3 of 5

Alternative #3

Overland Flow Capture and Piped Diversion

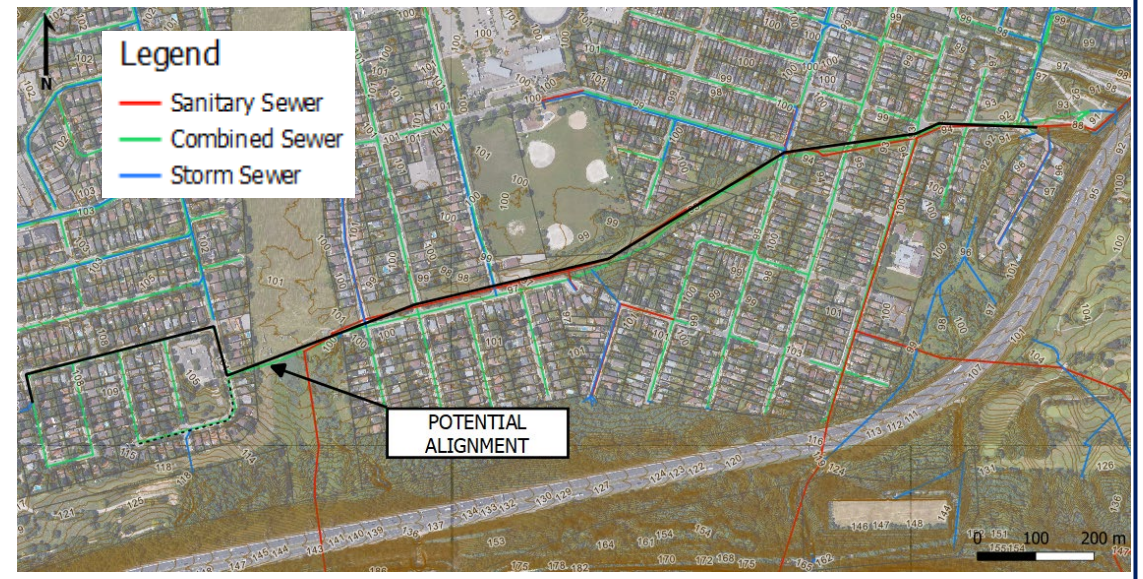
- Divert inputs to a new storm sewer
- Possible alignment shown below



Alternative #4

New Storm Sewer in Utility Corridor

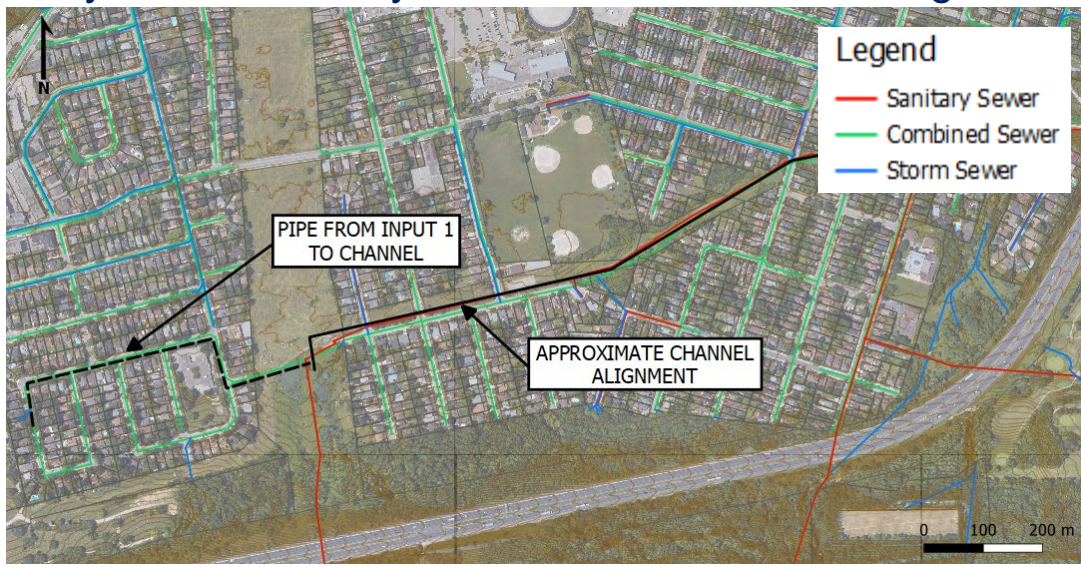
- Divert inputs to a storm sewer within the existing utility corridor (parallel to Iona Avenue)
- Possible alignment shown below



