



# **Brookdale Ave. North Sanitary Servicing Environmental Assessment**

*City of Cornwall*

**JOB#: 19006 | May 28, 2019**

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# 1. EXECUTIVE SUMMARY

## BACKGROUND

The City has been in discussions with the property owners in the Brookdale Avenue North Area concerning municipal servicing for over twenty years. The Brookdale Avenue North Area is defined as the lands fronting Brookdale Avenue from Tollgate Road north to Cornwall Centre Road. In 2017, landowners expressed interest in obtaining municipal sanitary services. In preparation for this project to move forward, the City of Cornwall's 2018 Official Plan adjusted the Urban Settlement Boundary to accommodate the development within this area.

The City's Engineering Department has been planning for these works over the course of the past 15 years. In 2006, while the City was undertaking the reconstruction of a portion of Brookdale Avenue, dual 250mm diameter sanitary forcemains were installed along the east side of Brookdale Avenue from Tollgate Road to Fourteenth Street West. This portion of the forcemain was identified in early preliminary design studies and completion of the works was undertaken to prevent disturbing the recently reconstructed road.

In 2010, the City extended their drinking water distribution system through the Brookdale Avenue North Area, completing watermain looping by connecting a watermain located on Tollgate Road to the watermain located on Cornwall Centre Road. During this construction project, casings were installed under Highway 401 and the South Branch of the Raisin River for future sanitary servicing.

The City has engaged EVB Engineering to complete the design and construction administration for the sanitary servicing of the Brookdale Avenue North Area. Prior to entering the detailed design stage of the project, it was identified that sewage pumping station(s) would be required to convey sewage from the area to the main trunk collector on Ninth Street. Because the scope of work includes the construction of a new sewage pumping station(s), a Schedule "B" Environmental Assessment was triggered.

## PROBLEM STATEMENT

Through consultation with the City and the public, the problem definition was developed as follows:

*The City of Cornwall has identified that the sanitary servicing of the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, will benefit the existing commercial developments and help with continued growth in the area.*

*The City of Cornwall initiated this Municipal Class Environmental Assessment to evaluate alternative solutions to provide servicing to this area taking into consideration impacts to the natural, social and economic environment in the area.*

## ALTERNATIVE SOLUTIONS

Based on a review of the original servicing report (Stantec, 2008), our project team developed the following alternative solutions for evaluation:

- Alternative #1: Do nothing
- Alternative #2: One pumping station (at Tollgate Road)
- Alternative #3: One pumping station (north of CN rail)
- Alternative #4: Two pumping stations (one north of Hwy 401, one north of CN rail)
- Alternative #5: Two pumping stations (one north of Raisin River, one north of CN rail)

## EVALUATION OF ALTERNATIVE SOLUTIONS

The project team developed the evaluation criteria (refer to Table 6-1) based on economic, technical, natural environment, and social environment criteria. On Table 6-2, the project team applied the evaluation criteria to each of the alternative solutions, with the final scoring being shown in Table 6-3.

Table 1-1: Scoring of Alternatives

Category & Evaluation Criteria	Maximum Score	Alternative				
		#1	#2	#3	#4	#5
<b>Economic</b>						
Relative Capital Cost*	35	n/a	12	35	0	19
Operation & Maintenance Cost	15	n/a	15	15	0	0
Opportunity for Development	10	n/a	7.5	10	7.5	5
<b>Technical</b>						
Meets Objectives	Yes/No	<b>No</b>	Yes	Yes	Yes	Yes
Ease of Construction	10	n/a	0	0	5	10
<b>Natural Environment</b>						
Terrestrial Vegetation	5	n/a	5	2.5	2.5	2.5
Soil Quality	5	n/a	0	0	0	5
Water Quality	5	n/a	5	5	5	5
<b>Social Environment</b>						
Aesthetics	5	n/a	0	5	0	0
Property Acquisition	10	n/a	10	10	0	0
<b>TOTAL</b>	<b>100</b>	<b>n/a</b>	<b>54.5</b>	<b>82.5</b>	<b>20</b>	<b>46.5</b>

\*The alternative with the lowest relative capital cost was given the maximum score, while the alternative with the highest relative capital cost was given a score of zero. The score of other alternatives for this criterion was linearly interpolated. Refer to Appendix "B" for a detailed comparative cost estimate.

## PREFERRED SOLUTION

The preferred solution is Alternative Solution #3 which involves the construction of a single sewage pumping station north of the CN rail, shown as Site “B” on Figure 3 - Pumping Station Site Alternatives, requiring a wet well depth of approximately 5.5 m to the lowest invert. Vacant land is available on both sides of Brookdale Avenue.

It is preferred that the sewage pumping station be installed on the east side of Brookdale Avenue to match the location of the proposed sanitary sewer. Construction of the sewage pumping station on the west side of Brookdale Avenue is technically feasible, however is not preferred since two additional roadway crossings would be required, one for the proposed gravity sewer and one for the proposed forcemain.

As part of this alternative, gravity sanitary sewer would be installed along Brookdale Avenue, from Cornwall Centre Road to the pumping station at Site “B”, and from Tollgate Road to the pumping station at Site “B”, providing sanitary servicing to all properties within the Study Area. A preliminary plan and profile of the sanitary sewer was prepared and is shown in FIG.1 which may be found in Appendix “C”.

A forcemain would be required in this alternative, extending from Site “B” to the existing forcemain installed and capped at the northeast corner of the Tollgate Road and Brookdale Avenue intersection as part of a previous City project.

## PUBLIC CONSULTATION

The project has followed the requirements of the Schedule “B” Environmental Assessment process described in the Municipal Engineers Association’s publication “Municipal Class Environmental Assessment”. Copies of all correspondences related to the process is provided in Appendix “A”. Milestone dates are summarized below:

March 27, 2019	Notice of Commencement was posted.
April 5, 2019	Notice of Public Information Centre was posted.
April 16, 2019	Public Information Centre was held.
May 28, 2019	Notice of Completion was posted.

This document is being provided as information for public comment for a 30-calendar day period. Comments and concerns should be directed to the Division Manager (Infrastructure), City of Cornwall.

If concerns arise regarding this project, which cannot be resolved in discussions with the City, a person or party may request that the Minister of the Environment, Conservation and Parks order a change in the project status and require a higher level of assessment under the individual Environmental Assessment process (referred to as a Part II Order). Please refer to Section 7.4 for more details.

Following the 30-calendar day period, the City intends to proceed with the design and construction of the sanitary servicing in the Brookdale Avenue North Area, as presented in this document.

## 2. INTRODUCTION

### 2.1 Background

Brookdale Ave North Area is defined as the lands fronting Brookdale Avenue from Tollgate Road north to Cornwall Centre Road. This corridor is currently serviced by municipal water; however, municipal sanitary servicing is not provided in this area. This lack of municipal sanitary servicing is believed to be a large factor limiting the potential development of the area.

Discussions with landowners have occurred over the past 20 years, with the project being postponed due to the capital cost and zoning/urban settlement boundary issues. At a landowner meeting in 2017, it was determined that there was sufficient interested in pursuing this project, with the goal of remedying any zoning and lack of access issues.

In the latter years, as development occurred in the area, agreements were struck between the property owners and the City that acknowledge a commitment to share the future cost of providing municipal sanitary servicing in the area.

The 2018 Official Plan forecasted ongoing commercial development in the Brookdale Ave North Area, and the Urban Settlement Boundary has been realigned to accommodate this development. The City has undertaken capital cost recovery studies and background development charge studies to prepare for this project to move forward.

### 2.2 Project Scope

The scope of this Environmental Assessment Study is to determine the infrastructure requirements to provide sanitary servicing in the Brookdale Avenue North Area.

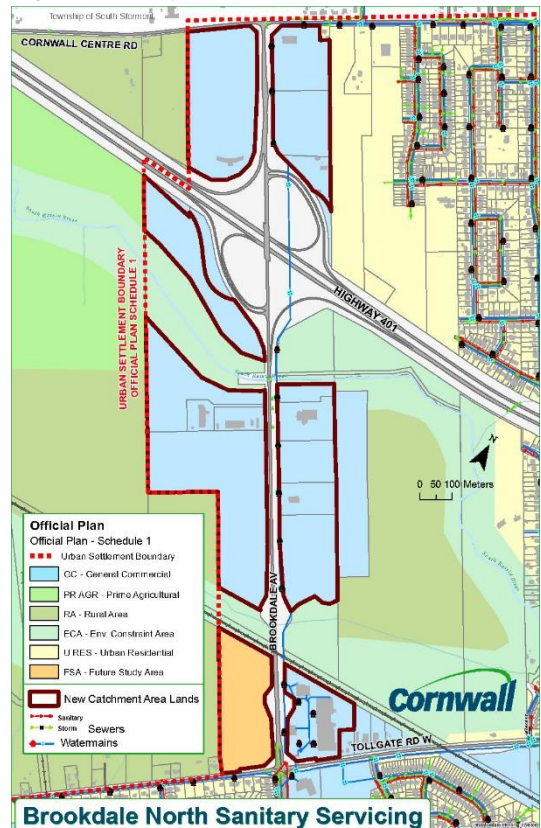
### 2.3 Project Objectives

The objective of this study is to identify a preferred solution that has a net positive impact on the natural, social and economic environment that will enable the Brookdale Avenue North Area to be serviced with a municipal sanitary collection system.

### 2.4 Study Area

Figure 1 illustrates the study area which includes both the east and west sides of Brookdale Avenue, starting at Tollgate Road north to Cornwall Centre Road.

Figure 1 - Study Area



## 3. THE ENVIRONMENTAL ASSESSMENT PROCESS

### 3.1 The Process

In Ontario, municipal roads, water, wastewater and master planning projects are subject to the provisions of the Municipal Class Environmental Assessment (2000, amended in 2007, 2011 & 2015). The Class Environmental Assessment (Class EA) is an approved planning document which describes the process which municipalities must follow to meet the requirements of the Environmental Assessment Act (EAA) of Ontario. By following the Class EA process, the municipality does not have to apply for an individual environmental assessment under the Act. The Class EA approach allows for the evaluation of the environmental effects of carrying out a project and alternative methods of carrying out a project, includes mandatory requirements for public input, and expedites the environmental assessment of smaller recurring projects.

The Class EA planning process was developed to ensure that the potential social, economic and natural environmental effects are considered in planning roads, water, stormwater and sewage projects. Since roads, sewage, stormwater management and water projects undertaken by municipalities under the Class EA planning process vary in their environmental impact, such projects are classified in terms of schedules

- Schedule A projects are limited in scale, have minimal adverse effects and include most municipal operations and maintenance activities. These projects are approved and may proceed to implementation without any further requirements under the provisions of the Class EA planning process.
- Schedule A+ projects are similar in size and scope to Schedule A activities. Schedule A+ activities require municipalities to advise the public of the project implementation and provide them with an opportunity to comment to municipal council.
- Schedule B projects have the potential for some adverse environmental effects. The proponent is required to undertake a screening process involving mandatory contact with directly affected public and with relevant government agencies to ensure that they are aware of the project and that their concerns are addressed. If there are no outstanding concerns, then the proponent may proceed to implementation. If, however, the screening process raises a concern which cannot be resolved, then the Part II Order ("bump-up") procedure may be invoked; alternatively, the proponent may elect voluntarily to plan the project as a Schedule C undertaking. Typically, Schedule B projects involve extensions to existing municipal infrastructure such as sewage collection systems and water distribution systems.
- Schedule C projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the Class EA process. Schedule C projects require that an Environmental Study

Report be prepared and submitted for review by the public. If concerns are raised that cannot be resolved, the "bump-up" procedure may be invoked, which may result in the requirement to complete a full environmental assessment. Refer to Section 3.5 for further discussion of the Part II Order ("bump-up") procedure. Typically, these projects involve the construction of municipal infrastructure such as wastewater treatment facilities, new sewage collection and water distribution systems, and water treatment facilities.

Figure 2 (Exhibit A.2, from the Class Environmental Assessment publication) presents a flow chart which illustrates the Planning and Design Process for Municipal Roads, Water and Wastewater Projects. The precise path to be followed in the process is dependent on the nature of the project and more particularly the schedule in which the project falls.

Phase 1 defines the nature and extent of the problem and the project opportunity. Often a discretionary public meeting is held to inform interested parties of the EA planning process and to discuss the problem.

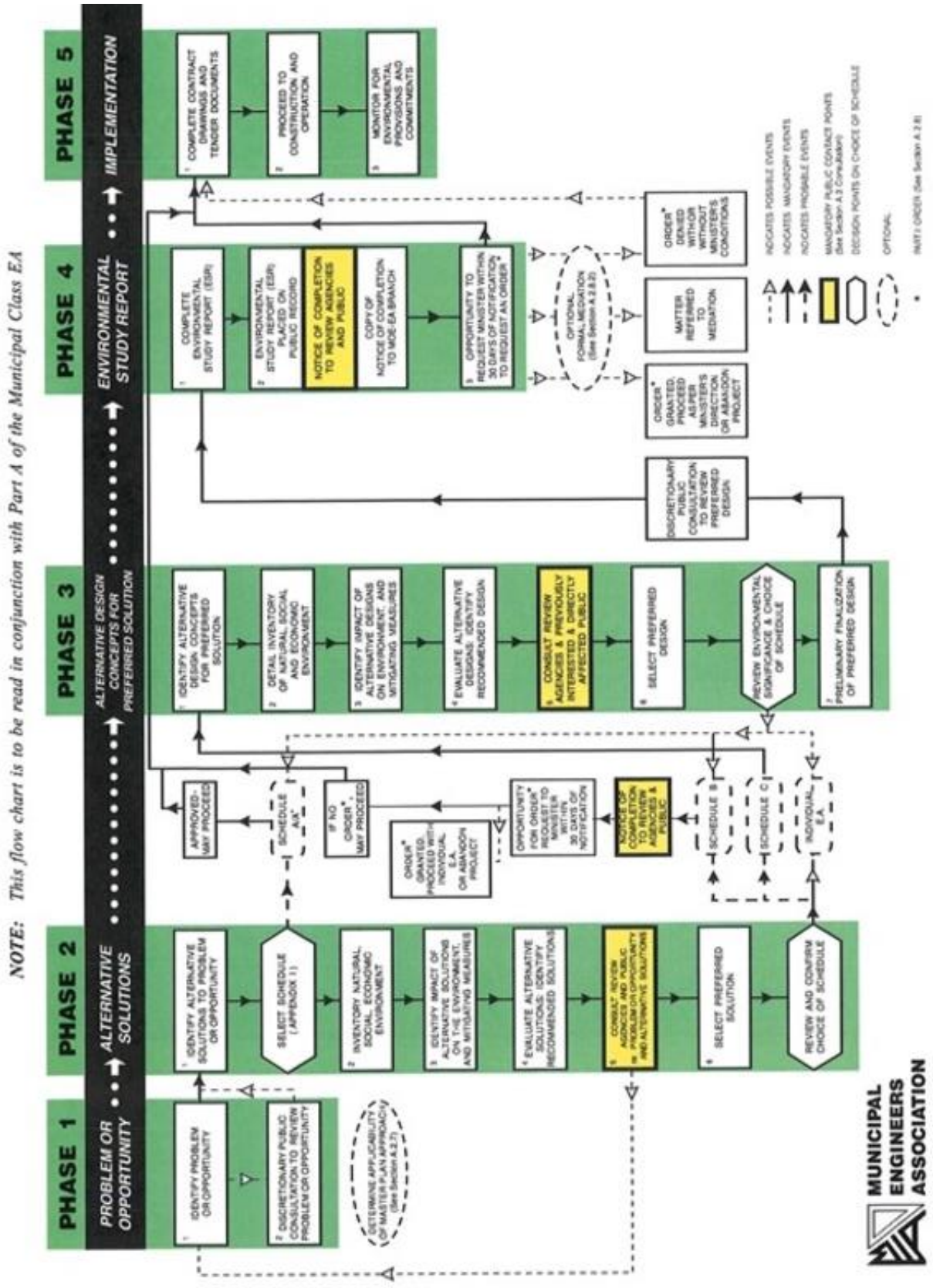
Phase 2 involves the identification of the alternative solutions. Also included are an inventory of the natural, social, and economic environment; the identification of the impacts of alternative solutions on the environment; the identification of mitigative measures; an evaluation of alternative solutions; consultation with review agencies and the public regarding the identified problem and alternative solutions; the identification of the preferred alternative solution; and confirmation of the path or schedule to follow for the balance of the Class EA process. Public consultation is mandatory at this phase and includes review agencies and the affected public. The appropriate EA schedule for the project is also identified.

