LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION – SCHEDULE 'C' MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

Appendices
December 4, 2025

APPENDICES

Project Number: 165620295

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- Figure 1.2: Little River Pollution Control Plant Process Schematic
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- Figure 4.2: Aerial Plan of Windsor's Cultural Heritage Sites





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CITY OF WINDSOR SERVICE AREA

TOWN OF TECUMSEH SERVICE AREA

Appd. YY.MM.DD Dwn. Chkd. Dsgn. YY.MM.DD

PRELIMINARY NOT FOR CONSTRUCTION

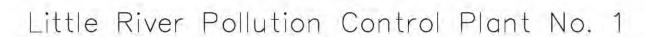
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LITTLE RIVER POLLUTION CONTROL PLANT MUNICIPAL CLASS ENVIRONMENTAL

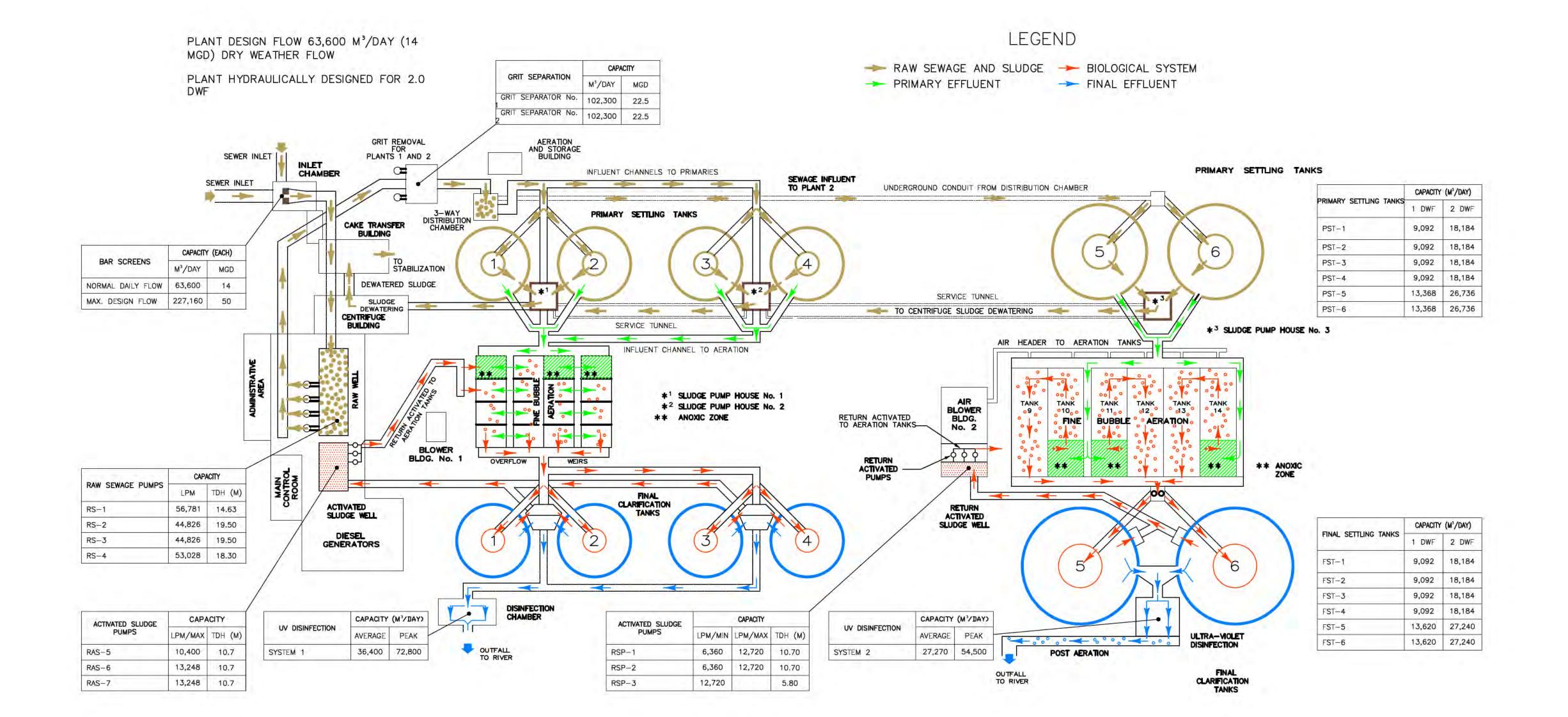
LITTLE RIVER POLLUTION CONTROL PLANT SANITARY SERVICING AREA

Scale

FIGURE 1.1



Little River Pollution Control Plant No. 2





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Legend

Note

Revision		By	Appd.	YY.MM.EY
Issued			Appd.	YY.MM.YY
File Name: 165620295_LRPCP_PLANT_FLOW	Dwn	Chkd	Dean	

Permit/Seal

Client/Project
CORPORATION OF CITY OF WINDSOR

LITTLE RIVER POLLUTION CONTROL PLANT MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

City of Windsor, Ontario

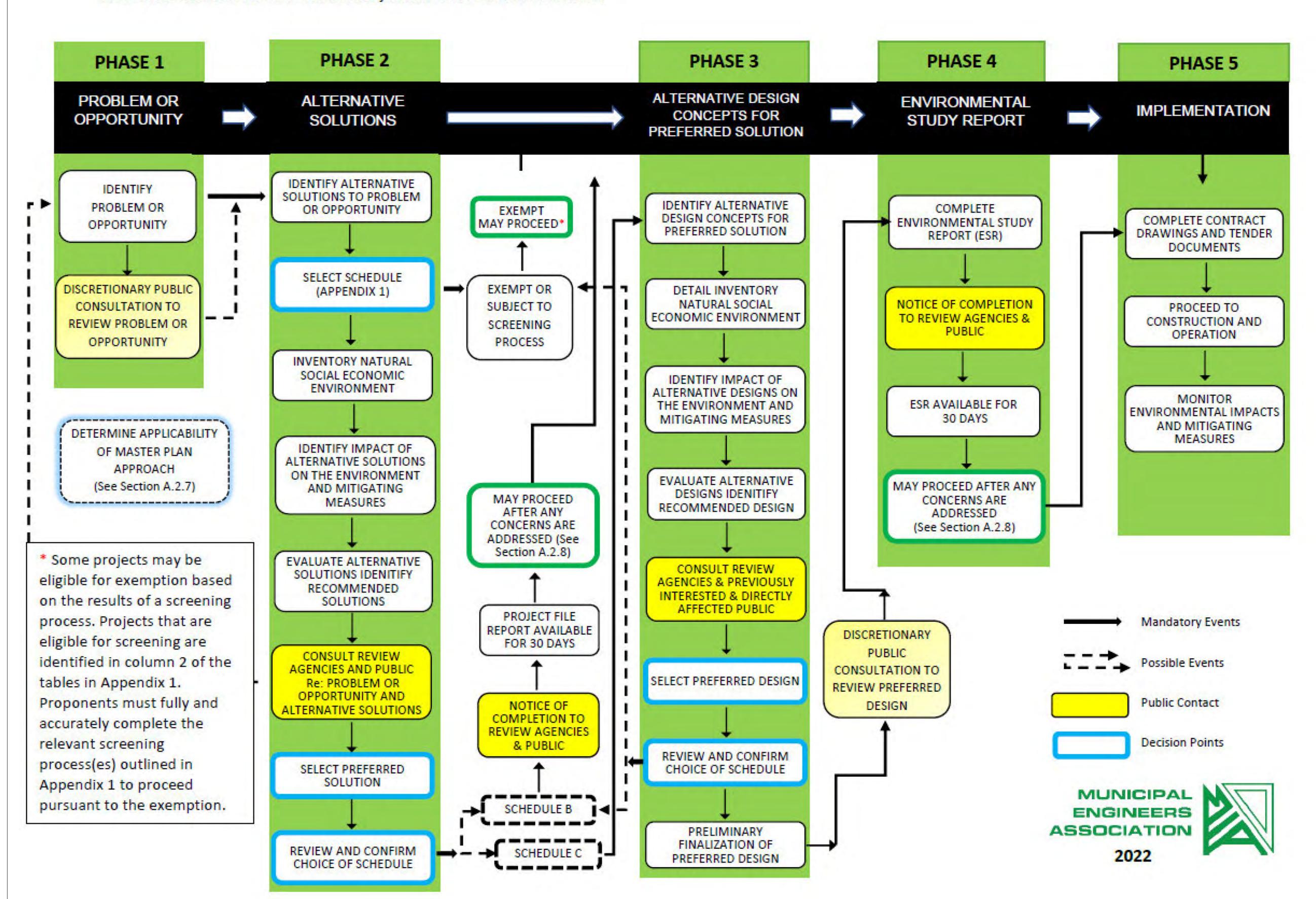
City

LITTLE RIVER POLLUTION CONTROL PLANT PROCESS SCHEMATIC

Project No. 165620295	Scale
Revision	Drawing No.
	FIGURE 1.2

EXHIBIT A.2. MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

NOTE: This flow chart is to be read in conjunction with Part A of the MCEA





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Notes

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Revision	Ву	Appd.	YY.MM.DD
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CORPORATION OF THE CITY OF WINDSOR LITTLE RIVER POLLUTION CONTROL PLANT MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

City of Windsor, Ontario

Title

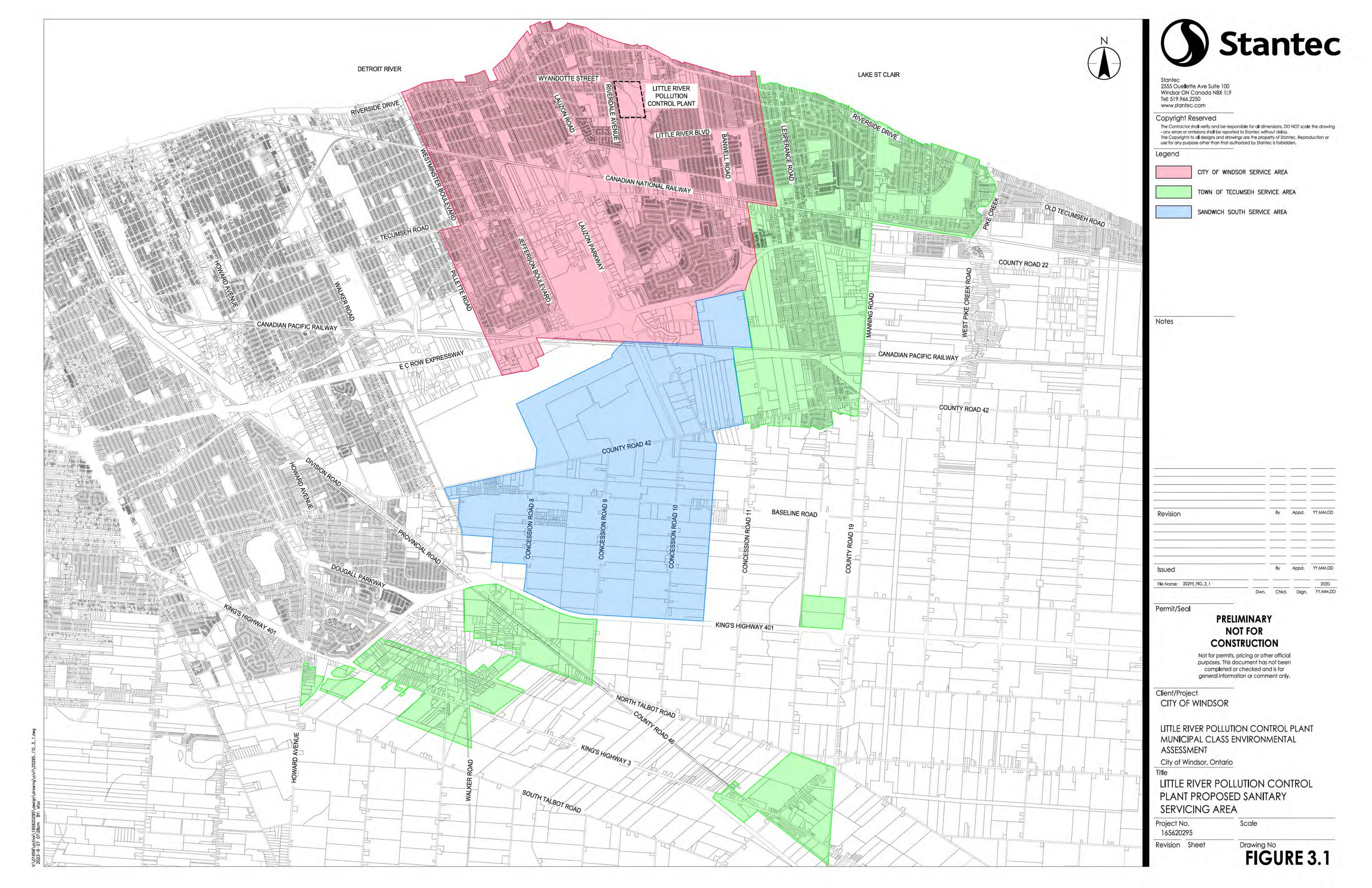
Municipal Class EA Planning and Design Process from the Municipal Engineers

Association

Project No. Scale
165620295 AS SHOWN
Revision Sheet Drawing No.

FIGURE 1.3

Dwn. Chkd. Dsgn. YY.MM.DD





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Legend

Closed Little River Landfill

Contaminant Attenuation Zone (CAZ)

1:1,455 (At original document size of 22x34)

1. Coordinate System: WGS 1984 UTM Zone 17N

- 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
- 3. Orthoimagery © First Base Solutions, 2018, Imagery Date, 2019.
- 4. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018. Elevations from SWOOP 2015 Digital Elevation Model.

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Project Location Windsor, Ontario

165620295 REVA Prepared by HR on 2023-11-06

Client/Project

City of Windsor

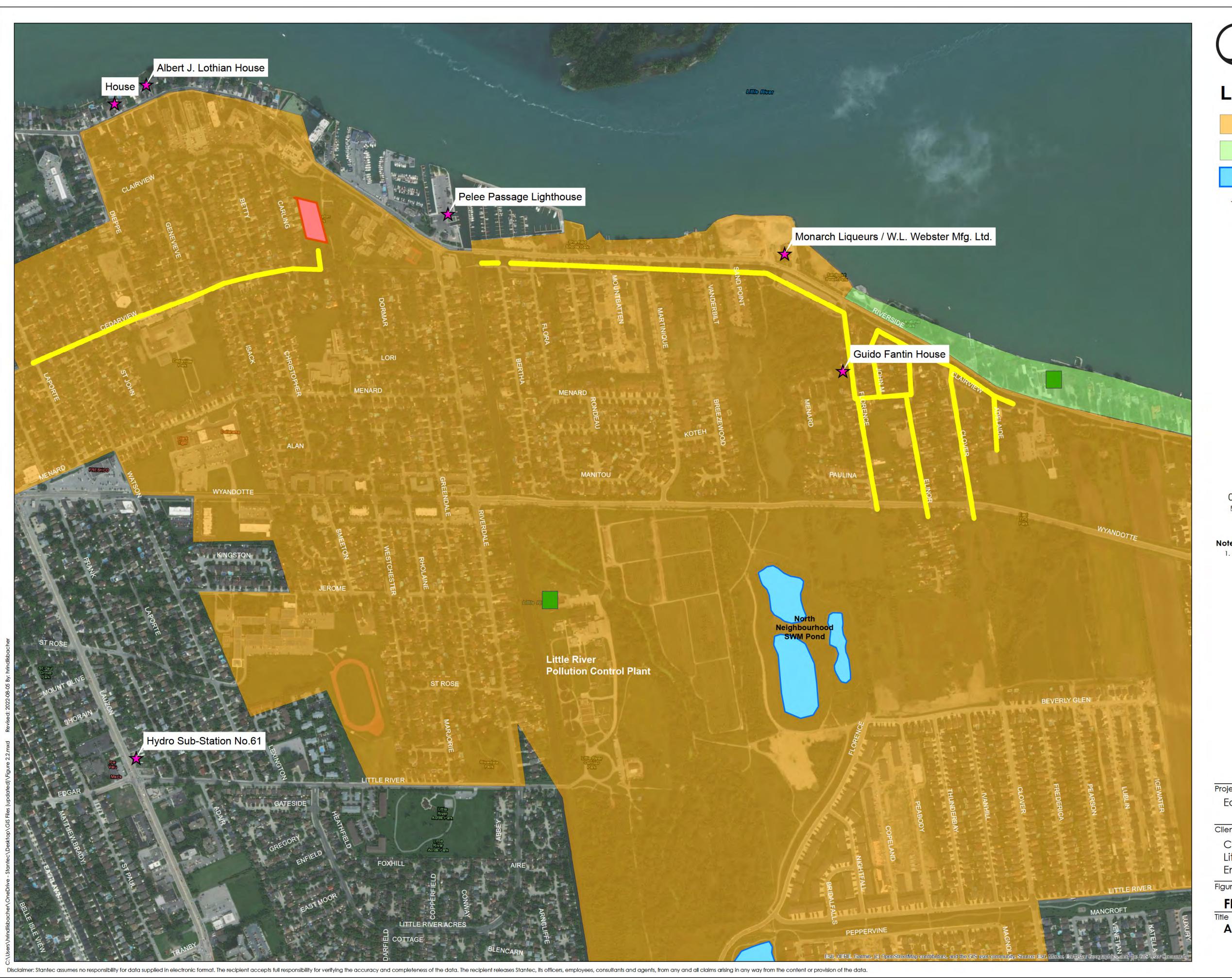
Little River Pollution Control Plant Municipal

Class Environmental Assessment

Figure No.

FIGURE 4.1

Closed Little River Landfill Site Plan





Legend

Pontiac Drainage Area Amended

Drainage Area Storm Sewer

SWM Ponds

★ Heritage Sites

0 270 540 metres 1:4,495 (At original document size of 22x34)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N

Project Location

East Windsor

165620249 REVA Prepared by HLR on 2022-08-05

Client/Project

City of Windsor Little River Pollution Control Plant Municipal Class Environmental Assessment

Figure No.