Alternative Solutions Part 4 of 5

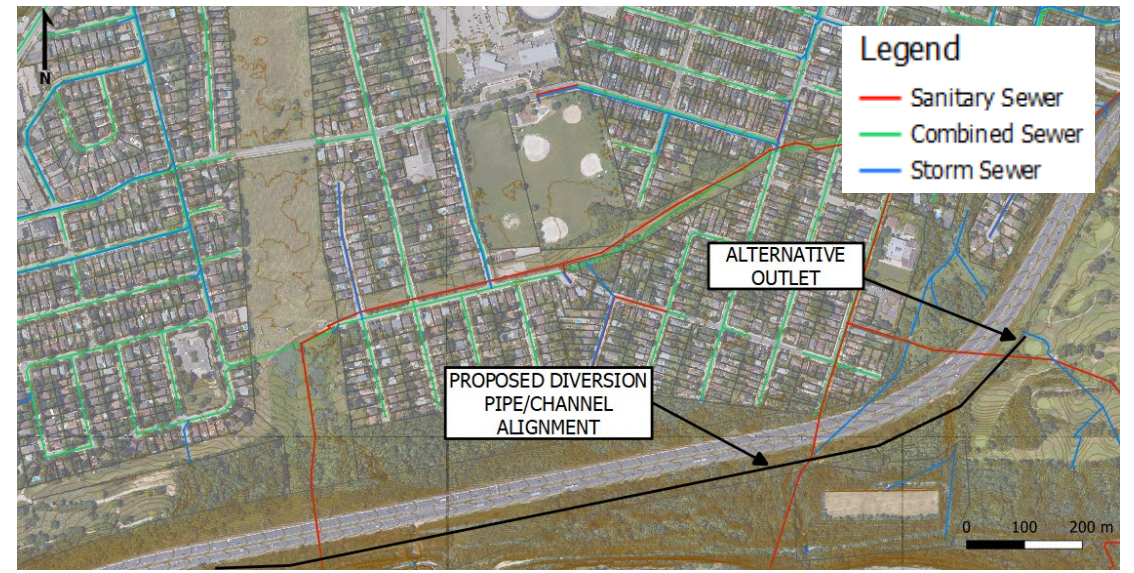
Alternative #5 Open Channel in Utility Corridor

- Divert inputs to a new surface channel within the existing utility corridor
- Hydro towers likely to interfere with channel alignment



Alternative #6 Upstream Diversion

- Divert inputs upstream of Highway 403 (south of Niagara Escarpment) to Chedoke Creek reach at Chedoke Golf Club