Phase 3 involves the identification of alternative designs for the selected alternative solution. Also included are a detailed inventory of the natural, social, and economic environment relating to the selected alternative solution; the identification of the impacts of alternative designs on the environment; the identification of mitigative measures; consultation with review agencies and the public regarding the alternative designs; and the identification of the recommended alternative design. Public consultation is mandatory at this phase and includes review agencies and the affected public.

Phase 4 represents the culmination of the planning and design process as set out in the Class EA. Phase 4 involves the completion of the documentation including the Environmental Study Report (ESR), if required, and the Notice of Completion. The ESR documents all the activities undertaken through Phases 1, 2 and 3 including the Consultation. The ESR is filed with the Clerk of the municipality and placed on the public record for at least 30 days to allow for public review. The public and mandatory agencies are notified through the Notice of Completion, which also discloses the Part II Order ("bump-up") provisions.

Phase 5 is the implementation phase of the Class EA process, and includes final design, construction plans and specifications, tender documents, and construction and operation. It also includes monitoring for environmental provisions and commitments (e.g. mitigative measures) as defined in the ESR.

Figure 2 - Exhibit A.2 - Municipal Class EA Planning



### 3.2 The Appeal Process (Part II Order Request)

The environmental assessment process allows for the public and review agencies to identify concerns with the information provided during public consultation centres or during the mandatory public circulation periods. Should a member of the public or a review agency feel that the proposed undertaking needs to be made subject to a more comprehensive review, they can request a Part II Order.

The Part II Order is a legal mechanism which requires a review of the project file by the Minister, or delegate, to determine if the process that was followed meet all of the requirements of the Environmental Assessment Act. Should the Minister determine that the proper process was not followed they can order the proponent to undertake a different Schedule of EA or an individual EA before proceeding with the project. Or the Minister may determine that the proper process was followed and allow the project to proceed as planned.

## 4. PUBLIC AND AGENCY CONSULTATION

Public consultation is an integral component of the environmental assessment process. Allowing the public and various governmental agencies an opportunity to provide input into the selection of a preferred solution for the Brookdale Avenue North Area Sanitary Servicing strategy is key to ensure the best solution is selected.

Upon the onset of the project a list of entities (property owners and agencies) was developed and is provided in Appendix “A”.

In addition to the property owners and governmental agencies, First Nation communities were also identified and included in the circulation of the notices related to this project.

On March 27, 2019, a Notice of Commencement (refer to Appendix “A”) was issued to property owners along Brookdale Ave North, between Tollgate and Cornwall Centre Road and to the agency contacts on the list provided in Appendix “A”. The Notice of Commencement was also advertised on the City of Cornwall’s website (<https://www.cornwall.ca/Modules/News/index.aspx?page=2&newsId=2862665c-c39c-4f83-bb7f-78adebaee5d9>).

Feedback from the issuance of the Notice of Commencement, included a request by the Ministry of Tourism, Culture and Sport, for the completion of the Criteria for Evaluating Archaeological Potential Checklist and Criteria for Evaluating Potential for Build Heritage Resources and Cultural Heritage Landscapes Checklist. Both Checklists were completed and required no further action (see Appendix “A”).

On April 5, 2019, a Notice of Public Information Centre was issued to the same property owners and agencies and advertised on the City of Cornwall website (<https://www.cornwall.ca/Modules/News/index.aspx?page=2&newsId=e2a64b3a-c687-40a2-b882-b60829668901>). A Public Information Centre was held on April 16, 2019, at the Benson Centre, on 800 Seventh Street West, Cornwall, ON. Presentation boards with information concerning the project was provided for discussion (refer to Appendix “A”). Approximately ten (10) people were in attendance.

On May 28, 2019, a Notice of Completion was issued to the same property owners and agencies and advertised on the City of Cornwall website (<https://www.cornwall.ca/en/live-here/engineering-notices-and-reports.aspx>). This document has been made available to the public for comment until June 27, 2019.

Any comments received will be incorporated into the Project File and finalized. If no significant concerns are received, the City intends to proceed with the implementation of the preferred solution.

## 5. PHASE 1 – PROBLEM STATEMENT

### 5.1 Existing Works

The preliminary design for the servicing of the Brookdale Avenue North Area required that two pumping stations and a dual 250mm diameter forcemain be built to convey the sanitary flows from the Brookdale Avenue North Area to the 1950mm diameter combined trunk sewer located at the intersection of Brookdale Avenue and Ninth Street West. The combined trunk sewer was determined to have sufficient capacity to support the proposed commercial development within the Brookdale Avenue North Area in the Preliminary Design Report, completed by Stantec in 2008. Based on the preliminary design, the two pumping stations would be located adjacent to the Highway 401 and Canadian National Railway (CNR) corridors.

The City of Cornwall took advantage of the Brookdale Avenue reconstruction that took place in 2006. A portion of Brookdale Avenue was being rebuilt, and the City incorporated into the design the installation of the dual 250mm diameter sanitary forcemain between Tollgate Road and Fourteenth Street West. The forcemain has not been in use but is available to be incorporated into this project.

The next step to servicing this area was accomplished when the City extended the water service to the area in 2010. In order to extend water service to the Brookdale Avenue North properties, a 300mm diameter watermain was installed from the existing 600mm diameter watermain at Tollgate Road to the 200mm diameter watermain located approximately 200m south of Cornwall Centre Road along Brookdale Avenue, thereby looping the water distribution system in the area. During this phase of the work, the City incorporated the installation of 600mm casings, under Highway 401 as well as the South Branch River, in order to accommodate the future sanitary sewer extension to this area.

### 5.2 Problem Statement

The City of Cornwall has identified that the sanitary servicing of the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, will benefit the existing commercial developments and help with continued growth in the area.

The City of Cornwall initiated this Municipal Class Environmental Assessment to evaluate alternative solutions to provide servicing to this area taking into consideration impacts to the natural, social and economic environment in the area.

## 6. PHASE 2 – ALTERNATIVE SOLUTIONS

As part of the second phase of the Class EA process, defining the evaluation criteria for evaluating the alternative solutions is undertaken, and feasible alternatives are identified. The following sections describe the alternative solutions, evaluation criteria and methodology considered during the evaluation of alternatives, more specifically related to the location of the proposed pumping stations and related infrastructure.

More specifically, this study will evaluate the following options:

- Alternative #1: Do nothing
- Alternative #2: One pumping station (at Tollgate Road)
- Alternative #3: One pumping station (north of CN rail)
- Alternative #4: Two pumping stations (one north of Hwy 401, one north of CN rail)
- Alternative #5: Two pumping stations (one north of Raisin River, one north of CN rail)

Preliminary plan and profile drawings to review the technical feasibility of alternatives #2 to #5, inclusively, was prepared and may be found in Appendix “C”.

### 6.1 Alternative #1 – Do Nothing

The first alternative considered is status quo, or the “do nothing” alternative. Under this alternative, the area would remain not serviced with municipal sanitary sewer and sewage treatment. As such, each individual property owner would be responsible for the design, construction, operation & maintenance and eventual replacement of its private sewage treatment system.

The complexity of a private sewage treatment system will vary with the design flows; high sewage generators such as hotels and restaurants will require extensive and complex septic systems that can be challenging to operate.

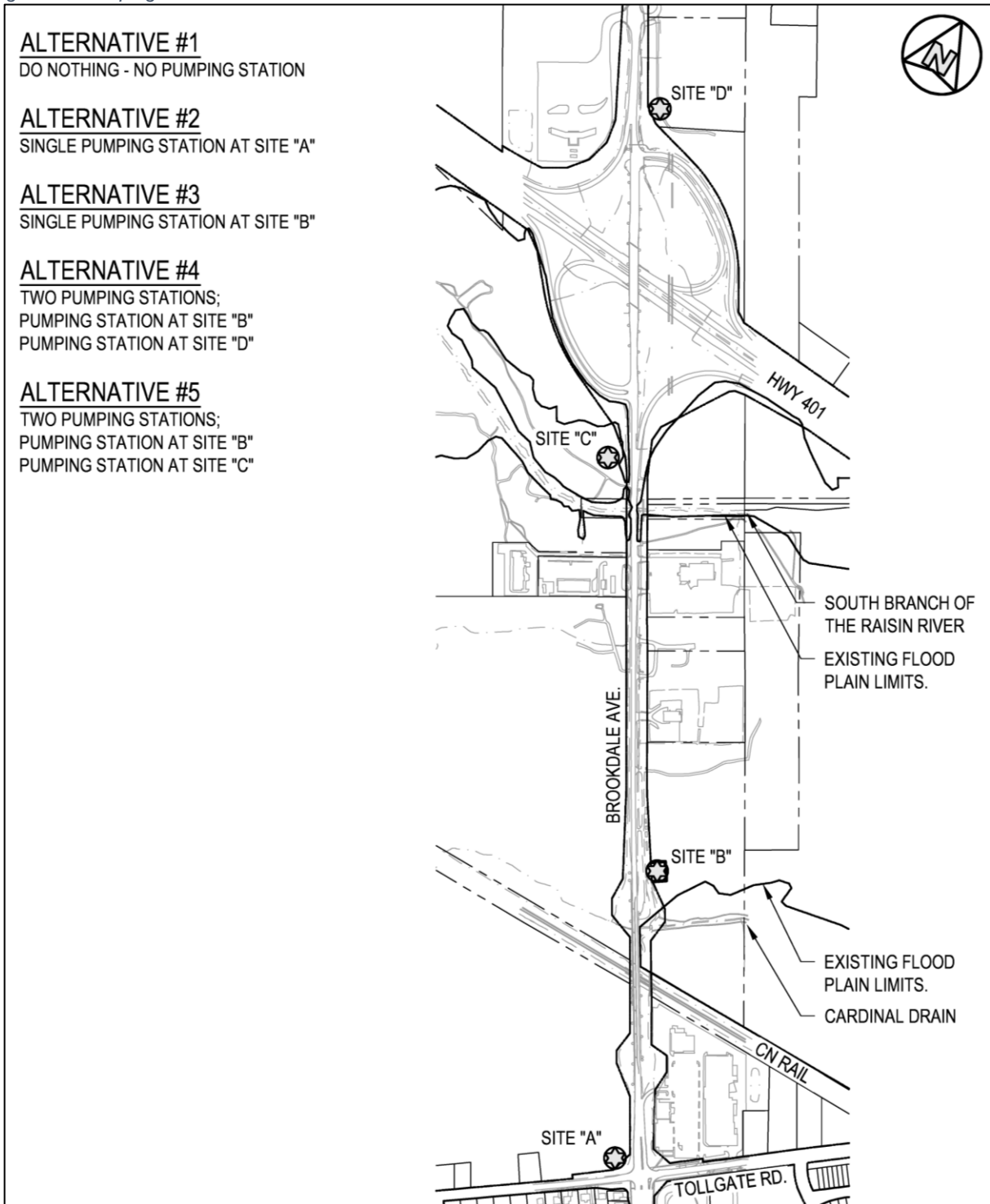
### 6.2 Alternative #2 – One Pumping Station (at Tollgate Road)

The second alternative considered is the construction of a single sewage pumping station at Tollgate Road, shown as Site “A” on Figure 3 - Pumping Station Site Alternatives which may be found on the following page, requiring a wet well depth of approximately 9.5 m to the lowest invert.

The sewage pumping station would have to be installed on the west side of Brookdale Avenue since vacant land is not available on the east side, and since the City’s right-of-way on the northeast corner of the Tollgate Road and Brookdale Avenue intersection is too small from a constructability perspective.

As part of this alternative, gravity sanitary sewer would be installed along Brookdale Avenue, from Cornwall Centre Road to the pumping station at Site “A”, providing sanitary servicing to all properties within the Study Area. A preliminary plan and profile of the sanitary sewer is shown in FIG.1 which may be found in Appendix “C”.

Figure 3 - Pumping Station Site Alternatives



As can be seen, the sewer is proposed to be at a nominal depth at Cornwall Centre Road, and the gravity sanitary sewer need to be installed at depths exceeding 8 m in some sections.

As for the forcemain from the proposed sewage pumping station, it would need to extend a short distance to connect to the existing forcemain installed and capped at the northeast corner of the Tollgate Road and Brookdale Avenue intersection as part of a previous City project.

### 6.1 Alternative #3 – One Pumping Station (North of CN rail)

Similarly to alternative #2, this alternative involves the construction of a single sewage pumping station north of CN rail, shown as Site “B” on Figure 3 - Pumping Station Site Alternatives, requiring a wet well depth of approximately 5.5 m to the lowest invert. Vacant land is available on both sides of Brookdale Avenue.

It is preferred that the sewage pumping station be installed on the east side of Brookdale Avenue to match the location of the proposed sanitary sewer. Construction of the sewage pumping station on the west side of Brookdale Avenue is technically feasible, however is not preferred since two additional roadway crossings would be required, one for the proposed gravity sewer and one for the proposed forcemain.

As part of this alternative, gravity sanitary sewer would be installed along Brookdale Avenue, from Cornwall Centre Road to the pumping station at Site “B”, and from Tollgate Road to the pumping station at Site “B”, providing sanitary servicing to all properties within the Study Area. A preliminary plan and profile of the sanitary sewer was prepared and is shown in FIG.1 which may be found in Appendix “C”. As can be seen, the sewer in this alternative is similar to that of alternative #2, however some deep sanitary sewer sections are avoided.

A longer forcemain would be required in this alternative, extending from Site “B” to the existing forcemain installed and capped at the northeast corner of the Tollgate Road and Brookdale Avenue intersection as part of a previous City project.

### 6.2 Alternative #4 – Two Pumping Stations (North of Hwy 401 & North of CNR)

Alternative #4 is similar to alternative #3 in that a sewage pumping station is constructed north of CN rail at Site “B”, however it adds a second pumping station at Site “D” north of the Highway 401 corridor as shown on Figure 3 - Pumping Station Site Alternatives. Vacant land is available on the east side of Brookdale Avenue at both locations. Wet well depths are approximately 3.0 m and 5.5 m to the lowest invert at the north and south pumping stations, respectively.

Again, it is preferred that the sewage pumping stations be installed on the east side of Brookdale Avenue to match the location of the proposed sanitary sewer. Construction of the sewage pumping station on the west side of Brookdale Avenue is technically feasible, however is not preferred since two additional roadway crossings would be required per pumping station, one for the proposed gravity sewer and one for the proposed forcemain.

As part of this alternative, gravity sanitary sewer would be installed along Brookdale Avenue, from Cornwall Centre Road to the pumping station at Site “D”, to provide sanitary servicing to the properties north of Highway 401. Forcemain from the sewage pumping

station at Site “D” then crosses the Highway 401 corridor, and outlets into the proposed gravity sanitary sewer north of the South Branch of the Raisin River and discharging into the sewage pumping station at Site “B”.

As in alternative #3, a gravity sanitary sewer is also required between Tollgate Road and the sewage pumping station at Site “B” to provide sanitary servicing to the properties at the south end of the Study Area, as well as a forcemain extending from Site “B” to the existing forcemain installed and capped at the northeast corner of the Tollgate Road and Brookdale Avenue intersection as part of a previous City project.

The preliminary plan and profile for this alternative is again shown on FIG.2 found in Appendix “C”. As can be seen, a length of gravity sanitary sewer can be avoided within the Highway 401 corridor, however deep gravity sanitary sewers are still required.

### 6.3 Alternative #5 – Two Pumping Stations (North of SBRR & North of CNR)

The last alternative considered also features two sewage pumping stations, with sewage pumping stations at Site “B” and at Site “C” as shown on Figure 3 - Pumping Station Site Alternatives. Wet well depths are approximately 4.5 m and 5.5 m to the lowest invert at the north and south sewage pumping stations, respectively.