FIGURE 4.2

Aerial Plan of Windsor's Cultural Heritage Sites

Appendix B BACKGROUND

Little River Pollution Control Plant Environmental Compliance Approval 4681-BT3L39, January 2021



Content Copy Of Original



Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4681-BT3L39

Issue Date: January 29, 2021

The Corporation of the City of Windsor 4155 Ojibway Pky Windsor, Ontario N9A 6S1

Site Location:Little River Pollution Control Plant 9400 Little River Road City of Windsor, County Of Essex

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

usage and operation of existing municipal sewage works, for the treatment of sanitary sewage and disposal of effluent to Little River via a Sewage Treatment Plant (Little River Wastewater Treatment Plant) and Final Effluent disposal facilities as follows:

Classification of Collection System: Separate Sanitary Sewer System

Classification of Sewage Treatment Plant: Secondary

Design Capacity of Sewage Treatment Plant

Design Capacity with All Treatment Trains in Operation	Existing Works
Rated Capacity	72,800 m ³ /d

Influent and Imported Sewage

Receiving Location	Types
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	Leachate

Existing Works:

Little River Wastewater Treatment Plant (WWTP)

Leachate Unloading Facility

 one (1) storage tank with a total effective storage volume of 734 m³, designed to receive up to 210 m³/d of leachate from Landfill #3 and Essex-Windsor Regional Landfill;

- one (1) submersible pump rated at 2.31 L/s at a total dynamic head (TDH) of 10 m, discharging to the inlet chamber;
- one (1) leachate metering gravity drain line;

Influent Sewers

• one (1) 1,500 mm diameter sanitary sewer and one (1) 900 mm diameter sanitary sewer to the Preliminary Treatment System;

Preliminary Treatment System

- · inlet chamber and screening
 - a 13.4 m x 6.4 m inlet chamber consisting of two (2) screen channels, each equipped with an automatically cleaned bar screen with 19 mm clear openings, inlet and outlet isolating sluice gates;
 - a 1,800 mm diameter sewer to the raw sewage pumping station;
- Raw Sewage Pumping Station
 - a 16.9 m x 2.21 m with 8.4 m depth wet well;
 - one (1) vertical centrifugal pump (RSP#1) rated at 56.4 m³/min. at a TDH of 16.2 m, equipped with variable speed drive;
 - one (1) vertical centrifugal pump (RSP#2) rated at 59.0 m³/min. at a TDH of 16.6 m, equipped with constant speed drive;
 - one (1) vertical centrifugal pump (RSP#3) rated at 59.0 m³/min. at a TDH of 16.6 m, equipped with variable speed drive;
 - one (1) vertical centrifugal pump (RSP#4) rated at 60.9 m³/min. at a TDH of 17.1 m, equipped with constant speed drive;
 - two (2) 600 mm diameter forcemains on easements from Raw Sewage Pumping Station to inlet feed channels at the Grit Removal Facility;
- Grit Removal
 - two (2) 7.92 x 7.92 m grit separators equipped with mechanical grit removal mechanism and reciprocating rake type grit clarifier;
 - two (2) 1.22 m x 3.05 m deep channels to the Flow Distribution Chamber and overflow through storm overflow weirs and sluice gates via a 1070 mm diameter overflow pipe to the Storm Overflow Chamber;

Flow Distribution/Areated Chamber

• one (1) 7.92 m x 7.92 m with nominal depth of 5.69 m flow distribution/aerated chamber located downstream of the Storm Overflow Chamber and Influent Flow Measurement Facility, equipped with six (6) downward opening weir type outlet side gates and discharging to the primary clarifiers of Plant #1 and Plant #2 and two (2) by-pass gates, electric motor operators, handwheel operators;

Storm Overflow Chamber

• one (1) storm overflow chamber to the overflow disinfection system;

Influent Flow Measurement and Sampling Point

- flow measurement device at the two (2) 1.22 m x 3.05 m deep channels;
- automatic composite sampler at the Raw Sewage Pumping Station;

Plant 1

Primary Treatment System

- four (4) 24.4 m diameter by 2.74 m side water depth (SWD), centre feed type primary clarifiers (PSTs #1 to #4), each equipped with sludge storage and thickening compartment, each having a hydraulic capacity of 9,092 m³/d, discharging to aeration tanks;
- sludge collection mechanisms and scum removal systems;
- two (2) sludge and scum pumps for PST #1 and PST #2, each with a maximum capacity of 750 L/min;
- two (2) sludge and scum pumps for PST #3 and PST #4, with a maximum capacity of 750 L/min and a maximum capacity of 662 L/min;
- one (1) washwater pump with a capacity of 1,893 L/min at a TDH of 70 m;

Secondary Treatment Systems

- · Biological Treatment
 - four (4) 37.5 m x 9.1 m x 3.9 m SWD aeration tanks, each equipped with fine bubble aeration system and divided into four

- (4) 9.1 m square compartments by a baffle wall, discharging to the secondary settling tanks, discharging to the secondary settling tanks;
- anoxic selector zones in first stage AT #1, AT #3 and AT #4;
- 900 mm diameter interconnection to aeration tanks in Plant 2;
- four (4) multistage centrifugal air blowers rated at 2,975 m³/h at 49 kPa and 3,600 rpm;
- · Secondary Sedimentation
 - four (4) 24.4 m diameter with 2.74 m SWD, centre feed type secondary settling tanks (FSTs #1 to #4) with sludge collection mechanisms and scum removal system, discharging to an effluent disinfection system;
 - one (1) 5.7 m x 2.59 m x 3.15 m activated sludge pump well;
 - two (2) variable speed vertical centrifugal return activated sludge pumps (RAS #6 and RAS #7), each rated at 13.2 m³/min at a TDH of 10.7 m and 1,200 rpm;
 - one (1) constant speed return activated sludge pump (RAS #5) rated at 15.1 m³/min at a TDH of 10.7 m and 870 rpm;

Effluent Aeration System

 an aeration chamber with fine bubble are diffusers, two (2) centrifugal type are blowers with a rated capacity of 470 m³/h at 4,75 psi gauge pressure, discharging to the disinfection system;

Disinfection System

• two (2) 1.46 m wide channels each equipped with 352 ultraviolet germicidal lamps to disinfect effluent serving FSTs #1 to #4, discharging to final effluent disposal facility;

Final Effluent Flow Measurement and Sampling Point

- flow measurement device installed in the outlet channel, for measuring Plant 1 flow;
- automatic composite sampler at outlet of disinfection channel;

Final Effluent Disposal Facilities

- one (1) 0.94 m wide x 1.575 m deep outlet channel, discharging to an elliptical underground pipe;
- 0.96 m x 1.52 m elliptical underground pipe connected to the outfall chamber (outfall No. 1) discharging to the Little River;

Effluent Water System

- one (1) effluent water system with two (2) centrifugal pumps, each rated at 11.4 L/s at a TDH of 47 m, a hydropneumatic pressure tank, sourcing effluent water from the contact chamber;
- a back-up connection to the municipal water supply;

Plant 2

Primary Treatment System

- two (2) 30.5 m diameter with 3.35 m SWD, centre feed type primary clarifiers (PSTs #5 and #6), each equipped with sludge storage and thickening compartment, each having a hydraulic capacity of 18,184 m ³/d, discharging to the aeration tanks;
- sludge collection mechanisms and scum removal systems;
- two (2) sludge and scum pumps for PST #5 and PST #6, each with a maximum capacity of 908 L/min;
- one (1) washwater pump with a capacity of 1,893 L/min at a TDH of 70 m;

Secondary Treatment Systems

Biological Treatment

- six (6) 30.5 m x 7.6 m with an average liquid depth of 6.04 m aeration tanks (ATs #9 to #14), each equipped with fine bubble air diffusers and divided into two (2) 7.6 m square compartments and one (1) 14.7 m x 7.6 m compartment by a baffle walls;
- anoxic selector zones in first stage AT#10, AT#11 and AT#14;
- 900 mm diameter interconnection to aeration tanks in Plant 1;
- three (3) multistage centrifugal air blowers rated at 3,960 m³/h at 61 kPa and 3,600 rpm;

Secondary Sedimentation

- two (2) 37.4 m diameter with 4.01 m SWD, centre feed type secondary settling tanks (FSTs #5 and #6) with sludge collection mechanisms and scum removal system, discharging to the disinfection system;
- one (1) 7.9 m x 2.59 m x 2.0 m x 4.98 m activated sludge pump well;
- two (2) variable speed vertical centrifugal return activated sludge pumps (RAS #1 and #2), each rated at 12.7 m³/min at a TDH of 5.8 m and 875 rpm, one (1) constant speed return activated sludge pump (RAS #3), rated at 12.7 m³/min at a TDH of 5.8 m and 875 rpm, discharging to the aeration tanks distribution chamber:
- one (1) constant speed waste activated sludge pump, rated at 1.1 m³/min at a TDH of 8.4 m and 1,750 rpm, discharging to the sludge management system;

Disinfection System

 two (2) 1.08 m wide channels each equipped with 265 ultraviolet germicidal lamps to disinfect effluent serving FSTs #5 and #6, discharging to the final effluent disposal facility;

Final Effluent Disposal Facilities

- a 1.83 m wide effluent aeration channel equipped with fine bubble are diffusers, equipped with two (2) centrifugal type are blowers with a rated capacity of 635 m³/h at 4 psi gauge pressure;
- a 1050 mm diameter pipe to outfall chamber to Little River;

Final Effluent Flow Measurement and Sampling Point

- flow measurement device at outlet of effluent aeration channel;
- automatic composite sampler at outlet of disinfection channel;

Effluent Water System

• one (1) effluent water system with one (1) centrifugal pump rated at 3.15 L/s at a TDH of 61 m, a hydropneumatic pressure tank, sourcing effluent water from the effluent aeration channel;

Overflow Disinfection System

a double wall sodium hypochlorite storage tank with a storage capacity of 24.5 m³, located within a containment area, equipped with diaphragm metering pumps and contact chamber, for the disinfection of overflow from storm overflow chamber to the outfall chamber (outfall No. 1), and serves as a back up to UV disinfection System for Plant 1;

Supplementary Treatment System

- Phosphorus Removal
 - three (3) vertical, circular, fibreglass reinforced, above ground outdoor phosphorus removal chemical storage tanks with two (2) tanks having a storage capacity of 56,750 L capacity and one (1) tank having a storage capacity of 63,560 L;
 - two (2) diaphragm metering feed pumps with a maximum capacity of 341 L/h, from the storage tanks to the raw sewage flow upstream of primary clarifiers;

Sludge Management System

Sludge Dewatering

- two (2) inclined macerator pumps, discharging to one (1) 3.65 m x 2.4 m x 3,5 m sludge holding tank;
- three (3) variable speed progressive cavity pumps, each rated at up to 1,120 L/min at a TDH of 28.2 m and 265 rpm;
- three (3) solid bowl centrifuges, each rated at up to 34.2 m³/h operating at 2,600 rpm;
- polymer feed system, sludge cake transport system and odour control system;
- a truck loading system capable of loading two (2) trucks consecutively and simultaneously with eight (8) sludge discharge port;
- Sludge Condition System
 - two (2) polymer batching and feed system to aid in bulking of solids in the centrifuges, consisting of:
 - one (1) dry polymer batch feeding and wetting unit for metering dry polymer from a bulk bag supply to prepare polymer solution and transfer it to either of the two (2) mixing/holding tank, capable of supplying up to 1.25 L/s of solution;
 - two (2) mixing/holding tanks, each with a capacity of 3,028 L, stainless steel mixing impeller, alternate on a fill-use cycle;
 - three (3) single positive displacement, progressing cavity type polymer pump with variable speed drive to pump polymer solution through static mixer to the centrifuge, with rated capacity of 4 to 60 L/min at a maximum pressure of 50 psi;
 - three (3) polymer dilution and mixing units (one unit per polymer pumps) with rotameter and static mixer;
 - three water meters to measure and record dilution water used when doing polymer to suction side of the sludge feed pumps;

Odour Control Facility

- one (1) odour control unit for removing odours resulting from primary sludge, domestic and industrial waste, and activated sludge secondary treatment facilities;
- one (1) above ground hypochlorite storage tank with a capacity of 2,400 L;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering

only;

all in accordance with the submitted supporting documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

- 1. "Annual Average Daily Influent Flow" means the cumulative total sewage flow of Influent to the Sewage Treatment Plant during a calendar year divided by the number of days during which sewage was flowing to the Sewage Treatment Plant that year;
- 2. "Approval" means this environmental compliance approval and any schedules attached to it, and the application;
- 3. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
- 4. "Bypass" means diversion of sewage around one or more treatment processes, excluding Preliminary Treatment System, within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling point(s) and discharged via the approved effluent disposal facilities;
- 5. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 6. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
- 7. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
- 8. "*E. coli*" refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well

methods);

- 9. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 10. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted:
- 11. "Event" means an action or occurrence, at a given location within the Works that causes a Bypass or Overflow. An Event ends when there is no recurrence of Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Overflows and Bypasses are separate Events even when they occur concurrently;
- 12. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
- 13. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, including all Bypasses, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
- 14. "Imported Sewage" means sewage hauled to the Sewage Treatment Plant by licensed waste management system operators of the types and quantities approved for co-treatment in the Sewage Treatment Plant, including hauled sewage and leachate within the meaning of R.R.O. 1990, Regulation 347: General Waste Management, as amended;
- 15. "Influent" means flows to the Sewage Treatment Plant from the collection system and Imported Sewage;
- 16. "Limited Operational Flexibility" (LOF) means the conditions that the Owner shall follow in order to undertake any modification that is pre-authorized as part of this Approval;
- 17. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
- 18. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month, calculated and reported as per the methodology specified in Schedule F;

- 19. "Monthly Geometric Mean Density" is the mean of all Single Sample Results of *E. coli* measurement in the samples taken during a calendar month, calculated and reported as per the methodology specified in Schedule F;
- 20. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;
- 21. "Operating Agency" means the Owner or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
- 22. "Overflow" means a discharge to the environment from the Works at designed location(s) other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the Final Effluent sampling point;
- 23. "Owner" means The Corporation of the City of Windsor and its successors and assignees;
- 24. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- 25. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
- 26. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
- 27. "Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a license issued under the Professional Engineers Act;
- 28. "Rated Capacity" means the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle;
- 29. "Sanitary Sewers" means pipes that collect and convey wastewater from residential, commercial, institutional and industrial buildings, and some infiltration and inflow from extraneous sources such as groundwater and surface runoff through means other than stormwater catch basins;
- 30. "Secondary Effluent" means the effluent from the Secondary Treatment System that

are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Secondary Treatment Effluent sampling point;

- 31. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
- 32. "Separate Sewer Systems" means wastewater collection systems that comprised of Sanitary Sewers while runoff from precipitation and snowmelt are separately collected in Storm Sewers;
- 33. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
- 34. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or sample, as required;
- 35. "Source Protection Authority" has the same meaning as in the *Clean Water Act,* 2006;
- 36. "Source Protection Plan" means a drinking water source protection plan prepared under the *Clean Water Act, 2006*;
- 37. "Storm Sewers" means pipes that collect and convey runoff resulting from precipitation and snowmelt (including infiltration and inflow);
- 38. "Works" means the approved sewage works, and includes Existing Works and modifications made under Limited Operational Flexibility.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

2. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

- 3. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
- 4. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

5. CHANGE OF OWNER AND OPERATING AGENCY

- 6. The Owner shall, within thirty (30) calendar days of issuance of this Approval, prepare/update and submit to the District Manager the Municipal and Local Services Board Wastewater System Profile Information Form, as amended (Schedule G) under any of the following situations:
 - a. the form has not been previously submitted for the Works;
 - b. this Approval is issued for extension, re-rating or process treatment upgrade of the Works;
 - c. when a notification is provided to the District Manager in compliance with requirements of change of Owner or Operating Agency under this condition.
- 7. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O.* 1990, c. B.17, as amended, shall be included in the notification;
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39*, as amended, shall be included in the notification.
- 8. The Owner shall notify the District Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Operating Agency;
 - b. change of Operating Agency, including address of new Operating Agency.
- 9. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of

the notice to the District Manager.

10. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

11. RECORD DRAWINGS

12. A set of record drawings of the Works shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

13. BYPASSES

- 14. Any Bypass is prohibited, except:
 - a. an emergency Bypass when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of a treatment process or when an unforeseen flow condition exceeds the design capacity of a treatment process that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not bypassed;
 - b. a planned Bypass that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Bypass, including an estimated quantity and duration of the Bypass, an assessment of the impact on the quality of the Final Effluent and the mitigation measures if necessary, and the District Manager has given written consent of the Bypass;
- 15. Notwithstanding the exceptions given in Paragraph 1, the Operating Agency shall undertake everything practicable to maximize the flow through the downstream treatment process(es) prior to bypassing.
- 16. At the beginning of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the type of the Bypass as indicated in Paragraph 1 and the reason(s) for the Bypass;
 - b. the date and time of the beginning of the Bypass;
 - c. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed;

- d. the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.
- 17. Upon confirmation of the end of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the end of the Bypass;
 - b. the estimated or measured volume of Bypass.
- 18. For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples, following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.
- 19. The Owner shall submit a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 11. If there is no Bypass Event during a quarter, a statement of no occurrence of Bypass is deemed sufficient.
- 20. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Bypass Event.

21. OVERFLOWS

- 22. Any Overflow is prohibited, except:
 - a. an emergency Overflow in an emergency situation when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of the Works or when an unforeseen flow condition exceeds the design capacity of the Works that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a

portion of the flow is not overflowed;

- b. a planned Overflow that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Overflow, including an estimated quantity and duration of the Overflow, an assessment of the impact on the environment and the mitigation measures if necessary, and the District Manager has given written consent of the Overflow;
- 23. Notwithstanding the exceptions given in Paragraph 1, the Operating Agency shall undertake everything practicable to maximize the flow through the downstream treatment process(es) and Bypass(es) prior to overflowing.
- 24. At the beginning of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the type of the Overflow as indicated in Paragraph 1 and the reason(s) for the Overflow;
 - b. the date and time of the beginning of the Overflow;
 - c. the point of the Overflow from the Works, the treatment process(es) gone through prior to the Overflow, the disinfection status of the Overflow and whether the Overflow is discharged through the effluent disposal facilities or an alternate location;
 - d. the effort(s) done to maximize the flow through the downstream treatment process(es) and Bypass(es) and the reason(s) why the Overflow was not avoided.
- 25. Upon confirmation of the end of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the date and time of the end of the Overflow;
 - b. the estimated or measured volume of the Overflow.
- 26. For any Overflow Event
 - a. in the Sewage Treatment Plant, the Owner shall collect sample(s) of the Overflow (Storm Overflow Chamber), at the frequency specified, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in Schedule D.
 - b. at a sewage pumping station in the collection system, the Owner shall collect at

least one (1) sample representative of the Overflow Event and have it analyzed for BOD5, total suspended solids, total phosphorus and total Kjeldahl nitrogen.

- 27. The Owner shall submit a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary report shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5). If there is no Overflow Event during a quarter, a statement of no occurrence of Overflow is deemed sufficient.
- 28. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Overflow Event.
- 29. The Owner shall develop a response plan for any unplanned Overflows, consisting of measures to mitigate and prevent the contamination of drinking water.

30. **DESIGN OBJECTIVES**

- 31. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the following objectives:
 - a. Final Effluent parameters design objectives listed in the table(s) included in Schedule B.
 - b. Final Effluent is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.
 - c. Annual Average Daily Influent Flow is within the Rated Capacity of the Sewage Treatment Plant.

32. COMPLIANCE LIMITS

- 1. The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for both the Monthly Average Effluent and the Single Sample Results included in Schedule C are met.
- 2. The Owner shall operate and maintain the Sewage Treatment Plant such that the Final Effluent is disinfected during the disinfection period between May 1 and October 31 inclusive.

OPERATION AND MAINTENANCE

- 1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
- 2. The Owner shall maintain the operations manual for the Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for the Works under Normal Operating Conditions;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;
 - d. procedures for the inspection and calibration of monitoring equipment;
 - e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition, including procedures to minimize Bypasses and Overflows;
 - f. a spill prevention and contingency plan, consisting of procedures and contingency plans, including notification to the District Manager, to reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result from spills of pollutants;
 - g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
- 3. The Owner shall maintain the operations manual up-to-date and make the manual readily accessible for reference at the Works.
- 4. The Owner shall ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as amended for the Works, including the classification of facilities, licensing of operators and operating standards.

34. MONITORING AND RECORDING

35. The Owner shall, upon commencement of operation of the Works, carry out a

scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in Schedule D and record all results, as follows:

- a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.
- b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 3.b.
- c. definitions for frequency:
 - i. Daily means once every day;
 - ii. Weekly means once every week;
 - iii. Quarterly means once every three months;
- d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week/month for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.
- 36. In addition to the scheduled monitoring program required in Paragraph 1, the Owner shall collect daily sample(s) of the Final Effluent, on any day when there is any situation outside Normal Operating Conditions, and analyze for all effluent parameters outlined in Compliance Limits condition that require composite samples, following the same protocol specified in this condition for the regular samples. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.
- 37. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:
 - a. the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;
 - b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;

- c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended.
- 38. The Owner shall monitor and record the flow rate and daily quantity using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate of the following:
 - a. Influent flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates, or in lieu of an actual installation of equipment, adopt the flow measurements of the Final Effluent for the purpose of estimating Influent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;
 - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates, or in lieu of an actual installation of equipment, adopt the flow measurements of the Influent for the purpose of estimating Final Effluent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;
 - c. each type of Imported Sewage received for co-treatment at the Sewage Treatment Plant by flow measuring devices/pumping rates/haul truck manifests;
- 39. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

40.

LIMITED OPERATIONAL FLEXIBILITY

- 1. The Owner may make pre-authorized modifications to the sewage pumping stations and Sewage Treatment Plant in Works in accordance with the document "Limited Operational Flexibility Protocol for Pre-Authorized Modifications to Municipal Sewage Works" (Schedule E), as amended, subject to the following:
 - a. the modifications will not involve the addition of any new treatment process or the removal of an existing treatment process, including chemical systems, from the liquid or solids treatment trains as originally designed and approved.
 - b. the scope and technical aspects of the modifications are in line with those delineated in Schedule E and conform with the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended, Ministry's regulations, policies, guidelines, and industry engineering standards;

- c. the modifications shall not negatively impact on the performance of any process or equipment in the Works or result in deterioration in the Final Effluent quality;
- d. where the pre-authorized modification requires notification, a "Notice of Modifications to Sewage Works" (Schedule E), as amended shall be completed with declarations from a Professional Engineer and the Owner and retained onsite prior to the scheduled implementation date. All supporting information including technical memorandum, engineering plans and specifications, as applicable and appropriate to support the declarations that the modifications conform with LOF shall remain on-site for future inspection.
- 2. The following modifications are not pre-authorized under Limited Operational Flexibility:
 - a. Modifications that involve addition or extension of process structures, tankages or channels;
 - b. Modifications that involve relocation of the Final Effluent outfall or any other discharge location or that may require reassessment of the impact to the receiver or environment;
 - c. Modifications that involve addition of or change in technology of a treatment process or that may involve reassessment of the treatment train process design;
 - d. Modifications that require changes to be made to the emergency response, spill prevention and contingency plan; or
 - e. Modifications that are required pursuant to an order issued by the Ministry.

41. REPORTING

- 1. The Owner shall report to the District Manager orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance.
- 2. The Owner shall, within fifteen (15) days of occurrence of a spill within the meaning of Part X of the EPA, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation, in addition to fulfilling the requirements under the EPA and O. Reg. 675/98 "Classification and Exemption of Spills and Reporting of Discharges".
- 3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff, Source Protection Authority and any other parties identified in the Source Protection Plans.

