Class EA Findings – Council Presentation

New Highway 7 Sewage Pumping Station

August 27, 2024

Kawartha Lakes
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Background Information

The City of Kawartha Lakes (City) has initiated a planning process to expand the wastewater collection system for the community of Lindsay. The community of Lindsay is rapidly expanding with new developments and upgrades to the wastewater collection system are required to support the increasing needs of the residents of the community.

One of the new developments is the Gateway Subdivision located on Highway 7 and Lindsay St. South. Upgrades to the wastewater collection system will be required to support the new homes to be built in the subdivision.

These upgrades and recommendations have been carried out as a Schedule ‘B’ project under the terms of the Municipal Class Environmental Assessment (Class EA) process, which is approved under the Environmental Assessment Act.

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Background Information Cont'd

A Public Information Centre (PIC) was held May 22nd, 2024, during which the proposed alternatives were presented, and questions/concerns were addressed.

The draft EA project file report has now been completed and submitted to the Ministry of Environment, Conservation and Parks for review and comment. Upon review of the report, a notice of completion will be issued, and the report will be filed with the MECP and made available to review agencies and the public for a review period of thirty (30) days.

The review period allows the public and review agencies to express concerns and request additional levels of assessment where required.

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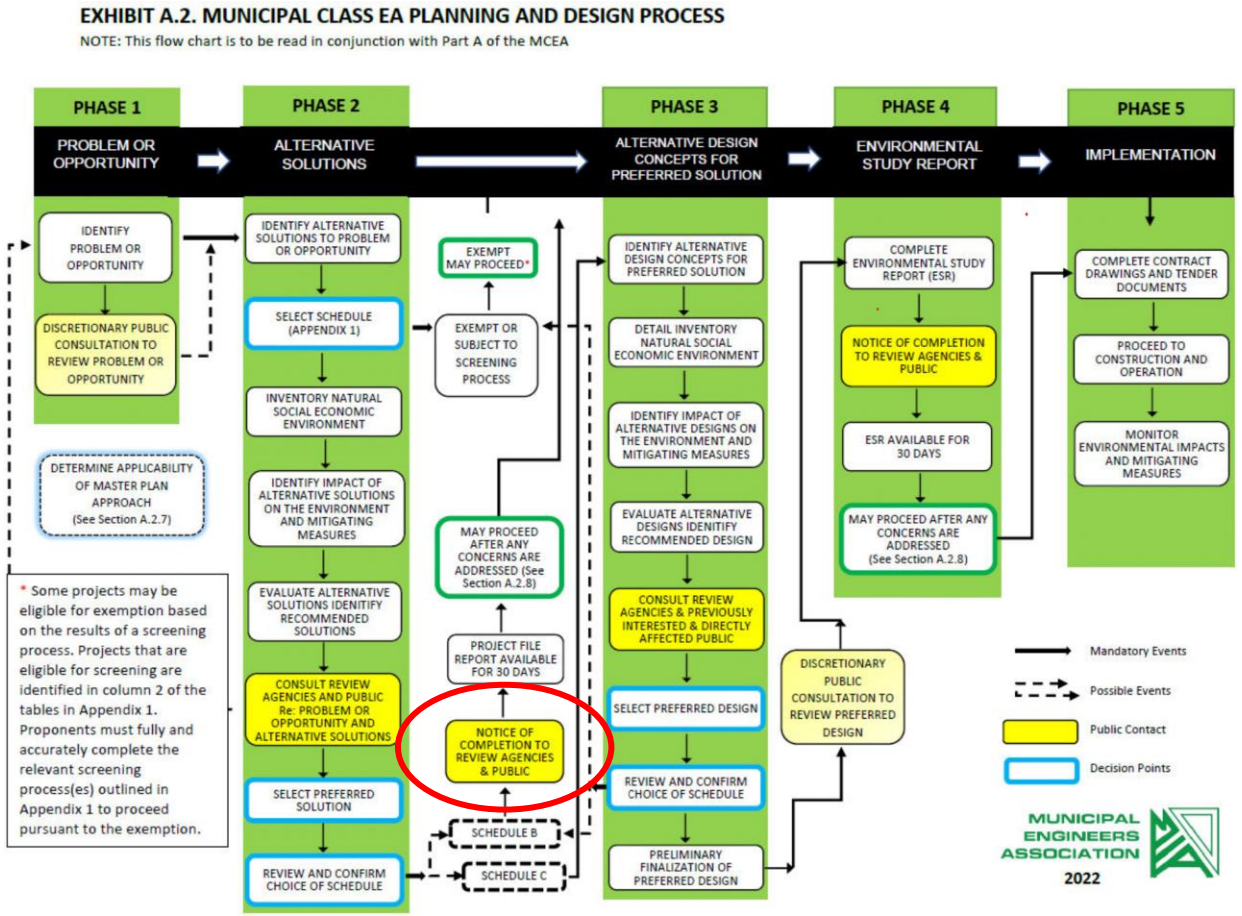
Municipal Class EA Process