Vacant land is available on both sides of Brookdale Avenue at both sites, however the vacant land east of Brookdale Avenue at Site “C” lies within the South Branch of the Raisin River’s (SBRR) flood plain and will therefore not be technically feasible.

At Site “B”, it is again preferred that the sewage pumping station be installed on the east side of Brookdale Avenue to match the location of the proposed sanitary sewer. Construction of the sewage pumping station on the west side of Brookdale Avenue is technically feasible, however is not preferred since two additional roadway crossings would be required per pumping station, one for the proposed gravity sewer and one for the proposed forcemain.

As part of this alternative, gravity sanitary sewer would be installed along Brookdale Avenue, from Cornwall Centre Road to the pumping station at Site “C” and from the existing high point just south of Cornwall Camping Centre Inc. to the pumping station at Site “C”, providing sanitary servicing to all properties its length. Sewage from pumping station “C” would then be pumped into the proposed gravity sanitary sewer to be installed between the aforementioned high point and the south pumping station at Site “B”.

As in alternative #3, a gravity sanitary sewer is also required between Tollgate Road and the sewage pumping station at Site “B”, as well as a forcemain extending from Site “B” to the existing forcemain installed and capped at the northeast corner of the Tollgate Road and Brookdale Avenue intersection as part of a previous City project.

The preliminary plan and profile for this alternative is again shown on FIG.2 found in Appendix “C”. As can be seen, this alternative allows for the proposed sanitary sewer to best match the existing topography along Brookdale Avenue, resulting in shallower gravity sanitary sewers compared to the other alternatives.

## 6.4 Evaluation Methodology

The various alternatives were evaluated against a set of evaluation criteria to compare options and identify the preferred alternative from an Economic, Technical, Natural Environment and Social Environment perspective. The evaluation criteria are discussed in greater detail in Table 6-1 below.

Table 6-1: Evaluation Criteria

Category & Evaluation Criteria	Description
<b>Economic</b>	
Relative Capital Cost	<ul style="list-style-type: none"> <li>Initial construction cost for pumping station and for associated forcemains &amp; gravity sewers</li> </ul>
Operation & Maintenance Cost	<ul style="list-style-type: none"> <li>Ongoing operation and maintenance cost</li> <li>Electricity costs</li> </ul>
Opportunity for Development	<ul style="list-style-type: none"> <li>Ability to service various types of development</li> <li>Impacts to prime commercial real estate</li> </ul>
<b>Technical</b>	
Meets Objectives	<ul style="list-style-type: none"> <li>Ability to service the Study Area</li> </ul>
Ease of Construction	<ul style="list-style-type: none"> <li>Depth requirement for pumping station wet well</li> <li>Depth requirement for gravity sewers</li> <li>Impacts to existing infrastructure and roadways</li> </ul>
<b>Natural Environment</b>	
Terrestrial Vegetation	<ul style="list-style-type: none"> <li>Potential impacts to existing treed areas &amp; vegetation</li> <li>Potential impacts to existing wildlife</li> </ul>
Soil Quality	<ul style="list-style-type: none"> <li>Potential impacts to soil</li> <li>Suitability of existing soils</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>Potential impacts to water &amp; groundwater</li> <li>Potential impacts to existing aquatic wildlife</li> </ul>
<b>Social Environment</b>	
Aesthetics	<ul style="list-style-type: none"> <li>Visual appearance of proposed works</li> <li>Need for visual improvements</li> </ul>
Property Acquisition	<ul style="list-style-type: none"> <li>Complexity and cost of property acquisition</li> <li>Impacts to existing properties</li> <li>Impacts to proposed land use and development</li> </ul>

## 6.5 Evaluation of Sewage Pumping Station Locations

All alternatives were evaluated against the criteria listed in the above table. Pros and cons for each alternative may be found in Table 6-2 found on the following pages, while the scoring of the alternatives may be found in Table 6-3 below.

Table 6-2: Evaluation of Alternatives

Category & Evaluation Criteria	Alternative #1 Do Nothing (Private Sewage Treatment Systems)	Alternative #2 One Pumping Station (at Tollgate Road)	Alternative #3 One Pumping Station (North of CN Rail)	Alternative #4 Two Pumping Stations (North of Hwy 401 & North of CN Rail)	Alternative #5 Two Pumping Stations (North of SBRR & North of CN Rail)
<b>Economic</b>					
Relative Capital Cost	<ul style="list-style-type: none"> <li>No cost to City, however high cost to property owners</li> </ul>	<ul style="list-style-type: none"> <li>Approximately \$550,000 more expensive to construct compared to Alternative #3</li> </ul>	<ul style="list-style-type: none"> <li>Most cost-efficient alternative</li> </ul>	<ul style="list-style-type: none"> <li>Approximately \$850,000 more expensive to construct compared to Alternative #3</li> </ul>	<ul style="list-style-type: none"> <li>Approximately \$400,000 more expensive to construct compared to Alternative #3</li> </ul>
Operation & Maintenance (O&M) Cost	<ul style="list-style-type: none"> <li>No cost to City, however each owner is responsible for ongoing O&amp;M costs</li> <li>Full replacement will eventually be required</li> </ul>	<ul style="list-style-type: none"> <li>Lower O&amp;M costs compared to the two pumping station alternatives</li> </ul>	<ul style="list-style-type: none"> <li>Lower O&amp;M costs compared to the two pumping station alternatives</li> </ul>	<ul style="list-style-type: none"> <li>Higher O&amp;M costs compared to the one pumping station alternatives</li> </ul>	<ul style="list-style-type: none"> <li>Higher O&amp;M costs compared to the one pumping station alternatives</li> </ul>
Opportunity for Development	<ul style="list-style-type: none"> <li>Restricts development</li> <li>Requires large areas of vacant land, especially for high flow users (hotels, restaurants, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Can accommodate various types of development</li> </ul>	<ul style="list-style-type: none"> <li>Can accommodate various types of development</li> <li>Pumping station parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial use</li> </ul>	<ul style="list-style-type: none"> <li>Can accommodate various types of development</li> <li>Pumping station parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial use</li> </ul>	<ul style="list-style-type: none"> <li>Can accommodate various types of development</li> <li>Pumping station at SBRR requires parcel of prime commercial real estate, and limited amount of frontage is available</li> <li>Pumping station parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial use</li> </ul>
<b>Technical</b>					
Meets Objectives	<ul style="list-style-type: none"> <li>Does not provide servicing to Study Area as a whole</li> <li>Not in accordance with Provincial Policy Statement</li> </ul>	<ul style="list-style-type: none"> <li>Provides sanitary servicing to all properties in the Study Area</li> </ul>	<ul style="list-style-type: none"> <li>Provides sanitary servicing to all properties in the Study Area</li> </ul>	<ul style="list-style-type: none"> <li>Provides sanitary servicing to all properties in the Study Area</li> </ul>	<ul style="list-style-type: none"> <li>Provides sanitary servicing to all properties in the Study Area</li> </ul>

Category & Evaluation Criteria	Alternative #1 Do Nothing (Private Sewage Treatment Systems)	Alternative #2 One Pumping Station (at Tollgate Road)	Alternative #3 One Pumping Station (North of CN Rail)	Alternative #4 Two Pumping Stations (North of Hwy 401 & North of CN Rail)	Alternative #5 Two Pumping Stations (North of SBRR & North of CN Rail)
Ease of Construction	<ul style="list-style-type: none"> <li>No impacts to existing roadways</li> <li>No impacts to existing infrastructure</li> <li>High sewage generators (hotels, restaurants, etc.) require extensive and complex septic systems</li> </ul>	<ul style="list-style-type: none"> <li>Longer sections of deep sanitary sewers compared to other alternatives</li> <li>Deep pumping station</li> <li>Road crossing of Brookdale Ave is required for gravity sewer and forcemain near Tollgate Rd</li> <li>Allows for shortest forcemain to the trunk sewer at Brookdale &amp; Ninth St</li> <li>Single CN Rail crossing is required</li> </ul>	<ul style="list-style-type: none"> <li>Deep sanitary sewers are required between the pumping station and SBRR</li> <li>Pumping station can be installed on east side of Brookdale, matching the location of gravity sewers</li> <li>Long access driveway from Brookdale Ave.</li> <li>Two CN Rail crossings are required (gravity sewer and forcemain)</li> </ul>	<ul style="list-style-type: none"> <li>Deep sanitary sewers are required between the pumping station and SBRR</li> <li>Forcemain can be installed across Hwy 401 instead of gravity sewer</li> <li>Both pumping stations can be installed on the east side of Brookdale, matching the location of gravity sewers</li> <li>Two CN Rail crossings are required (gravity sewer and forcemain)</li> </ul>	<ul style="list-style-type: none"> <li>Gravity sewers can be installed at a typical depth throughout</li> <li>Road crossing of Brookdale Ave. is required for gravity sewer and forcemain north of SBRR</li> <li>Pumping station north of CN Rail can be installed on east side of Brookdale, matching the location of gravity sewers</li> <li>Two CN Rail crossings are required (gravity sewer and forcemain)</li> </ul>
<b>Natural Environment</b>					
Terrestrial Vegetation	<ul style="list-style-type: none"> <li>Large areas need to be cleared to accommodate infiltration systems</li> </ul>	<ul style="list-style-type: none"> <li>No substantial tree clearing required</li> </ul>	<ul style="list-style-type: none"> <li>Some tree clearing is required</li> </ul>	<ul style="list-style-type: none"> <li>Minimal amount of tree clearing is required north of Hwy 401</li> <li>Some tree clearing is required north of CN Rail</li> </ul>	<ul style="list-style-type: none"> <li>No substantial tree clearing required north of SBRR</li> <li>Some tree clearing is required north of CN Rail</li> </ul>
Soil Quality	<ul style="list-style-type: none"> <li>Improperly operated / maintained systems can have negative impact on soils quality</li> <li>Some soils (e.g. clay) may not be well-suited for infiltration systems</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> <li>Limited available information on soil type &amp; characteristics at proposed sewer depths</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> <li>Limited available information on soil type &amp; characteristics at proposed sewer depths</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> <li>Limited available information on soil type &amp; characteristics at proposed sewer depths</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> <li>Information on soil type &amp; characteristics at proposed sewer depths is readily available</li> </ul>

Category & Evaluation Criteria	Alternative #1 Do Nothing (Private Sewage Treatment Systems)	Alternative #2 One Pumping Station (at Tollgate Road)	Alternative #3 One Pumping Station (North of CN Rail)	Alternative #4 Two Pumping Stations (North of Hwy 401 & North of CN Rail)	Alternative #5 Two Pumping Stations (North of SBRR & North of CN Rail)
Water Quality	<ul style="list-style-type: none"> <li>Improperly operated / maintained systems can have negative impact on water &amp; groundwater quality</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> </ul>	<ul style="list-style-type: none"> <li>Sewage is captured and conveyed to WWTP for treatment – no negative impacts are expected</li> </ul>
<b>Social Environment</b>					
Aesthetics	<ul style="list-style-type: none"> <li>Typically underground</li> <li>Minimal aesthetic impact but land cannot be improved</li> </ul>	<ul style="list-style-type: none"> <li>Highly visible location</li> <li>Visual improvements would be required to ensure system blends into neighbouring development</li> </ul>	<ul style="list-style-type: none"> <li>Pumping station is out of sight from roadway</li> <li>Visual improvements are not deemed required</li> </ul>	<ul style="list-style-type: none"> <li>Highly visible location north of Hwy 401</li> <li>Visual improvements would be required to ensure system blends into neighbouring development</li> <li>Pumping station north of CN Rail is out of sight from roadway; visual improvements are not required</li> </ul>	<ul style="list-style-type: none"> <li>Highly visible location north of Hwy 401</li> <li>Visual improvements would be required to ensure system blends into neighbouring development</li> <li>Pumping station north of CN Rail is out of sight from roadway; visual improvements are not required</li> </ul>
Property Acquisition	<ul style="list-style-type: none"> <li>No property acquisition required</li> </ul>	<ul style="list-style-type: none"> <li>One parcel needs to be acquired</li> <li>Parcel at Tollgate Rd requires prime commercial real estate</li> <li>Vacant land is not available on the east side of Brookdale at Tollgate Rd</li> </ul>	<ul style="list-style-type: none"> <li>One parcel needs to be acquired</li> <li>Parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial uses</li> </ul>	<ul style="list-style-type: none"> <li>One parcel needs to be acquired.</li> <li>Parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial uses</li> </ul>	<ul style="list-style-type: none"> <li>Two parcels need to be acquired</li> <li>Parcel north of SBRR requires prime commercial real estate, and limited amount of frontage is available</li> <li>Parcel north of SBRR must be located on west side of Brookdale Ave. due to flood plain to the east</li> <li>Parcel north of CN Rail is out of sight from roadway, hence less favourable for commercial uses</li> </ul>

Table 6-3: Scoring of Alternatives

Category & Evaluation Criteria	Maximum Score	Alternative				
		#1	#2	#3	#4	#5
<b>Economic</b>						
Relative Capital Cost*	35	n/a	12	35	0	19
Operation & Maintenance Cost	15	n/a	15	15	0	0
Opportunity for Development	10	n/a	7.5	10	7.5	5
<b>Technical</b>						
Meets Objectives	Yes/No	<b>No</b>	Yes	Yes	Yes	Yes
Ease of Construction	10	n/a	0	0	5	10
<b>Natural Environment</b>						
Terrestrial Vegetation	5	n/a	5	2.5	2.5	2.5
Soil Quality	5	n/a	0	0	0	5
Water Quality	5	n/a	5	5	5	5
<b>Social Environment</b>						
Aesthetics	5	n/a	0	5	0	0
Property Acquisition	10	n/a	10	10	0	0
<b>TOTAL</b>	<b>100</b>	<b>n/a</b>	<b>54.5</b>	<b>82.5</b>	<b>20</b>	<b>46.5</b>

\*The alternative with the lowest relative capital cost was given the maximum score, while the alternative with the highest relative capital cost was given a score of zero. The score of other alternatives for this criterion was linearly interpolated. Refer to Appendix “B” for a detailed comparative cost estimate.

## 6.6 Recommendation

Based on the above scoring and evaluation of the alternatives, alternative #1 (do nothing) is not recommended as it does not meet the project objectives.

From the above scoring, alternative #3 (single sewage pumping station north of CN Rail) is preferred since it has the lowest relative capital cost of all alternatives considered, and lower operation & maintenance cost compared to the two sewage pumping station alternatives. Alternative #3 also requires the acquisition of only one parcel which is out of sight from the roadway, hence less favourable for commercial uses.

Disadvantages of alternative #3 include the difficulty of constructing deep sewers along Brookdale Avenue between the proposed pumping station and the South Branch of the Raisin River, and limited available information on the soil type and characteristics at the proposed sewer depths. A geotechnical investigation will have to be undertaken to obtain this information.

## 7. IMPLEMENTATION

### 7.1 Scheduling of Project

Subject to the completion of the Class EA, design and approval activities are generally planned to occur from April 2019 to July 2019, with tendering of the project in August 2019 and construction commencing in the fall of 2019. A period of approximately 9 months is assumed for construction of the sewage pumping station and related infrastructure.

### 7.2 Environmental Impacts and Mitigation Strategies

During the Public Information Centres and through consultation with the property owners and the review agencies, potential adverse environmental effects were identified during the development and evaluation of the preferred solution.

Table 7-1

Potential Adverse Environmental Effects	Mitigating Measures
Temporary disruption of open space activities during construction	<ul style="list-style-type: none"><li>• Employ noise and dust control measures during construction</li></ul>
Noise emissions from the pumping station and generator	<ul style="list-style-type: none"><li>• Employ good engineering design utilizing acoustical measures to ensure noise emissions comply with MECP Guidelines (NPC-300)</li></ul>
Air emissions from the pumping station and emergency generator	<ul style="list-style-type: none"><li>• Employ good engineering design measures to ensure that the air emissions from the facility meet the requirements of the EASR Regulations.</li></ul>
Aesthetics	<ul style="list-style-type: none"><li>• The selected site is out of direct site from the roadway and requires no specific landscaping or architecture to improve on the site.</li></ul>

### 7.3 Confirmation of Environmental Assessment Schedule

The preferred solution is the construction of a single pumping station (north of the CN Rail). Based on the Table of Schedule Classifications, contained in the Companion Guide for the Municipal Class Environmental Assessment Manual (2018), the project is described as a “new pumping station...where new equipment is located in a new building or structure” and is thereby classified as a Schedule “B” Environmental Assessment.