- 4. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
 - b. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
 - c. a summary of all operating issues encountered and corrective actions taken;
 - d. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
 - e. a summary of any effluent quality assurance or control measures undertaken;
 - f. a summary of the calibration and maintenance carried out on all Influent, Imported Sewage and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
 - g. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any are required under the following situations:
 - i. when any of the design objectives is not achieved more than 50% of the time in a year, or there is an increasing trend in deterioration of Final Effluent quality;
 - ii. when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;
 - h. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
 - i. a summary of any complaints received and any steps taken to address the complaints;
 - j. a summary of all Bypasses, Overflows, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
 - k. a summary of all Notice of Modifications to Sewage Works completed under Paragraph 1.d. of Condition 10, including a report on status of implementation of

all modification.

- I. a summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overall Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflows with estimated budget forecast for the year following that for which the report is submitted.
- m. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year.

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 regarding general provisions is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted.
- 2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 3. Condition 3 regarding record drawings is included to ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
- 4. Condition 4 regarding Bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the Bypass itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass Events.
- 5. Condition 5 regarding Overflows is included to indicate that Overflow of untreated or partially treated sewage to the receiver is prohibited, except in circumstances where the failure to Overflow could result in greater damage to the environment than the Overflow itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Overflow Events.
- 6. Condition 6 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

- 7. Condition 7 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
- 8. Condition 8 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
- 9. Condition 9 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.
- 10. Condition 10 regarding Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works.
- 11. Condition 11 regarding reporting is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for this Approval.

Schedule A

- 1. Application for Approval of Municipal and Private Sewage Works dated September 1, 2009 and submitted under covering letter dated August 31, 2009 by K.J. Madill, P.Eng., of Stantec Consulting Ltd, consulting Engineers;
- 2. Physical Description, Little River Pollution Control Plant, Corporation of the City of Windsor, revised May 2002, prepared by Jack McRae of the City of Windsor;
- 3. Application for Approval of Municipal and Private Water and Sewage Works submitted by the City of Windsor dated August 2, 2000, the plans and specifications prepared by Stantec Consulting Ltd. and the treatability testing report prepared by Hydromantis, Inc. dated November 9, 1998.(Ref# 5858-4N8JMA);

- 4. Application for Approval of Sewage Works dated May 18, 2011, with cover letter submitted by Jian Li, P.Eng., of Stantec Consulting Ltd, Consulting Engineers, dated April 18, 2011;
- 5. Application for Environmental Compliance Approval dated April 8, 2020 and received May 27, 2020, submitted by The Corporation of the City of Windsor.

Schedule B

Final Effluent Design Objectives

Concentration Objectives

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
рН	Single Sample Result	6.5 - 9.0 inclusive
Dissolved Oxygen	Single Sample Result	greater than or equal to 4.0 mg/L

Schedule C

Final Effluent Compliance Limits - Monthly Average Effluent Concentration

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	15 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	15 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	1.0 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	6 mg/L
E. coli	Monthly Geometric Mean Density	*200 CFU/100 mL (from May 1 to October 31)

^{*}If the MPN method is utilized for E. coli analysis the limit shall be 200 MPN/100 mL

Concentration Limits at the outlet of Plant 1 and Plant 2 - Single Sample Result

^{**}For the purpose of compliance limits, the effluent value shall be calculated using flow weighted average of Plant 1 and Plant 2 effluent parameters

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Single Sample Result	25 mg/L
Total Suspended Solids	Single Sample Result	25 mg/L
Total Phosphorus	Single Sample Result	1.5 mg/L
Total Ammonia Nitrogen	Single Sample Result	8 mg/L
E. coli	Single Geometric Mean Density	*1000 CFU/100 mL (from May 1 to October 31)
рН	Single Sample Result	between 6.5 - 9.0 inclusive

^{*}If the MPN method is utilized for *E. coli* analysis the limit shall be 1000 MPN/100 mL

Schedule D

Monitoring Program

Influent - Influent sampling point

Parameters	Sample Type	Minimum Frequency
BOD5	24 hour composite	Weekly
Total Suspended Solids	24 hour composite	Weekly
Total Phosphorus	24 hour composite	Weekly
Total Ammonia	24 hour composite	Weekly
Nitrogen		
Total Kjeldahl Nitrogen	24 hour composite	Weekly
Alkalinity	24 hour composite	Weekly
рН	Grab/Probe	Daily
Temperature	Grab/Probe	Daily

Storm Overflow Chamber - chamber sampling point

Parameters	Sample Type	Minimum Frequency
BOD5	composite	every 2 hours (having same
		sample volume during the bypass event)
Total Suspended Solids	composite	every 2 hours (having same sample volume during the bypass event)
Total Phosphorus	composite	every 2 hours (having same sample volume during the bypass event)
E. coli	discrete grab	during the first hour of the event

Final Effluent - Final Effluent sampling point

Parameters	Sample Type	Minimum Frequency
CBOD5	24 hour composite	Weekly
Total Suspended Solids	24 hour composite	Weekly
Total Phosphorus	24 hour composite	Weekly
Total Ammonia Nitrogen	24 hour composite	Weekly
Total Kjeldahl Nitrogen	24 hour composite	Weekly
Nitrate as Nitrogen	24 hour composite	Weekly
Nitrite as Nitrogen	24 hour composite	Weekly
E. coli	Grab	Weekly (from May 1 to October 31)
Dissolved Oxygen	Grab/Probe	Daily
pH*	Grab/Probe	Daily
Temperature*	Grab/Probe	Daily
Un-ionized Ammonia**	As Calculated	Weekly

^{*}pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.

Sludge/Biosolids – holding tank/truck loading bay

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Quarterly
Total Phosphorus	Grab	Quarterly
Total Ammonia Nitrogen	Grab	Quarterly
Nitrate as Nitrogen	Grab	Quarterly
Metal Scan	Grab	Quarterly
- Arsenic		
- Cadmium		
- Cobalt		
- Chromium		
- Copper		
- Lead		
- Mercury		
- Molybdenum		
- Nickel		
- Potassium		
- Selenium		
- Zinc		

^{**}The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Schedule E

Limited Operational Flexibility

Protocol for Pre-Authorized Modifications to Municipal Sewage Works

1. General

- 2. Pre-authorized modifications are permitted only where Limited Operational Flexibility has already been granted in the Approval and only permitted to be made at the pumping stations and sewage treatment plant in the Works, subject to the conditions of the Approval.
- 3. Where there is a conflict between the types and scope of pre-authorized modifications listed in this document, and the Approval where Limited Operational Flexibility has been granted, the Approval shall take precedence.
- 4. The Owner shall consult the District Manager on any proposed modifications that may fall within the scope and intention of the Limited Operational Flexibility but is not listed explicitly or included as an example in this document.
- 5. The Owner shall ensure that any pre-authorized modifications will not:
- f. adversely affect the hydraulic profile of the Sewage Treatment Plant or the performance of any upstream or downstream processes, both in terms of hydraulics and treatment performance;
- g. result in new Overflow or Bypass locations, or any potential increase in frequency or quantity of Overflow(s) or Bypass(es).
- h. result in a reduction in the required Peak Flow Rate of the treatment process or equipment as originally designed.
- 9. Modifications that do not require pre-authorization:
- 10. Sewage works that are exempt from Ministry approval requirements;
- 11. Modifications to the electrical system, instrumentation and control system.
- 12. Pre-authorized modifications that do not require preparation of "Notice of Modification to Sewage Works"

- 13. Normal or emergency maintenance activities, such as repairs, renovations, refurbishments and replacements with Equivalent Equipment, or other improvements to an existing approved piece of equipment of a treatment process do not require preauthorization. Examples of these activities are:
- a. Repairing a piece of equipment and putting it back into operation, including replacement of minor components such as belts, gear boxes, seals, bearings;
- b. Repairing a piece of equipment by replacing a major component of the equipment such as motor, with the same make and model or another with the same or very close power rating but the capacity of the pump or blower will still be essentially the same as originally designed and approved;
- c. Replacing the entire piece of equipment with Equivalent Equipment.
- 14. Improvements to equipment efficiency or treatment process control do not require pre-authorization. Examples of these activities are:
- a. Adding variable frequency drive to pumps;
- b. Adding on-line analyzer, dissolved oxygen probe, ORP probe, flow measurement or other process control device.

15. Pre-Authorized Modifications that require preparation of "Notice of Modification to Sewage Works"

- 16. Pumping Stations
- q. Replacement, realignment of existing sewers including manholes, valves, gates, weirs and associated appurtenances provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved.
- r. Extension or partition of wetwell to increase retention time for emergency response and improve station maintenance and pump operation;
- s. Replacement or installation of inlet screens to the wetwell;
- t. Replacement or installation of flowmeters, construction of station bypass;
- u. Replacement, reconfiguration or addition of pumps and modifications to pump suctions and discharge pipings including valve, gates, motors, variable frequency drives and associated appurtenances to maintain firm pumping capacity or modulate

the pump rate provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head or an increase in the peak pumping rate of the pumping station as originally designed;

v. Replacement, realignment of existing forcemain(s) including valves, gates, and associated appurtenances provided that the modifications will not reduce the flow capacity or increase the total dynamic head and transient in the forcemain.

23. Sewage Treatment Plant

24. Sewers and appurtenances

a. Replacement, realignment of existing sewers (including pipes and channels) or construction of new sewers, including manholes, valves, gates, weirs and associated appurtenances within the a sewage treatment plant, provided that the modifications will not add new influent source(s) or result in an increase in flow from existing sources as originally approved and that the modifications will remove hydraulic bottlenecks or improve the conveyance of sewage into and through the Works.

25. Flow Distribution Chambers/Splitters

a. Replacement or modification of existing flow distribution chamber/splitters or construction of new flow distribution chamber/splitters, including replacements or installation of sluice gates, weirs, valves for distribution of flows to the downstream process trains, provided that the modifications will not result in a change in flow distribution ratio to the downstream process trains as originally designed.

26. Imported Sewage Receiving Facility

- a. Replacement, relocation or installation of loading bays, connect/disconnect hookup systems and unloading/transferring systems;
- b. Replacement, relocation or installation of screens, grit removal units and compactors;
- c. Replacement, relocation or installation of pumps, such as dosing pumps and transfer pumps, valves, piping and appurtenances;
- d. Replacement, relocation or installation of storage tanks/chambers and spill containment systems;
- e. Replacement, relocation or installation of flow measurement and sampling equipment;
- f. Changes to the source(s) or quantity from each source, provided that changes will

not result in an increase in the total quantity and waste loading of each type of Imported Sewage already approved for co-treatment.

27. Preliminary Treatment System

- a. Replacement of existing screens and grit removal units with equipment of the same or higher process performance technology, including where necessary replacement or upgrading of existing screenings dewatering washing compactors, hydrocyclones, grit classifiers, grit pumps, air blowers conveyor system, disposal bins and other ancillary equipment to the screening and grit removal processes.
- b. Replacement or installation of channel aeration systems, including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers.

28. Primary Treatment System

- a. Replacement of existing sludge removal mechanism, including sludge chamber;
- b. Replacement or installation of scum removal mechanism, including scum chamber;
- c. Replacement or installation of primary sludge pumps, scum pumps, provided that:the modifications will not result in a reduction in the firm pumping capacity or discharge head that the primary sludge pump(s) and scum pump(s) are originally designed to handle.

29. Secondary Treatment System

1. Biological Treatment

- a. Conversion of complete mix aeration tank to plug-flow multi-pass aeration tank, including modifications to internal structural configuration;
- b. Addition of inlet gates in multi-pass aeration tank for step-feed operation mode:
- c. Partitioning of an anoxic/flip zone in the inlet of the aeration tank, including installation of submersible mixer(s);
- d. Replacement of aeration system including air blowers, air supply main, air headers, air laterals, air distribution grids and diffusers, provided that the modifications will not result in a reduction in the firm capacity or discharge pressure that the blowers are originally designed to supply or in the net oxygen transferred to the wastewater required for biological treatment as originally required.

2. Secondary Sedimentation

- a. Replacement of sludge removal mechanism, including sludge chamber;
- b. Replacement or installation of scum removal mechanism, including scum chamber;
- c. Replacement or installation of return activated sludge pump(s), waste activated sludge pump(s), scum pump(s), provided that the modifications will not result in a reduction in the firm pumping capacity or discharge head that the activated sludge pump(s) and scum pump(s) are originally designed to handle.

30. Post-Secondary Treatment System

a. Replacement of filtration system with equipment of the same filtration technology, including feed pumps, backwash pumps, filter reject pumps, filtrate extract pumps, holding tanks associated with the pumping system, provided that the modifications will not result in a reduction in the capacity of the filtration system as originally designed.

31. Disinfection System

1. UV Irradiation

a. Replacement of UV irradiation system, provided that the modifications will not result in a reduction in the design capacity of the disinfection system or the radiation level as originally designed.

2. Chlorination/Dechlorination and Ozonation Systems

- a. Extension and reconfiguration of contact tank to increase retention time for effective disinfection and reduce dead zones and minimize short-circuiting;
- b. Replacement or installation of chemical storage tanks, provided that the tanks are provided with effective spill containment.

32. Supplementary Treatment Systems

1. Chemical systems

- Replacement, relocation or installation of chemical storage tanks for existing chemical systems only, provided that the tanks are sited with effective spill containment;
- b. Replacement or installation of chemical dosing pumps provided that the modifications will not result in a reduction in the firm capacity that the dosing pumps are originally designed to handle.
- c. Relocation and addition of chemical dosing point(s) including chemical feed

- pipes and valves and controls, to improve phosphorus removal efficiency;
- d. Use of an alternate chemical provided that it is a non-proprietary product and is a commonly used alternative to the chemical approved in the Works, provided that the chemical storage tanks, chemical dosing pumps, feed pipes and controls are also upgraded, as necessary..

33. Sludge Management System

1. Sludge Holding and Thickening

 a. Replacement or installation of sludge holding tanks, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;

2. Sludge Digestion

- a. Replacement or installation of digesters, sludge handling pumps, such as transfer pumps, feed pumps, recirculation pumps, provided that modifications will not result in reduction in the solids storage or handling capacities;
- b. replacement of sludge digester covers.

3. Sludge Dewatering and Disposal

a. Replacement of sludge dewatering equipment, sludge handling pumps, such as transfer pumps, feed pumps, cake pumps, loading pumps, provided that modifications will not result in reduction in solids storage or handling capacities.

4. Processed Organic Waste

a. Changes to the source(s) or quantity from each source, provided that changes will not result in an increase in the total quantity already approved for co-processing.

34. Standby Power System

1. Replacement or installation of standby power system, including feed from alternate power grid, emergency power generator, fuel supply and storage systems, provided that the existing standby power generation capacity is not reduced.

35. Pilot Study

1. Small side-stream pilot study for existing or new technologies, alternative treatment process or chemical, provided:

- a. all effluent from the pilot system is hauled off-site for proper disposal or returned back to the sewage treatment plant for at a point no further than immediately downstream of the location from where the side-stream is drawn;
- b. no proprietary treatment process or propriety chemical is involved in the pilot study;
- c. the effluent from the pilot system returned to the sewage treatment plant does not significantly alter the composition/concentration of or add any new contaminant/inhibiting substances to the sewage to be treated in the downstream process;
- d. the pilot study will not have any negative impacts on the operation of the sewage treatment plant or cause a deterioration of effluent quality;
- e. the pilot study does not exceed a maximum of two years and a notification of completion shall be submitted to the District Manager within one month of completion of the pilot project.

36. Lagoons

- a. installing baffles in lagoon provided that the operating capacity of the lagoon system is not reduced;
- b. raise top elevation of lagoon berms to increase free-board;
- c. replace or install interconnecting pipes and chambers between cells, provided that the process design operating sequence is not changed;
- d. replace or install mechanical aerators, or replace mechanical aerators with diffused aeration system provided that the mixing and aeration capacity are not reduced;
- e. removal of accumulated sludge and disposal to an approved location offsite.

37. Final Effluent Disposal Facilities

al. Replacement or realignment of the Final Effluent channel, sewer or forcemain, including manholes, valves and appurtenances from the end of the treatment train to the discharge outfall section, provided that the sewer conveys only effluent discharged from the Sewage Treatment Plant and that the replacement or re-aligned sewer has similar dimensions and performance criteria and is in the same or approximately the same location and that the hydraulic capacity will not be reduced.

This page contains an image of the form entitled "Notice of Modification to Sewage Works". A digital copy can be obtained from the District Manager.



Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE.

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuan	ce date and notice numb	er, which should sta	rt with "01" and consecutive numbers thereafter)
ECA Number	Issuance Date (mm/dd/yy)		Notice number (if applicable)
ECA Owner		Municipality	
Part 2: Description of the me (Attach a detailed description of the sewage		part of the Li	mited Operational Flexibility
Description shall include:			
1. A detail description of the modifications an	d/or operations to the se	wage works (e.g. se	wage work component, location, size, equipment
type/model, material, process name, etc.) 2. Confirmation that the anticipated environments	antal affanto ara nacticib	i.e.	
			e affected by the modifications as applicable, i.e.
submission of documentation is not require	ed, but the listing of upda	ted documents is (d	lesign brief, drawings, emergency plan, etc.)
Part 3 - Declaration by Prof	essional Engine	eer	
I hereby declare that I have verified the scop			and confirm that the design:
1. Has been prepared or reviewed by a Profe	essional Engineer who is	licensed to practice	in the Province of Ontario;
Has been designed in accordance with the Has been designed consistent with Minish			
			urces Act; and other appropriate regulations.
I hereby declare that to the best of my knowl	edge, information and be	lief the information	contained in this form is complete and accurate
Name (Print)			PEO License Number
Signature			Date (mm/dd/yy)
Name of Employer			
Part 4 - Declaration by Own	er		
I hereby declare that:	this Control		
 I am authorized by the Owner to complete The Owner consents to the modification; a 			
3. This modifications to the sewage works ar	e proposed in accordance		perational Flexibility as described in the ECA.
The Owner has fulfilled all applicable requ			Acf. contained in this form is complete and accurate
,	eage, information and be		·
Name of Owner Representative (Print)		Owner representative	s title (Print)
Owner Representative's Signature		Date (mm/dd/yy)	

Schedule F

Methodology for Calculating and Reporting

Monthly Average Effluent Concentration, Annual Average Effluent Concentration and Monthly Geometric Mean Density

1. Monthly Average Effluent Concentration

Step 1: Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed as follows depending on the result of the calculation:

- a. If the arithmetic mean does not exceed the compliance limit for the contaminant, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;
- b. If the arithmetic mean exceeds the compliance limit for the contaminant and there was no Bypass Event during the calendar month, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;
- c. If the arithmetic mean exceeds the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, then proceed to Step 2;
- d. If the arithmetic mean does not exceed the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, the Owner may still elect to proceed to Step 2 calculation of the flow-weighted arithmetic mean.
- Step 2: Calculate the flow-weighted arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed depending on the result of the calculation:
 - a. Group No Bypass Days (**NBPD**) data and Bypass Days (**BPD**) data during a calendar month separately;
 - b. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all NBPD during a calendar month and record it as **Monthly Average NBPD Effluent Concentration**;
 - c. Obtain the "**Total Monthly NBPD Flow**" which is the total amount of Final Effluent discharged on all NBPD during the calendar month;
 - d. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all BPD during a calendar month and record it as **Monthly Average**BPD Effluent Concentration:
 - e. Obtain the "**Total Monthly BPD Flow**" which is the total amount of Final Effluent discharged on all BPD during the calendar month;

f. Calculate the flow-weighted arithmetic mean using the following formula:

[(Monthly Average NBPD Effluent Concentration × Total Monthly NBPD Flow) + (Monthly Average BPD Effluent Concentration × Total Monthly BPD Flow)] ÷ (Total Monthly NBPD Flow + Total Monthly BPD Flow)

It should be noted that in this method, if there are no Bypass Event for the month, the calculated result would be the same as the non-flow-weighted arithmetic mean method;

- g. Report and use the lesser of the flow-weighted arithmetic mean obtained in Step 2 and the arithmetic mean obtained in Step 1 as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval.
- 2. Annual Average Effluent Concentration
- Step 1: Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year and proceed as follows depending on the result of the calculation:
 - a. If the arithmetic mean does not exceed the compliance limit for the contaminant, then report and use this arithmetic mean as the Annual Average Effluent Concentration for this parameter where applicable in this Approval;
 - b. If the arithmetic mean exceeds the compliance limit for the contaminant and there was no Bypass Event during the calendar year, then report and use this arithmetic mean as the Annual Average Effluent Concentration for this parameter where applicable in this Approval;
 - c. If the arithmetic mean exceeds the compliance limit for the contaminant and there was Bypass Event(s) during the calendar year, then proceed to Step 2;
 - d. If the arithmetic mean does not exceed the compliance limit for the contaminant and there was Bypass Event(s) during the calendar year, the

Owner may still elect to proceed to Step 2 calculation of the flow-weighted arithmetic mean.

