

Hastings Wastewater Treatment Facility Expansion Schedule C Municipal Class EA

Public Information Centre

Tuesday, August 26th, 2025

6:00 pm to 8:00 pm

Location: Hastings Civic Centre

6 Albert St E, Hastings

Key Instructions for this Meeting

Please Sign in

Meeting is a "Drop-in" format.

Public Information Centre

Review Display Materials

Our representatives will be pleased to discuss the study, or any questions or concerns that you may have.



Complete a Comment Sheet

Drop off your completed Comment Sheet in the Box tonight or return it to the people shown on the Comment Sheet by August 26th, 2025.



Why are we here tonight?

The Municipality of Trent Hills is undertaking a Schedule C Municipal Class Environmental Assessment (Class EA) Study to select the preferred alternative to meet future wastewater treatment demands in the Village of Hastings.

Objectives of this Public Information Centre:



Introduce the project and its background



Present alternative options considered for increasing the wastewater treatment capacity at Hastings and the preliminary recommendations



Receive comments from the public about the preliminary preferred alternative chosen from the recommendations



Class EA Context

- The Class EA process meets the **Ontario's Environmental Assessment Act (EAA)** by identifying problems or opportunities, and identifying, evaluating and selecting a preferred means of addressing the problems or opportunities.
- A Class EA study enables the planning and implementation of municipal infrastructure to be undertaken in accordance with an approved procedure designed to protect the environment.
- Water and wastewater projects/activities are discussed in Part C of the Municipal Class EA planning process.
- Schedule C Class EA projects have the potential for more significant environmental effects.
- Municipalities are required to prepare an Environmental Study Report (ESR) for Schedule C Class EA projects for review by the public, Indigenous Communities, and review agencies.





Class EA Process

Phase 1 Getting Started

- Review available information/data
- Identify Problem / Opportunity
 Statement

NOTICE OF
COMMENCEMENT
February 27, 2025

Phase 2 Exploring the Options

- Consider ways to address servicing needs and identify potential impacts
- Assess and shortlist
 Alternative Solutions
- Evaluate and select
 Preliminary Preferred
 Solution

PUBLIC INFORMATION CENTRE #1 August 26, 2025

Confirm Preferred
 Solution based on
 public, indigenous
 community, and review
 agency input

Phase 3 Conceptualizing the Preferred Solution

- Explore technologies and/or design concepts to implement the Preferred Solution from Phase 2
- Identify impacts and mitigation measures
- Evaluate options and select the recommended
 Preliminary Preferred
 Technology and/or
 Design Concept

PUBLIC INFORMATION
CENTRE #2
Target Q1 2026

Phase 4 Documenting the Process

- Prepare a Report and satisfy the documentation requirements of the Class EA process
- Make report available for public review

NOTICE OF COMPLETION (Future)

Phase 5 Implementing the Recommendations

- Complete detailed design of the recommended solution
- Initiate construction

Phases 1, 2, 3 and 4 of the Class EA Process will be completed during the Class EA.