### 7.4 Class EA Filing

On May 28, 2019, the City of Cornwall issued a Notice of Completion for the project, and have placed this document on public record for comment for 30-calendar days.

If concerns arise regarding this project, which cannot be resolved in discussion with the municipality, a person or party may request that the Minister of the Environment, Conservation and Parks to order a change in the project status and require a higher level of assessment under an individual Environmental Assessment process (referred to as a Part II Order). Reasons must be provided for this request. Request must be received by the Minister within 30 calendar days of this Notice.

Minister of the Environment and Climate Change  
77 Wellesley Street West  
11th Floor, Ferguson Block  
Toronto, ON M7A 2T5

-and-

Ministry of the Environment and Climate Change  
Environmental Approvals Branch  
135 St. Clair Avenue West, 1st Floor  
Toronto, ON M4V 1P5

-and-

Mike Fawthrop, P.Eng.  
Division Manager, Infrastructure  
City of Cornwall / Ville de Cornwall  
1225 Rue Ontario Street  
Cornwall, Ontario K6H 5T9  
telephone: 613-930-2787 (x2209)  
mfawthrop@cornwall.ca

If there is no request received by June 27, 2019, the City of Cornwall will proceed to design and construction for the Brookdale Avenue North Sewage Pumping Station, as presented in the planning documentation.

# APPENDIX A

## Public and Agency Consultation

First_name	Last_Name	Job_Title	Company	Address	City	Postal_Code	Phone	Email
<b>Municipality</b>								
		Mayor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
		Councillor	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	
Maureen	Adams	CAO	City of Cornwall	100 Water Street East	Cornwall	K6H 6G4	613-930-2787	<a href="mailto:madams@cornwall.ca">madams@cornwall.ca</a>
John	St. Marseille	General Manager, Infrastructure & Municipal	City of Cornwall	1225 Ontario Street	Cornwall	K6H 4E1	613-930-2787	<a href="mailto:jstmarseille@cornwall.ca">jstmarseille@cornwall.ca</a>
Michael	Fawthrop	Division Manager, Infrascture	City of Cornwall	1225 Ontario Street	Cornwall	K6H 4E1	613-930-2787	<a href="mailto:mfawthrop@cornwall.ca">mfawthrop@cornwall.ca</a>
<b>Political Representation</b>								
Guy	Lauzon	MP	Member of Parliament	621 Pitt Street	Cornwall	K6J 3R8	613-937-3331	<a href="mailto:Guy.Lauzon@parl.gc.ca">Guy.Lauzon@parl.gc.ca</a>
Jim	McDonell	MPP	Member of Provincial Parliament	120 Second Street West	Cornwall	K6J 1G5	613-933-6513	<a href="mailto:jim.mcdonellco@pc.ola.org">jim.mcdonellco@pc.ola.org</a>
<b>Provincial Government</b>								
Vicki	Mithell	Environmental Assessment Coordinator	MECP	1259 Gardiners Road, Unit 1	Kington	K7P 3J6	613-540-6852	<a href="mailto:vicki.mitchell@ontario.ca">vicki.mitchell@ontario.ca</a>
James	Mahoney	Manager (Acting)	MECP	1259 Gardiners Road, Unit 1	Kington	K7P 3J6	613-548-6902	<a href="mailto:james.mahoney@ontario.ca">james.mahoney@ontario.ca</a>
Melissa	Forget	Water Inspector	MECP	113 Amelia Street	Cornwall	K6H 3P1	613-933-0709	<a href="mailto:melissa.forget@ontario.ca">melissa.forget@ontario.ca</a>
Stephen	Kapusta	Cooridor Manager Planner	MTO					<a href="mailto:stephen.kapusta@ontario.ca">stephen.kapusta@ontario.ca</a>
Mary	Dillon	District Planner (Acting)	MNR	10 Campus Drive, P.O.Box 2002	Kemptville	K0G 1J0	613-258-8470	<a href="mailto:mary.dillion@ontario.ca">mary.dillion@ontario.ca</a>
Jonh	O'Neil	Rural Planner	OMAFRA	59 Ministry Road, PO Box 2004	Kemptville	K0G 1J0	613-258-8341	<a href="mailto:john.o'neil@ontario.ca">john.o'neil@ontario.ca</a>
Michael	Elms	Manager	Ministry of Municipal Affairs & Housing	Rockwoord House, 8 Estate Lane	Kingston	K7M 9A8	613-545-2132	<a href="mailto:michael.elms@ontario.ca">michael.elms@ontario.ca</a>
Katherine	Kirzati	Heritage Planner	Ministry of Tourism	401 Bay Street	Toronto	M7A 0A7	416-314-7643	<a href="mailto:katherine.kirzati@ontario.ca">katherine.kirzati@ontario.ca</a>
Heather	Levecque	Director (Acting)	Indigenous Relations	9th Floor, 160 Bloor St. East	Toronto	M7A 2E6	416-325-7032	<a href="mailto:heather.levecque@ontario.ca">heather.levecque@ontario.ca</a>
<b>Federal Government</b>								
Anjala	Puvananathan	Director	Canadian Environmental Assessment Agency	55 St. Clair Avenue East, Rm 907	Toronto	M4T 1M2	416-953-1575	<a href="mailto:anjala.puvananathan@ceaa-acee.gc.ca">anjala.puvananathan@ceaa-acee.gc.ca</a>
Anne	Scotton	Regional Director General	Indigenous Affairs and Northern Development	25 St. Clair Avenue East, 8th Fl	Toronto	M4T 1M2	416-973-1255	<a href="mailto:anne.scotton@aadnc-aandc.gc.ca">anne.scotton@aadnc-aandc.gc.ca</a>
<b>Agencies</b>								
Dr. Paul	Roumeliotis	Medical Officer of Health	Eastern Ontario Health Unit	1000 Pitt Street	Cornwall	K6J 3X1	613-933-1375	<a href="mailto:proumeliotis@eohu.ca">proumeliotis@eohu.ca</a>
Lisa	Deslandes	Regulation Officer	RRCA	18045 County Road #2, Box 429	Cornwall	K6H 5T2	613-938-3611	<a href="mailto:info@rrca.on.ca">info@rrca.on.ca</a>
Benjamin	de Haan	Director of Transportation and Planning Service	United Counties of SDG	26 Pitt Street	Cornwall	K6J 3P2	613-932-1515	<a href="mailto:bdehaan@sdgcounties.ca">bdehaan@sdgcounties.ca</a>
Ernie	Longo	Real Estate Manager	CNR					<a href="mailto:ernie.longo@cn.ca">ernie.longo@cn.ca</a>
			CNR - Consultant					
Zaid	Haymoor		CNR - Contractor					<a href="mailto:zaid.haymoor@landformcivil.ca">zaid.haymoor@landformcivil.ca</a>
<b>First Nation Groups</b>								
			Algonquin Anishinabeg Nation	81 Kichi Mikan	Kitigan Zibi,	QJ9E 3C3	819-449-1225	<a href="mailto:info@anishinabenation.ca">info@anishinabenation.ca</a>
Aly	Alibhai	Director	Metis Nation of Ontario Region				416-977-9881x	<a href="mailto:alya@metisnation.org">alya@metisnation.org</a>
Peggy	Pyke	Director	Mohawk Council of Akwesasne	PO Box 90	Akwesasne,	H0M 1A0	613-575-2250	<a href="mailto:peggy.pyke@akwesasne.ca">peggy.pyke@akwesasne.ca</a>
<b>Property Owners</b>								

REFER TO SPREADSHEET PROVIDED BY CITY

## BROOKDALE AVE. PROPERTY OWNERS

REC.	ROLLNO	LOCATION	NAME1	NAME2	ADDRESS1	ADDRESS2	ADDRESS3	CITY_PROV	POSTAL	TELEPHONE
127	6000600300	TOLLGATE RD W	GRAVELEY HUGH ESTATE	C/O HUGH GRAVELEY JR	735 TOLLGATE ROAD WEST			CORNWALL ON	K6H 5R6	6139328290
128	6000600350	501 TOLLGATE RD W	BROOKDALE SQUARE INC		151 SPINNAKER WAY	UNIT 5		CONCORD ON	L4K 4C3	9057386456
129	6000602700	BROOKDALE AVE	7137796 CANADA INC		C/O BENSON GROUP INC	700 EDUCATION RD		CORNWALL ON	K6H 6B8	
130	6000602900	3105 BROOKDALE AVE	BENSON GROUP INC		700 EDUCATION RD			CORNWALL ON	K6H 6B8	
				Christian Mercier	De Saulniers Construction Lts.	1120 Marleau Ave		Cornwall, ON	K6H 2W8	6133630268
131	6000602901	2695 BROOKDALE AVE	1343700 ONTARIO LTD		PO BOX 938			CORNWALL ON	K6H 5V1	6139333000
132	6000602905	CON 3 PT LOT 12 RP52R3892 PA	2629887 ONTARIO LTD		2695 BROOKDALE AVE			CORNWALL ON	K6J 5X9	
133	6000602925	2605 BROOKDALE AVE	1498057 ONTARIO INC		C/O AYMAN GABRIEL	1107 BROOKDALE AVE		CORNWALL ON	K6J 4P6	
134	6000602930	2525 BROOKDALE AVE	CORNWALL CAMPING CENTRE INC		2525 BROOKDALE AVE			CORNWALL ON	K6J 5X9	
135	6000602935	BROOKDALE AVE	PURANIK PRAKASH	PURANIK VIDYA	C/O REMAX	649 SECOND ST E		CORNWALL ON	K6H 1Z7	6139388100
136	6000602998	CON 3 PT LOTS 11,12 RP52R465	CORNWALL CITY		CITY CLERK	360 PITT ST		CORNWALL ON	K6J 3P9	
137	6000603200	2690 BROOKDALE AVE	SEAWAY TRAVEL CENTRE LTD		345 HORNER AVE	SUITE 100		TORONTO ON	M8W 1Z6	
138	6000603250	CON 3 N PT LOT 13 RP52R3275	EDWARDSON DEVELOPMENT	CORPORATION	C/O CHRISTOPHER GUEST	12 WINDERMERE DR		INGLESIDE ON	K0C 1M0	6135345247
139	6000603260	2694 BROOKDALE AVE	GRAND JANSONS (CANADA INC)		2694 BROOKDALE AVE			CORNWALL ON	K6J 5Y2	6139328888
140	6000603300	3250 BROOKDALE AVE	IRVING OIL PROPERTIES LTD		ATTN: CORPORATE REAL ESTATE	PO BOX 1421		SAINT JOHN NB	E2L 4K1	5066476699
141	6000603302	3301 BROOKDALE AVE	1721992 ONTARIO INC		3301 BROOKDALE AVE			CORNWALL ON	K6J 5Y2	
142	6000914400	903 BROOKDALE AVE	2005455 ONTARIO INC		805 BROOKDALE AVE			CORNWALL ON	K6J 4P3	
143	6000914900	CORNWALL CON 1 PT LOTS D TO	CANADIAN NATIONAL RAILWAY	COMPANY	PROPERTY TAX GROUP	8TH FLOOR	PO BOX 8100,DOWNTOWN STN	MONTREAL PQ	H3C 3N4	9057605244
144	6000914950	CON 1 PT LOTS 14 TO 20 CON 2	CEDARS RAPIDS LIMITEE		944 PRINCIPALE			RIVIERE BEAUDETTE PQ	J0P 1R0	

# Notice of Study Commencement

## Brookdale Avenue North Sanitary Servicing Class Environmental Assessment

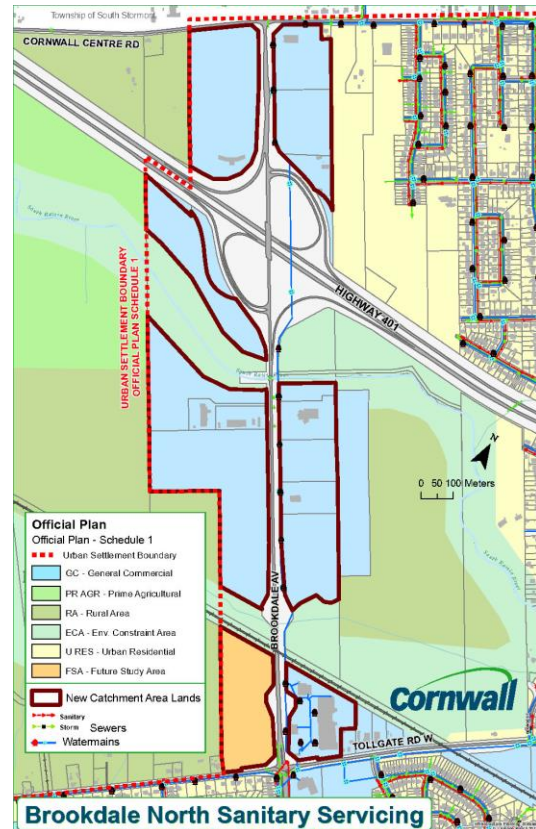
The City of Cornwall provides wastewater collection and treatment services to properties within its municipal boundaries. It has been identified that the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, would benefit from sanitary services. The City has initiated an environmental assessment to determine the most effective manner of providing sanitary servicing to this area. This project is being planned under **Schedule B** of the **Municipal Class Environmental Assessment**.

For further information on the project, or on the planning process being followed please contact our consultant, Josh Eamon, President, EVB Engineering, 800 Second Street West, Cornwall, Ontario, K6J 1H6 Telephone: (613) 935-3775, x 200 or at [josh.eamon@evbengineering.com](mailto:josh.eamon@evbengineering.com).

Public input and comment are invited, for incorporation into the planning and design of this project and will be received until Friday April 10, 2019. Subject to the identification of a preferred solution, comments received and receipt of the necessary approvals, the City of Cornwall intends to proceed with the planning, design and construction of this project, to be completed by early 2020.

Issued: March 27, 2019

Mike Fawthrop, P.Eng.  
Division Manager, Infrastructure  
City of Cornwall / Ville de Cornwall  
1225 Rue Ontario Street  
Cornwall, Ontario K6H 5T9  
telephone: 613-930-2787 (x2209)  
[mfawthrop@cornwall.ca](mailto:mfawthrop@cornwall.ca)



# Notice of Completion

## Brookdale Avenue North Sanitary Servicing Class Environmental Assessment

The City of Cornwall provides wastewater collection and treatment services to properties within its municipal boundaries. It has been identified that the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, would benefit from sanitary services. The City has determined that a single sewage pumping station solution is the preferred solution to provide servicing to this area. The works are planned to be completed by the fall of 2020 at an estimated cost of \$7,000,000.

This project is being planned under **Schedule B** of the **Municipal Class Environmental Assessment**. Subject to comments received as a result of this Notice, and the receipt of necessary approvals, the City intends to proceed with the design and construction of this project.