Step 2: Calculate the flow-weighted arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year and proceed depending on the result of the calculation:

- a. Group No Bypass Days (**NBPD**) data and Bypass Days (**BPD**) data during a calendar year separately;
- b. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all NBPD during a calendar year and record it as **Annual Average NBPD Effluent Concentration**:
- c. Obtain the "**Total Annual NBPD Flow**" which is the total amount of Final Effluent discharged on all NBPD during the calendar year;
- d. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all BPD during a calendar year and record it as **Annual Average BPD Effluent Concentration**;
- e. Obtain the "**Total Annual BPD Flow**" which is the total amount of Final Effluent discharged on all BPD during the calendar year;
- f. Calculate the flow-weighted arithmetic mean using the following formula:

[(Annual Average NBPD Effluent Concentration × Total Annual NBPD Flow) + (Annual Average BPD Effluent Concentration × Total Annual BPD Flow)] ÷ (Total Annual NBPD Flow + Total Annual BPD Flow)

It should be noted that in this method, if there are no Bypass Event for the calendar year, the calculated result would be the same as the non-flow-weighted arithmetic mean method;

g. Report and use the lesser of the flow-weighted arithmetic mean obtained

in Step 2 and the arithmetic mean obtained in Step 1 as the Annual Average Effluent Concentration for this parameter where applicable in this Approval.

3. Monthly Geometric Mean Density

Geometric mean is defined as the n^{th} root of the product of n numbers. In the context of calculating Monthly Geometric Mean Density for $E.\ coli$, the following formula shall be used:

$$\sqrt[n]{x_1x_2x_3\cdots x_n}$$

in which,

"n" is the number of samples collected during the calendar month; and

"x" is the value of each Single Sample Result.

For example, four weekly samples were collected and tested for *E. coli* during the calendar month. The *E. coli* densities in the Final Effluent were found below:

Sample Number	E. coli Densities* (CFU/100 mL)
1	10
2	100
3	300
4	50

The Geometric Mean Density for these data:

$$\sqrt[4]{10 \times 100 \times 300 \times 50} = 62$$

*If a particular result is zero (0), then a value of one (1) will be substituted into the calculation of the Monthly Geometric Mean Density. If the MPN method is utilized for E. coli analysis, values in the table shall be MPN/100 mL.

Schedule G

Municipal and Local Services Board Wastewater System

Profile Information Form

(For reference only, images of the form are attached on the next four pages. A digital copy can be obtained from the District Manger.)



Ministry of the Environment, Conservation and Parks

Municipal and Local Services Board Wastewater System Profile Information Form

The Information in this form is necessary to administer the Ministry's approvals, compliance and enforcement programs with respect to wastewater treatment and collection systems owned by municipalities and local services boards. These programs are authorized under the Onlario Water Resources Act, the Environmental Protection Act, the Nutrient Management Act and their respective regulations

Email the completed form to, waterforms@ontario.ca For any questions call 1-868-793-2588.

[A] SYSTEM PROFILE INFOR	MATION								
Wastewater System Number (if as	signed)	□New Profile □Update Exis							
Name of System		☐ Primary	Level of Treatment (select one*) Primary Secondary						
Name of Municipality or Local Serv	ices Board			☐ Second:	ary Equivalent pecify): s and Concepts on	page 4			
Population Served	Population	(Design)		Type of System	Collection System	☐ Collection System On			
Design Rated Capacity (m ³ /day)		vironmental Comp CA) Number		CA Issue Date (yyyy/mm/dd):					
The treatment plant receives s Sanitary Sewer Nominally Separated Sewer		heck all that applied Combined S	ewer		one option below, inc				
[B] OWNER INFORMATION									
Legal Name of Municipality or Loc	al Services Board	i							
Unit No Street No. Street	t Name.			S	Street Type (St. Rd. etc.) Street Direction (N.				
PO Box Oity/Town				-1-	Postal Code				
Dr Miss Owner Contact	t First Name	Owner Conb	act Last Name	0	Owner Contact Job Title				
Tel. No. () - ext.	Fax (Number) -	Email 9	odress					
[C] OPERATING AUTHORITY	Check If sam	ne as owner							
Legal Name of Operator									
Unit No Street No. Street Name					reet Type (St. Rd. etc	Street Direction (N,S.E.W)			
PO Box City/Town				1	Postal Code				
□ Dr □ Miss Operator Cont □ Mr □ Mrs □ Ms	act First Name	Operator Co	nntaci Last Name	0	perator Contact Job T	itie			
Tel, No. () - ext.	Fax (Number	Email a	ddress					

[D] 24/7 CONTACT								
⊠ Mr ☐ Mrs ☐ Ms	rst Name	Last Name	-		Job T	lie		
Tel. No.	ext ()		Emai	l address				
[E] SYSTEM CIVIC Unit No Street N	LOCATION ADDRESS (I.E. A o. Street Name.	ADDRESS O	FTREATME	NT PLANT)	Street Type (St. Rd. etc) S		Street Direction (N,S,E,W)	
PO Box City/	Town			Postal Code		-		
If the Wastews	ater System has no street	t address						
Geographical Townshi	P	Lot		-	Conc	ession		
Geographical	Referencing (if known, en	ter the Geo	graphical R	eference Infor	matic	on for this Wastew	vater System)	
Map Datum	Geo-Referencing Method		Accuracy Es	stmete	Lo	cation Reference		
Latilude	Longitude		Zone		Es	esting	Northing	
[F] TREATMENT P	ROCESS							
Preliminary	Primary	Seco	ondary	Secondary Equivalent		Post-Secondar	y Additional Treatment	
□ Screening □ Shredding/ grinding □ Grit Removal □ Other(specify):	☐ Settling/sedimentation/ clarification ☐ Soum Removal ☐ Polymer Addition ☐ Other(specify):	Secondary Conventional Activated Sluege (CAS) Extended Aeration Membrane Bioreactor (MBR) Sequencing Batch Reactor (SBR) Rotating Biological Contactor (RBC) Trickling Filter (TF) Biological Aerated Filter (BAF)		☐ Aerated Lagoon ☐ Facultative Lagoon ☐ Anaerobic Lagoon ☐ Aerobic Lagoon ☐ Other(spec		☐ Filtration ☐ Clarification ☐ Intermittent Sand Filter (at lagoons) ☐ Polishing Wetlands ☐ Polishing Lagoons ☐ Other(specify)	☐ Phosphorous Removal ☐ Biological ☐ Chemical If chemical is user specify. ☐ Nitrification ☐ Denithfication ☐ Other(specify)	
[G] DISINFECTION Method of Disinfer	ction			Disinfection F	Period	j.		
☐ Chlorination If you ch ☐ Yes	nlorinate, do you practice de □ No	é-chlorinatio	n?	☐ Continuous ☐ Seasonal				
☐ Ultraviolet Irra				☐ Continuous ☐ Seasonal				
☐ Other (specify)	X			☐ Continuous ☐ Seasonal				

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all I am late a							
Sludge Stabilizat	ion Process	Method o	Method of Sludge Disposal/Utilization				
☐ Aerobic D	igestion	□ A	gricultural				
☐ Anaerobio	Digestion		andfill				
☐ Drying & F	Pelletization	□ li	ncineration				
☐ Lime Trea	tment		ther (specify):				
□ Composti	g						
☐ Other (spe	eclly).						
Available Sludge	Storage Capacity (m³):						
(I) EFFLUENT							
Effluent Disposal	Method		Effluent Discharge Frequency				
Surface W Receiving W	/ater ater Body Name:		☐ Continuous ☐ Seasonal				
□ Subsurfac	e		☐ Continuous ☐ Seasonal				
☐ Other (specify).			☐ Continuous ☐ Seasonal				
is the effluent dis Clean Water Act Yes No		dentified in the loca	al source protection assessment report approved under the				
[J] INFLUENT			the state of the s				
Does the plant re system or hauled Yes	i sev/age?		services board either through an interconnected collection rd):				
Does the plant re system or hauled Yes (if yes, n	I sewage? □ No	local services boa	rd)(
Does the plant re system or hauled Yes	f sewage? El No ame(s) of other municipality or	local services boa annual volume in n	rd):				

Oct 2014

Terms and Concepts

The following Terms and Concepts are provided to assist you when completing Wastewater System Profile Information Form.

In order to determine the level of treatment that applies to the wastewater system, the effluent quality objectives that the wastewater treatment plant was designed to meet must be considered. The process based approach often used in the past has led to confusion and is open to interpretation due to recent developments and practices in the wastewater treatment industry. For example, a plant with a high rate filter (often referred to as a tertiary filter) after its secondary treatment was considered a tertiary treatment in the past since the filter was designed and operated to produce a tertiary quality effluent. However, secondary plants are now being constructed with these filters as a safeguard against any potential secondary clarifier performance degradation and not for the purpose of ensuring tertiary treatment performance. Also, new technologies have evolved that can produce tertiary quality effluent without having these high rate filters (e.g., membrane bioreactors). Lagoons were considered in the past as being capable of providing only secondary equivalent treatment. However, with add-on treatment after the lagoons (e.g. intermittent sand filters), many lagoon treatment systems are capable of producing secondary or tertiary quality effluent.

During the establishment of sewage works, site-specific effluent limits (including averaging periods) are provided by the Ministry's Regional Technical Support Section, considering the assimilative capacity of the receivers and the minimum treatment requirements provided in Procedure F-5-1. The designer of the sewage works then selects objective values that are acceptable to the Ministry and are less (i.e. more stringent) than the effluent limits, in order to provide an adequate safety factor based on the designer's confidence/experience with the technology chosen and other site-specific conditions. The sewage works are then designed (and operated) to meet these design objectives in a reliable and consistent manner. Therefore, the values that are to be used in the determination of the level of treatment that applies to the sewage works must be based on the design objectives, and not the effluent limits.

Two common parameters used in almost all sewage works designs and performance evaluations are CBOD₅ (carbonaceous biochemical oxygen demand) (BOD₅ – biochemical oxygen demand - for primary sewage works) and total suspended solids (TSS). Therefore, it is logical that the <u>objective values</u> of these two parameters are used to determine the level of treatment at the sewage

Level of Treatment:

Primary:

Wastewater treatment plants that have only settling/sedimentation (with or without chemical addition) and providing 30% and 50% or better reduction of BOD₅ and TSS respectively are considered primary plants (MOE Procedures F-5-1 and F-5-5).

Secondary:

Wastewater treatment plants that have biological processes (e.g. activated sludge process and its variations, fixed film processes) or physical-chemical processes producing an effluent quality of CBOD₅ and TSS of 15 mg/L or better are considered secondary plants (MOE Design Guidelines for Sewage Works, 2008).

Secondary Equivalent:

Wastewater treatment plants producing an effluent quality of $CBOD_{\S}$ of 25 mg/L and TSS of 30 mg/L or better are considered as secondary equivalent plants.

Note: Wastewater treatment plants that provide only primary settling of solids and the addition of chemicals to improve the removal of TSS (and phosphorus) are not considered as secondary treatment plants or secondary equivalent plants (MOE Design Guidelines for Sewage Works, 2008).

Tertiary:

Wastewater treatment plants that have biological processes (e.g. activated sludge process and its variations, fixed film processes) and/or physical-chemical processes producing an effluent quality of CBOD₅ and TSS of 5 mg/L or better are considered tertiary plants.

Note: Biological processes such as nitrification, denitrification and enhanced biological phosphorus removal can be part of either a secondary or tertiary treatment plant. They may be described as secondary treatment plant with nitrification, secondary treatment plant with enhanced biological phosphorus removal, tertiary treatment plant with nitrification etc.

Sewer System Type:

Sanitary Sewers:

Pipes that convey sanitary sewage flows made up of wastewater discharges from residential, commercial, institutional and industrial establishments plus extraneous flow components from such sources as groundwater and surface run off.

Combined Sewers:

Pipes that convey both sanitary sewage and stormwater runoff through a single-pipe system.

Partially Separated Sewers:

Exist when either a portion of the combined sewer area was retrofitted to separate (sanitary and storm) sewers and/or a service area with combined sewers has had a new development area with separate sewers added to the service area; whatever the case may be, the final flows will be combined sewage.

Nominally Separated Sewers:

These sewers are constructed as separate sewers, but the sanitary sewers accept stormwater from roof and foundation drains (i.e., these are separated sewers in name only).

Oct 2014 Page 4 of 4

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8532-8JBLBT issued on July 26, 2011.

In accordance with Section 139 of the Environmental Protection Act, you may by written

Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

Ministry of the Environment, Conservation and Parks

135 St. Clair Avenue West, 1st Floor Toronto, Ontario

of the Environmental Protection Act

The Director appointed for the purposes of Part II.1

M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

AND

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 29th day of January, 2021

Aziz Ahmed, P.Eng. Director

appointed for the purposes of Part II.1 of the *Environmental Protection Act*

LW/

c: Area Manager, MECP Windsor

c: District Manager, DWECD, MECP Sarnia

Pompiliu Ignat, The Corporation of the City of Windsor

Appendix C TECHNICAL MEMORANDUM

LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility Technical Memo





Re-Rating Technical Memo

To: Chandana Walgama, P.Eng. From: Olav Natvik, M.Eng., P.Eng.

City of Windsor Stantec Consulting

 4155 Ojibway Parkway
 400-1305 Riverbend Road

 Windsor, Ontario N9C 4A5
 London, Ontario N6K 0J5

 Phone: (519) 253-7111, ext. 3274
 Phone: (519) 645-2007

File: Re-Rating Study for the LRPCP Date: March 12, 2025

Project: 165620295 - Little River Pollution Control Plant Expansion

Email: cwalgama@citywindsor.ca

Schedule C - Municipal Class Environmental Assessment

Reference: Appendix D of Little River Pollution Control Plant Environmental Study Report LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

1.0: INTRODUCTION

1.1: BACKGROUND

The LRPCP is undergoing a Schedule C Class EA aimed at determining the most appropriate capacity expansion scheme to address immediate 20-year growth projections as well as longer-term ultimate build-out. The detailed background planning information is contained in the Little River Pollution Control Plant Expansion Environmental Study Report. Key excerpts include:

- The LRPCP is a conventional activated sludge (CAS) rated for 72.8 MLD annual average flow (AAF) that is currently treating approximately 45 MLD AAF. The sanitary collection system is heavily influenced by wet weather inflow/infiltration such that peak flows routinely exceed 180 MLD.
- Growth projections presented in Technical Memo No. 2 have identified areas of new development and increases in anticipated flows as shown in Table 1.

Table 1 - Class EA Growth/Flow Projections

Characteristic	20-Year Design	Ultimate Design
Average Daily Sewage Flow	77.2 MLD	104 MLD
Peak Dry Weather Sewage Flow	201 MLD	259 MLD
	380 MLD (4,400 L/s)	460 MLD (5,330 L/s)
Peak Wet Weather Sewage Flow	to	to
	405 MLD (4,690 L/s)	486 MLD (5,619 L/s)

Per existing ECA, the LRPCP is rated for 72.8 MLD AAF. However, the actual treatment capacity for the existing treatment works may be different. Therefore, as a first step towards developing an expansion scheme, it has been recommended to complete a high-level unit capacity assessment of the existing works (focused on the primary clarifiers, aeration tanks, and secondary clarifiers) using the MECP design guidelines values to assess potential reserve capacities and retrofit upgrade possibilities.

March 12, 2025 Chandana Walgama, P.Eng. Page 2 of 8

Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

1.2: PURPOSE

The purpose of this technical memorandum is to assess the feasibility of re-rating the existing LRPCP from 72.8 MLD AAF to a higher flow/loading – ideally to 77.2 MLD AAF, or even 104 MLD ADF – to meet the anticipated growth projections.

1.3: SCOPE OF WORK

The scope of work for this Re-Rating Technical Memo is limited to assessing the treatment capacities for the primary clarifiers (PCs), aeration tanks (ATs), and secondary clarifiers (SCs) using MECP design guideline values as a basis.

Additional work will be required beyond the proposed PC/AT/SC capacity analysis vs MECP design guideline loading rates to determine the full scope of upgrade work, including:

- Other unit capacity upgrade requirements for: coarse screening, raw sewage pumping, grit removal, flow splitting, disinfection, solids handling, wet weather treatment, etc.
- Hydraulic calculations to confirm conveyance limitations and upgrade possibilities.
- More detailed analysis using wastewater simulator such as Biowin, to refine the capacity gain estimates that may be possible beyond assuming typical MECP design loading rates.

2.0: ANALYSIS

2.1: PC/AT/SC - EXISTING SITE & EXPANSION OPPORTUNITY

An aerial view of the existing LRPCP is shown in **Figure 1**. Per **Figure 1**, it appears space may have been reserved to allow Plant 1 and 2 ATs to expand – Plant 1 by 100% and Plant 2 by 33%. The PC and SC areas appear to be fully utilized and do not allow for additional PC and SC tankage.

Other key PC/AT/SC observations to note, include that screened/degrited flows are split to Plants 1 and 2 before the PCs using a weir box arrangement. It's unclear the current flow splitting targets that are maintained to Plants 1 and 2 but it is assumed a flow split target is maintained to balance the flows according to the more sensitive and easily upset secondary treatment system. This would suggest Plant 2 receives more flow than Plant 1 due to its greater AT volume (8400 m 3 vs 5324 m 3 – 57% greater) and larger SC area (2196 m 2 vs 1869 m 2 – 17% greater).

Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

Figure 1 - Existing LRPCP Aerial with Future AT Space Allocations



2.2: EXISTING PC/AT/SC CAPACITY VS MECP DESIGN GUIDELINES

Spreadsheet calculations were performed to estimate the PC/AT/SC unit capacities using MECP design guideline values as a basis (see appendix A spreadsheet calculations).

Given that the current ECA requires biological nitrification for ammonia reduction and alum dosing for phosphorus precipitation, the unit capacities were estimated versus MECP loading rates assuming nitrification and TP removals. Note that it's unclear whether the original design basis for the construction of Plants 1 and 2 was for cBOD5/TSS removals only which would have allowed for much higher AT/SC loading rates.

The unit capacities versus various MECP capacity measures are shown in **Figure 2**. The MECP design guideline values that are the basis for **Figure 2** include:

- PC surface overflow rate (SOR) @ max day flow (MDF) = max. 60 m³/m²/d with WAS co-settling
- AT hydraulic residence time (HRT) @ average day flow (ADF) = min. 6 hours
- AT organic loading rate (OLR) @ average day flow (ADF) = max. 0.72 kg BOD/m3/d
- AT Food: Micro-organism ratio (F/Mv) @ average day flow (ADF) = max. 0.25 per day
- SC surface overflow rate (SOR) @ peak hour flow (PHF) = max. 37 m³/m²/d
- SC solids loading rate (SLR) @ max day flow (MDF) = max. 170 kg/m²/d

Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

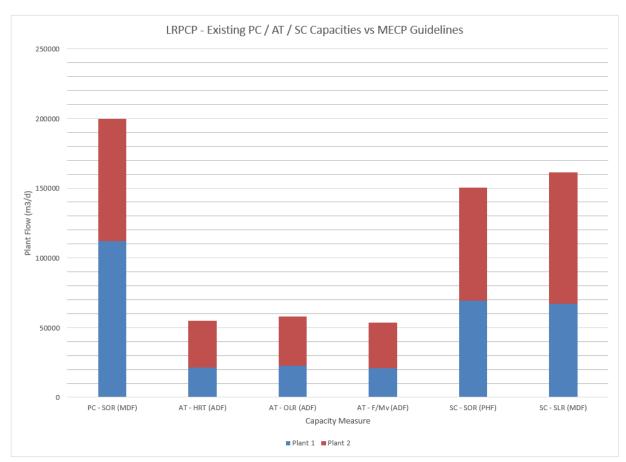


Figure 2 - LRPCP - Existing PC/AT/SC Capacities vs MECP Guidelines

Key Figure 2 observations include:

- PC area is sufficient to treat max day flows as high as 200 MLD.
- AT volume is constraining, particularly in terms of maintaining minimum 6 hours HRT. The combined Plant 1 & 2 AT capacity is approximately 55-60 MLD - less than the current ECA of 73 MLD when compared vs current MECP design guidelines for a conventional activated sludge (CAS) plant that needs to nitrify and remove phosphorus.
- SC area is sufficient to treat a peak flow of approx. 150 160 MLD through Plants 1 and 2 combined.
 This assumes that the AT MLSS can be operated at approx. 2500 mg/L. At higher MLSS operation, the
 secondary clarifier capacity in terms of SLR will decrease.