WE

ARE

HERE



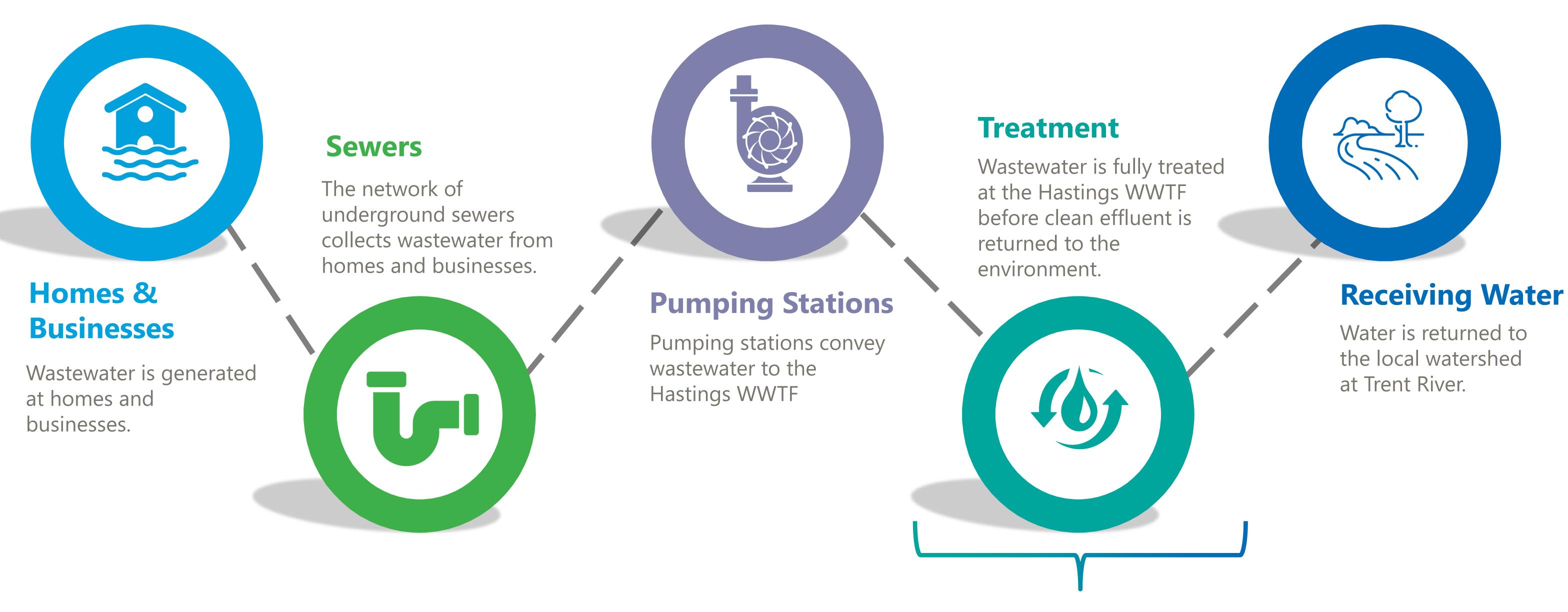
Process for Phase 1 & 2 of Class EA

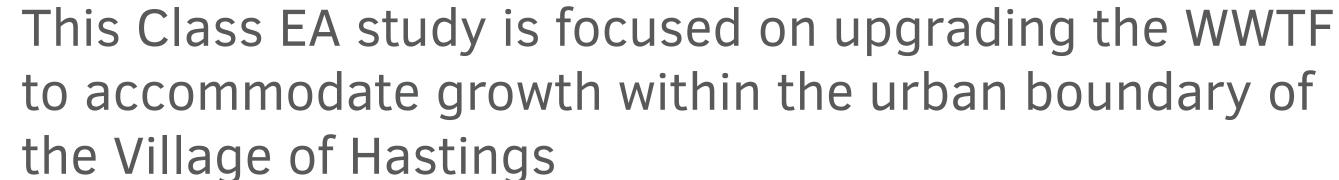
Select Pre-screen long preliminary list alternatives preferred Develop to eliminate alternative for Problem/ unrealistic the Hastings Opportunity options WWTF Statement Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Review Hastings Develop long Detailed WWTF evaluation of list of background short-listed alternatives to information and alternatives address service Problem/ population/flow Opportunity projections Statement



How does the Village of Hastings manage wastewater?

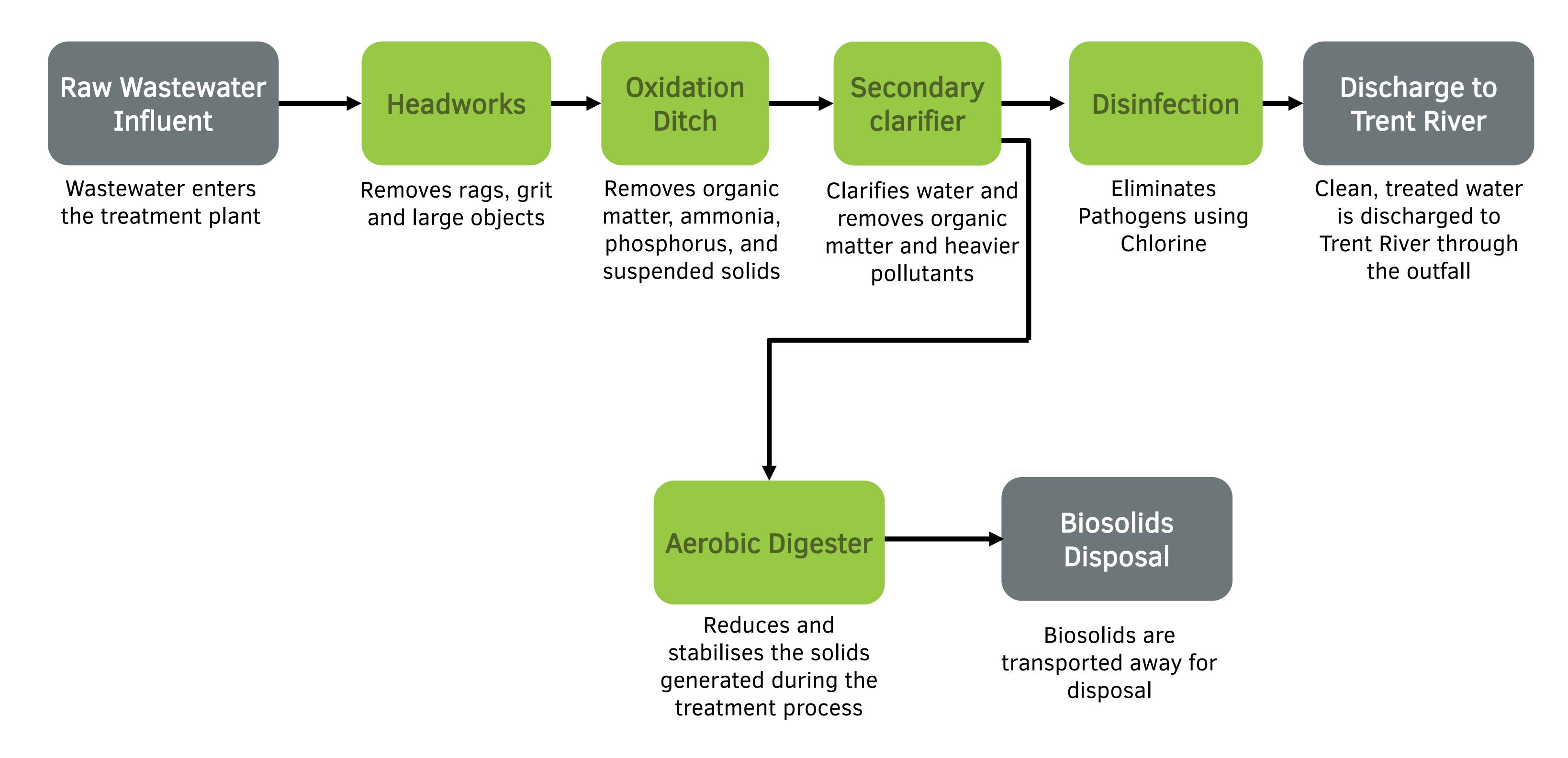
Wastewater treatment for the Village of Hastings is currently provided by the Hastings Wastewater Treatment Facility (WWTF). The treatment progression is as follows:







How is wastewater treated at Hastings?