- Meets the requirements of Ontario's Environmental Assessment Act by ensuring that potential environmental impacts of projects are considered.

- Consultation with the public and interested stakeholders including government review agencies and First Nations is required to identify environmental impacts of alternative solutions, develop mitigating measures and identify a preferred solution.



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Opportunity Statement

New and future developments within the community of Lindsay including the Gateway Subdivision, require upgrades to the capacity of the existing wastewater collection system.

Alternatives Considered

Do Nothing

This alternative would have the lowest capital cost and would involve continuing to use the existing wastewater collection system without any changes. This alternative is not feasible as the current system will not be able to support future developments.

Gravity Sewer System for New Development

This option involves servicing all new properties with gravity sewers. This is not a viable option because all properties will not meet the required elevations for gravity sewers to connect to the existing wastewater collection system.

New Sewage Pumping Station

This alternative involves constructing a new sewage pumping station facility within the new Gateway Subdivision development site. A new wet well system of sufficient storage volume with submersible pumps to meet the flow requirements for the wastewater collection system is considered a viable option.

Alternatives Evaluation Matrix

City of Kawartha Lakes Highway 7 Pumping Station

Project No. 2337786

Evaluation of Alternative Solutions

Description/Elements		Alt. 1		Alt. 2		Alt. 3	
		Do Nothing		Gravity Sewer System for New Development		New Sewage Pumping Station	
	Weighing Factor	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Meet Flow Capacity Requirements	0.25	0	0	0	0	5	1.25
Site/Neighbourhood/Impact/Noise/Odour/Aesthetics	0.05	5	0.25	5	0.25	4	0.2
Property Acquisition/Availability	0.05	5	0.25	5	0.25	5	0.25
Expansion Potential	0.2	0	0	1	0.2	5	1
Ease of Integration/Constructability	0.05	5	0.25	2	0.1	4	0.2
Terrestrial Habitat/Wildlife	0.05	5	0.25	5	0.25	5	0.25
Archaeological Resources	0.05	5	0.25	5	0.25	5	0.25
Operability	0.1	0	0	0	0	5	0.5
Capital/Operating Costs	0.2	5	1	4	0.8	3	0.6
Total Weighted Score	1		2.25		2.1		4.5

*Scoring: 5 is the highest (best). The highest scoring alternative reflects the preferred solution

Preferred Alternative

- The preferred alternative is a new sewage pumping station located within the Gateway Subdivision.
- The new station is expected to be a wet well system with submersible pumps rated to provide 43 L/s of flow each, in a duty-standby configuration. This design flow includes a 20% factor of safety. The station will be equipped with emergency power systems with an outdoor generator to allow operations to continue if utility power is lost.
- The station is proposed to be in the designated Block 45 of the new Gateway Subdivision. The station property will be enclosed with a fence.
- The new forcemain will extend from the proposed station and travel north to connect to maintenance hole MH 331A. Sewage will be pumped from the new station to MH 331A, then travel by gravity sewer north to Logie St. SPS.
- The high-level cost estimate for construction of the station and forcemain, is $3,400,000 including HST. Potential construction will be funded through development charges.

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Consultation

Agency Consultation

Consultation with review agencies has been undertaken throughout the project to evaluate environmental impacts of the alterative solutions and develop mitigating measures. Agencies consulted include the Ministry of Environment, Conservation and Parks (MECP) and the Ministry of Citizenship and Multiculturalism (MCM).