The project plans and other information are available at <https://www.cornwall.ca/en/livehere/engineering-notices-and-reports.aspx> and at the following location:

**Location:** Municipal Works Building,  
1225 Ontario Street, Cornwall.

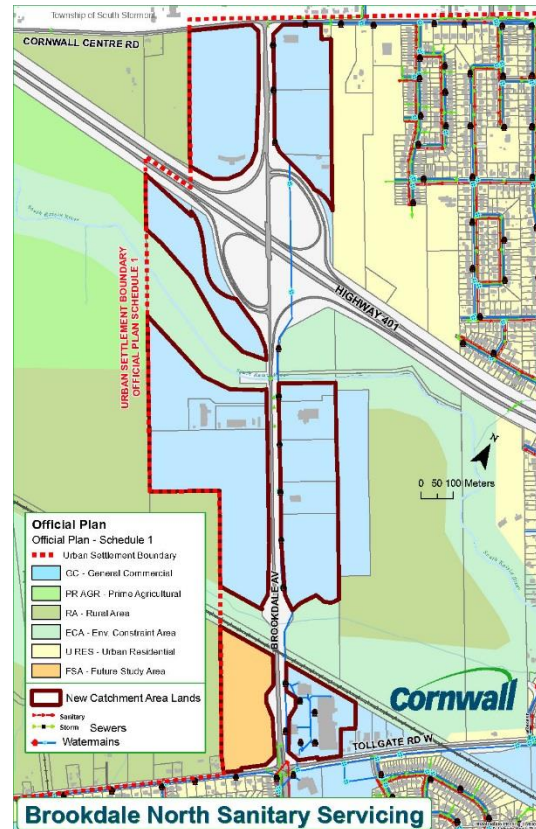
Interested persons should provide written comment to the municipality on the proposal within 30 calendar days from the date of this Notice. Comments should be directed to the Division Manager of Infrastructure.

If concerns arise regarding this project, which cannot be resolved in discussion with the municipality, a person or party may request that the Minister of the Environment, Conservation and Parks to order a change in the project status and require a higher level of assessment under an individual Environmental Assessment process (referred to as a Part II Order). The Part II Order Request Form is available online on the Forms Repository Website (<http://www.forms.ssb.gov.on.ca>) by searching "Part II Order" or "012-2206E" (the form number). Reasons must be provided for this request. Request must be received by the Minister within 30 calendar days of this Notice.

Minister Rod Phillips  
Minister of the Environment, Conservation and Parks  
77 Wellesley Street West  
11th Floor, Ferguson Block  
Toronto, ON M7A 2T5

-and-

Director, Environmental Assessment and Permissions Branch  
Ministry of the Environment, Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, ON M4V 1P5



-and-

Mike Fawthrop, P.Eng.  
Division Manager, Infrastructure  
City of Cornwall / Ville de Cornwall  
1225 Rue Ontario Street  
Cornwall, Ontario K6H 5T9  
telephone: 613-930-2787 (x2209)  
[mfawthrop@cornwall.ca](mailto:mfawthrop@cornwall.ca)

If there is no request received by June 27, 2019, the City of Cornwall will proceed to design and construction for the Brookdale Ave. North Sewage Pumping Station, as presented in the planning documentation.

Please note that ALL personal information included in a Part II Order submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the Environmental Assessment Act or is collected and maintained for the purpose of creating a record that is available to the general public as described in s.37 of the Freedom of Information and Protection of Privacy Act. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the ministry's Freedom of Information and Privacy Coordinator at 416-327-1434.

Issued: May 28, 2019

# Notice of Public Information Centre

## Brookdale Avenue North Sanitary Servicing Class Environmental Assessment

The City of Cornwall provides wastewater collection and treatment services to properties within its municipal boundaries. It has been identified that the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, would benefit from sanitary services. The City has determined that a single sewage pumping station solution is the preferred solution to provide servicing to this area. The works are planned to be completed at an estimated cost of \$7,000,000.

This project is being planned under **Schedule B** of the **Municipal Class Environmental Assessment**. Subject to comments received as a result of this Notice, and the receipt of necessary approvals, the City intends to proceed with the design and construction of this project.

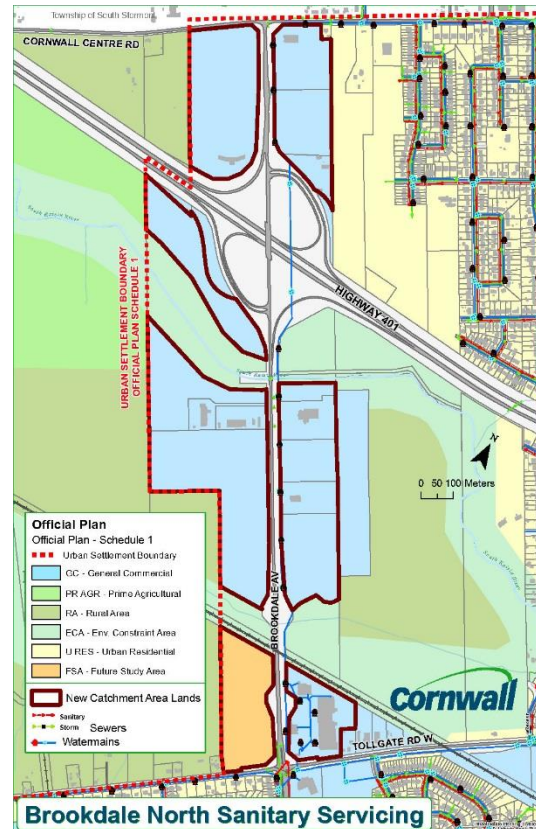
The City is making preliminary study material and plans available for public review. On **Tuesday April 16<sup>th</sup>, 2019**, between the hours of **6:00pm and 8:00pm**, the public is invited to attend a *Public Information Centre* at the following location:

**Location:** MacEwen Room  
Benson Centre  
800 Seventh Street West, Cornwall.

For more information on the project, or on the planning process being followed, contact the City's consultant: EVB Engineering, 800 Second Street West, Cornwall, ON K6H1H6, (613) 935-3775, x200; attention Mr. Josh Eamon, President at [josh.eamon@evbengineering.com](mailto:josh.eamon@evbengineering.com).

Issued: April 5, 2019

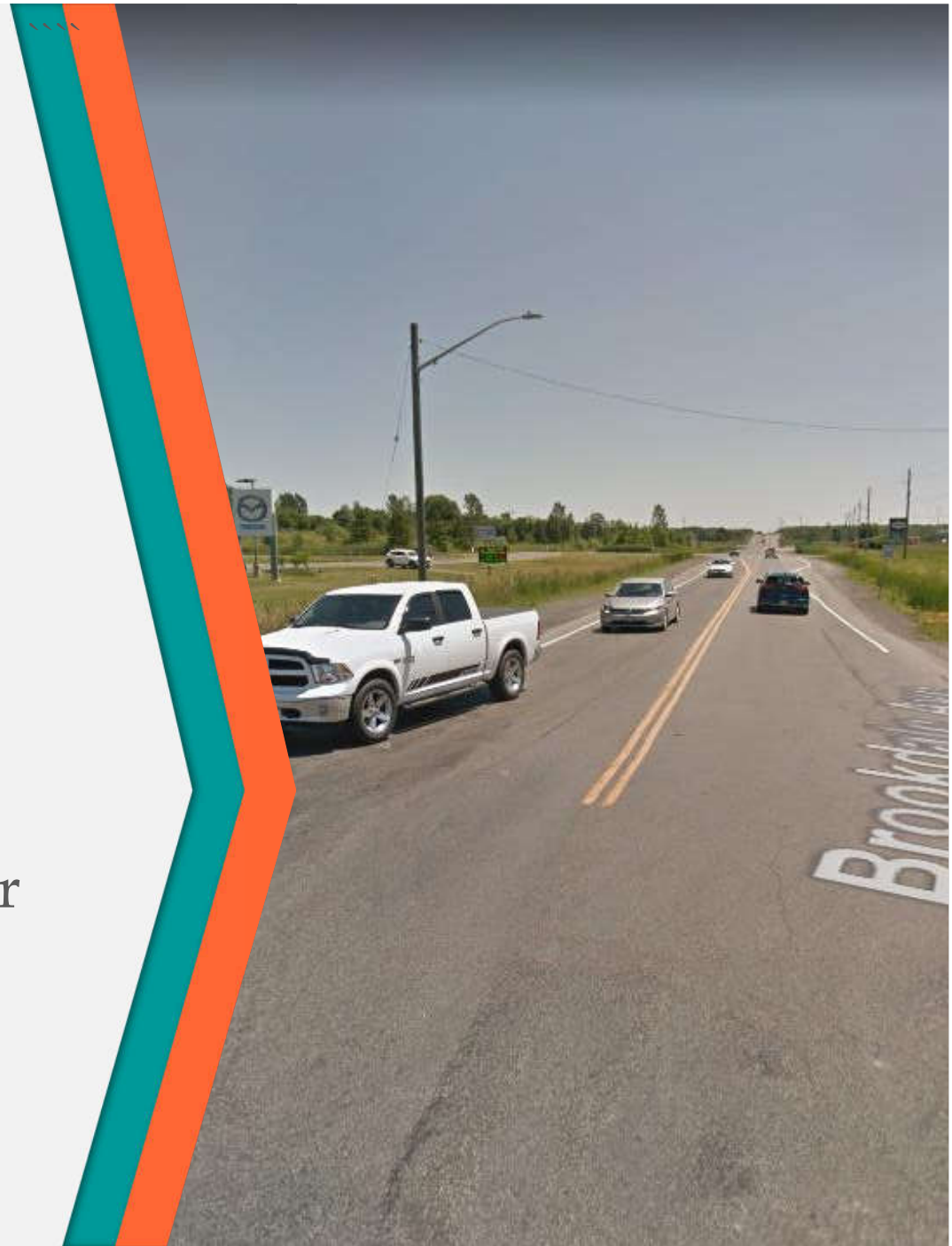
Mike Fawthrop, P.Eng.  
Division Manager, Infrastructure  
City of Cornwall / Ville de Cornwall  
1225 Rue Ontario Street  
Cornwall, Ontario K6H 5T9  
Telephone: 613-930-2787 (x2209)  
[mfawthrop@cornwall.ca](mailto:mfawthrop@cornwall.ca)





Brookdale Ave.  
Sanitary Servicing  
Environmental Assessment

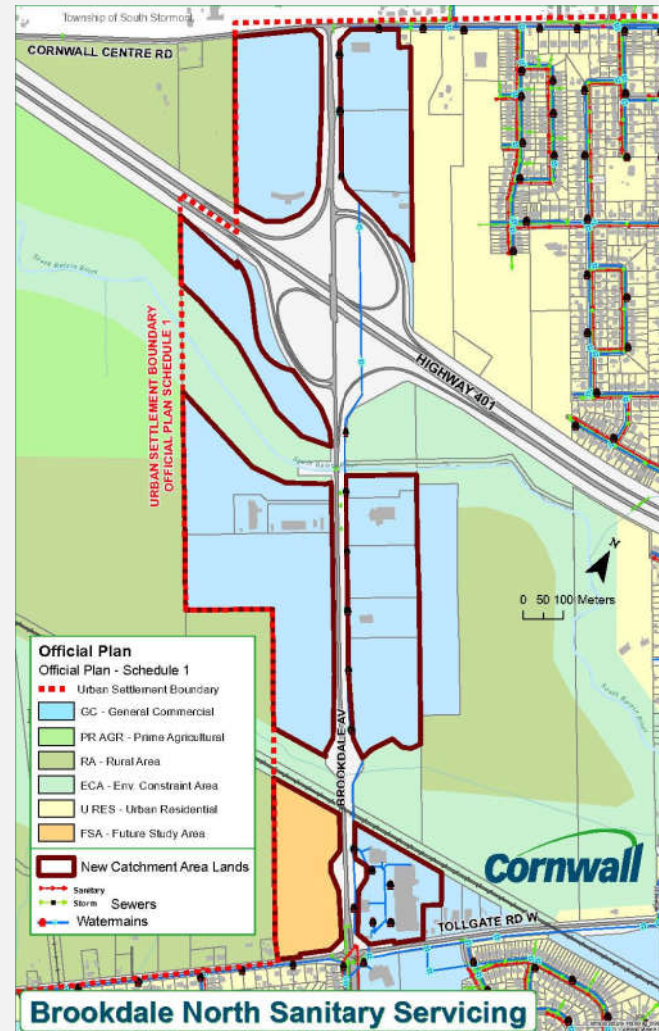
Public Information Center  
April 16, 2019



# Brookdale Ave. Sanitary Servicing

The City of Cornwall has identified that the sanitary servicing of the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road, will benefit the existing commercial developments and help with continued growth in the area.

The area to benefit from sanitary servicing is shown in the adjacent figure.



# Description of Area to be Serviced

## General characteristics of the area to be serviced:

- Total developable area of 166.2 acres (67.3 hectares)
- 15 different property owners
- Official Plan designation: “General Commercial” and “Future Study Area”
- Zoning: “Highway Commercial”, “Commercial Community” and “Rural Area”
- Area was serviced with watermain in 2010
- Pumping of sewage will be required due to the existing topography
- Sewage will be pumped into the trunk sewer at Brookdale Ave. and Ninth Street
- This Schedule “B” EA seeks to evaluate different servicing options and recommend the most efficient alternative



# Summary of Servicing Alternative

Various options were considered, and are summarized below:

- Alternative #1: Do nothing
- Alternative #2: One pumping station, at Tollgate Road
- Alternative #3: One pumping station, north of CN Rail
- Alternative #4: Two pumping stations: one north of #401, one north of CN Rail
- Alternative #5: Two pumping stations: one north of Raisin River, one north of CN Rail

Alternatives are discussed in greater detail on the following boards and evaluated based on the following criteria:

- Natural environment (air, soil and water quality)
- Social environment (aesthetics, property acquisition, inconvenience, etc.)
- Economic environment (project costs, opportunity for development, etc.)



# Alternative #1 – Do Nothing

The area is currently not serviced with municipal sanitary sewer and sewage treatment, and disposal remains the responsibility of the individual land owners.

Pros	Cons
Least expensive	Does not provide the area with sanitary servicing
No inconvenience due to construction	Does not support existing and proposed development/growth
	Private sewage systems need to be maintained and eventually will require replacement
	High flow users (e.g. hotels) require complex and/or very large private sewage systems
	Partial services not in accordance with Provincial Policy Statement

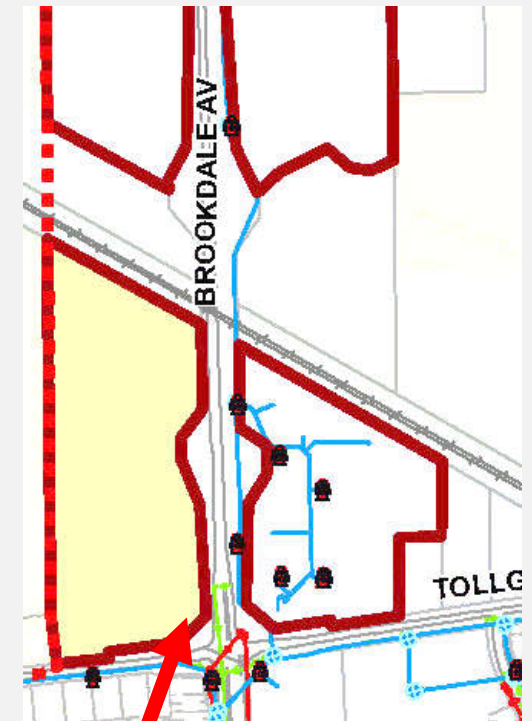
This alternative was not considered further as it does not address the project needs.



# Alternative #2 – Pumping Station at Tollgate Rd

A single pumping station is constructed at Tollgate Road.

Pros	Cons
Provides sanitary servicing to all properties along Brookdale Ave.	Requires additional road crossings to be installed west of Brookdale Ave.
Lower O&M costs compared to the two pumping station options	Vacant land is not available east of Brookdale at Tollgate Road
Allows for shortest forcemain to the trunk sewer located at Brookdale Ave & Ninth St	Pump station and gravity sewers near Tollgate Road are deep
Only one CN Rail crossing is required	Approximately \$550,000 more expensive to construct when compared to the most cost-efficient option
	Location is highly visible and aesthetics need to be addressed to ensure system blends into the development



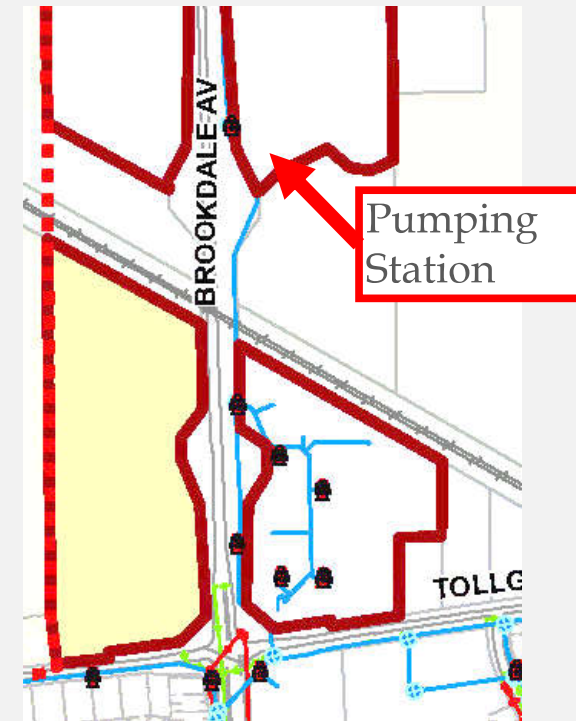
Pumping Station



# Alternative #3 – Pumping Station North of CN Rail

A single pumping station is constructed north of CN Rail.