Because plant flows currently average approximately 45 MLD, well below the current ECA value of 73 MLD, capacity limitations may not be immediately apparent.

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Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

2.3: CAPACITY INCREASE POTENTIAL WITH MAXIMIZED AT VOLUME

Per **Figure 2**, the PCs have significant reserve capacity (~200 MLD peak flow) as well as the SC's (~150-160 MLD peak flow). The current process limiting constraint is the ATs (~50-60 MLD annual average flow).

Per **Figure 1**, adding AT volume to the site (+100% volume to Plant 1 and +33% volume to Plant 2) would increase the ADF capacity significantly.

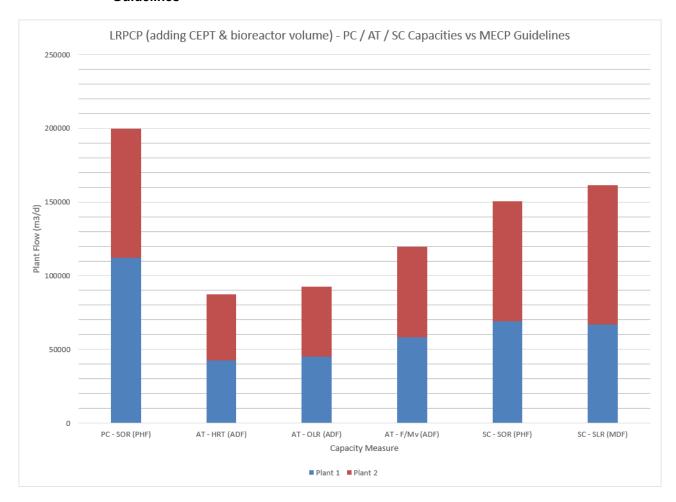
Spreadsheet calculations were performed to estimate the PC/AT/SC unit capacities using MECP design guideline values as a basis assuming the Plant 1 and 2 AT volumes were increased +100% and +33% respectively (see appendix B spreadsheet calculations).

Given that the current ECA requires biological nitrification for ammonia reduction and alum dosing for phosphorus precipitation, the unit capacities were estimated versus MECP loading rates assuming nitrification and TP removals. Note that it's unclear whether the original design basis for the construction of Plants 1 and 2 was for cBOD5/TSS removals only which would have allowed for much higher AT/SC loading rates.

The unit capacities versus various MECP capacity measures are shown in **Figure 3**. The MECP design guideline values that are the basis for **Figure 3** are the same as listed for **Figure 2** (i.e. PC SOR=60 m³/m²/d, AT HRT = 6 hours, AT OLR=0.72 kg BOD/m³/d, AT F/Mv=0.25 per day, SC SOR=37 m³/m²/d, SC SLR=170 kg/m²/d).

Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

Figure 3 - LRPCP (adding CEPT & AT volume) - PC/AT/SC Capacities vs MECP Guidelines



Key Figure 3 observations include:

- PC area is sufficient to treat max day flows as high as 200 MLD.
- Adding AT volume (+100% Plant 1 and +33% Plant 2) increases the ADF capacity significantly from approximately 55-60 MLD to 88-90 MLD. This exceeds the Phase 1 expansion need of 77.2 MLD but not the ultimate capacity need of 104 MLD.
- Chemically enhanced primary treatment (CEPT) may be required during the winter months to reduce
 organic loading to the AT and assist with always maintaining MLSS < 2500 mg/L and keeping SC SLR
 <170 kg/m²/d during higher flow periods 150-160 MLD. Adding chemicals may include coagulants such
 as alum and/or polymers to assist PC particulates removals.
- Plant wet weather flows are anticipated to exceed the PC and SC peak flow capacities and therefore a
 wet weather flow strategy is needed for the excess flows. This could include flow equalization and/or

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Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

CEPT of excess flows and blending with the final effluent. Additional study is required to determine a preferred wet weather treatment strategy.

3.0: KEY FINDINGS

The key findings of the PC/AT/SC capacity review include:

- The existing PC area is sufficient to treat max day flows as high as 200 MLD.
- The existing PC/AT/SC process is limited by relatively "small" AT volumes. To maintain minimum HRT = 6 hours, then Plant 1 and 2 can treat a combined 55-60 MLD annual average flow. The existing ATs will need to operate at approx. 4.5 hours HRT to treat ECA=73 MLD flow.
- Adding AT volume (+100% Plant 1 and +33% Plant 2) increases the ADF capacity significantly from approximately 55-60 MLD to 88-90 MLD. This exceeds the Phase 1 expansion need of 77.2 MLD but not the ultimate capacity need of 104 MLD.
- The existing SC area is sufficient to treat peak flows as high as 150-160 MLD. The AT MLSS will need
 to be always maintained <2500 mg/L which may prove challenging in winter when higher MLSS is
 typically needed to maintain nitrification. Hence CEPT may be needed to reduce organic loading and
 assist with maintaining MLSS<2500 mg/L.
- Plant wet weather flows are anticipated to exceed the PC and SC peak flow capacities and therefore a
 wet weather flow strategy is needed for the excess flows. This could include flow equalization and/or
 CEPT of excess flows and blending with the final effluent. Additional study is required to determine a
 preferred wet weather treatment strategy.

4.0: RECOMMENDATIONS

The key recommendations arising from this work include:

- High level unit loading calculations suggest re-rating the existing plant to 77.2 MLD average flow with peak flow treatment of 150-160 MLD may be feasible. At a minimum, this will require expanding Plant 1 ATs +100% and Plant 2 ATs +33% and providing winter CEPT operation to assist nitrification.
- Assess hydraulic constraints and the upgrades that may be necessary to convey/split peak flows up to 160 MLD.
- Assess other process unit capacity impacts associated with increasing peak flows to 160 MLD, including: raw sewage pumping, grit removal, UV.
- Assess the solids handling process capacity vs operation at 77.2 MLD average annual flow
- Assess wet weather treatment options that will be necessary to manage peak flows > 160 MLD that exceed the secondary treatment peak flow capacity.
- Consider more detailed modeling analysis using a wastewater simulator such as Biowin. Calibrate the model to existing plant conditions and then reassess potential capacity gains with various modifications.

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Reference: LRPCP Capacity Assessment & Re-Rating Upgrade Feasibility

- Consider stress testing the PC and SC to determine actual field allowable SOR and use that as the basis for better estimating allowable peak flows. For example, the MECP design guideline SC SOR = 37 m³/m²/d limits the SC capacity to ~150 MLD. Successful LRPCP stress testing at SOR=50 m³/m²/d could increase the allowable peak flow capacity to ~200 MLD.
- Consider options for expanding treatment beyond 77.2 MLD. This may include constructing a new 3rd plant to operate in parallel with existing Plants 1 and 2 assuming these Plants can be modified and rerated to 77.2 MLD. If wet weather flows are managed as part of the 77.2 MLD expansion, then the new plant could be operated as a "scalping" plant focused on treating only base sanitary flow with minimal peaking factor. It would also feature appropriate filtration technology depending upon the eventual effluent limits that will be developed at that time.

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Appendix D CONSULTATION

- 1. Stakeholder Contact List
- 2. Notice of Study Commencement
- 3. Public Information Centre No.1
- 4. Public Information Centre No.2
- 5. Public Information Centre No.3
- 6. Email Packages to Review Agencies
- 7. Mailout Packages to Local Residents
- 8. Response from Review Agencies Notice of Project Commencement
- 9. Response from Review Agencies Public Information Centre No.1
- 10. Response from Public Public Information Centre No.1
- 11. Response from Review Agencies Public Information Centre No.2
- 12. Response from Review Agencies Public Information Centre No.3
- 13. Response from Review Agencies Notice of Draft ESR
- 14. Indigenous Consultation Log





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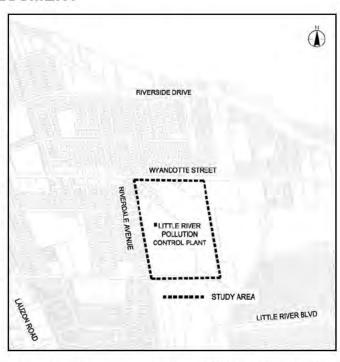




LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process including: (Phase 1) review of background information and definition of a problem statement, (Phase 2) evaluation of alternative solutions, (Phase 3) evaluation of alternative design concepts, and (Phase 4) preparation of an environmental study report.



PROJECT BACKGROUND

In 2020, the City of Windsor endorsed its first comprehensive Sewer and Coastal Flood Protection Master Plan (SMP). The SMP identified treatment capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. During these events flow in excess of the LRPCP wet weather treatment capacity is by-passed to the nearby Pontiac Pumping Station and discharged to the Little River as a combined sewer overflow (CSO). The Ministry of Environment, Conservation and Parks has indicated that any future expansion of the LRPCP should eliminate the need for CSO.

In 2021, the City of Windsor initiated a master servicing plan for the Sandwich South Area geared towards providing the required municipal infrastructure in support of growth. The Sandwich South Master Service Plan, a Municipal Class EA discussed the capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development.

PUBLIC CONSULTATION

This notice of study commencement marks the initiation of the public consultation process for this project. Throughout this project the public will be invited to attend public open houses where interested individuals can learn more about the project, ask questions, and submit feedback to the project team.

If you have any questions or if you wish to be added to the study mailing list, please contact:

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Personal information submitted is collected, maintained, and disclosed under the authority of the Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act for transparency and consultation purposes. 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.

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LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT NOTICE OF STUDY COMMENCEMENT

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

This Notice of Study Commencement marks the initiation of the public consultation process for this project. Throughout this project the public will be invited to attend public open houses where interested individuals can learn more about the project, ask questions, and submit feedback to the project team.

If you would like to learn more about this project or wish to learn how to be added to the project mailing list, please visit the City of Windsor's Project Webpage:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

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Happy Anniversary



Not many kids get to wish their parents a happy 60th anniversary these days. We are the lucky few, and we count ourselves as blessed. Even more so that you have set such an example of what love is to not just us, but everyone. We are lucky to have watched and grown up surrounded by a love like yours. Lucky to call you Mom and Dad. Congratulations on your 60th wedding anniversary.

Love Lisa (Andrej), Mark (Tina) and Natalia









NOTICE OF PUBLIC INFORMATION CENTRE NO. 1

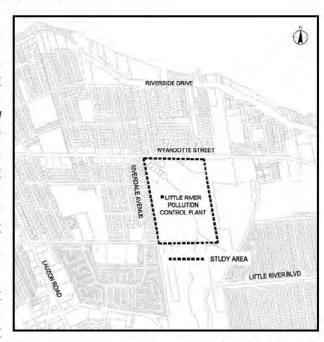
LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document consultation activities and design recommendations.

PROJECT BACKGROUND

In 2020, the City of Windsor endorsed its first comprehensive Sewer and Coastal Flood Protection Master Plan (SMP). The SMP identified treatment



capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. In 2021, the City of Windsor initiated a master servicing plan for the Sandwich South Area geared towards providing the required municipal infrastructure in support of growth. The SSMSP, outlined limitations of the existing LRPCP and recommended to increase the capacity to accommodate the development in Sandwich South. Additional information regarding this Class EA can be found on the City's project website:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

PUBLIC INFORMATION CENTRE

NO. 1

Wednesday February 28th, 2024 3:00 p.m. – 7:00 p.m.

WFCU Centre Ontario Room 8787 McHugh Street, Windsor, ON

PUBLIC CONSULTATION

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. Consultation is an integral part of the EA process and members of the public, agencies, and other interested persons are invited to participate in the upcoming PIC. Following the PIC, comments are welcomed and will be received until March 28th, 2024.

If you have any questions or if you wish to be added to the study mailing list, please contact:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Jian Li, Ph.D., P. Eng.
Project Manager, Stantec Consulting
2555 Ouellette Avenue, Suite 100
Windsor, Ontario, N8X 1L9
226-704-3039
iian.li@stantec.com

Personal information submitted is collected, maintained, and disclosed under the authority of the Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act for transparency and consultation purposes. 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.

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NOTICE

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION CLASS ENVIRONMENTAL ASSESSMENT

NOTICE OF PUBLIC INFORMATION CENTRE NO. 1

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document consultation activities and design recommendations.

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. The PIC will be held on Wednesday February 28th, 2024 (3:00 to 7:00 pm) at the WFCU Centre, Ontario Room, 8787 McHugh Street, Windsor, ON.

Additional details regarding the PIC are available on the City of Windsor's project webpage: https://www.citvwindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx



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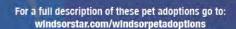


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I'm a young 46ib guy who can be a bit shy at first. I'm young and full of energy, ready to play and explore. I would prefer a home where I'm the only pet. I might need a little training, but I promise I'm a fast learner.

11 months - 2000040827 **Bloomin' Onion**



I'm a shy yet curious soul. I'm a mellow companion, preferring quiet cuddles over rambunctious play. My curious nature means I'll always be interested in your

Male - Domestic Medium Hair 4 years - 2000085913



Not only are we best buddles who need a home together, but we are barn buddles! We're independent and great mousers. Male (Darren) & Female (Dynasty) 0 months - 2000073600



I know it maybe tempting to pet me, but you can only touch on my terms. I have a hard time adjusting to new environments and routines so you'll need to be patient with me. I would prefer to be the only pet. Female - Ragdoll 7 years - 2000072872



I'm a young 77lb sweet boy who quite the goofball... but I'm smart too! I love puzzles, especially if they lead to treats. I like to play all day, and then cuddle. I'm a social butterfly and I love making new friends! Male - Labrador Retriever 10 months - 2000086748

I am a young 42lb guy who LOVES people, playing with toys, treats, and working on training! I will need an adopter who is home A LOT to help me work through my anxiety with being left alone.

Male - Mixed Breed 1 year - 2000028266



excitement and jumping or playing with the



I'm a nice 57lb guy who behaves so well, especially for my age! I have a stoic side and a goofy side, and love to meet new people! I enjoy playing with other dogs, and would likely enjoy having kids around.

Male - Mixed Breed 8 months - 2000086859

Jessica Rabbit

I'm a carrot-loving, ear-twitching diva! So, here's my tale. I'm a sweet, friendly, and curious gal, just waiting to bring laughter and carrot crunching sounds to your home!

Female - New Zealand Rabbit 1 year - 2000085775



I'm a big handsome fellow looking for a very special home. I'm gentle, sweet, and curious. I tested positive for FeLV, which my adopter will need to be comfortable

Male - Domestic Short Hair 2 years - 2000087291

Lil (Bonded with Angelica)



I'm a tiny finch who came here with 5 of my friends! I'm looking for a home with at least one of my buddles, as I'm a social gal. Female - Finch Adult - 2000077329



I'm an affectionate, outgoing guy. I'm looking for a home where I can get lots of attention and hopefully someone who will play with me. Come meet me at Pet Valu Roundhouse Centre!

house Centre!
Male - Domestic Short Hair
8 months - 2000060094

Polly & Perdita (Bonded)

We came in as strays and are looking for a home together. Polly is younger, and is very nervous and scared without Perdita. Perdita is a confident, laid back and friendly girl who loves to sniff around. Females - Beagles 1 & 2 years - 2000086006



I'm a curious fellow with an independent nature. I'm looking for a caring human to provide a new home, full of love. Adopt me and we can embark on a magical journey

of friendship!
Male - Flemish Glant/Lionhead 1 year - 2000085503

Snowball



I'm a clever and friendly rabbit. I'm a savvy bunny with a knack for solving puzzles. I'm quite independent, but I also love a good snuggle. Adopt me and you'll never be bored!

Female - New Zealand Rabbit 1 year - 2000085772

CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre

February 28th, 2024 – 3:00 p.m. to 7:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
1	Rob Ceschan		
2	Michael Blain.		
3	WILLIAM SWANTZ		
4	DAWN & GARY RAINBIRS		
5	So san Bufton		
6	Tom Montgomery		
7	Warren Stint		
8	KIRBY MARDIE		
9	Amethyst Branch		
10	Somble MIKE SE		
11	NELSON SOULLIERE		
12	PAT WINTERY		

CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre February 28th, 2024 – 3:00 p.m. to 7:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
13	Jogna Tanosik		
14	Joseph Tanosik Joseph Evogeni		
15	Gregfrymak		
16	CHRIS MANSON		
17	mike Honson		
18	La Dijon		
19	anne mange		
20	Pete Simeoni		
21			
22			
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24			



PUBLIC INFORMATION CENTRE NO. 1 COMMENT FORM

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). This study will satisfy Phase No.'s 1 through 4 of the Class EA process including:

(PHASE 1) review of background information and definition of a problem statement;

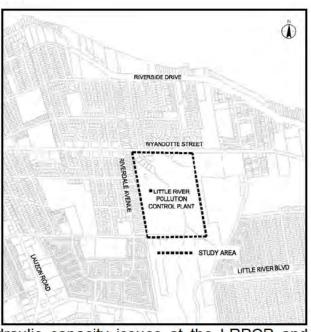
(PHASE 2) evaluation of alternative solutions:

(PHASE 3) evaluation of alternative design concepts;

(PHASE 4) preparation of an environmental study report.

PROJECT BACKGROUND

The City of Windsor Sewer and Coastal Flood Protection Master Plan (SMP) from 2020 and Sandwich South Master Service Plan (SSMSP) from 2021, identified the need to upgrade the existing Little River



Pollution Control Plant (LRPCP). The SMP outlined hydraulic capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow resulting in combined sewer overflows. The SSMSP discussed the treatment capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development. Further to these planning reports, gap analysis has identified the need to evaluate and include considerations for the hydraulic grade line through the LRPCP (effluent pumping requirements), aging infrastructure and equipment, and energy efficiency.

PHASE 1 - PROBLEM / OPPORTUNITY STATEMENT

The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This Class EA will identify, evaluate, and report on the preferred solution and design concepts to address this problem / opportunity statement.

THANK YOU

Thank you for your interest in this project and attendance at this Public Information Centre (PIC). Copies of the material presented at the PIC are available on the project website below:

OR

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

Please return your completed comment form on or before March 28th, 2024, to:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Jian Li, Ph.D., P. Eng. Project Manager, Stantec Consulting 2555 Ouellette Avenue, Suite 100 Windsor, Ontario, N8X 1L9 226-704-3039 jian.li@stantec.com



PUBLIC INFORMATION CENTRE NO. 1 COMMENT FORM

	OMMENTS OR CONCERNS ON THE PRESEN ION CONTROL PLANT CLASS EA:	ITED MATERIAL FOR
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City of Windsor LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION

PUBLIC INFORMATION CENTRE WELCOME

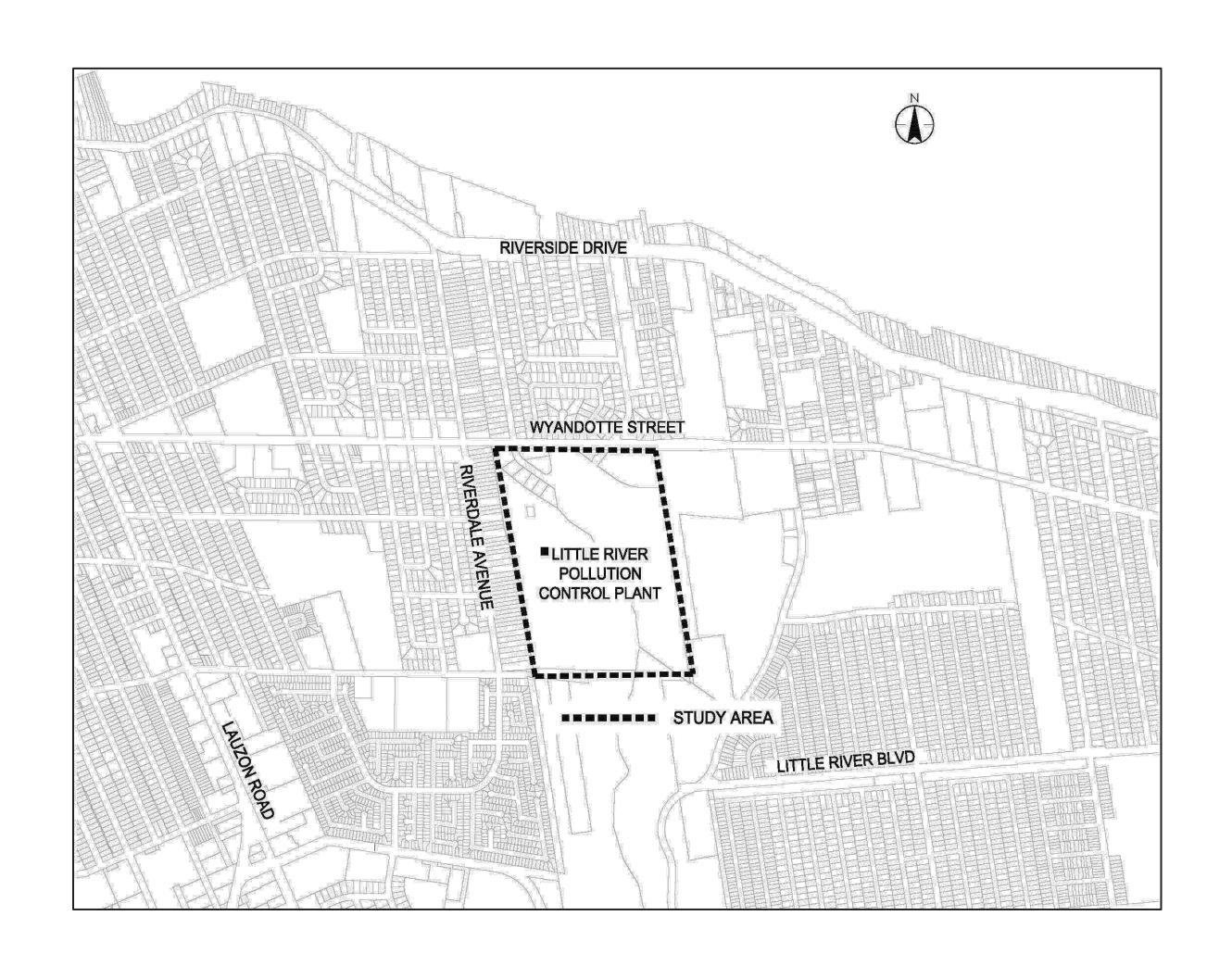
Municipal Class Environmental Assessment February 28, 2024

Introduction Study Overview

The purpose of this study is to determine the preferred solution and conceptual design to address the need for additional wastewater capacity at the Little River Pollution Control Plant (LRPCP).