First Nations Consultation

Consultation with relevant First Nations groups has been undertaken throughout the project to assess the impacts of the project on Aboriginal or treaty rights. The list of relevant First Nations groups to be contacted was provided by the MECP.

Public Consultation

Interested members of the public have been added to the project contact list. Project notices were circulated and received questions have been addressed from interested public stakeholders.

Existing Environmental Inventory

Studies Completed – Natural Environment

The following studies have been completed and are referenced to support the Class EA:

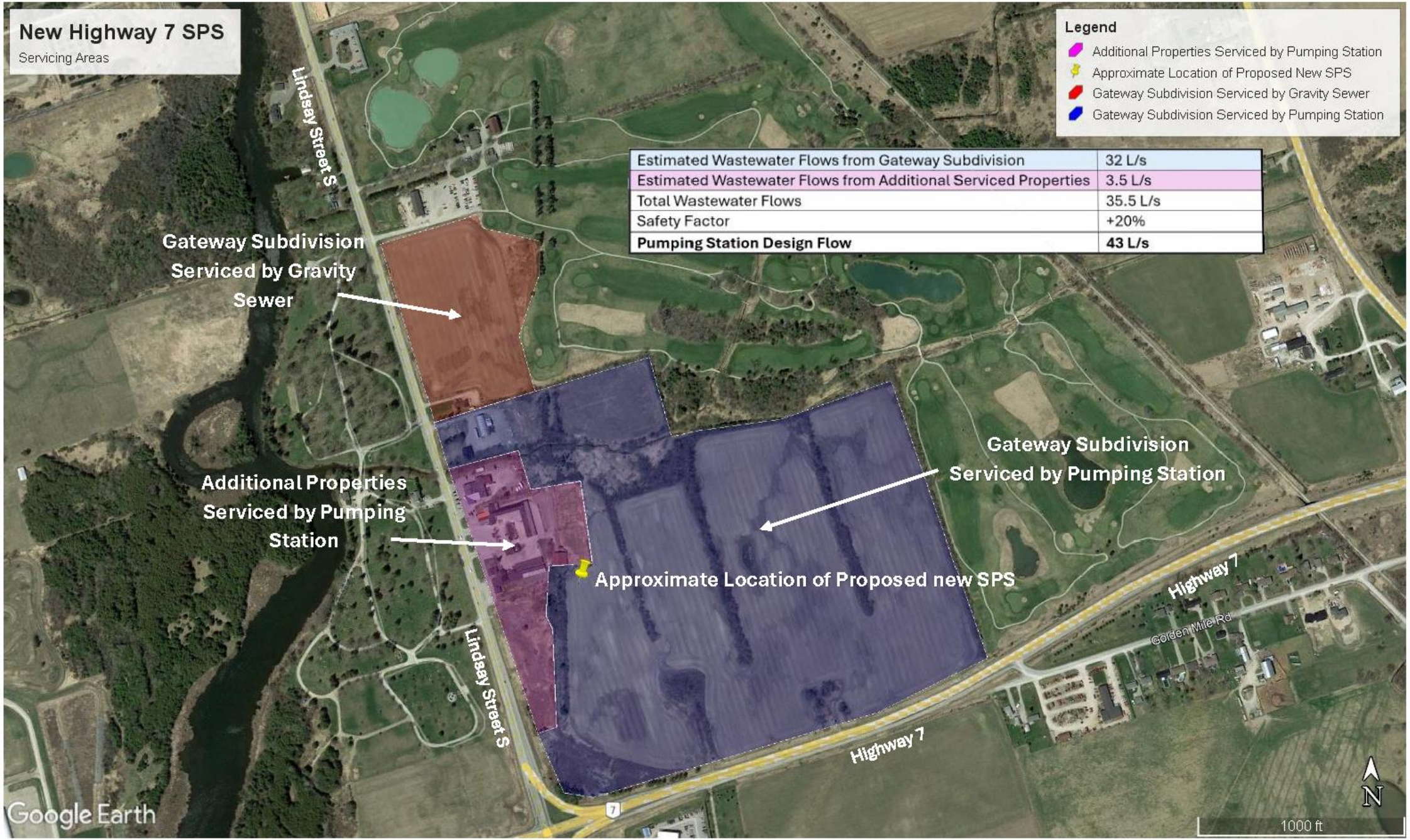
- Phase I Environmental Site Assessment
- Tree Impact Assessment
- Geotechnical Investigation
- Source Water Protection Assessment