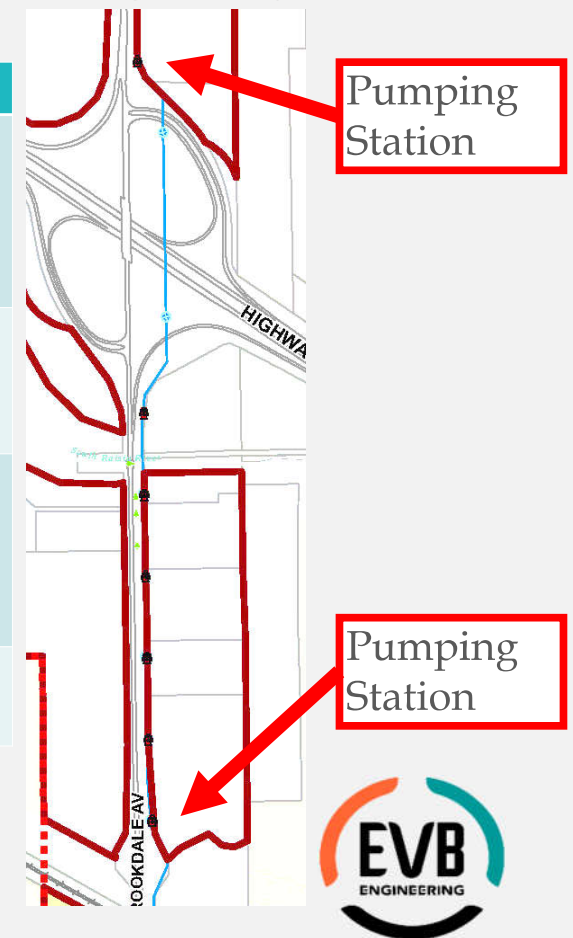
Pros	Cons
Provides sanitary servicing to all properties along Brookdale Ave.	Land acquisition required (one parcel), preferably on east side of Brookdale Ave. to avoid additional road crossings
Lower O&M costs compared to the two pumping station options	Deep gravity sewers between the pump station and Raisin River
Lowest capital cost of all options	Long access driveway to pumping station
Vacant land is available on either side of Brookdale Ave.	Two CN Rail crossings are required
Pumping station location is out of sight from roadway	



# Alternative #4 – Two Pumping Stations: North of Highway 401 and North of CN Rail

Two pumping stations are constructed: one north of Highway 401 and one north of CN Rail.

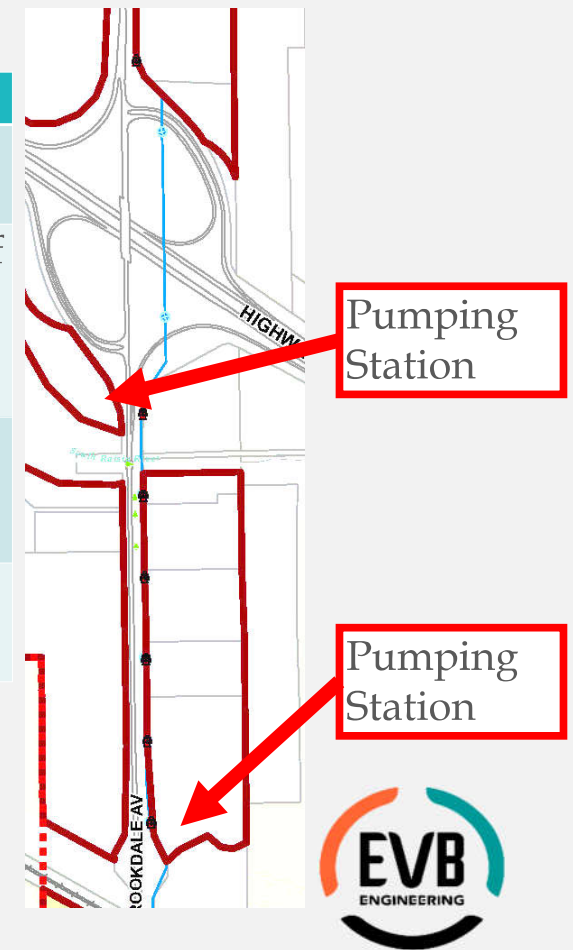
Pros	Cons
Provides sanitary servicing to all properties along Brookdale Ave.	Land acquisition required (two parcels), preferably on east side of Brookdale Ave. to avoid additional road crossings
Vacant land is available on either side of Brookdale Ave at CN and on the east side at Highway 401	Deep gravity sewers between the south pump station and Raisin River
Shortest length of gravity sewer; forcemains are instead installed across Highway 401	Approximately \$850,000 more expensive to construct compared to the most cost-efficient option
All existing casings at Highway 401 remain and are used	Higher O&M costs compared to one pump station options



# Alternative #5 – Two Pumping Stations: North of Raisin River and North of CN Rail

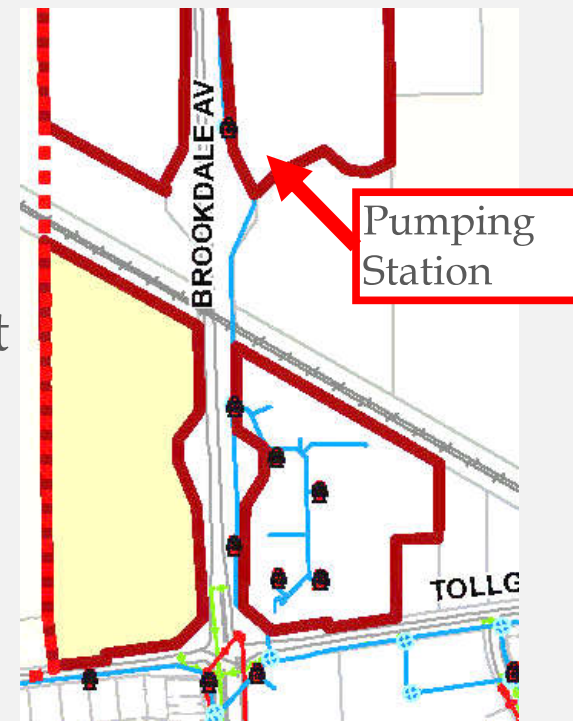
Two pumping stations are constructed: one north of Raisin River and one north of CN Rail.

Pros	Cons
Provides sanitary servicing to all properties along Brookdale Ave.	Land acquisition required (two parcels)
Vacant land is available on either side of Brookdale Ave at both locations	Flood plain is located on the east side of Brookdale Ave. at the north pumping station; north pumping station would have to be installed on the west side
Gravity sewers can be installed at typical depth (2-4 m) throughout	Approximately \$400,000 more expensive to construct compared to the most cost-efficient option
	Higher O&M costs compared to one pump station options



# Preferred Alternative

- Alternative #1 was rejected as it does not address the project needs
- Alternatives #2, #3, #4 and #5 provide servicing to all properties along Brookdale Avenue
- Alternatives #2, #3, #4 and #5 are similar in terms of natural environment impacts and social environment impacts, however Alternatives #4 and #5 require the acquisition of an additional land parcel
- Alternative #3 has the lowest construction cost of all alternatives considered, and lower O&M costs compared to alternatives #4 and #5
- Alternative #3 (single pumping station north of CN Rail) is therefore preferred



# Ranking of Alternatives

Rank	Alternative	Rationale
1	Alternative #3 - One pumping station north of CN Rail	<ul style="list-style-type: none"> <li>• Lowest capital cost of alternatives considered</li> <li>• O&amp;M costs equivalent to Alternative #2</li> <li>• Vacant is available on either side of Brookdale Ave.</li> <li>• Pumping station location is out of sight from roadway</li> </ul>
2	Alternative #2 - One pumping station at Tollgate Road	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> highest capital cost of alternatives considered</li> <li>• Lower O&amp;M costs compared to alternative #4 &amp; #5</li> <li>• Vacant land is not available on the east side of Brookdale Ave</li> <li>• High visibility</li> <li>• Greater length of deep sewers compared to alternative #3</li> </ul>
3	Alternative #5 - Two pumping stations, one north of Raisin River, one north of CN Rail	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> lowest capital cost of alternatives considered</li> <li>• Two pumping stations are required, resulting in higher O&amp;M costs</li> <li>• Gravity sewers can be installed at typical depth (2-4 m) throughout</li> <li>• Two parcels have to be acquired</li> </ul>
4	Alternative #4 - Two pumping stations, one north of Hwy 401, one north of CN Rail	<ul style="list-style-type: none"> <li>• Highest capital cost of alternatives considered</li> <li>• Two pumping stations are required, resulting in higher O&amp;M costs</li> <li>• Deep gravity sewers are required</li> <li>• Two parcels have to be acquired</li> </ul>
5	Alternative #1 - Do Nothing	<ul style="list-style-type: none"> <li>• <b>Rejected - does not address the project needs and does not support future growth</b></li> </ul>

# Next Steps

- Receive comments & input from the public
- Complete Environmental Assessment
- Acquire property
- Proceed to detail design of the preferred option
- Obtain permits, approvals, etc. as required
- Tender the project to contractors
- Host another Public Information Center to update property owners on the project status & servicing costs





**Ministry of the  
Environment,  
Conservation and Parks**

Eastern Region  
1259 Gardiners Road, Unit 3  
Kingston ON K7P 3J6  
Phone: 613.549.4000  
or 1.800.267.0974

**Ministère de l'Environnement,  
de la Protection de la nature  
et des Parcs**

Région de l'Est  
1259, rue Gardiners, unité 3  
Kingston (Ontario) K7P 3J6  
Tél: 613 549-4000  
ou 1 800 267-0974



**By email only**

May 2, 2019

City of Cornwall

Attention: Mike Fawthrop, P.Eng., Division Manager, Infrastructure  
mfawthrop@cornwall.ca

Dear Mr. Fawthrop:

Re: Brookdale Avenue North Sanitary Servicing Class Environmental Assessment

Thank you for the Notice of Study Commencement provided March 28, 2019. The notice indicates that the project is being planned as a schedule B activity in accordance with the Municipal Class Environmental Assessment (Class EA). The study will assess the most effective way to provide sanitary servicing to the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road.

Here are MECP preliminary comments on the project. Please consider these comments as you proceed through the Class EA process. The comments are grouped under these headings:

- Class EA process,
- MECP technical review issues,
- Aboriginal consultation.

## Class Environmental Assessment Process

### *Notification*

As the Regional EA Coordinator for this project, I will be responsible for circulating project notices and information to MECP reviewers and coordinating the MECP response during the Class EA process. I am a mandatory contact for all Notices issued for the project. In addition, I request copies of other relevant information such as information updates, technical studies related to MECP's mandate, interim reports and technical memoranda, and two copies of the final report when it is available.

My preferred methods of correspondence are email for notices, one hard copy of technical reports and final reports, and one copy of the report on a thumb drive. It is helpful to provide scanned copies of the notices as they appear in newspapers, and confirm the dates of publication.

My contact information is:

Vicki Mitchell, Environmental Assessment Coordinator  
Ministry of the Environment, Conservation and Parks  
1259 Gardiners Road  
P.O. Box 22032  
Kingston, Ontario  
K7M 8S5

telephone: (613) 540-6852  
email: [vicki.mitchell@ontario.ca](mailto:vicki.mitchell@ontario.ca)

Please ensure that the Notice of Completion states that Part II Order requests should be addressed in writing to:

Minister Rod Phillips  
Ministry of Environment, Conservation and Parks  
11<sup>th</sup> Floor, 77 Wellesley St. W  
Toronto ON M7A 2T5  
[minister.mecp@ontario.ca](mailto:minister.mecp@ontario.ca)

and

Director, Environmental Assessment and Permissions Branch  
Ministry of Environment and Climate Change  
135 St. Clair Ave. W, 1<sup>st</sup> Floor  
Toronto ON, M4V 1P5  
[enviopermissions@ontario.ca](mailto:enviopermissions@ontario.ca)

The notice should also state that a Part II Order Request Form must be used to request a Part II Order. The Part II Order Request Form is available online on the Forms Repository Website (<http://www.forms.ssb.gov.on.ca>) by searching “Part II Order” or “012-2206E” (the form number).

### *Consultation with Review Agencies*

In addition to public consultation, consultation with review agencies is an important component of the Class EA process. Please ensure that you contact review agencies directly to determine their interest in the project at the Notice of Commencement stage.

The MECP Regional office is a mandatory contact for all notices. In addition, other ministries and agencies that may have an interest in the project are listed in section A.3.6 and Appendices 3 and 7. The provincial ministries that are most often involved in Class EA project review include the Ministry of Municipal Affairs (for example, expansion of settlement boundaries, consistency with Growth Plan), Ministry of Natural Resources and Forestry (for example, endangered species, significant wetlands), and Ministry of Tourism, Culture and Sport (for example, cultural heritage or archaeological resources).

The final report should include information on correspondence with review agencies, issues raised by reviewers, and how these issues will be addressed. This could include technical studies or other information, and commitments to obtain specific approvals or permits.

The Class EA project should consider any impacts to servicing policies for the area. For example, the Province does not support growth on partial services. In addition, expansion of settlement boundaries may have implications for the Official Plan. We recommend that you include the Ministry of Municipal Affairs Municipal Services Office in Kingston on this project.

### MECP Technical Review

This Ministry’s interest in the project includes:

- impacts to groundwater and surface water due to construction (i.e. dewatering of trenches during installation of sewers or tanks, control of erosion and sedimentation, construction and/or dredging at outfall location),
- potential for encountering contaminated soil, sediment or groundwater during construction,
- noise and odour impacts to nearby residents from new infrastructure such as pumping stations.

Proponents undertaking a Municipal Class EA project must identify early in the process whether a project is occurring within a source water protection vulnerable area. This must be clearly documented in a Project File report or ESR. If the project is occurring in a vulnerable area, then there may be policies in the local Source Protection Plan (SPP) that need to be addressed (requirements under the Clean Water Act). The proponent should contact and consult with the appropriate Conservation Authority/Source Protection Authority (CA/SPA) to discuss potential considerations and policies in the SPP that apply to the project.

These environmental issues, and appropriate mitigation measures, should be addressed during the Class EA process.

We recommend that you contact this office as soon as possible during the environmental assessment process if you become aware of:

- contaminated sites in the study area or influence area of the project,
- a source water protection vulnerable area in the vicinity of the project, or
- issues that are contentious to the general public, aboriginal communities or review agencies.

#### Consultation with First Nation and Métis Communities

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before you can proceed with this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the process.

Your proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to your proposed project, **the MECP is delegating the procedural aspects of rights-based consultation to you through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information you have provided to date and the Crown's preliminary assessment you are required to consult with the following Aboriginal communities who have been identified as potentially affected by your proposed project:

- Mohawk Council of Akwesasne
- MNO Ottawa Métis Council – please copy Métis Nation of Ontario (MNO) on any correspondence going to the council

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the “Code of Practice for Consultation in Ontario’s Environmental Assessment Process” which can be found at the following link:

<https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process>

Additional information related to Ontario’s Environmental Assessment Act is available online at: [www.ontario.ca/environmentalassessments](http://www.ontario.ca/environmentalassessments)

You must contact the Director of Environmental Assessment and Permissions Branch under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right
- Consultation has reached an impasse
- A Part II Order request or elevation request is expected

The Director can be notified by email, mail or fax using the information provided below:

<b>Email:</b>	<a href="mailto:enviopermissions@ontario.ca">enviopermissions@ontario.ca</a> Subject: Potential Duty to Consult
<b>Fax:</b>	416-314-8452
<b>Address:</b>	Environmental Assessment and Permissions Branch 135 St. Clair Avenue West, 1 <sup>st</sup> Floor Toronto, ON, M4V 1P5

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required.