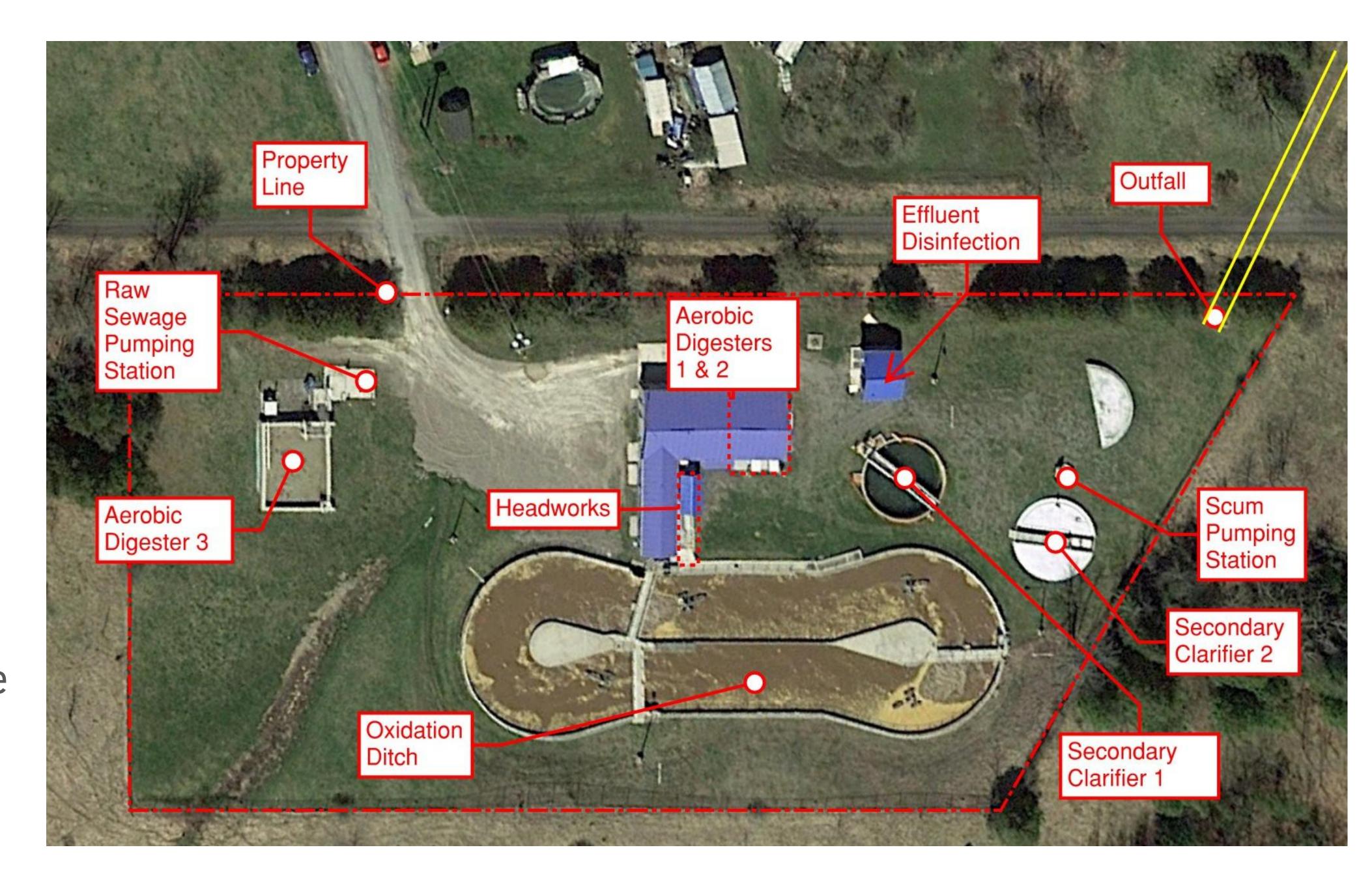




Existing Hastings WWTF

- Originally constructed in 1976, and upgraded in 2010
- Currently serves 1,562 people
- ❖ Current Average Day Flow: 763.4 m³/d
- *Rated Capacity: 1,060 m³/d
- ❖ Peak Daily Flow Capacity: 3,236 m³/d
- The Hastings WWTF is currently operating at 72.1% of its rated capacity.

Typically, the planning process to evaluate the future needs of a WWTP begins when average day flows reach 80% of the rated capacity.