The purpose of this Public Information Center (PIC) is to:

- Describe the Municipal Class
 Environmental Assessment (EA) Process
- Introduce the Study Background
- Identify the Problem / Opportunity
- Present Capacity Requirements for the LRPCP
- Obtain Public Input on the Study



Introduction to the Class EA Process

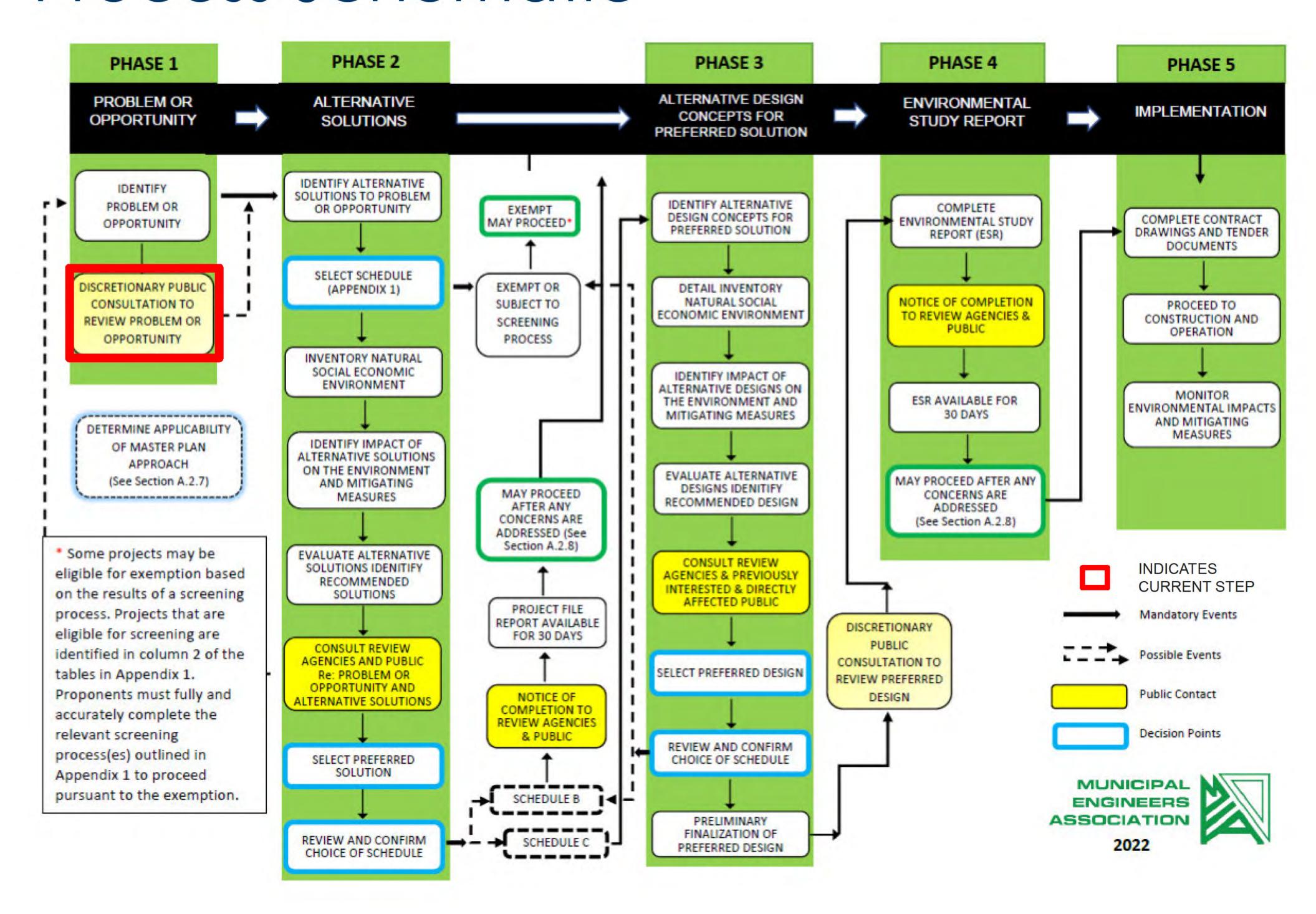
Key Features

This study is being conducted in accordance with the Class EA requirements for Schedule 'C' Projects.

Municipal Class EA Phases	
★ Phase 1 – Review and identify problem or opportunity	This EA Study
Phase 2 – Alternative solutions to problem	This EA Study
Phase 3 – Alternative design concepts for the preferred solution	This EA Study
Phase 4 – Prepare Environmental Study Report	This EA Study
Phase 5 – Implementation of the preferred design	Future Work

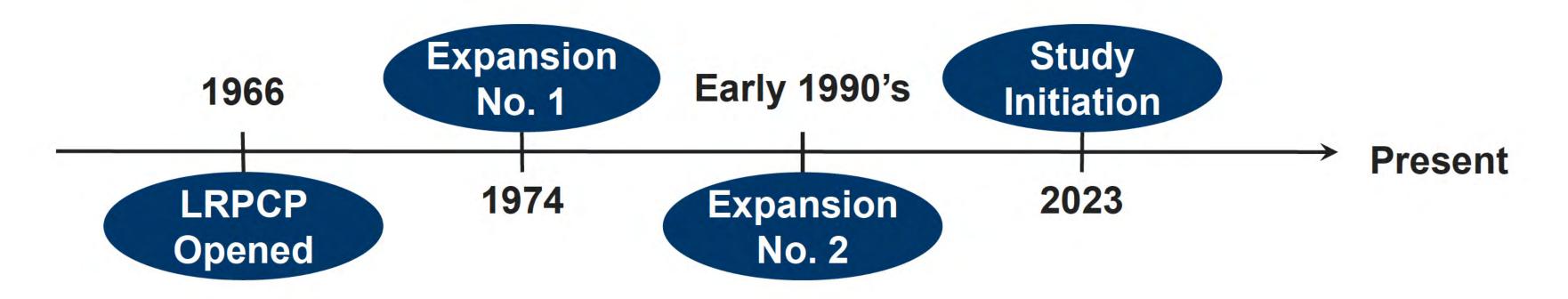
Introduction to the Class EA Process

Process Schematic



Background Little River Pollution Control Plant

The LRPCP is located at 9400 Little River Road and provides treatment for municipal & industrial wastewater in the region.



- Plant 1 at the LRPCP was commissioned as a primary treatment plant with a capacity of 18 MLD
- Plant 1 at the LRPCP was upgraded and

 1974 → expanded to provide secondary treatment and a Rated Capacity of 36 MLD
- 1990's

 The LRPCP was expanded to include Plant 2 for a combined a Rated Capacity of 73 MLD
- 2023 -> Stantec initiated this Class EA



Background LRPCP Service Area

The LRPCP currently services the eastern portion of the City of Windsor (RED), including:

- Riverside
 East Windsor
- East Riverside
 Fontainebleau
- Forest Glade
 Part of Walker Farm

As well as the Municipality of Tecumseh (GREEN), including:

- Tecumseh Centre
- St. Clair Shores
- Oldcastle



Background LRPCP Operating History

- The LRPCP has continued to consistently achieve a high-quality effluent and meets the limits set by the Ministry of Environment, Conservation, and Parks (MECP)
- Over the period reviewed, the concentrations of CBOD₅,TSS, TP, and TAN are well below the effluent limits and objectives

Historic Operating Conditions at the LRPCP from 2017 to 2022:

Parameters	Monthly Average INFLUENT Concentration (mg/L)	Monthly Average EFFLUENT Concentration (mg/L)	Removal Rate (%)	MECP EFFLUENT Compliance Limit (mg/L)
Biological Oxygen Demand (CBOD ₅)	155	2.3	98.5	15
Total Suspended Solids (TSS)	161	4.2	97.4	15
Total Phosphorus (TP)	3.9	0.3	92.3	1.0
Total Ammonia Nitrogen (TAN)	19	0.4	97.9	6.0

BackgroundMunicipal Planning Reports

Capacity issues and limitations at the LRPCP were identified through the following municipal planning reports:

Year	Report Name	Purpose of Report
2018	Town of Tecumseh Water and Wastewater (W & WW) Master Plan	→ Update the planning projections and provide a technical review of the servicing strategies for the Town
2020	Sewer & Costal Flood Protection Master Plan (SMP)	→ Address flooding issues related to severe storm events
2021	Sandwich South Master Servicing Plan (SSMSP)	→ Geared towards providing the required municipal infrastructure in support of growth

- The SMP confirmed that the LRPCP cannot accommodate all wet weather flow during significant storm events due to hydraulic capacity issues.
- The SSMSP discussed the LRPCP treatment capacity limitations and recommended an expansion to accommodate future development in Sandwich South.

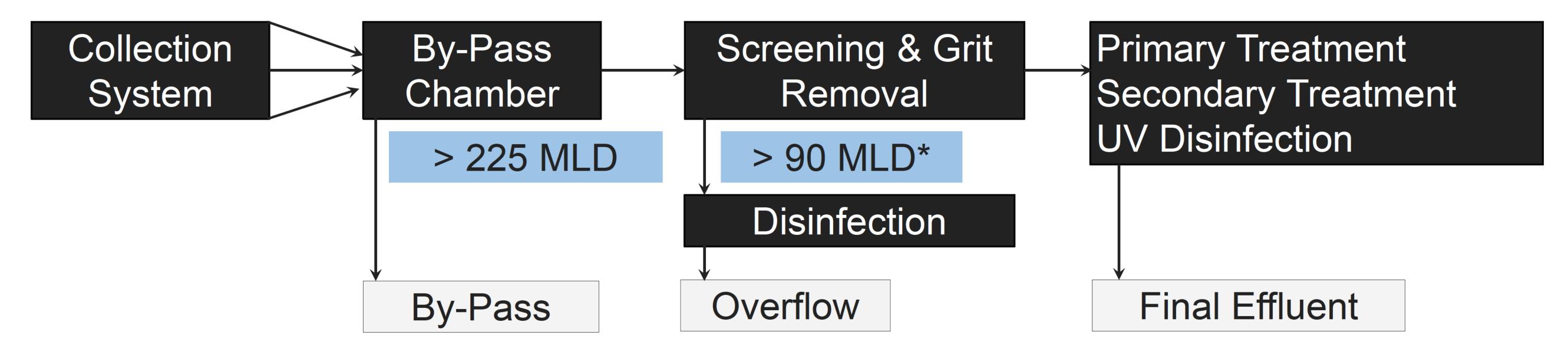
Municipal Planning Reports Town of Tecumseh W & WW Master Plan

In the current wastewater servicing agreement, the Municipality of Tecumseh has the following allocation at the LRPCP:

- Maximum Daily Average of 19.8 MLD with an option to increase to 38.0 MLD
- Maximum Peak Flow of 113 MLD
- Based on the W&WW Master Plan, the projected wastewater flows are anticipated to exceed the current allotted capacity at the LRPCP on the 2036+ horizon.

Sub Sarvica Area	Population (persons)		Average Flow (MLD)		Peak Flow (MLD)	
Sub-Service Area	2016	2036+	2016	2036+	2016	2036+
Tecumseh	12,180	15,380	6.5	7.7	35	39
St. Clair Beach	3,484	3,894	2.1	2.2	17	17
Tecumseh Hamlet	5,264	13,683	2.9	8.9	20	45
Maidstone Hamlet	335	2,259	_	1.2	_	6.0
Oldcastle Hamlet	350	10,947	0.4	7.4	2.0	29
Highway Service Area	_	_	_	0.6	_	2.5
Rural	1,617	1,617	_	_	_	_
Total	23,229	47,756	11.9	28.0	74	135

Municipal Planning Reports Sewer & Costal Flood Protection Master Plan



Hydraulic upgrades are required at the LRPCP to reduce the potential for and impact of by-pass and overflow events:

- By-pass events occur when the flow to the LRPCP exceeds 225 MLD. Flow is diverted away from the LRPCP to the Pontiac Pumping Station and receives no treatment.
- Overflow events occur when the flow to the LRPCP is less than 225 MLD and exceeds 90 MLD*. Flow is diverted from the primary and secondary treatment processes and is disinfected prior to release.

^{*} The exact flow rate at which overflow occurs will be reviewed through this Class EA Study.

Municipal Planning Reports Sandwich South Master Servicing Plan

It is anticipated that significant growth will occur in Sandwich South (BLUE) over the next

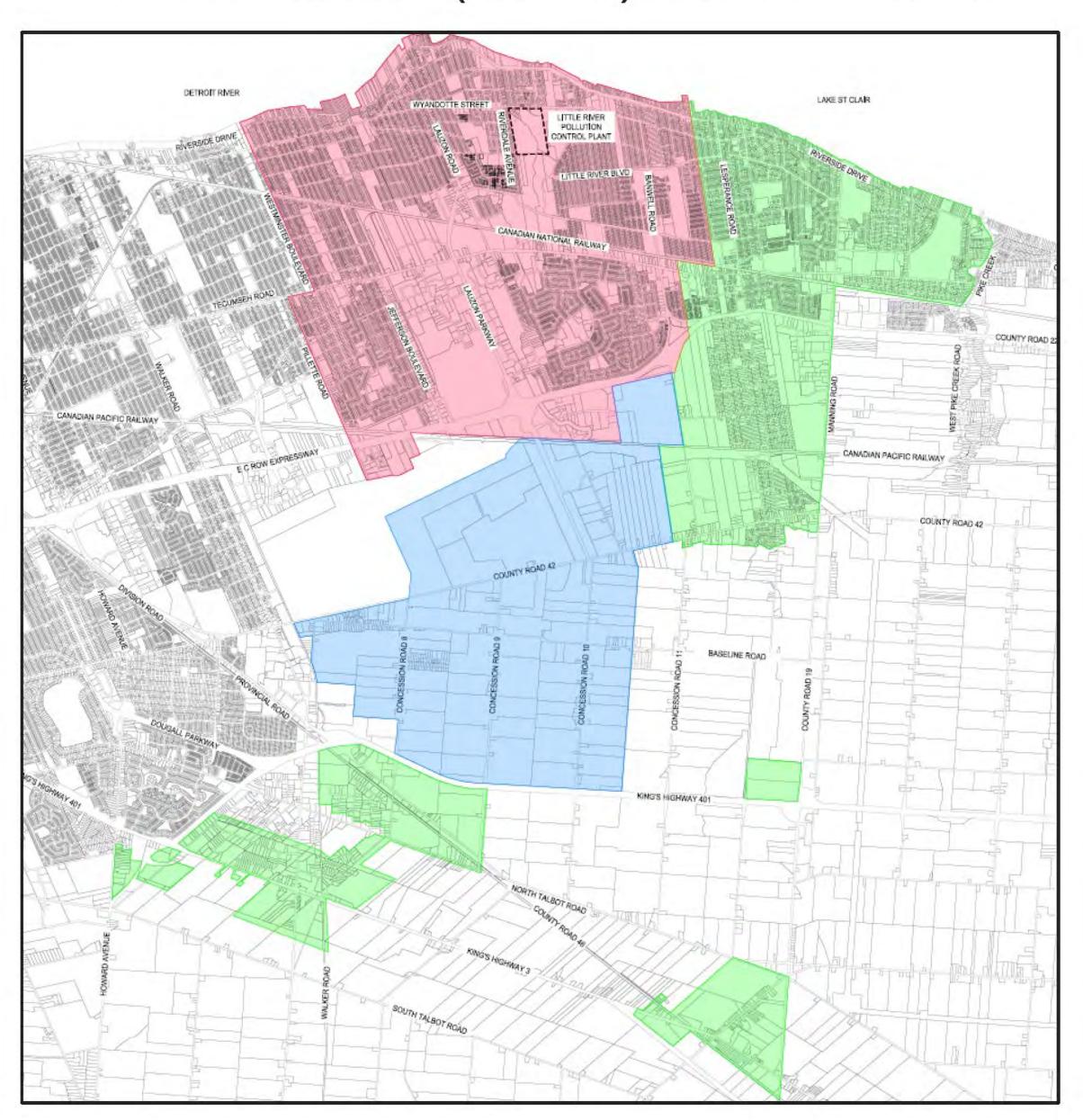
20 years and will include:

 A mix of residential, commercial, institutional, and industrial establishments

 The most notable developments in this area include the Windsor/Essex Acute Care Hospital and the Nexstar Battery Plant

Design Flow's for this area are outlined below:

Design Characteristic	Value
Sanitary Drainage Area	1,998 ha
Design Population	86,009
Average Daily Sewage Flow	64.1 MLD
Peak Wet Weather Sewage Flow	1,005 L/s



Problem / Opportunity Statement

The SMP (2020) and SSMSP (2021) identified the need to upgrade the existing LRPCP.

- The SMP outlined hydraulic capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow resulting in combined sewer overflows.
- The SSMSP discussed the treatment capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development.