Should you or any members of your project team have any questions regarding the material above, please contact me at (613) 540-6852.

Yours Truly,



Vicki Mitchell  
Environmental Assessment Coordinator  
Eastern Region

ec: Marco Vincelli, EVB Engineering  
Jim Mahoney, MECP  
Mike Seguin, MECP

April 11, 2019      EMAIL ONLY

Josh Eamon, President  
EVB Engineering  
800 Second Street West  
Cornwall, ON K6J 1H6  
josh.eamon@evbengineering.com

**MTCS File # : 0010443**  
**Proponent : City of Cornwall**  
**Subject : Notice of Study Commencement**  
**Project : Brookdale Avenue North Sanitary Servicing Class EA**  
**Location : City of Cornwall**

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Dear Mr. Eamon:

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Study Commencement for the above-referenced project. MTCS's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources. The recommendations below are for a Schedule B Municipal Class EA project, as described in the notice of study commencement. If any municipal bridges may be impacted by this project, we can provide additional screening documentation as formulated by the Municipal Engineers Association in consultation with MTCS.

### **Project Summary**

The City of Cornwall has identified that the Brookdale Avenue North Area, between Tollgate Road and Cornwall Centre Road would benefit from sanitary services. The City has initiated an EA to determine the most effective manner of providing sanitary servicing to this area.

### **Identifying Cultural Heritage Resources**

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

### **Archaeological Resources**

This EA project may impact archaeological resources and should be screened using the MTCS [Criteria for Evaluating Archaeological Potential](#) and [Criteria for Evaluating Marine Archaeological Potential](#) to determine if an archaeological assessment is needed. MTCS archaeological sites

data are available at [archaeology@ontario.ca](mailto:archaeology@ontario.ca). If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the *OHA*, who is responsible for submitting the report directly to MTCS for review.

### **Built Heritage and Cultural Heritage Landscapes**

The MTCS [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#) should be completed to help determine whether this EA project may impact cultural heritage resources. The Clerk for the City of Cornwall can provide information on property registered or designated under the *Ontario Heritage Act*. Municipal Heritage Planners can also provide information that will assist in completing the checklist.

If potential or known heritage resources exist, MTCS recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MTCS (and the local municipality as appropriate) for review, and make it available to local organizations or individuals who have expressed interest in review.

### **Environmental Assessment Reporting**

All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical cultural heritage studies will be completed for this EA project, and provide them to MTCS before issuing a Notice of Completion or commencing any work on the site. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank you for consulting MTCS on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, do not hesitate to contact me.

Sincerely,



Kimberly Livingstone  
Heritage Planner (A)  
Heritage Planning Unit  
[kimberly.livingstone@ontario.ca](mailto:kimberly.livingstone@ontario.ca)

Copied to: Mike Fawthrop, Division Manager, Infrastructure, City of Cornwall  
[mfawthrop@cornwall.ca](mailto:mfawthrop@cornwall.ca)

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MTCS makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MTCS be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MTCS if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services (416-326-8800) must be contacted. In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

**From:** Marco Vincelli  
**Sent:** Friday, April 12, 2019 8:40 AM  
**To:** Josh Eamon  
**Cc:** Francois Lafleur  
**Subject:** RE: MTCS File No. 0010443- Brookdale North Pumping Station, Cornwall

Josh,

Both the Archaeological and Heritage Checklists have been completed. There was nothing found that would trigger further assessment of the site located north of the CN rail.

Should the preferred option change, and a new site is selected which is within 300m of the South Branch of the Raisin River a stage 1 archaeological investigation would be required.

I will include the checklists in the EA Project File.

If you have any questions, please let me know.

Marco

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**From:** Josh Eamon <josh.eamon@evbengineering.com>  
**Sent:** April 11, 2019 5:47 PM  
**To:** Marco Vincelli <marco.vincelli@evbengineering.com>  
**Cc:** Francois Lafleur <Francois.Lafleur@evbengineering.com>  
**Subject:** FW: MTCS File No. 0010443- Brookdale North Pumping Station, Cornwall

Hi Marco,

Please see attached correspondence from the Ministry of Tourism, Culture and Sport. As our EA lead, are you able to complete the screening documents referenced?

Thanks,

Josh



**Josh Eamon, P. Eng.**

President, EVB Engineering

**A** 800 Second St. W, Cornwall, ON K6J 1H6

**P** 613.935.3775 ext. 200

**M** 613.363.0268 **F** 613.935.6450

**W** [EVBengineering.com](http://EVBengineering.com)

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**From:** Livingstone, Kimberly (MTCS) <[Kimberly.Livingstone@ontario.ca](mailto:Kimberly.Livingstone@ontario.ca)>  
**Sent:** April 11, 2019 1:41 PM  
**To:** Josh Eamon <[josh.eamon@evbengineering.com](mailto:josh.eamon@evbengineering.com)>  
**Cc:** [mfawthrop@cornwall.ca](mailto:mfawthrop@cornwall.ca)  
**Subject:** MTCS File No. 0010443- Brookdale North Pumping Station, Cornwall

Hello,

Please see the attached letter. My apologies in sending it off a day late.  
Should you have any comments or questions please feel free to contact me.

Regards,

**Kimberly Livingstone | Heritage Planner (A)**

**Culture Division | Programs and Services Branch | Heritage Planning Unit**

Ministry of Tourism, Culture and Sport

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The **purpose of the checklist** is to determine:

- if a property(ies) or project area may contain archaeological resources i.e., have archaeological potential
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

**Processes covered** under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

### Archaeological assessment

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a licensed consultant archaeologist (see page 4 for definitions) to undertake an archaeological assessment.

The assessment will help you:

- identify, evaluate and protect archaeological resources on your property or project area
- reduce potential delays and risks to your project

**Note:** By law, archaeological assessments **must** be done by a licensed consultant archaeologist. Only a licensed archaeologist can assess – or alter – an archaeological site.

### What to do if you:

- **find an archaeological resource**

If you find something you think may be of archaeological value during project work, you must – by law – stop all activities immediately and contact a licensed consultant archaeologist

The archaeologist will carry out the fieldwork in compliance with the *Ontario Heritage Act* [s.48(1)].

- **unearth a burial site**

If you find a burial site containing human remains, you must immediately notify the appropriate authorities (i.e., police, coroner's office, and/or Registrar of Cemeteries) and comply with the *Funeral, Burial and Cremation Services Act*.

### Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages when completing this form.

Project or Property Name

Brookdale Avenue North Sewage Pumping Station

Project or Property Location (upper and lower or single tier municipality)

City of Cornwall

Proponent Name

City of Cornwall

Proponent Contact Information

Mike Fawthrop, Division Manager, Infrastructure

### Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes**, please follow the pre-approved screening checklist, methodology or process.

**If No**, continue to Question 2.

	Yes	No
2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes**, do **not** complete the rest of the checklist. You are expected to follow the recommendations in the archaeological assessment report(s).

The proponent, property owner and/or approval authority will:

- summarize the previous assessment
- add this checklist to the project file, with the appropriate documents that demonstrate an archaeological assessment was undertaken e.g., MTCS letter stating acceptance of archaeological assessment report

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., environmental assessment document
- maintained by the property owner, proponent or approval authority

**If No**, continue to Question 3.

	Yes	No
3. Are there known archaeological sites on or within 300 metres of the property (or the project area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No
4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property (or project area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No
5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or project area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No
6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No
7. Has the property (or project area) been recognized for its cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes** to any of the above questions (3 to 7), do **not** complete the checklist. Instead, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment of your property or project area.

**If No**, continue to question 8.

	Yes	No
8. Has the entire property (or project area) been subjected to recent, extensive and intensive disturbance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes** to the preceding question, do **not** complete the checklist. Instead, please keep and maintain a summary of documentation that provides evidence of the recent disturbance.

An archaeological assessment is not required.

**If No**, continue to question 9.

9. Are there present or past water sources within 300 metres of the property (or project area)?

Yes  No

**If Yes**, an archaeological assessment is required.

**If No**, continue to question 10.

10. Is there evidence of two or more of the following on the property (or project area)?

Yes  No

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

**If Yes**, an archaeological assessment is required.

**If No**, there is low potential for archaeological resources at the property (or project area).

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

## Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

In this context, the following definitions apply:

- **consultant archaeologist** means, as defined in Ontario regulation as an archaeologist who enters into an agreement with a client to carry out or supervise archaeological fieldwork on behalf of the client, produce reports for or on behalf of the client and provide technical advice to the client. In Ontario, these people also are required to hold a valid professional archaeological licence issued by the Ministry of Tourism, Culture and Sport.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

### 1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may be already in place for identifying archaeological potential, including:

- one prepared and adopted by the municipality e.g., archaeological management plan
- an environmental assessment process e.g., screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s. B.2.]

### 2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?

Respond 'yes' to this question, if all of the following are true:

- an archaeological assessment report has been prepared and is in compliance with MTCS requirements
  - a letter has been sent by MTCS to the licensed archaeologist confirming that MTCS has added the report to the Ontario Public Register of Archaeological Reports (Register)
- the report states that there are no concerns regarding impacts to archaeological sites

Otherwise, if an assessment has been completed and deemed compliant by the MTCS, and the ministry recommends further archaeological assessment work, this work will need to be completed.

For more information about archaeological assessments, contact:

- approval authority
- proponent
- consultant archaeologist
- Ministry of Tourism, Culture and Sport at [archaeology@ontario.ca](mailto:archaeology@ontario.ca)

### 3. Are there known archaeological sites on or within 300 metres of the property (or project area)?

MTCS maintains a database of archaeological sites reported to the ministry.

For more information, contact MTCS Archaeological Data Coordinator at [archaeology@ontario.ca](mailto:archaeology@ontario.ca).

### 4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property?

Check with:

- Aboriginal communities in your area
- local municipal staff

They may have information about archaeological sites that are not included in MTCS' database.

Other sources of local knowledge may include:

- property owner
- [local heritage organizations and historical societies](#)
- local museums
- [municipal heritage committee](#)
- published local histories

## 5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or property area)?

Check with:

- Aboriginal communities in your area
- local municipal staff

Other sources of local knowledge may include:

- property owner
- [local heritage organizations and historical societies](#)
- local museums
- [municipal heritage committee](#)
- published local histories

## 6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulation Unit, Ontario Ministry of Consumer Services – for [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, ‘adjacent’ means ‘contiguous’, or as otherwise defined in a municipal official plan.

## 7. Has the property (or project area) been recognized for its cultural heritage value?

There is a strong chance there may be archaeological resources on your property (or immediate area) if it has been listed, designated or otherwise identified as being of cultural heritage value by:

- your municipality
- Ontario government
- Canadian government

This includes a property that is:

- designated under *Ontario Heritage Act* (the OHA ), including:
  - individual designation (Part IV)
  - part of a heritage conservation district (Part V)
  - an archaeological site (Part VI)
- subject to:
  - an agreement, covenant or easement entered into under the OHA (Parts II or IV)
  - a notice of intention to designate (Part IV)
  - a heritage conservation district study area by-law (Part V) of the OHA
- listed on:
  - a municipal register or inventory of heritage properties
  - Ontario government’s list of provincial heritage properties
  - Federal government’s list of federal heritage buildings
- part of a:
  - National Historic Site
  - UNESCO World Heritage Site
- designated under:
  - *Heritage Railway Station Protection Act*
  - *Heritage Lighthouse Protection Act*
- subject of a municipal, provincial or federal commemorative or interpretive plaque.

To determine if your property or project area is covered by any of the above, see:

- Part A of the MTCS Criteria for Evaluating Potential for Built Heritage and Cultural Heritage Landscapes

## Part VI – Archaeological Sites

Includes five sites designated by the Minister under Regulation 875 of the Revised Regulation of Ontario, 1990 (Archaeological Sites) and 3 marine archaeological sites prescribed under Ontario Regulation 11/06.

For more information, check [Regulation 875](#) and [Ontario Regulation 11/06](#).

### 8. Has the entire property (or project area) been subjected to recent extensive and intensive ground disturbance?

Recent: after-1960

Extensive: over all or most of the area

Intensive: thorough or complete disturbance

Examples of ground disturbance include:

- quarrying
- major landscaping – involving grading below topsoil
- building footprints and associated construction area
  - where the building has deep foundations or a basement
- infrastructure development such as:
  - sewer lines
  - gas lines
  - underground hydro lines
  - roads
  - any associated trenches, ditches, interchanges. **Note:** this applies only to the excavated part of the right-of-way; the remainder of the right-of-way or corridor may not have been impacted.

A ground disturbance does **not** include:

- agricultural cultivation
- gardening
- landscaping

#### Site visits

You can typically get this information from a site visit. In that case, please document your visit in the process (e.g., report) with:

- photographs
- maps
- detailed descriptions

If a disturbance isn't clear from a site visit or other research, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment.

### 9. Are there present or past water bodies within 300 metres of the property (or project area)?

Water bodies are associated with past human occupations and use of the land. About 80-90% of archaeological sites are found within 300 metres of water bodies.

#### Present

- Water bodies:
  - primary - lakes, rivers, streams, creeks
  - secondary - springs, marshes, swamps and intermittent streams and creeks
- accessible or inaccessible shoreline, for example:
  - high bluffs
  - swamps
  - marsh fields by the edge of a lake
  - sandbars stretching into marsh

Water bodies not included:

- man-made water bodies, for example:
  - temporary channels for surface drainage
  - rock chutes and spillways
  - temporarily ponded areas that are normally farmed
  - dugout ponds
- artificial bodies of water intended for storage, treatment or recirculation of:
  - runoff from farm animal yards
  - manure storage facilities
  - sites and outdoor confinement areas

## Past

Features indicating past water bodies:

- raised sand or gravel beach ridges – can indicate glacial lake shorelines
- clear dip in the land – can indicate an old river or stream
- shorelines of drained lakes or marshes
- cobble beaches

You can get information about water bodies through:

- a site visit
- aerial photographs
- 1:10,000 scale [Ontario Base Maps](#) - or [equally detailed and scaled maps](#).

## 10. Is there evidence of two or more of the following on the property (or project area)?

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

### • **Elevated topography**

Higher ground and elevated positions - surrounded by low or level topography - often indicate past settlement and land use.

Features such as eskers, drumlins, sizeable knolls, plateaus next to lowlands, or other such features are a strong indication of archaeological potential.

Find out if your property or project area has elevated topography, through:

- site inspection
- aerial photographs
- [topographical maps](#)

### • **Pockets of well-drained sandy soil, especially within areas of heavy soil or rocky ground**

Sandy, well-drained soil - in areas characterized by heavy soil or rocky ground - may indicate archaeological potential

Find out if your property or project area has sandy soil through:

- site inspection
- [soil survey reports](#)

- **Distinctive land formations**

Distinctive land formations include – but are not limited to:

- waterfalls
- rock outcrops
- rock faces
- caverns
- mounds, etc.

They were often important to past inhabitants as special or sacred places. The following sites may be present – or close to – these formations:

- burials
- structures
- offerings
- rock paintings or carvings

Find out if your property or project areas has a distinctive land formation through:

- a site visit
- aerial photographs
- 1:10,000 scale [Ontario Base Maps](#) - or [equally detailed and scaled maps](#).

- **Resource extraction areas**

The following resources were collected in these extraction areas:

- food or medicinal plants e.g., migratory routes, spawning areas, prairie
- scarce raw materials e.g., quartz, copper, ochre or outcrops of chert
- resources associated with early historic industry e.g., fur trade, logging, prospecting, mining

Aboriginal communities may hold traditional knowledge about their past use or resources in the area.