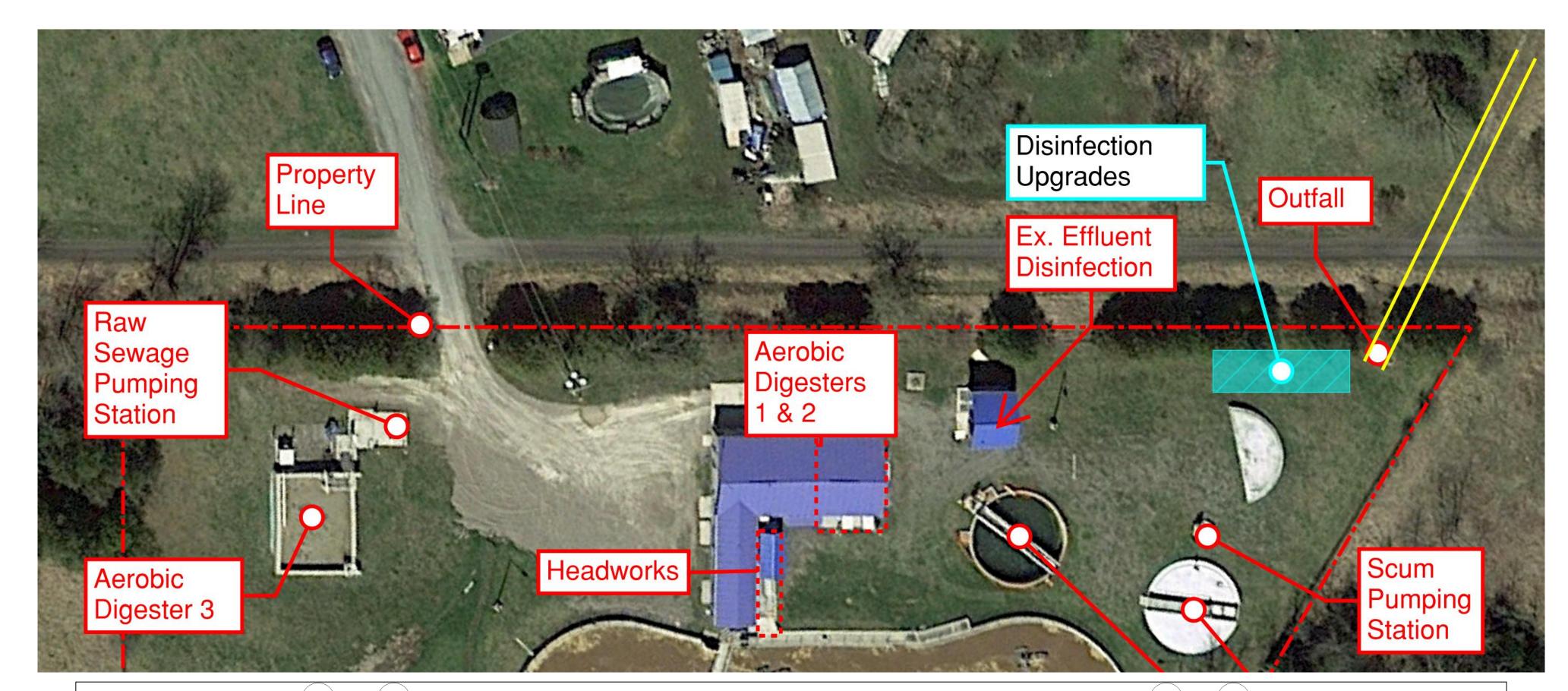


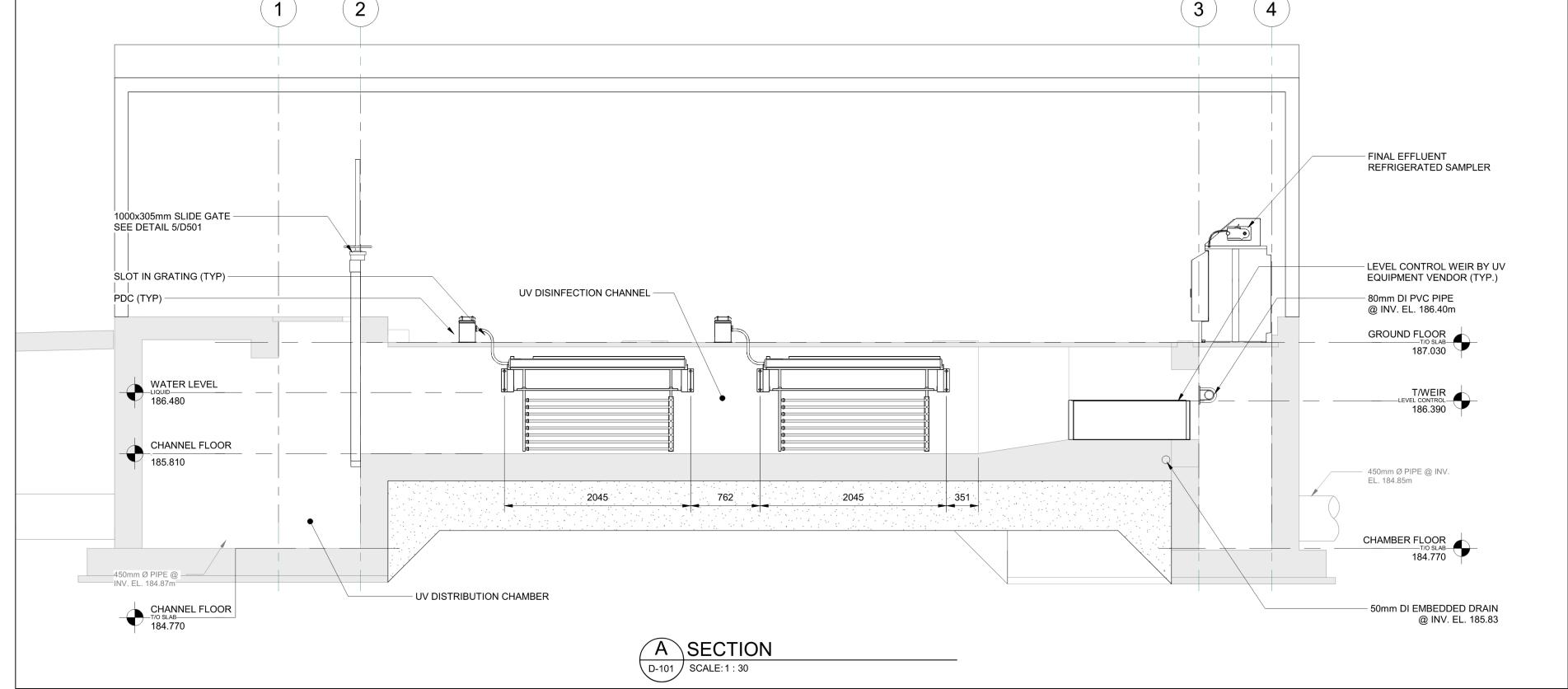
- * Currently, the Hastings WWTF is having trouble meeting the final effluent E.coli objectives in certain months.
- Upgrades include expanding the plant's treatment capacity, as well as Disinfection Upgrades to meet effluent limits regularly and more efficiently



Hastings WWTF – Disinfection Upgrades

- ❖ Disinfection Upgrades are currently underway at the Hastings WWTF to replace the existing chlorine-based disinfection with UV disinfection.
- The upgrades will improve compliance with effluent E. Coli objectives.
- The upgrades follow the same design basis and tie-in with the overall plant upgrades.
- ❖ Given the proposed UV building's small footprint, the upgrades can be situated within the existing project site and avoid conflict with upgrades to the other processes.