In general, the study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

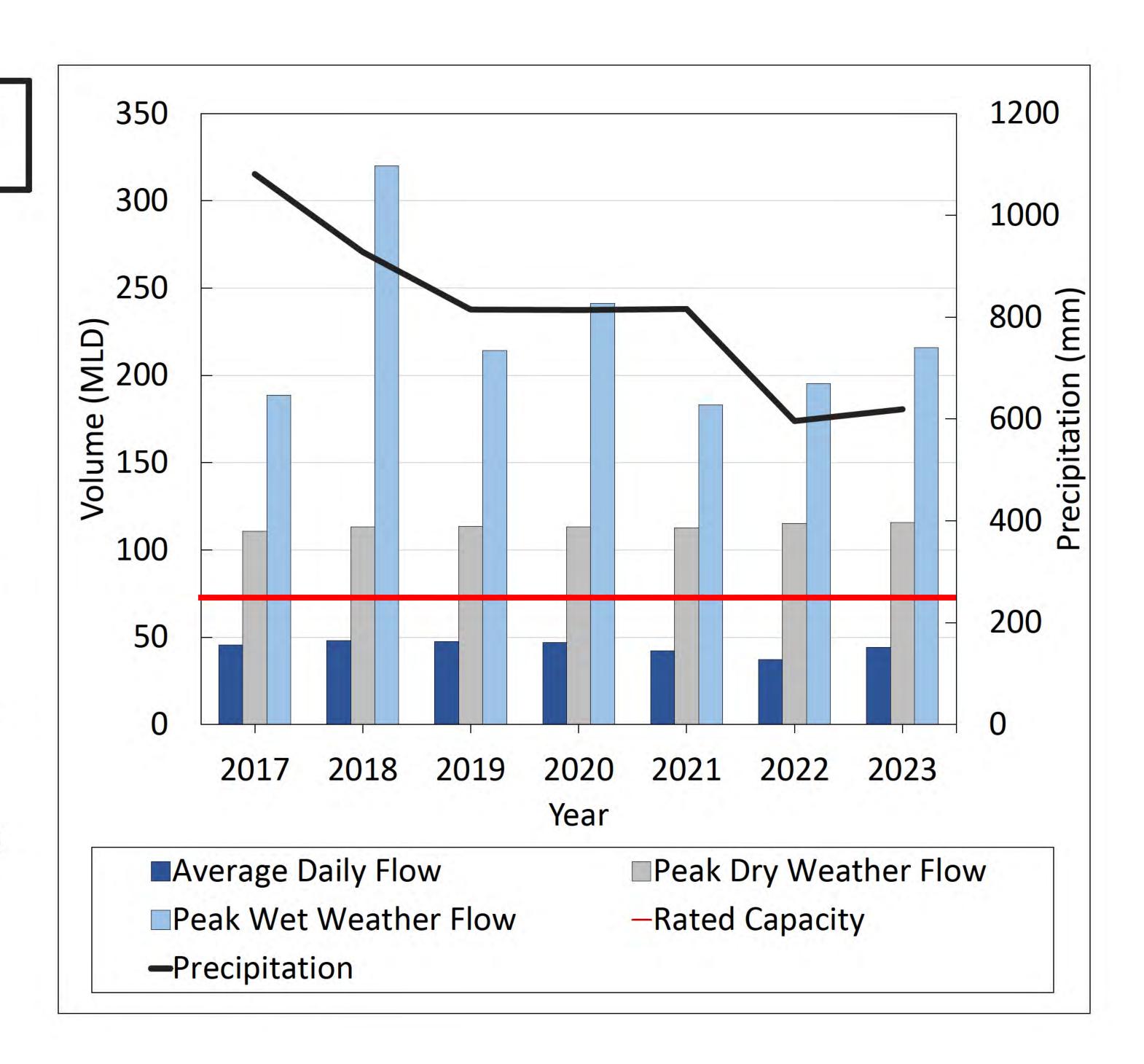


Plant Capacity LRPCP Historic Flows

The Rated Capacity of the existing LRPCP is 72.8 MLD

The historic flows at the LRPCP were reviewed for the period of 2017 to 2023:

- Average Daily Flow was approximately 45 MLD
- → This represents roughly 62% of the LRPCP Rated Capacity
- Maximum Peak Dry Weather Flows was 116 MLD
- Maximum Peak Wet Weather Flows was 320 MLD



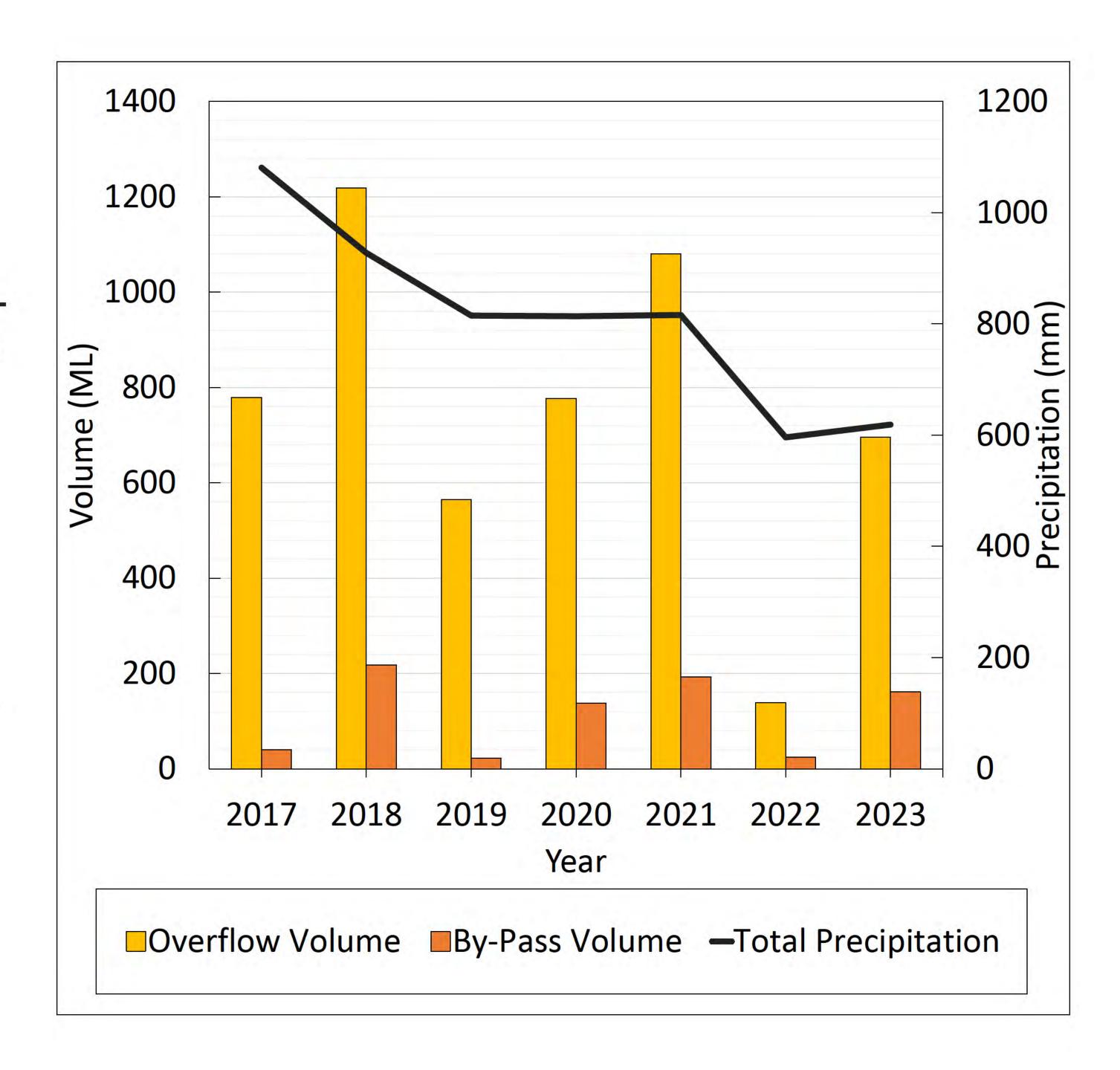
Plant Capacity Severe Storm Events

Overflow Events:

- The annual overflow volume ranged from 139 to 1,219 ML
- Average overflow volume was 760 ML
- → Roughly 5% of the flow to the LRPCP

By-Pass Events:

- The annual by-pass volume ranged from 22 to 218 ML
- Average by-pass volume was 102 ML
- → Less than 1% of the flow to the LRPCP



Future Requirements Plant Capacity

The cumulative estimated wastewater flow from the City of Windsor (existing service area), Sandwich South, and the Town of Tecumseh are outlined below:

Summary	20-Year Design	Ultimate Design
Average Daily Sewage Flow	86.0 MLD	111 MLD
Peak Dry Weather Sewage Flow	217 MLD	255 MLD
Peak Wet Weather Sewage Flow	470 MLD	557 MLD

The preferred solution and conceptual design for this project should have:

- A Rated Capacity to accommodate the '20-Year Design Flow'
- With consideration for future expansion or phasing to the 'Ultimate Design'
- Hydraulic capacity to accommodate Peak Wet Weather Flows
- Treatment capacity to accommodate Peak Dry Weather Flows

Future Requirements Treatment Capacity

The existing effluent limits for the LRPCP are outlined below:

Doromotor	Effluent Compliance Limits			
Parameter	Monthly Average	Single Sample		
cBOD5	15 mg/L	25 mg/L		
TSS	15 mg/L	25 mg/L		
TP	1.0 mg/L	1.5 mg/L		
TAN	6 mg/L	8 mg/L		
	200 CFU/100 mL OR	1000 CFU/100 mL OR		
E. coli	200 MPN/100mL	1000 MPN/100mL		
	(from May 1 to October 31)	(from May 1 to October 31)		
pH		Between 6.5 – 9.0 (inclusive)		

As a part of this Class EA Study, new effluent criteria will be set for the LRPCP. New effluent criteria will be determined through an Assimilative Capacity Study and consultation with the MECP.

Next Steps

Complete Phase 2, 3, and 4 Class EA Process:

	Project Component	Date
7	Identify and Evaluate Alternative Solutions	February 2024 – April 2024
Phase	Public Information Centre No. 2 - Alternative Solutions	April 2024
Д.	Council Presentation and Resolution – Preferred Solution	May 2024
	Evaluate Alternative Design Concepts	May 2024 – August 2024
hase 3	Public Information Centre No. 3 - Design Alternatives	July 2024
Ph	Public Information Centre No. 4 - Preferred Design	August 2024
4	Environmental Study Report (ESR)	September 2024 – October 2024
hase	Council Presentation and Resolution – Preferred Design	October 2024
Ph	Notice of Study Completion	November 2024

Thank You

Please visit the City of Windsor's project website to submit a feedback form.

Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)



NOTICE OF PUBLIC INFORMATION CENTRE NO. 2

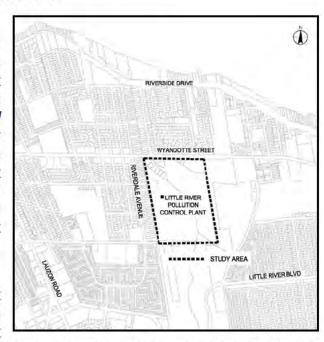
LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document consultation activities and design recommendations.

PROJECT BACKGROUND

In 2020, the City of Windsor endorsed its first comprehensive Sewer and Coastal Flood Protection Master Plan (SMP). The SMP identified treatment



capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. In 2021, the City of Windsor initiated a master servicing plan for the Sandwich South Area geared towards providing the required municipal infrastructure in support of growth. The SSMSP, outlined limitations of the existing LRPCP and recommended to increase the capacity to accommodate the development in Sandwich South. Additional information regarding this Class EA can be found on the City's project website:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

PUBLIC INFORMATION CENTRE

NO. 2

Wednesday April 23rd, 2025 3:00 p.m. – 6:00 p.m.

WFCU Centre Ontario Room 8787 McHugh Street, Windsor, ON

PUBLIC CONSULTATION

The City is hosting a Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. Consultation is an integral part of the EA process and members of the public, agencies, and other interested persons are invited to participate in the upcoming PIC. Following the PIC, comments are welcomed and will be received until May 23rd, 2025.

If you have any questions or if you wish to be added to the study mailing list, please contact:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Chrissy Jung, P. Eng.
Project Manager, Stantec Consulting
2555 Ouellette Avenue, Suite 100
Windsor, Ontario, N8X 1L9
226-704-3037
chrissy.jung@stantec.com

Personal information submitted is collected, maintained, and disclosed under the authority of the Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act for transparency and consultation purposes. 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.

Obituaries

Obituaries



MCNEILLY, Ken August 24, 1947 -March 31, 2025

It is with great sadness we announce the sudden passing of Ken McNeilly after a brief illness on March 31, 2025 at the age of 77. Now reunited with his parents Les and Ruby McNeilly, his brother Dougle, and his sister Sharon. Ken is survived by his beloved wife of 22 years Karen (nee. Roy). His sons Chad (Mary), and Todd (Denise), and his step-son Larry Jeffrey. Ken is the cherished grandpa of Karlie, Cole, Aiden, and Larry Jr. Loving Brother to Ellwood (Janice) of Cardinal, and Elaine Dillabough (Ross) of South Mountain. Also Survived by his sister-in-law Fay. Ken was a Chrysler Canada Retiree. In Ken's memory, donations may be made to Diabetes Canada. As per his wishes, cremation has taken place.

CELEBRATE LIFE



TAYLOR, Pearl Agnes Oct 30, 1929 - Mar 15, 2025

With love and gratitude, we announce the life and passing of Pearl Agnes Taylor, (Mailloux). A matriarch, the eldest of seven, mother of nine, grandma/great grandma to seventeen.

She lived and died with grace, humility, and dignity. Her life was filled with both adversities and joys. She relied on her faith through all of it. Her senior years were filled with love and beauty. She was a positive influence and loving inspiration to everyone that knew her.

Pearl is survived by her nine children, calling them her jewels: Bruce Taylor, daughter Brandi Byk; Kneale, husband Peter. daughter Chantelle; Mark Taylor, sons James and Jesse; Lynn Howe, daughter Geri-Lyn; Ross Taylor, wife Janet, children Natasha and Jacob; Jeff Taylor, daughter Carmin; Gloria Taylor, daughter Allison; Joyce husband Steven, children Bauer. Parker and Taylor; Yvonne Taylor. Great Grandchildren: KeShaun, Keyanna, Ryder, Brooklyn, Bridgette, Brodie.

Her brothers Wally Mailloux and wife Debbie, Rick Mailloux, and sister Shirley Dean, sister in law Anne

Predeceased by French Canadian parents Harvey and Violet Mailloux (Meloche), her siblings Grondon and husband Robert, Audrie Clarke, and Lloyd Mailloux, Her husband, Glenn Taylor, in laws Eilleen and Milton Taylor, Phil and Ann Taylor, Fred Plexman, Matthew Taylor, Derden Taylor.

Pearl was ahead of her time, highly spiritual, skilled in music, cooking, baking, gardening, fashion, fibre arts, crafts, and accounting. She was a devout Catholic, singing in the choir, volunteering her time at church, and teaching Catechism. importantly Pearl was a loving mother and grandmother.

There will be private celebrations in Vancouver and Windsor.

The family respectfully requests that in lieu of flowers, please donate to the BC Cancer Foundation or Lions Gate Hospital in Pearl's name.

In Memoriams

BEARD, Harold, Nancy & Keith

BEARD, Harold Blake April 9, 1952 - April 4, 2008 BEARD, Nancy Elizabeth September 5, 1954 -August 15, 2018 BEARD, Keith Edward July 10, 1948 - September 27, 2011

Always in our memories and hearts, with all our love Mom, Janis, Marty, Aaron, Michelle, Mabel, and Henry.

GARROD, George March 26, 1946 - April 7, 1975

George 50 years Your memory is as dear today as in the hour you passed away. Sandra, Donna, Kelly, Corey, grandchildren and greatgrandchildren

Thinking of you always!

Obituaries



UJJ, Andy December 2, 1936 - April 2, 2025

It is with great sadness that we announce the passing of Andy Ujj. Loving husband to Claire Ujj for 65 years. Kind and generous father of Jody Wellwood (Dr. Douglas Paulk). Proud grandfather of Austin Wellwood and Andrew Wellwood (Andrea Wellwood). Adoring greatgrandfather to Amelia Wellwood.

Andy was a hard-working man who could build anything and fix everything. He worked as a custom rate tariff analyst for Dominion-Consolidated Truck Lines for over 30 years. Andy had a strong sense of community. He was a volunteer firefighter and ultimately Deputy Chief of the Sandwich South Fire Department. He was instrumental in planning and building the Sandwich South Fire Station (now Tecumseh Station 2). He was the recipient of the Governor Generals Exemplary Service Award for fire service.

For fun he ran a lawn maintenance business with his friend, the late Stan Scaife. Together they cut the grass for many of the businesses in the Oldcastle Industrial Park. Andy cut the grass and plowed the snow for neighbors well into his 80's. He had a passion and dedication to the maintenance of the family farm that his immigrant parents (the late Peter and Mary Ujj) worked and saved so hard to purchase.

Andy was born and raised on the farm where he lived with his parents and late brother, Peter.

Donations can be made to The Ronald McDonald House, The Windsor/Essex Humane Society or to The Essex Region Goodfellows in Andy's memory.

Please join us at Victoria Greenlawn Funeral Home for a Celebration of Life for this wonderful man on Saturday April 5, 2025. Visitation at 11a.m. Service at noon. God just got a new handyman in heaven.



In Memoriams

In Loving Memory Of Zella Ann (2015), Alfred (2010) and Delor (1961) Laprise

In loving memory of our dear family members. Gone but not forgotten. With love from the family.

JOE SUZOR



For your Birthday in Heaven on April 6th

Birthdays in Heaven Decorations of gold Where the years come and go and you never grow old. Where you celebrate with Angels and past family there. With no illness in sight just love everywhere. So I don't need to worry how your birthday was spent Cause you're safe in Heaven and our wishes are sent.

Loving and missing you always Mom and Dad, Shelley and Dave, Hannah and Brendan

HAPPY EASTER TOO

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Regardless of birth

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VintageStarWars1977@gmail.com

NOTICE The Annual General Meeting for Windsor Memorial Gardens & Windsor Grove Cemeteries will be held via Zoom at 11:00am on Monday April 14, 2025. Register at windsomemorial.com

Other



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Public Notices

Public Notices



NOTICE

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION CLASS ENVIRONMENTAL ASSESSMENT

NOTICE OF PUBLIC INFORMATION CENTRE NO. 2 The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document

The City is hosting a Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. The PIC will be held on Wednesday April 23rd, 2025 (3:00 to 6:00 pm) at the WFCU Centre, Ontario Room, 8787 McHugh Street, Windsor, ON.

Additional details regarding the PIC are available on the City of Windsor's project webpage: https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx



TTY: 1-866-488-9311

consultation activities and design recommendations.

www.citywindsor.ca

AIDA PERTH ADD SCALDS SMELLIER RESISTTHEMERGE ARCADE T E E S H O O T A T E A R N S V A N STALER TERRA MENSOLVEDMYSTERIES TIERS TALENT M E N D E R L I N E S G O A L I E LEAST DOD COWBOY TIDIES SEAGOD TIARA OTTOMFINESTHOMERMFRAY PLANEKENNEL COSIGN SPOOLAGE SEXILEMABS CANARY VOTERFRAMED POETICESOOZES NAILEDTHEDISMOMENT ONLYOARED OTOOLE MOWERTSMAMP APEROL ITSNOTYOUITSME ALLEGE BIGGREEN

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CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre il 23rd, 2025 – 3:00 p.m. to 6:00 p

April 23rd, 2025 – 3:00 p.m. to 6:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
1	DENNIS STAMMY LENZ		
2	WARREN Som		
3	LAURIE BOYCE		
4	STURET WINCHESTER.		
5	Phil Barnik		
6	Michael Blain		
7	Kyle Edminds		
8	Josotte Eugeni		
9	KD VAIGEZ		
10	JOHN HONDGROW.		
11	Jake Renaud		
12	Kim Tomljenovic		

CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre

April 23rd, 2025 – 3:00 p.m. to 6:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
13	LAN VAISBITT		
14	203 PERRYMAN		
15	BRIAN GUINEY		
16	Jae Parent		
17	CHRIS MANZON		
			1



PUBLIC INFORMATION CENTRE NO. 2

COMMENT FORM

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). This study will satisfy Phase No.'s 1 through 4 of the Class EA process including:

(PHASE 1) review of background information and definition of a problem statement;

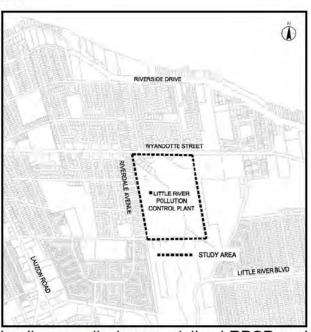
(PHASE 2) evaluation of alternative solutions;

(PHASE 3) evaluation of alternative design concepts;

(PHASE 4) preparation of an environmental study report.

PROJECT BACKGROUND

The City of Windsor Sewer and Coastal Flood Protection Master Plan (SMP) from 2020 and Sandwich South Master Service Plan (SSMSP) from 2021, identified the need to upgrade the existing Little River



Pollution Control Plant (LRPCP). The SMP outlined hydraulic capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow resulting in combined sewer overflows. The SSMSP discussed the treatment capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development. Further to these planning reports, gap analysis has identified the need to evaluate and include considerations for the hydraulic grade line through the LRPCP (effluent pumping requirements), aging infrastructure and equipment, and energy efficiency.

PHASE 2 – EVALUATION OF ALTERNATIVE SOLUTIONS

The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This Class EA will identify, evaluate, and report on the preferred solution and design concepts to address this problem / opportunity statement.

THANK YOU

Thank you for your interest in this project and attendance at this Public Information Centre (PIC). Copies of the material presented at the PIC are available on the project website below:

OR

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

Please return your completed comment form on or before May 23rd, 2025, to:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Chrissy Jung, P. Eng.
Project Manager, Stantec Consulting
2555 Ouellette Avenue, Suite 100
Windsor, Ontario, N8X 1L9
226-704-3037
chrissy.jung@stantec.com



PUBLIC INFORMATION CENTRE NO. 2 COMMENT FORM

	OMMENTS OR CONCERNS ON THE PRESE TON CONTROL PLANT CLASS EA:	INTED MATERIAL FOR
NAME		
TELEPHONE NO.		
DATE	SIGNATURE	

Personal information submitted is collected, maintained, and disclosed under the authority of the *Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act* for transparency and consultation purposes. 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.





