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.

We are interested in hearing any comments or concerns you may have with respect to this study. Comments received through the course of the study will be considered in selecting the preferred solution. Deadline to submit comment is April 25th, 2022. Click here to submit your comments and/or questions.

Project Introduction

The City of Hamilton initiated a Schedule B Class Environmental Assessment to investigate alternatives and select a preferred alternative for a new trunk watermain to service the community of Waterdown in 2019.

The community of Waterdown is serviced by the City’s lake-based municipal water system which includes supply from the Woodward Avenue Water Treatment Plant (WTP). Potable water is conveyed to Waterdown from Dundas via a 600 mm trunk watermain along York Road to the York Road and Valley Road Pumping Station (HD016). From there, the station discharges to a 600 mm trunk watermain along Valley Road and Highway 5, where it continues into the community of Waterdown.

The City’s Water and Wastewater Master Plan recommended a second watermain into Waterdown to support growth and to provide additional system security. The Master Plan identified the need to conduct a Schedule B Class Environmental Assessment (EA) to revise or confirm the solution and preliminary route, the subject of this Study.
Study Background

The City of Hamilton initiated the Waterdown Trunk Watermain Twinning Class EA and Conceptual Design project in 2019. Public Information Centre (PIC) No. 1 was held in October 2019 and presented the Study Area and an inventory of existing conditions. Additional study area constraints and challenges, such as natural environment features and socio-cultural considerations, were identified through the background review and public/stakeholder feedback received at PIC No. 1. This led to the current re-commencement of the study which includes additional route alternatives, technical studies, and an enhanced evaluation process.

Public Information Centre Objectives

The objectives of this virtual Public Information Centre (PIC) No. 2 are to:

1. Provide the public and stakeholders with an opportunity to learn about the study purpose, objectives and route alternatives.
2. Outline the Class Environmental Assessment project schedule and what steps are being taken to support the decision-making process.
3. Listen to your feedback and/or answer any questions you may have about the project process or potential outcomes.

Key Dates

April 11, 2022
Project information and project overview posted

April 11, 2022, to April 25, 2022
Submit questions or comments to the City of Hamilton Project Manager

May 9, 2022
Responses to questions and/or comments posted

Present the study purpose, objectives and alternative routes to the public and interested stakeholders.

Outline the Class Environmental Assessment project schedule and what steps are being taken to support the decision-making process.

Listen to your feedback and answer any questions you may have about the project process or potential outcomes.
Environmental Assessment Process

This project is following the Municipal Class Environmental Assessment (MEA) process, which is a decision-making process that all Ontario municipalities follow for rehabilitating and building new infrastructure.

This study will satisfy Phases 1 and 2 of the Municipal Class EA Process.

The focus of Phase 1 of the Municipal Class EA process is the development of a problem/opportunity statement that identifies the opportunities and challenges will be addressed by this project.

Phase 2 addresses important technical questions that will guide the development and assessment of alternative routes. This phase also includes preparing an inventory of the natural, social, and economic environments that could be impacted by the alternatives.
Problem and Opportunity Statement

The focus of Phase 1 of the Municipal Class Environmental Assessment (EA) process is the development of a problem/opportunity statement that identifies the opportunities and challenges that are being addressed. The problem/opportunity statement for the Waterdown Watermain Twinning Class EA is summarized as follows:

**Identify a solution to meet current and future water supply needs in the Community of Waterdown that improves system redundancy and security while minimizing potential impacts to the natural, socio-cultural, and technical environments.**

The problem/opportunity statement for this Class EA considers the following strategy goals:

- Provide an appropriate level of redundancy and security while considering growth within the service area;
- Limit total capital, operation and maintenance, and lifecycle costs;
- Limit potential natural, socio-cultural, and technical environmental impacts;
- Promote engagement with stakeholders such as regulatory agencies and local residents that may be directly affected by potential impacts; and
- Align with the overall servicing requirements indicated in the City’s Water and Wastewater Master Plan.
Technical Studies

Existing Conditions in the Study Area

Through this study, key technical studies have been completed to understand the existing conditions.

Stage 1 Archaeological Assessments

The purpose of the archaeological assessment is to determine whether there is potential for archaeological sites within the study area and along the route alternatives.

- A Stage 1 archaeological assessment has been completed.
- Areas that have steep terrain, have been previously disturbed or have been previously assessed are exempt from further archaeological assessment.
- Other areas such as undisturbed lands and areas outside roads rights-of-way may retain archaeological potential as illustrated. Stage 2 Archaeological Assessments will be required for works within those areas.
Cultural Heritage Screening

The purpose of the cultural heritage screening is to identify cultural heritage properties and/or resources located within the study area and along the route alternatives.