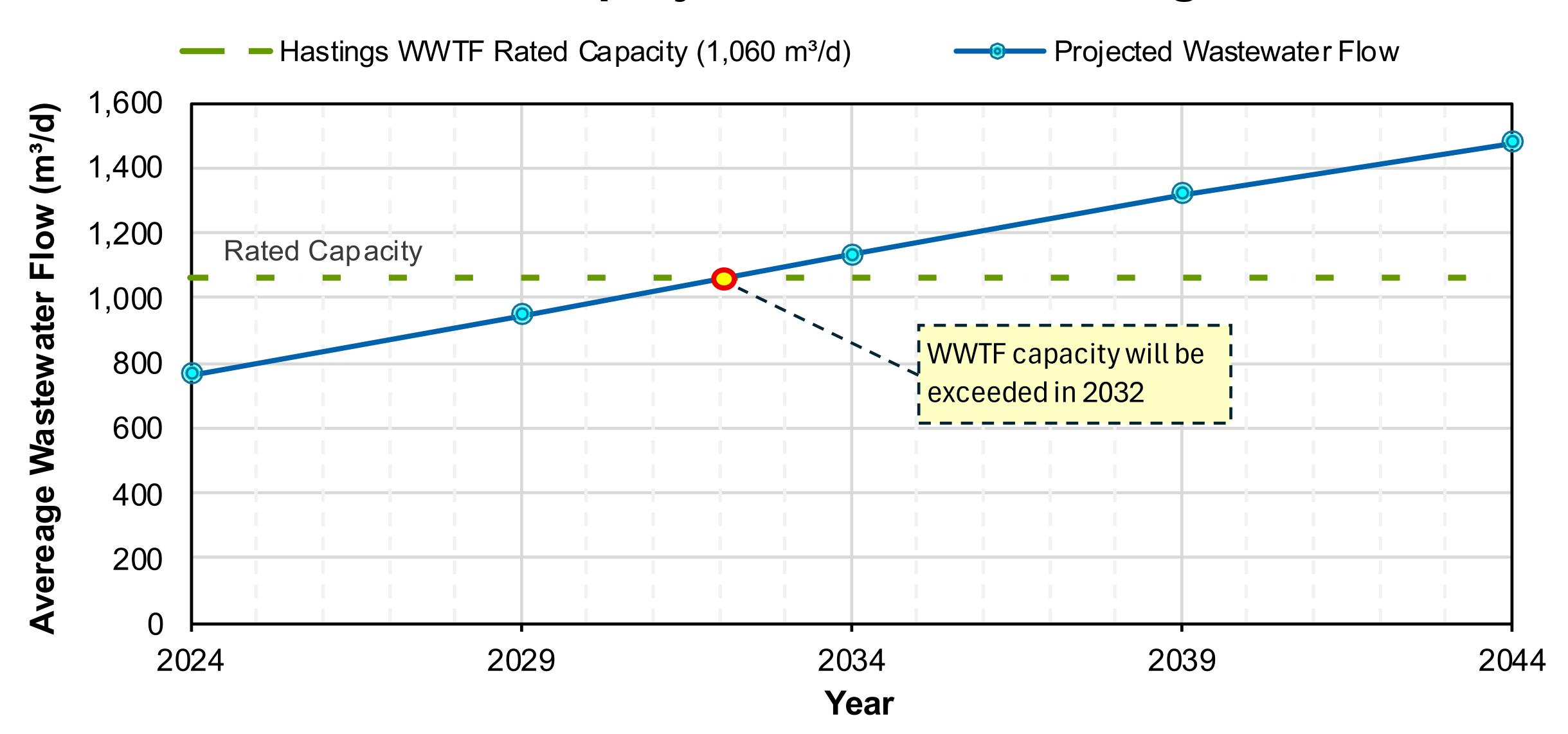


Hastings WWTF Existing/Future Conditions

Parameter	Existing
Service Population	1,562
Average Day Flowrate, m ³ /d	763.4
WWTP Rated Capacity, m ³ /d	1,060