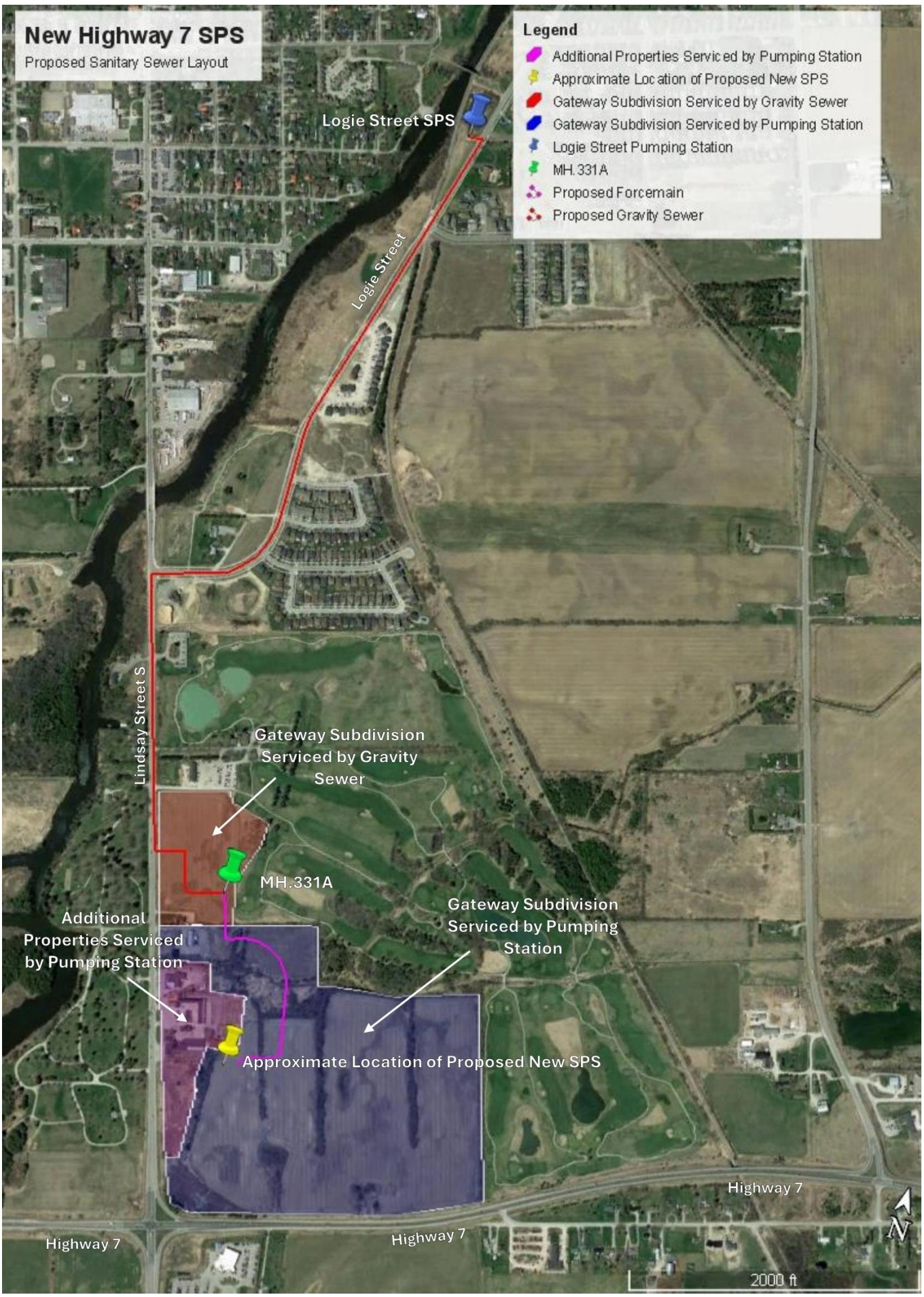
Screening Checklists Completed

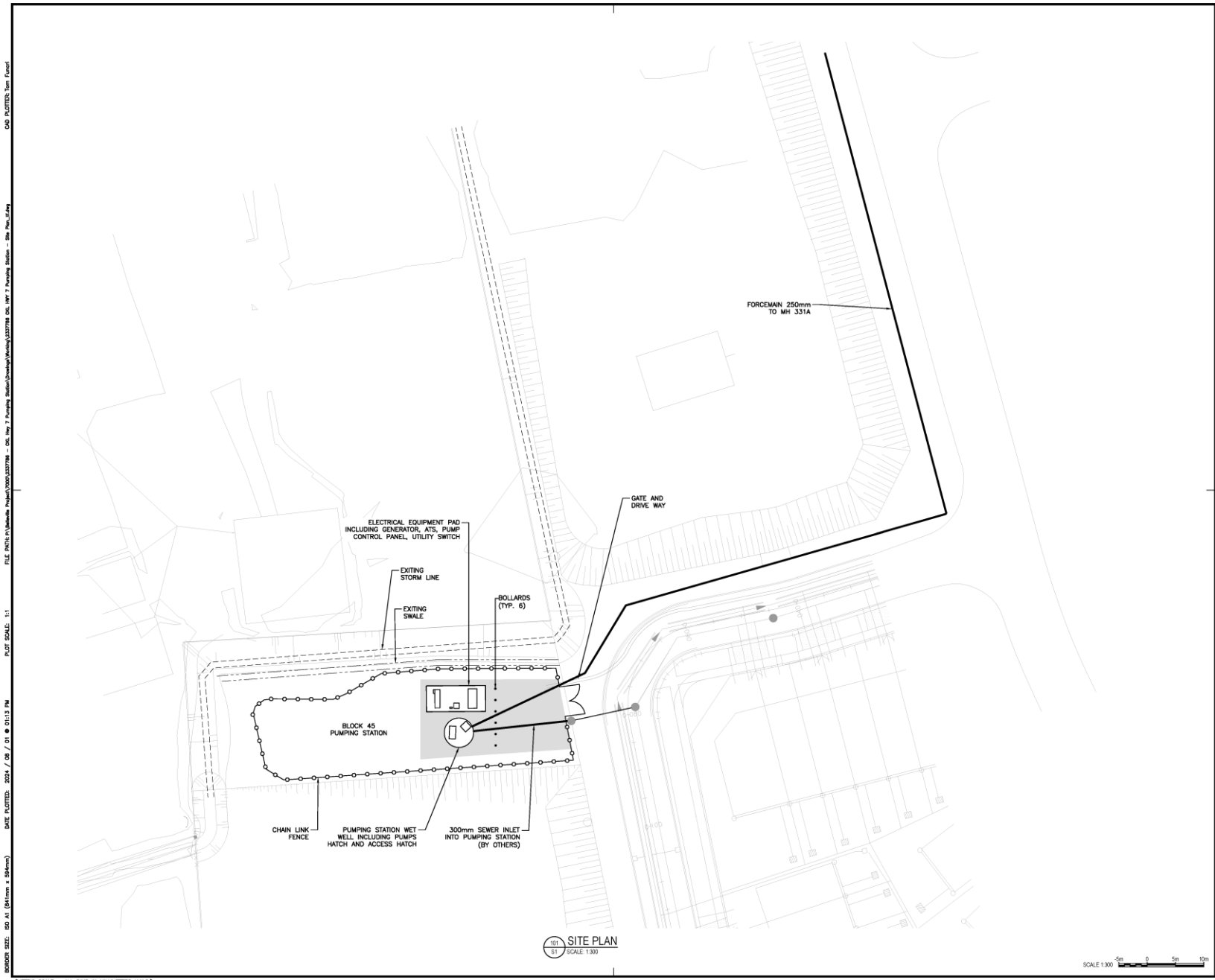
The following screening checklists developed by the MCM have been completed as part of the EA Project File:

- Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes
- Criteria for Evaluating Archaeological Potential
- Criteria for Evaluating Marine Archaeological Potential

The project site has been subjected to a Stage 1 and 2 Archeological Assessment which concluded that there is no presence of any archeological resources of cultural value or interest. As such, the conclusion of the checklists is that the study area has low potential for archeological, built heritage, cultural heritage and marine archeological resources.


