

Harvest Village Development Sanitary Servicing

Municipal Class Environmental Assessment (EA) Study and Conceptual Design

Site Address: 18477 Yonge Street, East Gwillimbury, Ontario



Public Information Centre No. 1

Mount Albert Community Centre Hall 53 Main Street, Mount Albert

Tuesday, January 30, 2024 5:30 – 7:30 p.m.





Land Acknowledgement

The Town of East Gwillimbury (Town) and the Regional Municipality of York (Region) are located on the traditional territory of many Indigenous peoples such as the Huron-Wendat First Nation, the Haudenosaunee and the Anishinaabe peoples and the treaty territories of the Chippewas of Georgina Island First Nation and the Mississaugas of the Credit First Nation.

The Town and the Region fall under Treaty 13 with the Mississaugas of the Credit First Nation and the Williams Treaties with the Chippewas of Beausoleil, Georgina Island and Rama First Nations and the Mississauga of Alderville, Curve Lake, Hiawatha and Scugog Island First Nations.

Redwood Properties and MTE Consultants Inc. stand with all Indigenous peoples, past and present, in promoting the wise stewardship of the lands on which we live.





Purpose of EA and Public Consultation

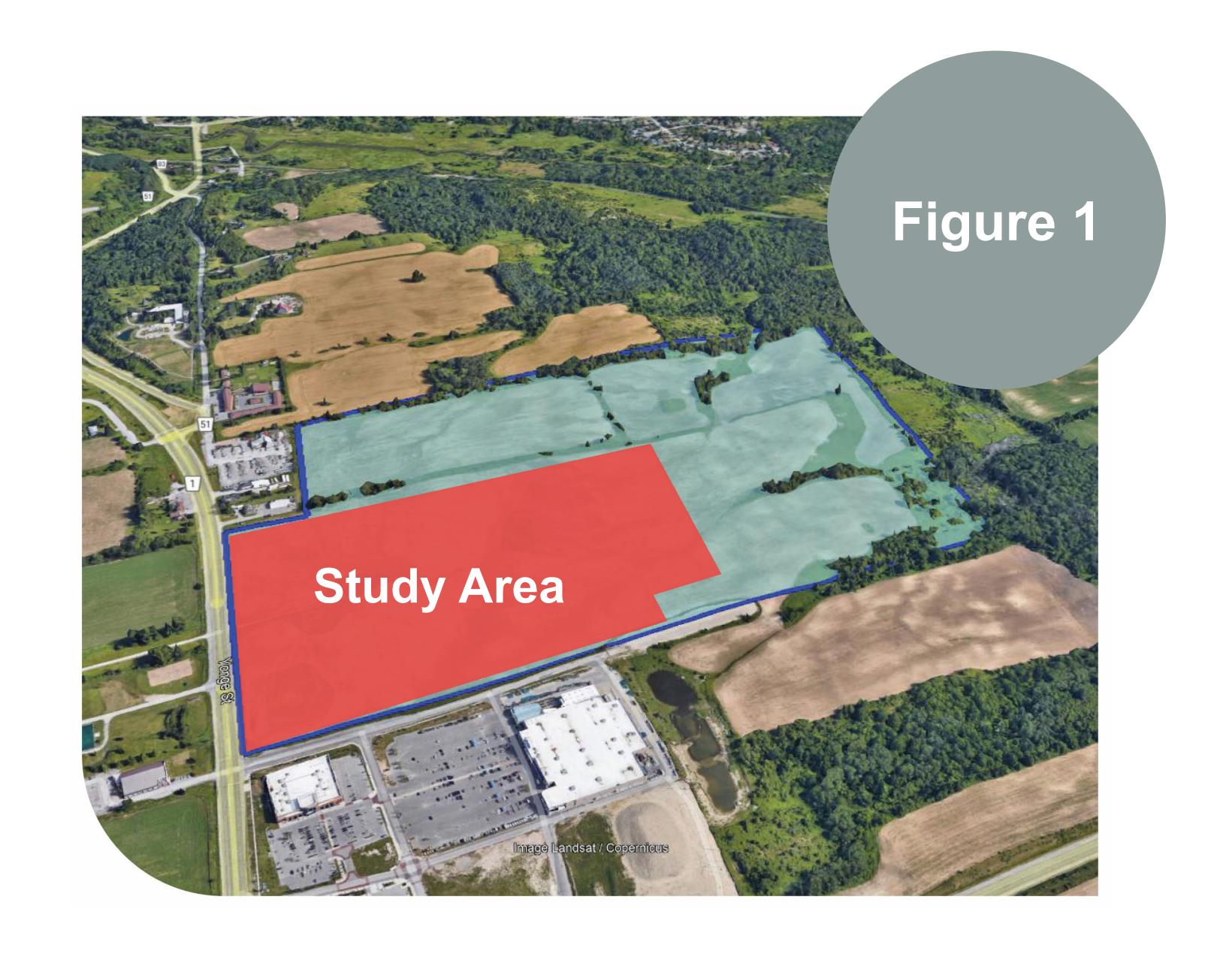
Purpose of Study

1450117 Ontario Ltd. c/o Redwood Properties has initiated a Municipal Class Environmental Assessment (Schedule 'C') to assess sanitary servicing for the proposed Harvest Village Subdivision (**Figure 1**).

Purpose of Public Consultation

The purpose of this Public Information Centre is to:

- Outline the problem-solving process
- Present the proposed alternatives for evaluation
- Obtain public feedback on the Harvest Village Subdivision Sanitary Servicing Class EA and answer questions







Municipal Class EA Process







Phase 1: Problem or Opportunity Identification

Phase 2: Identification of alternatives, completion of studies and screening of alternatives

Phase 3: Evaluation of alternative design concepts and selection of preferred alternative including mitigation methods

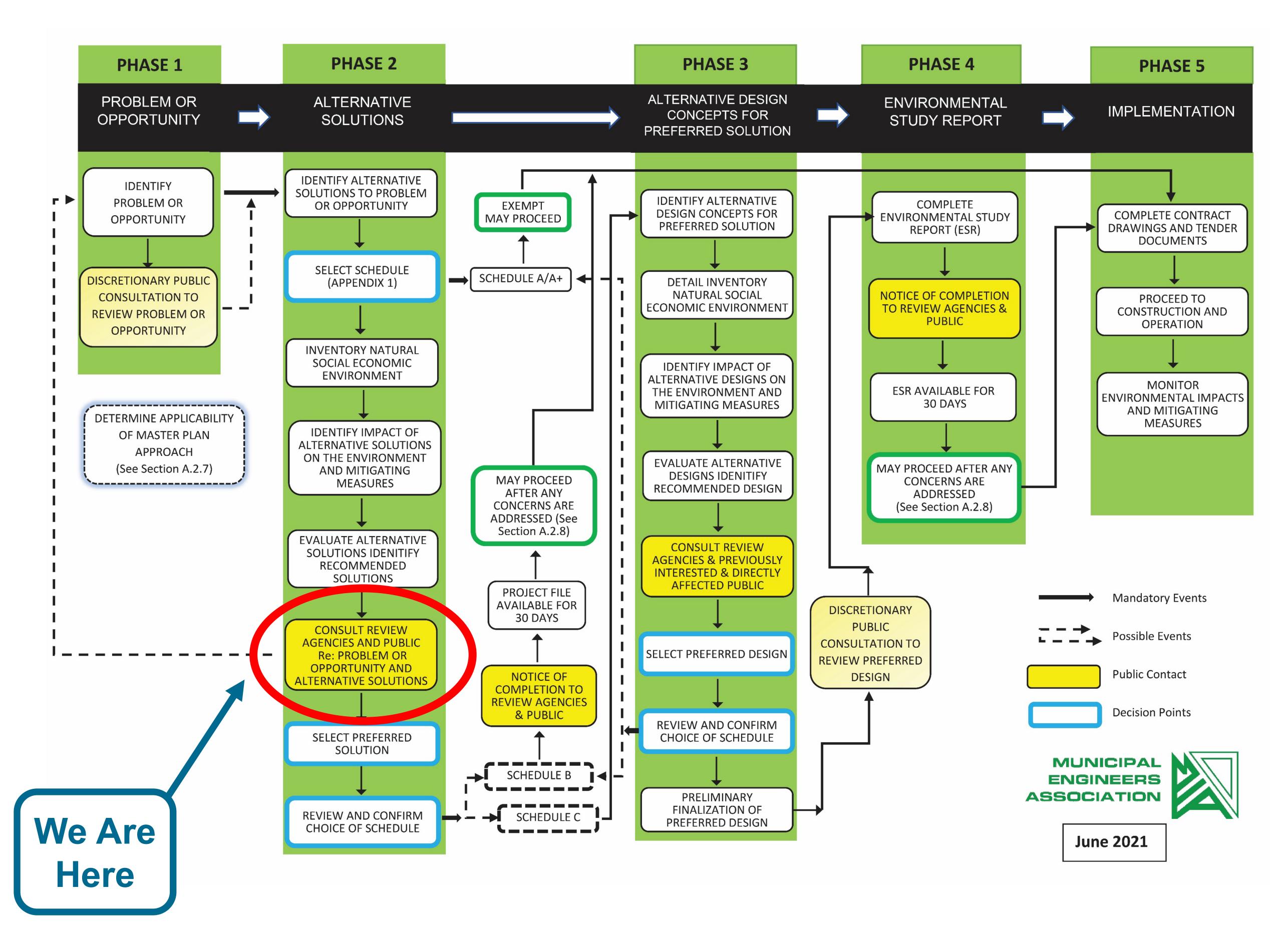
Phase 4: Preparation and submission of Environmental Study Report (ESR) for public and government agency review