Future (2046)	
3,098	
1,478	
1,478	

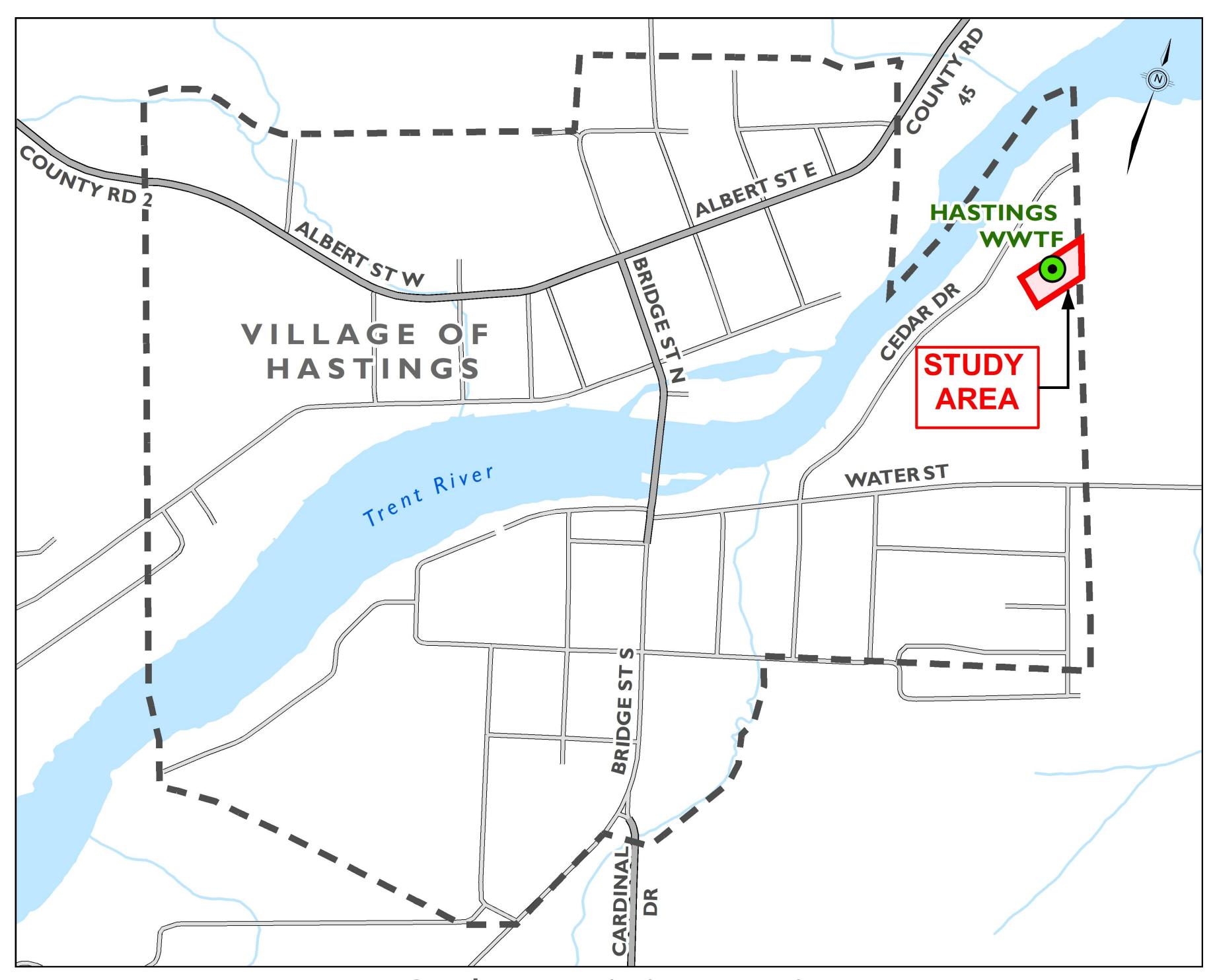
Wastewater flow projections at the Hastings WWTF





Problem/Opportunity Statement

The Village of Hastings is anticipated to grow from its current population of 1,562 persons to a buildout population of 3,098 persons. Current flow conditions exceed the rated capacity of the existing Hastings WWTF several times per year. The Hastings WWTF requires short and long term upgrades to achieve compliance and facilitate planned and future growth within the Urban Boundary.



Study Area Limits – Hastings WWTF



Long List of Alternatives – Pre-Screening

	Alternative Servicing Strategy	Pre-Screening Assessment	Shortlisted
1	Do Nothing	 Does not address existing or anticipated plant limitations, nor the capacity limitations at the Hastings WWTF WWTF will fail to service predicted population growth and developments 	
2	Limit Growth	 Limiting the community growth is inconsistent with the Municipality's objectives and planning initiatives Does not address the constraints of the existing plant. 	
3	Expand the existing WWTP	 The capacity of the existing WWTP can be upgraded through a plant expansion, to accommodate increased wastewater flows and address existing plant limitations 	Yes
4	Replace with new WWTF at a different location	 A second WWTP can treat future wastewater flows anticipated from population growth and developments Existing plant limitations could be addressed Involves reconfiguration of the wastewater collection system and construction of a new WWTF, and potential new outfall and pumping stations 	
5	Send wastewater (export) to other systems for treatment	 The nearest WWTP is approximately 19 km away (Campbellford WWTP) Requires new pumping station and connection line to the Campbellford WWTP and associated upgrades Not ideal for long term planning. Capital costs very high. More cost effective to construct a new WWTF. Hence, financially unjustifiable and not practical for the Municipality 	
6	Decentralized wastewater systems for new developments	 Likely limits growth which is inconsistent with the Municipality's objectives and planning initiatives Does not address existing plant limitations, nor the capacity limitations at the Hastings WWTF 	

Evaluation Categories

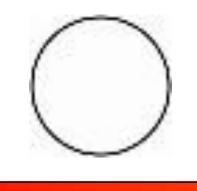
The project team established four (4) evaluation categories (Social, Technical, Natural Environment, and Economic) to evaluate the impacts and benefits of each short-listed alternative relative to each other. Examples of the questions which were asked to evaluate each alternative's impact or benefit within each category are shown below.

Can the alternative maximise use of existing infrastructure, meet future What are the potential impacts WWTF capacity requirements and in terms of noise, odour, air address existing plant constraints? quality, and traffic on the community? What are the impacts on operations? Technical Social Evaluation Categories Natural Economic Environment Does the alternative utilize existing infrastructure, with remaining asset life, in which the Municipality has What are the potential impacts already invested? of construction and operations of the alternative on the Are the alternative's long-term surrounding environments? operational and maintenance costs feasible for the Municipality?

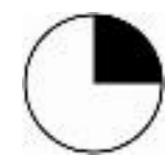


Evaluation Scoring

Short listed alternatives were assessed relative to each other and assigned a score for each evaluation category based on feasibility, complexity and other applicable aspects. Scores were assigned based on the following scoring approach:



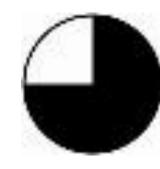
Scores according to the evaluation criteria are very low. The losses are far greater than the gains.



Scores according to the evaluation criteria are low.
Implementation would require extensive mitigation measures to reduce impacts.



Scores according to the evaluation criteria are moderate. The gains are on par with the losses.



Scores according to the evaluation criteria are moderately high, with some drawbacks. The gains outweigh the losses.



Scores according to the evaluation criteria are relatively high.
Good feasibility, low complexity and provides a viable solution.