- Cultural Heritage Screening Report has been completed
- The study area contains cultural heritage resources and properties. A cultural heritage impact assessment will be required if works are proposed near a cultural heritage resource or property
Natural Environmental Review

The purpose of the natural environment assessment is to document the existing natural environment features within the study area and along the route alternatives.

- Desktop Natural Environmental Report has been completed.
- Significant natural environmental features are located within the study area. The study will aim to minimize impacts to natural features.
**Construction Methodology**

There are two main construction methodologies:

1. Trenchless (includes microtunnelling) involves digging entry and exit shafts (pits) and constructing an underground tunnel slightly larger than the proposed new watermain. The watermain is installed within the tunnel, while the surface remains unaffected (except at the shaft locations).

2. Open-Cutting involves the process of digging a trench to install infrastructure. Because construction occurs on the surface over a stretch of time, open cut construction has the potential to increase local disruption.

Where possible, microtunnelling will be the preferred construction method to reduce overall impacts to the study area.
Long List Route Alternatives

All Route Alternatives

Based on the preferred conceptual strategy idea – twinning of the existing watermain, a long list of route alternatives to meet future water demands in Waterdown was developed.
Route 1A

Trunk watermain along Valley Road, Rock Chapel Road and Highway 5 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Algonquin Avenue.
Route 1B

Trunk watermain along Valley Road, moving behind resident properties, Rock Chapel Road and Highway 5 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Algonquin Avenue.
Route 1C

Trunk watermain along Valley Road, York Road, through RBG lands, Rock Chapel Road and Highway 5 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Algonquin Avenue.
Route 1D

Trunk watermain along Valley Road, York Road, through RBG lands, Patterson Road, Rock Chapel Road and Highway 5 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Algonquin Avenue.
Route 1E

Trunk watermain along Valley Road, Chapel Road, Algonquin Avenue and Highway 5 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Algonquin Avenue.
Route 2

Trunk watermain along York Road, through RBG lands, and Patterson Road to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and South Drive.
Route 3

Trunk watermain along York Road, through Cartwright Nature Sanctuary, and Patterson Road to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and South Drive.
Route 4

Trunk watermain along York Road, Sovereign Avenue, and South Drive to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and South Drive.
Route 5A

Trunk watermain along York Road, Old Guelph, and South Drive to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and South Drive.
Route 5B

Trunk watermain along York Road, Old Guelph, and Highway No. 6 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Highway No. 6.
Route 6

Trunk watermain along York Road, and Highway 6 to distribute water from the HD016 Pumping Station to the existing watermain at Highway No. 5 and Highway No. 6.
Detailed Evaluation Criteria

The route alternatives will undergo a detailed evaluation using key evaluation criteria to determine the best solution that will minimize overall impacts to the study area.

Technical

- Meet existing and future servicing needs
- Ease of operation
- Provides water supply redundancy and security
- Compatibility with existing water supply system
- Avoids conflicts with existing infrastructure (water, wastewater, stormwater, utilities and roads)
- Ability to reduce and manage risks associated with geotechnical and hydrogeology
- Ability to adapt to climate change

Natural Environment

- Terrestrial habitats, species and systems
- Aquatic habitats, species and systems
- Groundwater quality and quantity
- Minimizes climate change impacts

Social and Cultural Environment

- Residential properties and owners
- Local businesses
- Agricultural lands
- Recreational uses and users
- Cultural heritage
- Archaeological resources

Regulatory and Jurisdictional

- Ease of receiving permits and approvals
- Ability to limit property acquisition and easements
- Ability to meet Source Protection Area (SPA) requirements

Economic

- Capital costs
- Annual operations and maintenance (O&M) costs
- Life cycle costs
Project Timeline

- **Spring 2022**: Notice of Study Re-Commencement and Public Information Centre (PIC) No.2 (We are here!)
- **Fall 2022**: Notice of PIC No. 3 and PIC No.3 release
- **Spring/Summer 2023**: Notice of Completion and 30-day Public Review Period of Project File

Next Steps

Following this virtual PIC, the project team will review and consider your input received, complete the detailed evaluation of the route alternatives, and present the preliminary preferred route in Fall 2022 at PIC No. 3.

We encourage you to get involved through EngageHamilton by April 25th, 2022, to provide any feedback on the study and/or if would like to receive project information updates. Responses to all comments received will be provided by May 9, 2022.

**Winston Wang, Project Manager, Water and Wastewater Planning**

[Winston.Wang@hamilton.ca](mailto:Winston.Wang@hamilton.ca) | (905) 546-2424  Ext.4092

Visit the Project Website