New Highway 7 SPS
Servicing Areas
Legend
Additional Properties Serviced by Pumping Station
Approximate Location of Proposed New SPS
Gateway Subdivision Serviced by Gravity Sewer
Gateway Subdivision Serviced by Pumping Station
Estimated Wastewater Flows from Gateway Subdivision 32 L/s
Estimated Wastewater Flows from Additional Serviced Properties 3.5 L/s
Total Wastewater Flows 35.5 L/s
Safety Factor +20%
Pumping Station Design Flow 43 L/s
Gateway Subdivision Serviced by Gravity Sewer
Additional Properties Serviced by Pumping Station
Gateway Subdivision Serviced by Pumping Station
Approximate Location of Proposed new SPS
Lindsay Street S
Lindsay Street S
Highway 7
Highway 7
Golden Mile Rd
7
Google Earth
N
1000 ft


New Highway 7 SPS
Proposed Sanitary Sewer Layout
Legend
Additional Properties Serviced by Pumping Station
Approximate Location of Proposed New SPS
Gateway Subdivision Serviced by Gravity Sewer
Gateway Subdivision Serviced by Pumping Station
Logie Street Pumping Station
MH.331A
Proposed Forcemain
Proposed Gravity Sewer
Logie Street SPS
Logie Street
Lindsay Street S
Gateway Subdivision Serviced by Gravity Sewer
MH.331A
Additional Properties Serviced by Pumping Station
Gateway Subdivision Serviced by Pumping Station
Approximate Location of Proposed New SPS
Highway 7
Highway 7
Highway 7
N
2000 ft



101 / S1 SITE PLAN
SCALE 1:300

SCALE 1:300 -5m 0 5m 10m

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NOTES:
1. ALL WORK SHALL BE IN ACCORDANCE WITH RELEVANT CODES AND GUIDELINES.
2. ALL DRAWINGS AND ADDENDA ARE TO BE READ AS, AND IN CONJUNCTION WITH THE SPECIFICATIONS.
3. ALL EQUIPMENT SHALL BE INSTALLED AS SPECIFIED OR APPROVED EQUIVALENT.
4. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH WORK AND BE RESPONSIBLE FOR SAME.
5. CONTRACTOR MUST REPORT ANY DISCREPANCIES TO ENGINEER FOR RESOLUTION BEFORE COMMENCING THE WORK.
6. ANY CHANGES MUST BE APPROVED BY THE ENGINEER.

A/B A DETAIL NO.
B DRAWING NO. – WHERE DETAILED

REVISION	DESCRIPTION	DATE
01	ISSUED FOR REVIEW	24/05/17

NORTH

STAMP

PROJECT
CKL HWY 7
PUMPING STATION

LINDSAY, ONTARIO

DRAWING TITLE
SITE PLAN

DESIGNED BY
J. SINNAKANDU

DRAWN BY
T. FUNARI/C. CLARK

REVIEWED BY
T. GUERRERA

APPROVED BY
T. GUERRERA

PROJECT DATE
2024/03/01
(YYYY/MM/DD)

PROJECT #
23-3-7786

DRAWING #
SP1

DRAWING SCALE (ISO A1)
HOR: AS SHOWN
VER: AS SHOWN

BORDER SIZE: ISO A1 (841mm x 594mm) DATE PLOTTED: 2024 / 08 / 01 @ 01:13 PM PLOT SCALE: 1:1 FILE PATH: P:\Belleville Project\7000\3337788 - CKL Hwy 7 Pumping Station\Drawings\Working\3337788 CKL HWY 7 Pumping Station - Site Plan_2.dwg CAD PLOTTER: Tom Funari

(METRIC SCALE – ALL DIMS IN MILLIMETERS U.N.O.)

Next Steps

- Finalize Project File Report and issue Notice of Completion
- Complete review period and address raised concerns
- Complete Contract Drawings and Tender Documents

Project Contact Information

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Thank you