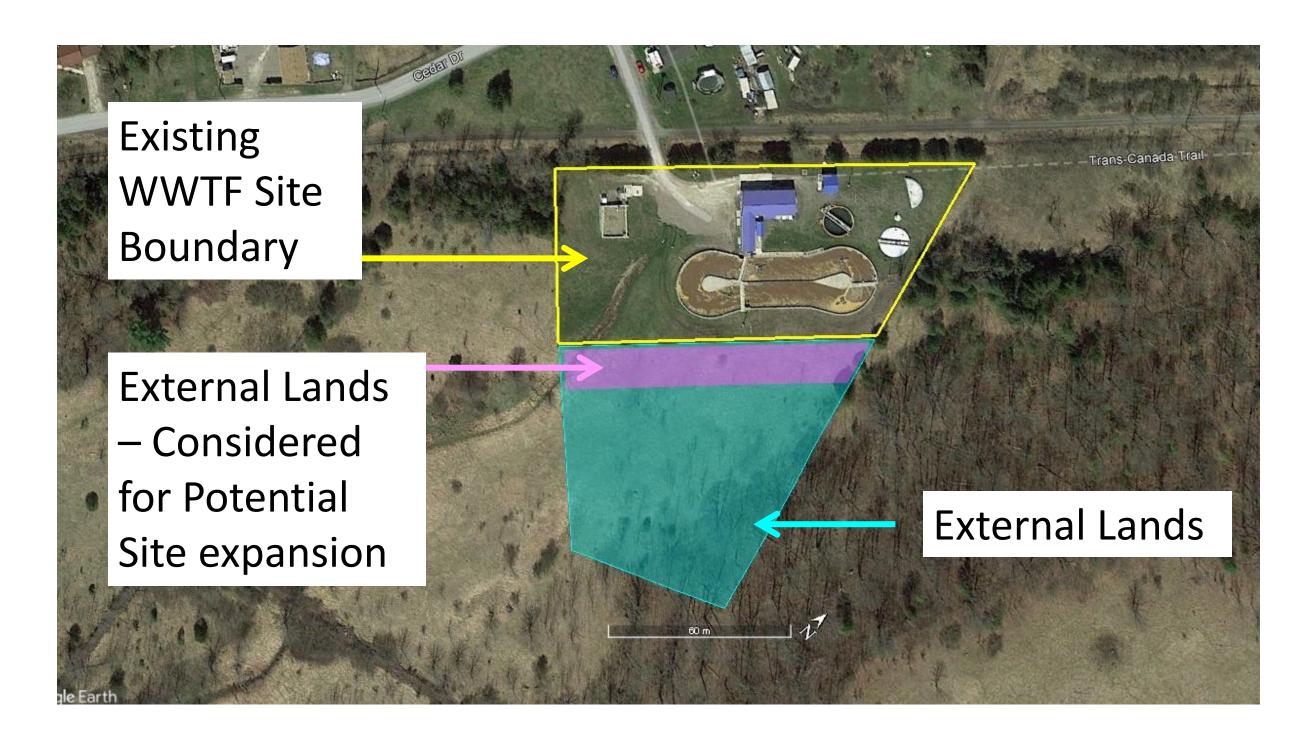
Least Preferred Most Preferred



Alternative 3 - Expand the Existing WWTP

RATING CONSIDERATIONS		
Social	 Increased truck traffic with increasing capacity Some constraints with existing facilities' layout. Noise, dust/mud, air quality, and traffic are anticipated only during construction period. Shorter construction period required. No change in noise, dust/mud, air quality anticipated during operation. No anticipated change in odour impacts. Currently no known odour issues at the WWTP. 	
Technical	 Reuse of existing outfall; No change to collection system/ sewers. Upgrades provide more capacity to treat and reliability upgrades for more redundancy. Retrofit of existing facility may be challenging for design and construction considering continuous operation of existing WWTP must be maintained & with construction around the existing facilities & associated constraints Less construction scope than other alternative 	
Natural Environment	 Impacts on the aquatic environment during operation are anticipated to be similar to existing plant operation. Increased truck traffic with plant load. Conventional Technologies to be reused, limited in efficiency gains Minor Impact due to low flow. Vulnerable on flow in the river. 	
Economic	 Full utilization of existing resources and land area. Less equipment & tankage costs and Less facilities cost required. Additional O&M costs expected to be scaled with the additional flow. Option to avoid operations bottleneck in future, ability to "Future proof" with additional upgrades. 	