Phase 5: Implementation of the preferred alternative and monitoring of impacts

Municipal Class EA Process







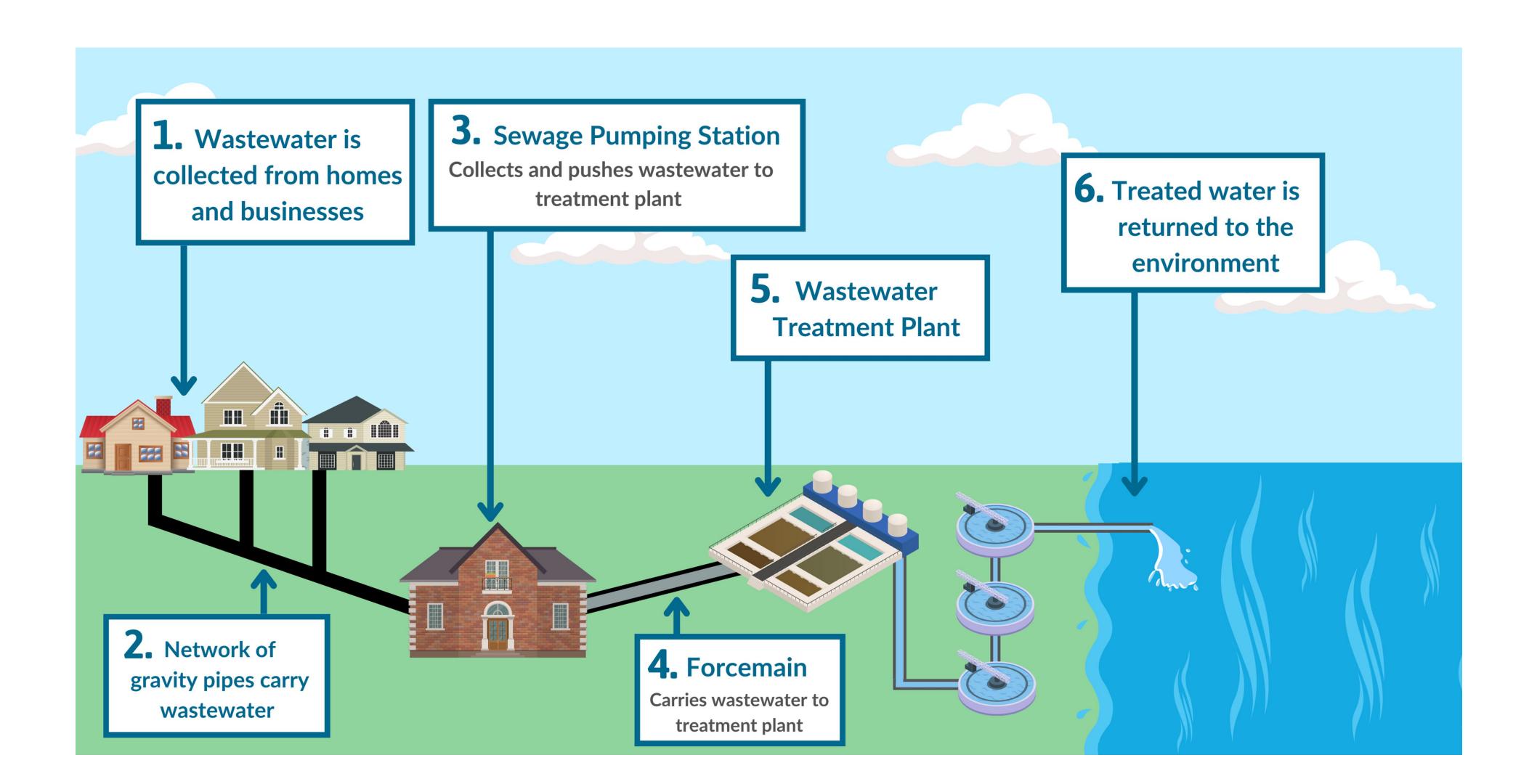
Wastewater Collection and Treatment

What is a Sanitary Collection System?

Wastewater is any water that leaves a home or building through a drain such as a toilet, sink, bathtub, dishwasher or washing machine.

Sanitary collection systems are comprised of underground gravity pipes, maintenance holes, tanks, lift stations, control structures, and forcemains that gather sewage or wastewater from residential and nonresidential customers and convey the flow to a wastewater treatment plant.

It takes thousands of kilometres of pipe to collect this wastewater so it can be treated and returned to the environment.



What is a Wastewater Treatment Facility?

Wastewater from homes and buildings connected to a sanitary sewer collection system travels through underground pipes to a wastewater treatment facility (WWTF). Treatment is designed to remove contaminants from sewage to produce water that is suitable to return to the surrounding environment or to an intended reuse application, thereby preventing water pollution from raw sewage discharges.





Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
Treatment
Facility

Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

Problem Solving Process

Opportunity Statement

The proposed Harvest Village Subdivision requires a sanitary servicing solution to address the wastewater anticipated to be generated by residents and businesses. The sanitary servicing solution is required to:

- Support the short term and ultimate build-out of the Harvest Village subdivision.
- Mitigate the risk of wastewater discharges to the environment.
- Provide efficient capital and operating cost investments
- Investigate re-use and other sustainable opportunities and measures.

Phase 1: Strategies

High level sanitary servicing strategies were screened:

- 1. Do Nothing
- Does not address the opportunity statement
- 2. Construct a private on-site
 Wastewater Treatment Facility
- Addresses some of the opportunity statement
- 3. <u>Connection to Municipal</u> Sewer
- Addresses some of the opportunity statement

Phase 2: Alternatives

Sanitary servicing alternatives for the Harvest Village Subdivision were developed based on:

- Availability of municipal wastewater treatment capacity.
- Timing of available capacity within municipal collection and treatment systems.
- Environmental benefits.
- Capital and operating cost considerations.

Evaluation

Each alternative will be evaluated based on the following criteria:

- Natural
- Environment
- Social Environment
- Archaeological and Cultural Heritage
- Technical Feasibility

Cost

be considered.

Feedback from First Nations, Public and other Stakeholders will Preferred Alternative