- **Early historic settlement**

Early Euro-Canadian settlement include – but are not limited to:

- early military or pioneer settlement e.g., pioneer homesteads, isolated cabins, farmstead complexes
- early wharf or dock complexes
- pioneers churches and early cemeteries

For more information, see below – under the early historic transportation routes.

- **Early historic transportation routes** - such as trails, passes, roads, railways, portage routes, canals.

For more information, see:

- historical maps and/or historical atlases
  - for information on early settlement patterns such as trails (including Aboriginal trails), monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.
  - [Archives of Ontario](#) holds a large collection of historical maps and historical atlases
  - digital versions of historic atlases are available on the [Canadian County Atlas Digital Project](#)
- commemorative markers or plaques such as local, [provincial](#) or [federal](#) agencies
- [municipal heritage committee](#) or other [local heritage organizations](#)
  - for information on early historic settlements or landscape features (e.g., fences, mill races, etc.)
  - for information on commemorative markers or plaques

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
  - is a recognized heritage property
  - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

**Processes covered** under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

### **Cultural Heritage Evaluation Report (CHER)**

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

### **Other checklists**

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Brookdale Ave North Sewage Pumping Station

Project or Property Location (upper and lower or single tier municipality)

City of Cornwall

Proponent Name

City of Cornwall

Proponent Contact Information

Mike Fawthrop, Division Manager (Infrastructure)

**Screening Questions**

	<b>Yes</b>	<b>No</b>
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

**Part A: Screening for known (or recognized) Cultural Heritage Value**

	<b>Yes</b>	<b>No</b>
2. Has the property (or project area) been evaluated before and found <b>not</b> to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	<b>Yes</b>	<b>No</b>
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

## Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes** to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

**If No** to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

## Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

### 1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

## Part A: Screening for known (or recognized) Cultural Heritage Value

### 2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

**Note:** Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

### 3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
  - individual designation (Part IV)
  - part of a heritage conservation district (Part V)

## Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

## Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
  - [Ontario Heritage Trust](#)
  - local land registry office (for a title search)
- 

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
  - municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
  - local land registry office (for a title search)
- 

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
  - municipal heritage planning staff
  - municipal heritage committee
- 

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
  - [Ontario Heritage Trust](#)
-

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at [registrar@ontario.ca](mailto:registrar@ontario.ca).

### **3b. Is the property (or project area) a National Historic Site (or part of)?**

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

### **3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?**

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

### **3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?**

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

### **3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?**

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

### **3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?**

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

## **Part B: Screening for potential Cultural Heritage Value**

### **4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?**

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

#### **4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?**

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

#### **4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?**

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

#### **4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?**

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

**Note:** 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

## Part C: Other Considerations

### 5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

### 5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

### 5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

# APPENDIX B

## Comparative Cost Estimate



## Brookdale Ave. Sanitary Servicing Comparative Cost Estimate

May 28, 2019

ITEM #	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL AMOUNT
<b>Alternative #2 - Single Pump Station at Tollgate Road</b>					
1	Sanitary sewer, 2-4 m depth	m	1,162	\$350	\$406,700
2	Sanitary sewer, 4.1-6 m depth	m	200	\$850	\$170,000
3	Sanitary sewer, 6.1-8 m depth	m	1,000	\$1,500	\$1,500,000
4	Sanitary sewer, > 8.1 m depth	m	0	\$2,250	\$0
5	HDD at Highway 401	m	30	\$500	\$15,000
6	HDD at Brookdale Ave	m	50	\$500	\$25,000
7	Sanitary forcemain	m	0	\$275	\$0
8	Pumping station at Tollgate (9.0m to invert)	ea	1	\$1,020,000	\$1,020,000
<b>Total, Alternative #2</b>					<b>\$3,136,700</b>
<b>Cost Difference Compared to Alternative #3</b>					<b>\$567,500</b>
<b>Score (see Evaluation of Alternatives)</b>					<b>12</b>
<b>Alternative #3 - Single Pump Station north of CN Rail</b>					
1	Sanitary sewer, 2-4 m depth	m	1,662	\$350	\$581,700
2	Sanitary sewer, 4.1-6 m depth	m	200	\$850	\$170,000
3	Sanitary sewer, 6.1-8 m depth	m	500	\$1,500	\$750,000
4	Sanitary sewer, > 8.1 m depth	m	0	\$2,250	\$0
5	HDD at Highway 401	m	30	\$500	\$15,000
6	Sanitary forcemain	m	500	\$275	\$137,500
7	Pumping station north of CNR (5.5m to invert)	ea	1	\$915,000	\$915,000
<b>Total, Alternative #3</b>					<b>\$2,569,200</b>
<b>Cost Difference Compared to Alternative #3</b>					<b>\$0</b>
<b>Score (see Evaluation of Alternatives)</b>					<b>35</b>

**\*\* COMPARATIVE COST ESTIMATE ONLY \*\***  
**DOES NOT INCLUDE ALL CAPITAL COSTS**

<b>Alternative #4 - Two Pump Stations (North of Hwy 401 &amp; North of CNR)</b>					
1	Sanitary sewer, 2-4 m depth	m	950	\$350	\$332,500
2	Sanitary sewer, 4.1-6 m depth	m	325	\$850	\$276,250
3	Sanitary sewer, 6.1-8 m depth	m	500	\$1,500	\$750,000
4	Sanitary sewer, > 8.1 m depth	m	0	\$2,250	\$0
5	HDD at Highway 401	m	0	\$500	\$0
6	Sanitary forcemain	m	1,100	\$275	\$302,500
7	Pumping station north of Highway 401 (3.0m to invert)	ea	1	\$840,000	\$840,000
8	Pumping station north of CNR (5.5m to invert)	ea	1	\$915,000	\$915,000
	<b>Total, Alternative #4</b>				<b>\$3,416,250</b>
	<b>Cost Difference Compared to Alternative #3</b>				<b>\$847,050</b>
	<b>Score (see Evaluation of Alternatives)</b>				<b>0</b>
<b>Alternative #5 - Two Pump Stations (North of SBRR &amp; North of CNR)</b>					
1	Sanitary sewer, 2-4 m depth	m	2,300	\$350	\$805,000
2	Sanitary sewer, 4.1-6 m depth	m	70	\$850	\$59,500
3	Sanitary sewer, 6.1-8 m depth	m	0	\$1,500	\$0
4	Sanitary sewer, > 8.1 m depth	m	0	\$2,250	\$0
5	HDD at Highway 401	m	90	\$500	\$45,000
6	HDD at Brookdale Ave	m	50	\$500	\$25,000
7	Sanitary forcemain	m	1,020	\$275	\$280,500
8	Pumping station north of SBRR (4.5m to invert)	ea	1	\$885,000	\$885,000
9	Pumping station north of CNR (3.5m to invert)	ea	1	\$855,000	\$855,000
	<b>Total, Alternative #5</b>				<b>\$2,955,000</b>
	<b>Cost Difference Compared to Alternative #3</b>				<b>\$385,800</b>
	<b>Score (see Evaluation of Alternatives)</b>				<b>19</b>

**\*\* COMPARATIVE COST ESTIMATE ONLY \*\*  
DOES NOT INCLUDE ALL CAPITAL COSTS**

**Notes/Exclusions:**

- Pump station base cost \$750,000
- Add'tl cost per m of depth to inv. \$30,000 /m

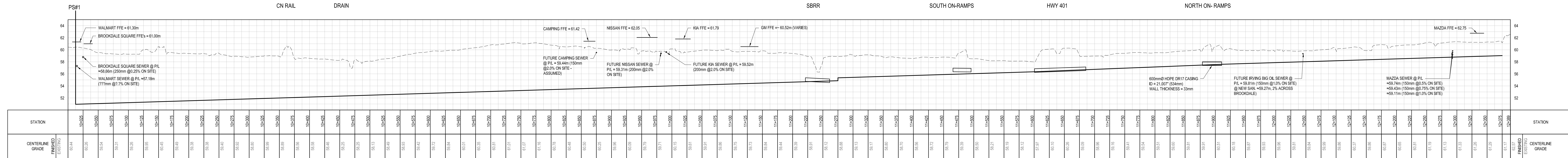
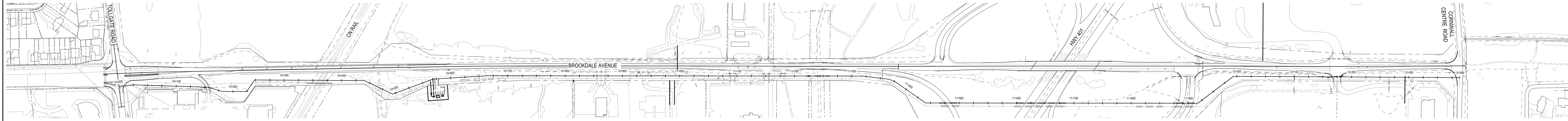
**Scoring:**

- Alternative with lowest comparative cost (#3) was given the highest score (35)
- Alternative with the highest comparative cost (#4) was given a score of 0
- Scoring of other alternatives was interpolated based on their comparative cost

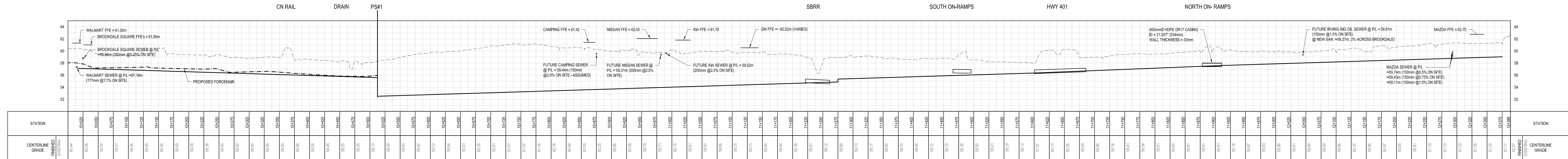
# APPENDIX C

**FIG.1 – Preliminary Plan & Profiles, Alternative No. 2 & 3**

**FIG.2 – Preliminary Plan & Profiles, Alternative No. 4 & 5**

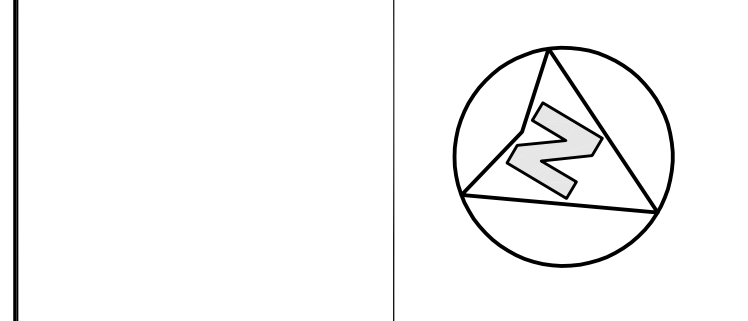


ALTERNATIVE No.2 - ONE PUMPING STATION AT TOLLGATE ROAD



ALTERNATIVE No.3 - ONE PUMPING STATION AT NORTH OF CN RAIL

DATE	No.	REVISION



**EVB ENGINEERING**  
 890 SECOND STREET WEST  
 CORNWALL, ONTARIO CANADA, K6L 1W6  
 TEL: 613-332-0775 FAX: 613-332-6450  
 WEBSITE: EVBengineering.com

CLIENT:  
**Cornwall**  
 ONTARIO CANADA

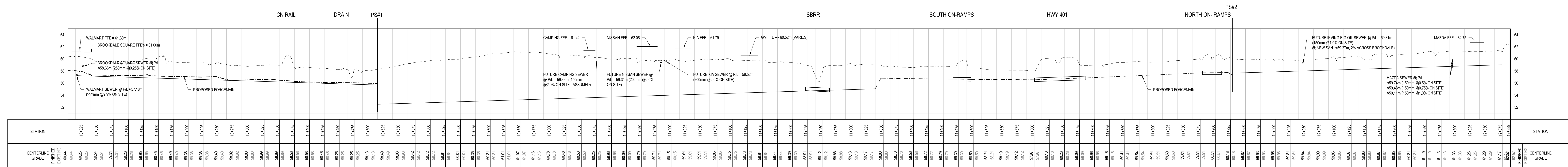
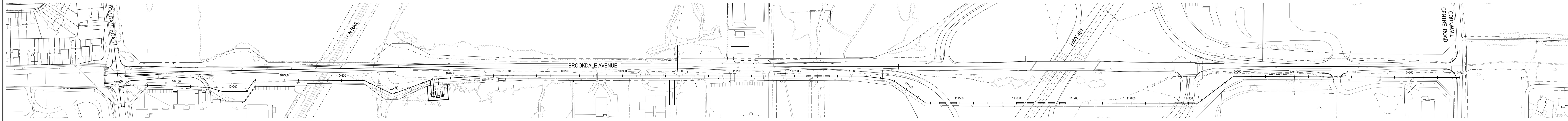
PROJECT:  
**BROOKDALE AVENUE  
 SANITARY SERVICING**

TITLE:  
**PRELIMINARY PLAN & PROFILES  
 ALTERNATIVE No.2 & 3**

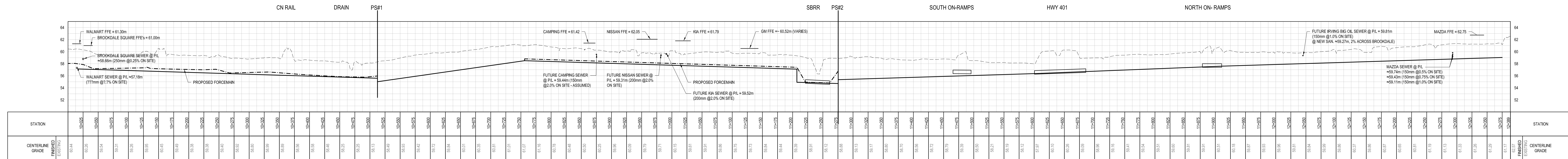
SCALE:	DATE:	JOB NO.:
H:1:2000, V:1:200	2019/04/16	19006
DESIGNED BY:	DATE:	
F.L.	2019/04/16	
DRAWN BY:		
K.B.W.		
CHECKED BY:		
F.L.		

FIG.1

M:\2019\19006 - Brookdale North Sewerage\Drawings\2-DWG\12 Preliminary\12.01 Preliminary Plan & Profiles.dwg, Apr 20, 2019, 11:45am (F.L.)

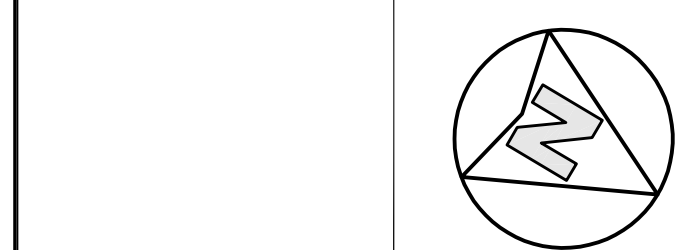


ALTERNATIVE No.4 - TWO PUMPING STATIONS; NORTH OF HIGHWAY OF HIGHWAY 401 AND NORTH OF CN RAIL



ALTERNATIVE No.5 - TWO PUMPING STATIONS; NORTH RAISIN RIVER AND NORTH OF CN RAIL

DATE	No.	REVISION



890 SECOND STREET WEST  
 CORNWALL, ONTARIO CANADA, K6L 1W6  
 TEL: (343)333-0775 FAX: (343)455-6450  
 WEBSITE: EVBengineering.com

CLIENT:

PROJECT:  
 BROOKDALE AVENUE  
 NORTH END SERVICING

TITLE:  
 PRELIMINARY PLAN & PROFILES  
 ALTERNATIVE No.4 & 5

SCALE:	JOB NO.:
H:1:2000, V:1:200	19006
DESIGNED BY:	DATE:
F.L.	2019/04/16
DRAWN BY:	DRAWING NO.:
K.B.W.	
CHECKED BY:	
F.L.	

FIG.2

K:\2019\04\16 - Brookdale North Servicing\Drawings\2019\04\16 - Preliminary Plan & Profiles\0000 - PS#1 - PS#2 - On-Ramps - 2019-11-14.dwg (P:\Users\fl...)