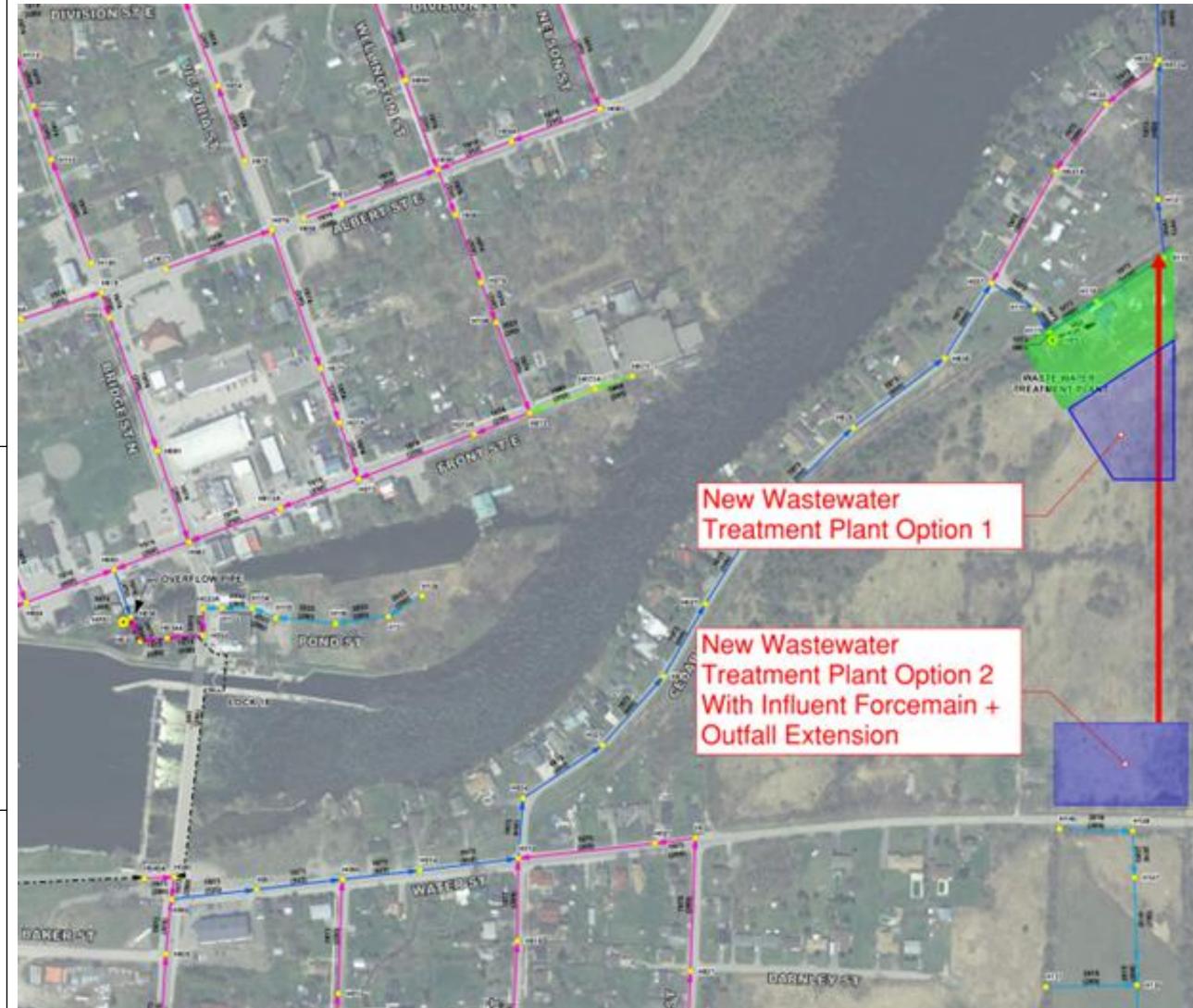




Alternative 4 - Replace with New WWTF at a Different Location

RATING CONSIDERATIONS			
Social	 Increased truck traffic with increasing capacity Truck traffic located nearer to main roads, further from residential areas. Land Acquisition required. Limited suitable locations within and outside of settlement Area Longer construction period likely resulting in prolonged noise, dust/mud, air quality and traffic impacts that require mitigation. New WWTP design will require mitigation measures (covers and odourous air treatment) to reduce potential impacts of odours on nearby residents. No anticipated change in odour impacts during operation 		
Technical	 New WWTF Processes; Potential increase in operational intensity. Increased treatment capacity; New facility with lifecycle "reset". Requires reconfiguration of Raw Sewage Pumping station and Outfall or potential new outfall Construction of a new WWTF is less complex than retrofit of existing facility and can be completed offline with tie-in during commissioning. Construction period longer; additional approvals may be required 		
Natural Environment	 Proposed location is near main road away from prominent shoreline. Impacts on the aquatic environment during operation are anticipated to be similar to existing plant operation. Increased truck traffic with plant load. Potential for more efficient technologies to replace the existing site. Vulnerable to changes in flow in the Trent River. 		
Economic	 Costs for land Acquisition (since potential sites are external lands) New Tankage and Equipment costs & new facilities cost for the new WWTF Decommissioning costs for the existing WWTF, Decommissioning of existing WWTF has minimal reuse of existing structures and equipment. Forcemain and outfall reconfiguration costs for the new WWTF Additional O&M costs expected to be scaled with the additional flow 		

New technologies may reduce unit O&M costs (electricity, etc.)



Potential External Lands (in purple) identified as possible locations for a New WWTF (Existing plot boundary in green)



Summary of Evaluation Results

Evaluation Criteria	Alternative 3 - Expand the Existing WWTP	Alternative 4- Replace with New WWTF at a Different Location
Social		
Technical		
Natural Environment		
Economic		
Ranking	1	2

The preliminary preferred alternative is:

Alternative 3 – Expand the Existing Hastings WWTF

The key advantages of this alternative as compared to the other short-listed alternative include:

- Maximizes use of existing assets and infrastructure, including no change to sewer collection network
- Minimal impacts on the surrounding natural environment
- Minimal noise, odour, air quality, and traffic impacts
- Lower anticipated greenhouse gas generation; and
- Lower estimated capital and O&M cost



What are the next steps?

After this Public Information Centre, the project team will:

- Review and consider input received during this PIC to confirm the preliminary preferred alternative presented tonight for the Hastings WWTF
- Develop and pre-screen a long-list of technologies and/or design concepts for the expansion of the Hastings WWTF.
- Evaluate short-listed technologies and/or design concepts to identify a preliminary preferred alternative for the expansion of the Hastings WWTF.
- Present preliminary preferred alternative for the expansion of the Hastings WWTF at PIC #2 to receive comments from the public, indigenous communities, and review agencies.

Summer 2025

Compile comments
from PIC #1 and
confirm
recommendation
to expand Hastings
WWTF

Fall-Winter- 2025

Identify preliminary preferred technology and/or design concept for Hastings WWTF expansion

Target Q1 2026

PIC #2



Next Steps & Comments

Questions or comments?

Should you have any questions about this presentation or the project, please fill out a comment sheet tonight or contact:



Tanya Redden, C.Tech, rcsi

Manager of Capital Works and Asset Management Municipality of Trent Hills 66 Front Street South, P.O. Box 1030 Campbellford, ON KOL 1L0 Phone: 705.653.1900 x 252 Email: tanya.redden@trenthills.ca



Bradley Young, Ph.D., P.Eng.

Project Manager CIMA+ 600-1400 Blair Towers Place, Ottawa, Ontario, K1J 9B8 Phone: 613.860.2462

Email: <u>bradley.young@cima.ca</u>

Please provide your comments and questions by September 26th, 2025.