We Are Here

Public Consultation #1

Public Consultation #2





Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
Treatment
Facility

Alternative 3

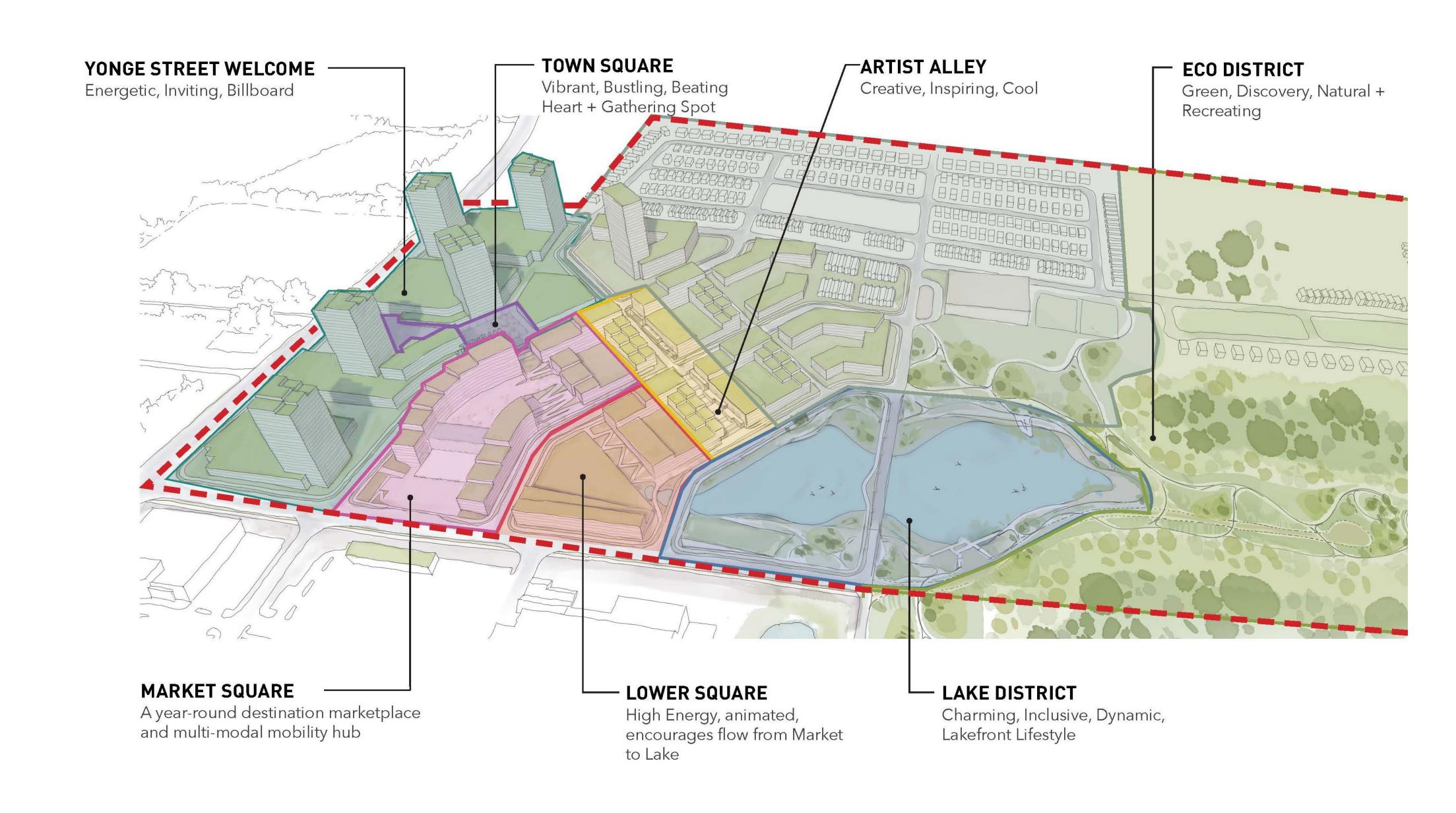
Connection to Municipal Sewer

Evaluation Criteria

Alternatives

Sanitary servicing for the Harvest Village Subdivision is proposed based on the alternatives below:

- 1. Do Nothing
- 2. Centralized On-Site Communal WWTF with Surface Discharge
- 3. Connection to Municipal Sanitary Sewer







Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
Treatment
Facility

Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

Alternative 1 – "Do Nothing"

Technical Features

N/A

Pros

- No facilities or infrastructure would be constructed to solve the identified problem or opportunity.
- No capital and operations costs.

Cons

- The problem of providing a sanitary servicing solution would remain and would not be addressed.
- Will not facilitate development.





Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
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Connection to Municipal Sewer

Evaluation Criteria

Alternative 2 – Centralized On-Site Communal WWTF with Surface Discharge

Technical Features

- Wastewater generated by the development will be directed to a new onsite WWTF through planned internal development gravity sewer system.
- The new WWTF will utilize tertiary technology complete with UV disinfection.
- Highly treated water will be discharged to an onsite receiving surface water body. Effluent reuse opportunities will be reviewed as part of the study.
- An Assimilative Capacity Study will be completed to ensure the receiving water body will not be excessively impacted.
- Approval will be obtained from the Ministry of Environment, Conservation and Parks (MECP), Lake Simcoe Region Conservation Authority (LSRCA), Regional Municipality of York, and Town of East-Gwillimbury.

Pros

- Reduced collection and no conveyance systems required.
- Provides opportunity for re-use of the treated water (e.g., irrigation).
- Provides consistent base flow to receiving water body throughout the year.
- Smaller footprint size.
- Reasonable timeline for implementation.
- Lowest discharge of nutrients to the environment, including opportunities to treat for enhanced phosphorous removal, micro-plastics, and pharmaceuticals.
- Allows the development to commence construction without the uncertainty of municipal capacity availability.
- Capital and annual operating costs covered by proponent (no public funds required for construction and operations).

Cons

- Portion of development land required (footprint).
- New wastewater treatment facility is more visible.
- Annual operational cost to subdivision tenants and residents expected throughout lifecycle.
- Municipal Responsibility Agreement (MRA) and Security Fund required should proponent not meet agreed commitments of performance requirements.





Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
Treatment
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Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

Private Wastewater Treatment Facility









Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
Treatment
Facility

Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

Alternative 3 – Connection to Municipal Sanitary Sewer

Technical Features

- Wastewater generated by the development will be discharged to a municipal sanitary sewer and subsequently treated off-site at a municipal WWTF, via the proposed York-Durham North Sanitary Solution.
- A private onsite sanitary pumping station is likely required to convey sanitary flows to the municipal sewer when it is available.
- An enclosed outdoor generator will be located adjacent to the new sanitary pumping station.

Pros

- Increased developable land area.
- Potential for noise and odour complaints is reduced.

Cons

- Additional future capital replacement and operating costs to local municipality.
- Sewer capacity not currently available from Town.
- Completion of York Region Sewage Works Project Phase 1, is required to increase the Town's wastewater treatment capacity. Tentatively anticipated for completion in 2028.
- Increased annual operational cost to Town.
- Less potential for enhanced phosphorous removal, and opportunities for micro-plastic and pharmaceutical treatment.
- Increased off-site construction impact.
- Minimizes opportunities to consider effluent re-use options.





Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

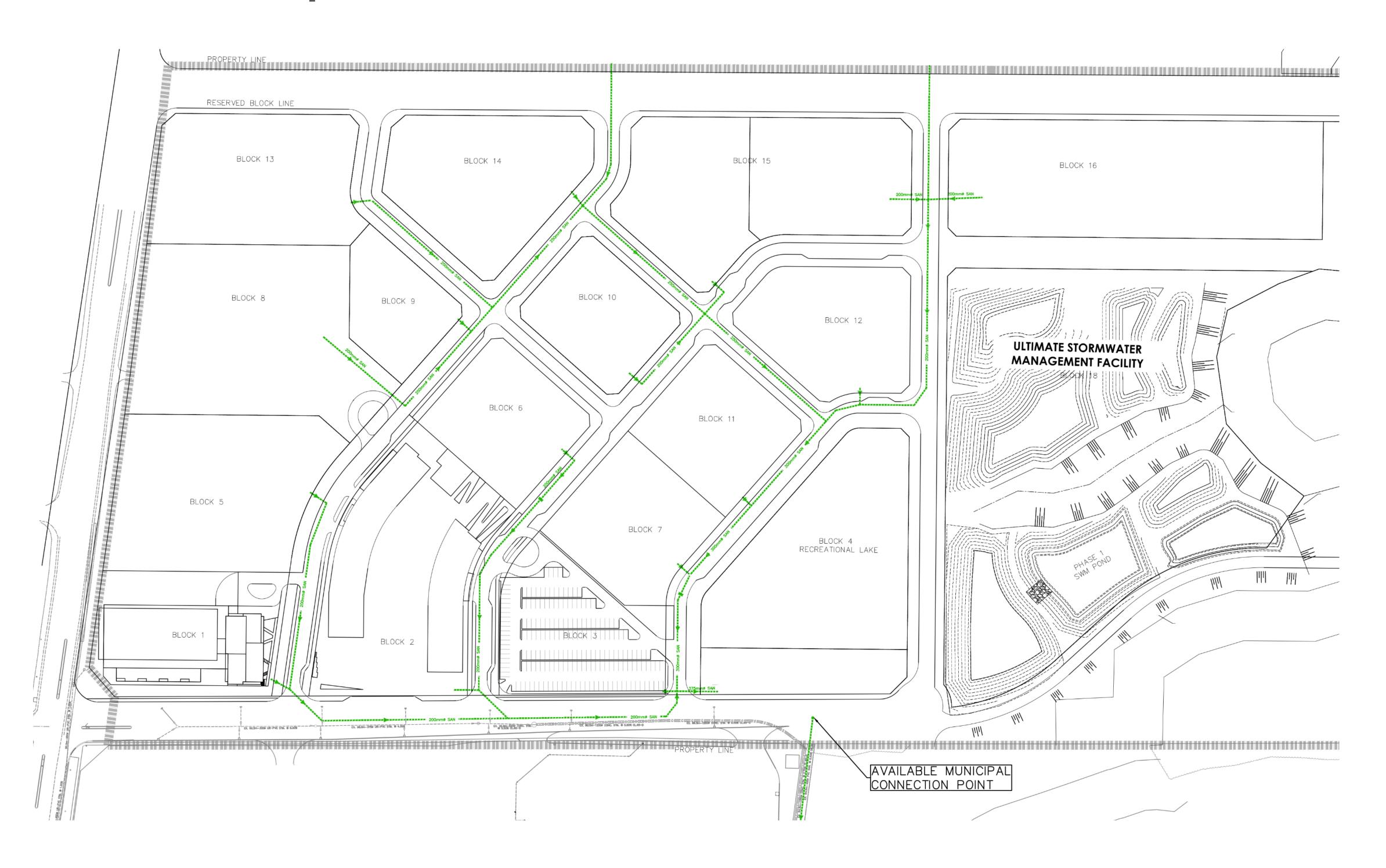
Private Wastewater
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Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

Connection to Municipal Sewer







Evaluation Criteria

Problem Solving Process

Alternative Selection

Alternative 1

Alternative 2

Private Wastewater
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Alternative 3

Connection to Municipal Sewer

Evaluation Criteria

The following criteria have been selected to evaluate the alternatives:



Natural Environment

- Effects on vegetation, water quality, wildlife and aquatic habitat, wetlands, terrestrial resources, woodlands, species at risk
- Potential for contamination
- Greenhouse gas emissions and carbon footprint



Social Environment

- Impacts on local community
- Anticipated impacts during construction
- Influence on community aesthetics



Archaeological and Cultural Heritage

- Potential impacts on cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological resources
- Input from First Nations has been requested and will be factored into the evaluation process



Technical Feasibility

- Construction feasibility
- Treatment requirements and effluent quality (Nutrient impacts)
- Required agency permits and approvals
- Wastewater system operation (capacity constraints, maintenance & operation)



Costs

Anticipated capital, operating, and maintenance costs

Evaluation and Selection of Preferred Alternative



- Both Alternatives will allow the proposed development to proceed.
- Studies (Archaeological, Assimilative Capacity, etc.) as well as cost and schedule considerations will inform the evaluation process.
- The Preferred Alternative will be selected as part of this Municipal Class EA and presented at a second Public Information Centre.





Next Steps



Public Consultation #1

Public Consultation #2

Environmental Study Report

Notice of Study Completion

Construction

Opportunity for the public to provide feedback on the project and selection of the recommended alternatives.

Opportunity for the public to provide feedback on the project and selection of the Preferred Alternative.

Document findings of the study. Incorporate comments received from the public and review agencies.

Class EA Environmental Study Report with a mandatory 30-day public review period.

Construction anticipated to begin in 2025 at the earliest





We Want to Hear From You!

Please provide comments by filling out the comment form using the QR code below or by contacting one of the Study ambassadors:

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Please provide your comments on or before February 28, 2024. To receive updates on the project, request that your name and email be added to the mailing list.

Thank you for your participation in the study. Your contribution to the study is valuable and appreciated.

All information collected will be part of the public record unless otherwise requested.