Alternative Solutions Part 5 of 5

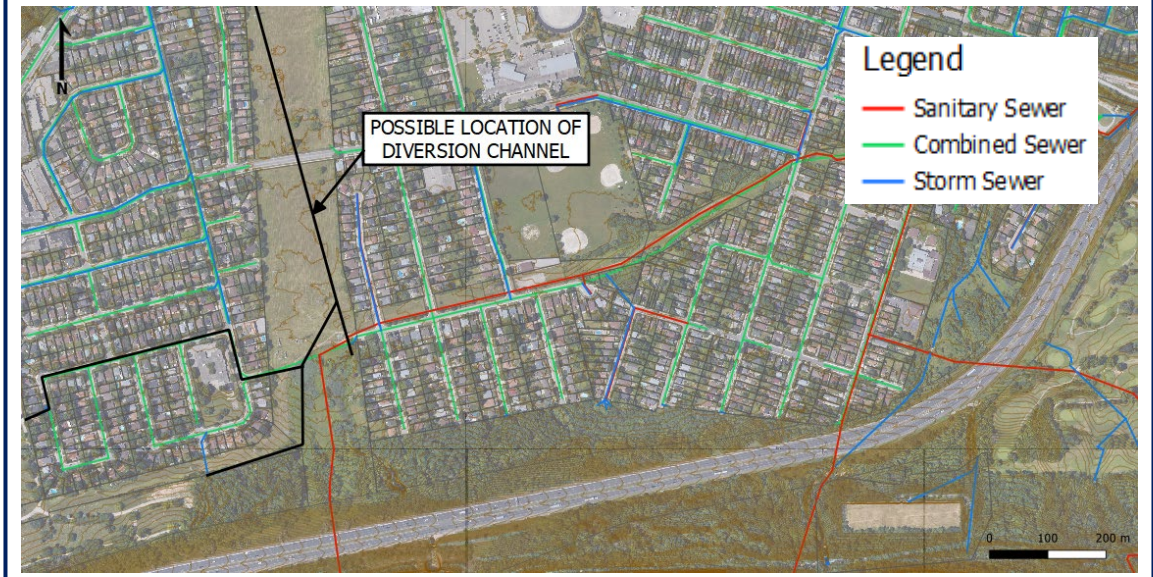
Alternative #7 Infiltration / Low-Impact Development (LID) Diversion

- Divert to LID features or infiltration galleries
- This option could be applied to 1 or more inputs



Alternative #8 North Diversion

- Divert inputs north towards Main St. storm sewer system



Preliminary Evaluation Criteria

The long-list of alternatives will be screened to a short list for evaluation. The following preliminary evaluation criteria are proposed for comparative evaluation of the short-listed alternative solutions. These criteria will guide the selection of the preferred alternative for the Ainslie Wood Neighbourhood Creek Separation.

Engineering & Technical Considerations

- Hydraulic Performance (ability to convey water)
- Flood Mitigation
- Erosion Mitigation
- Reduction of Wet Weather Flow to Combined Sewer
- Constructability and Site Access
- Permits & Approvals

Natural Environment

- Greenspace and Woodlots Impact / Opportunities
- Aquatic Habitat Impact / Opportunities
- Terrestrial Habitat Impact / Opportunities
- Sensitive Species Impact / Opportunities
- Water Quality Impacts / Opportunities

Economic

- Property Acquisitions Requirements
- Capital Costs
- Operation and Maintenance Costs

Social / Cultural Environment

- Recreational Amenity Impacts / Opportunities
- Archaeological & Cultural Heritage Resources Impacts/ Opportunities
- Adjacent Property Impacts / Opportunities
- Indigenous Community Impacts
- Niagara Escarpment Plan Designations
- Noise, Traffic, and Dust Impacts During Construction

Next Steps

1 - Review and incorporate stakeholder comments received

2 - Complete baseline inventory and study area characterization

3 - Refine long-list of alternatives to a shortlist of options

4 - Confirm evaluation criteria and evaluate alternative solutions

5 - Identify a preliminary preferred solution

6 - Prepare for and host PIC No. 2 (Fall 2023)

7 - Prepare Project File Report and publish Notice of Study Completion

Ongoing communications and consultation



Your Participation is Important!

How can you remain involved in this study?

- Request that your name / email is added to the project emailing list
- Complete and send in a Comment Sheet (PDF available on City website) or email your questions or comments.
- Contact one of our project team members at any time:

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Thank you for your participation in this virtual PIC.

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.