City of Windsor LITTLE RIVER POLLUTION CONTROL PLANT STUDY

PUBLIC INFORMATION CENTRE NO. 2 WELCOME

Municipal Class Environmental Assessment Study April 23rd, 2025

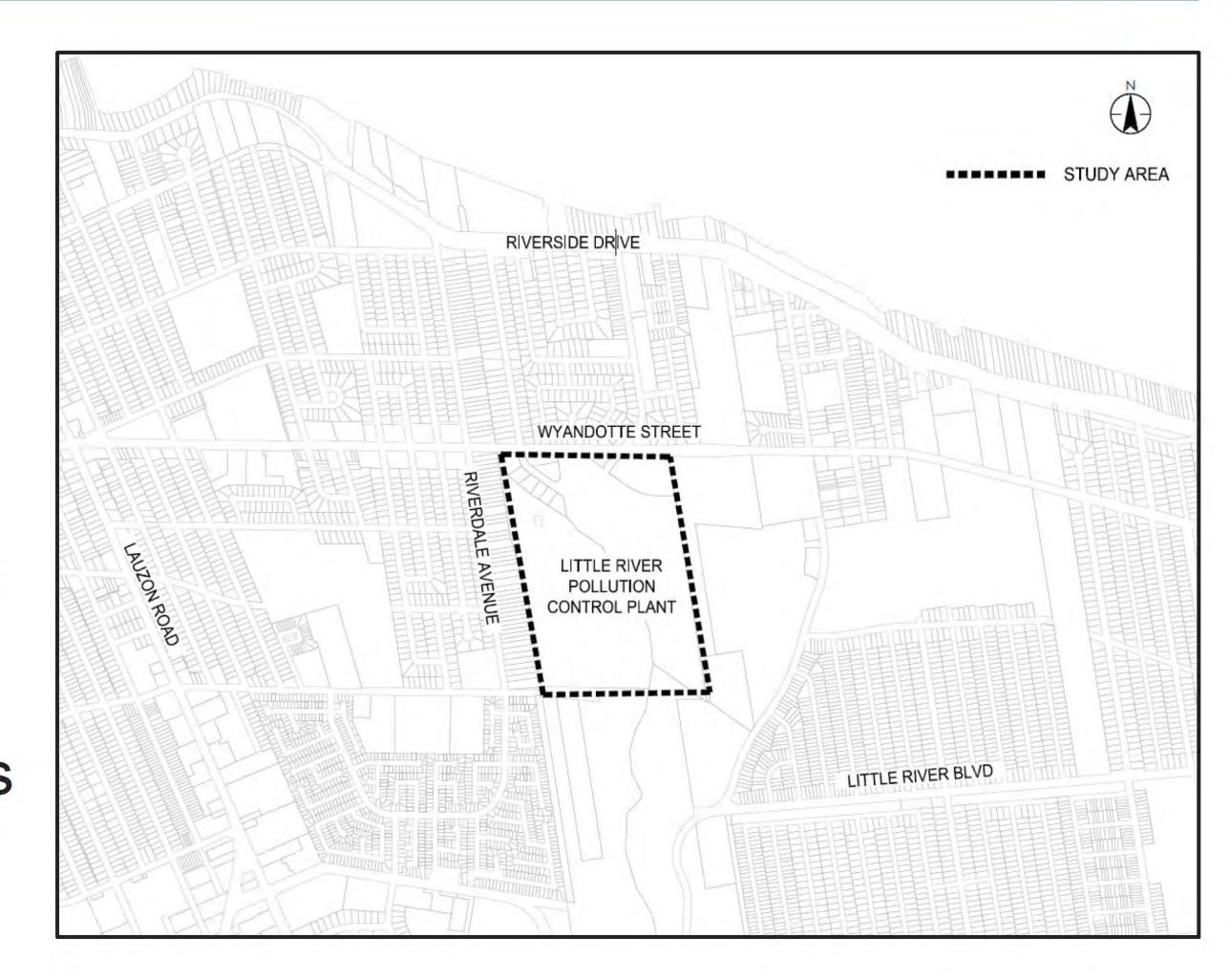
Introduction

Purpose of this Study

The purpose of this study is to determine the preferred solution and conceptual design to address the need for additional wastewater capacity at the Little River Pollution Control Plant (LRPCP).

The purpose of this Public Information Center (PIC) is to:

- Describe the Class Environmental Assessment (EA) Process
- Review the Study Background
- Present an Evaluation of and Obtain Public Input on Alternative Design Solutions
- Include Feedback in the Evaluation Process



Introduction

Key Features of the Class EA Process

This study is being conducted in accordance with the Class EA requirements for Schedule 'C' Projects.

	Municipal Class EA Phases	
	Phase 1 – Review and identify problem or opportunity	This EA Study
*	Phase 2 – Alternative solutions to problem	This EA Study
	Phase 3 – Alternative design concepts for the preferred solution	This EA Study
	Phase 4 – Prepare Environmental Study Report	This EA Study
	Phase 5 – Implementation of the preferred design	Future Work

Problem / Opportunity Statement

Prior planning reports identified the need to upgrade the existing LRPCP.

- The Sewer & Costal Flood Protection Master Plan (SMP) outlined immediate wet weather flow capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to accommodate all flows resulting in combined sewer overflows.
- The Sandwich South Master Servicing Plan (SSMSP) identified the **long-term treatment capacity limitations** of the LRPCP and the need to increase capacity to accommodate future development.

In general, the study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional capacity at the LRPCP.



Future Requirements Service Area and LRPCP Capacity

The anticipated wastewater flow in millions of liter per day (MLD) was determined to be:

Flow Projections	2045 (20-Year)	2065+ (Ultimate)
Average Daily Flow (ADF)	77.2 MLD	104 MLD
Peak Dry Weather Flow (DWF)	201 MLD	259 MLD
Peak Wet Weather Flow (WWF)	393 MLD	474 MLD

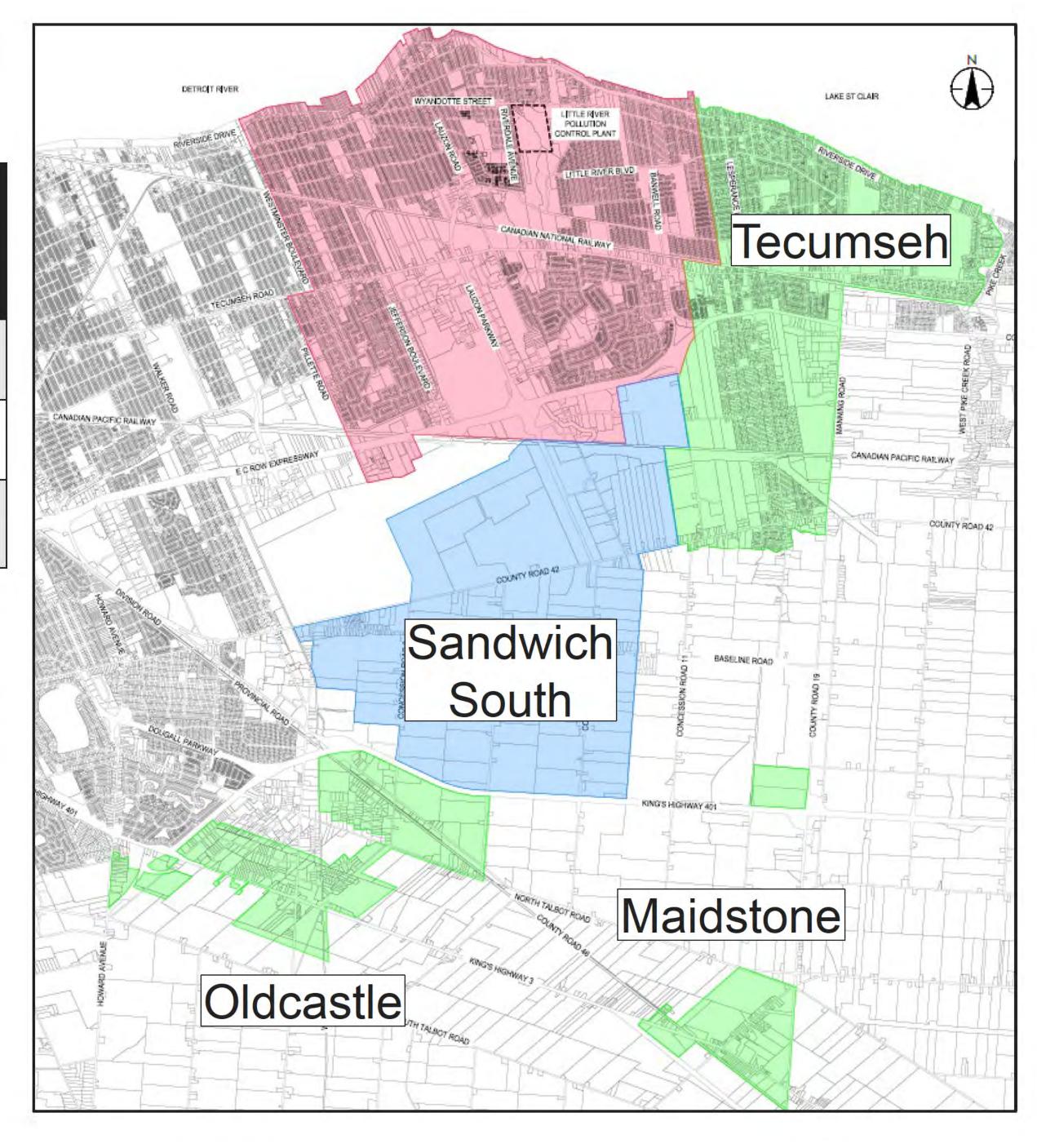
Note: Flow values were updated since last PIC based on new projections in the Town of Tecumseh. The Peak WWF varies with Inflow and Infiltration (I&I) Reduction Factor (equivalent to ± 13 MLD).

Existing LRPCP Rated Capacity:

ADF = 72.8 MLD

Peak DWF = 90 MLD

Peak WWF = 225 MLD



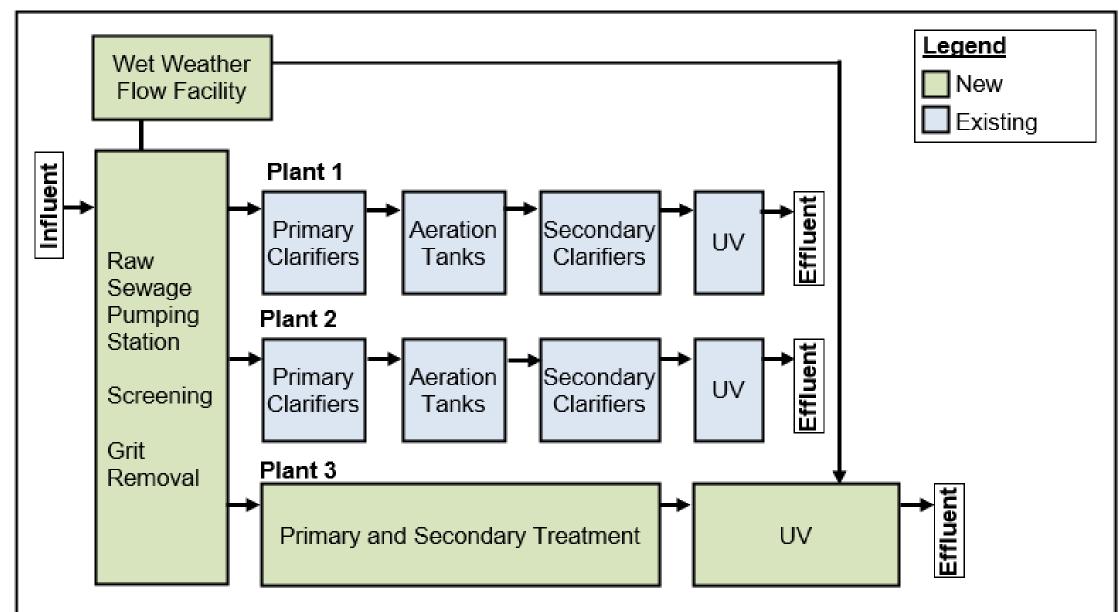
Alternative Solutions Long-List of Potential Design Solutions

The following broad planning level alternative solutions were considered:

- 1. Do Nothing
- 2. Reduce WWFs through Inflow and Infiltration (I&I) Reduction Efforts
- 3. Construct a WWF Management Facility
- 4. Modify Operations of Existing Infrastructure
- Schematic for Alternative No. 3 + 6
- <u>Legend</u> Wet Weather Flow Facility Existing Plant 1 Raw Effluent Pumping Station Sewage Aeration AT Dist. Secondary Primary UV UV Pumping Pumping Clarifiers Clarifiers Chamber Tanks Station Plant 2 Screening Effluent Aeration Dist. Primary Secondary Grit Tanks Chamber Clarifiers Clarifiers Removal

- 5. Discharge to New Sewage System
- 6. Upgrade Existing Treatment Trains at LRPCP
- 7. Add an Additional Treatment Train at LRPCP
- 8. Combination of Above Alternatives

Schematic for Alternative No. 3 + 7



Alternative Solutions Evaluation Criteria

Component	Evaluation Criteria
Technical	 Ability to meet current and future wastewater servicing needs Constructability, implementation timeline, and phasing
Suitability	 Flexibility to meet future needs and/or climate change projections No adverse impacts on existing infrastructure (operations and/or maintenance)
	 Impacts to archaeological sites or areas of archaeological potential Impacts to known or potential built heritage resources and cultural heritage landscapes
Social	 Noise, vibration, odour, or air pollution emissions Permanent changes or impacts to society / community Development policies and agreements
	 Ability to increase development and improve housing supply
Natural Environment	 Impacts to vegetation, fish and wildlife, areas of natural and scientific interest, environmentally sensitive areas, and soil / geology Regulatory compliances Development and planning policies
Economic	 Capital, operational and maintenance (O&M) costs Ability to improve development and generate economic growth

Alternative Solutions Screening of Alternatives



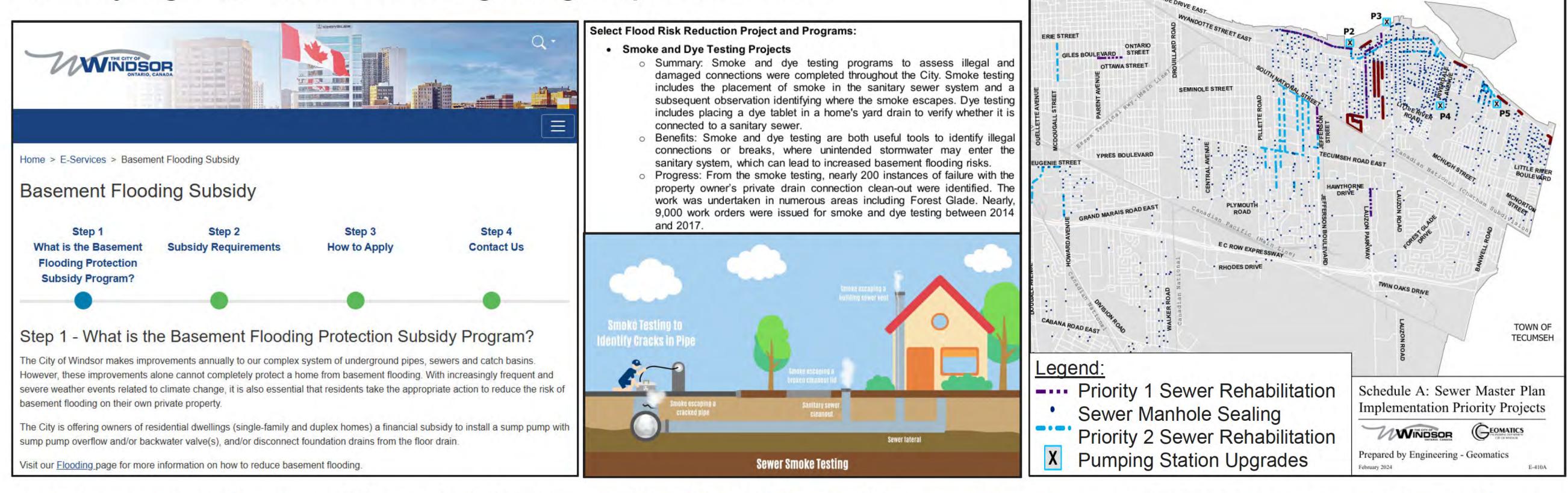
Alternative	Technical	Social	Natural Environmental	Economic	Screening Result
1. Do Nothing					
2. Reduce WWFs through I&I Reduction Efforts					
3. Construct a WWF Facility					
4. Modify Operations of Existing Infrastructure					
5. Discharge to New Sewage System					
6. Upgrade Existing Treatment Trains at LRPCP					
7. Add an Additional Treatment Train at LRPCP					
Combination of Above Alternatives					

- Alternative 1, 4, and 5 were not considered viable solutions
- Alternative 2 and 3 were considered for addressing Peak WWF
- Alternative 6 and 7 were considered for addressing the Peak DWF
- A combination of alternatives 2, 3, 6, and 7 would be considered as a holistic solution for the LRPCP servicing needs

Alternative Solution No. 2 Reduce WWFs through I&I Reduction Efforts

City has numerous initiatives, programs, plans, and construction projects aimed at

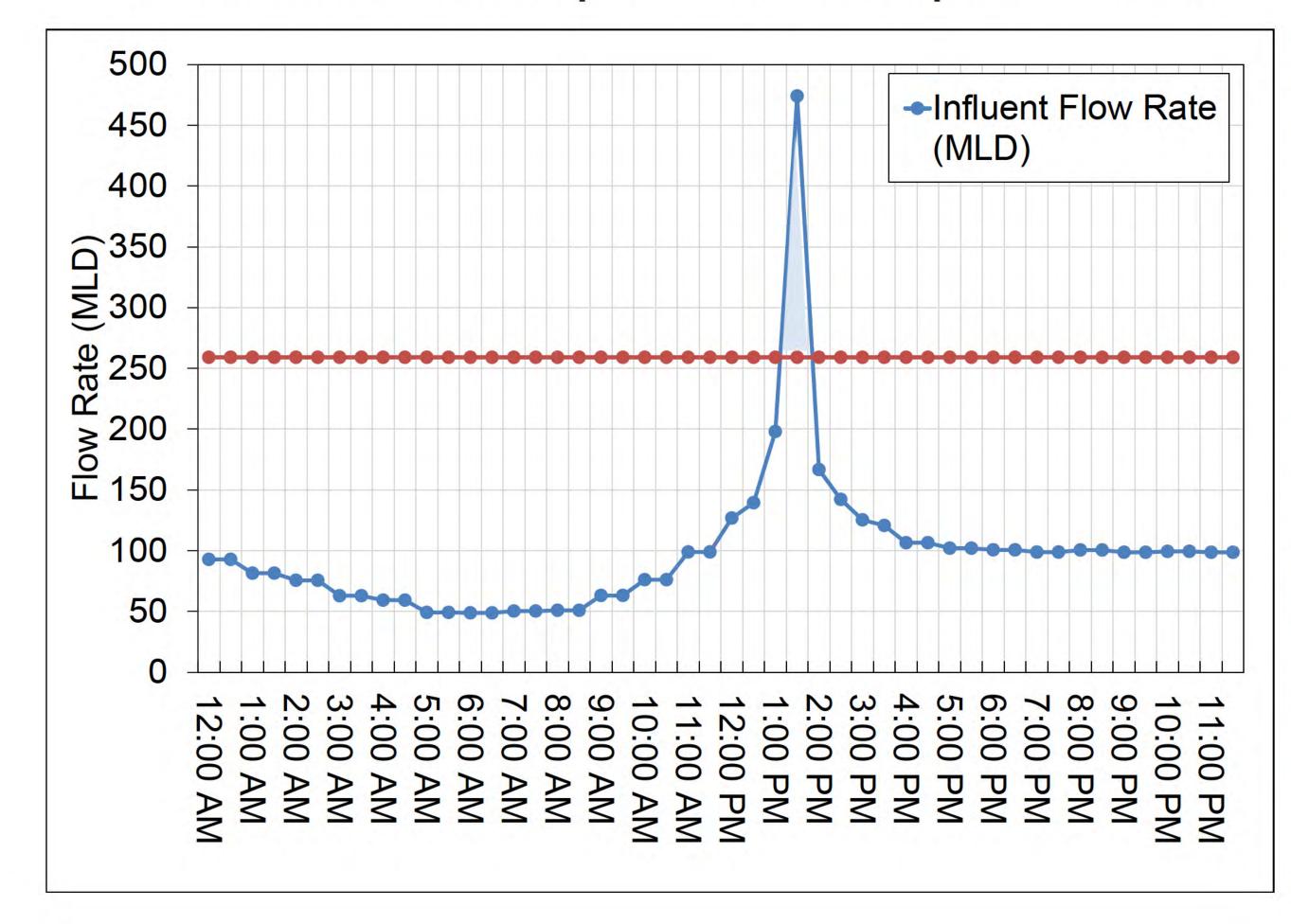
identifying sources and mitigating impacts of I&I:



- These projects will assist in reducing WWFs to the sanitary sewer system and therefore could delay the LRPCP expansion or reduce the capacity requirements at the LRPCP
- For this study, the anticipated peak WWF is presented as a range that will be refined accordingly during the detailed design phase

Alternative Solution No. 3 Construct a WWF Management Facility

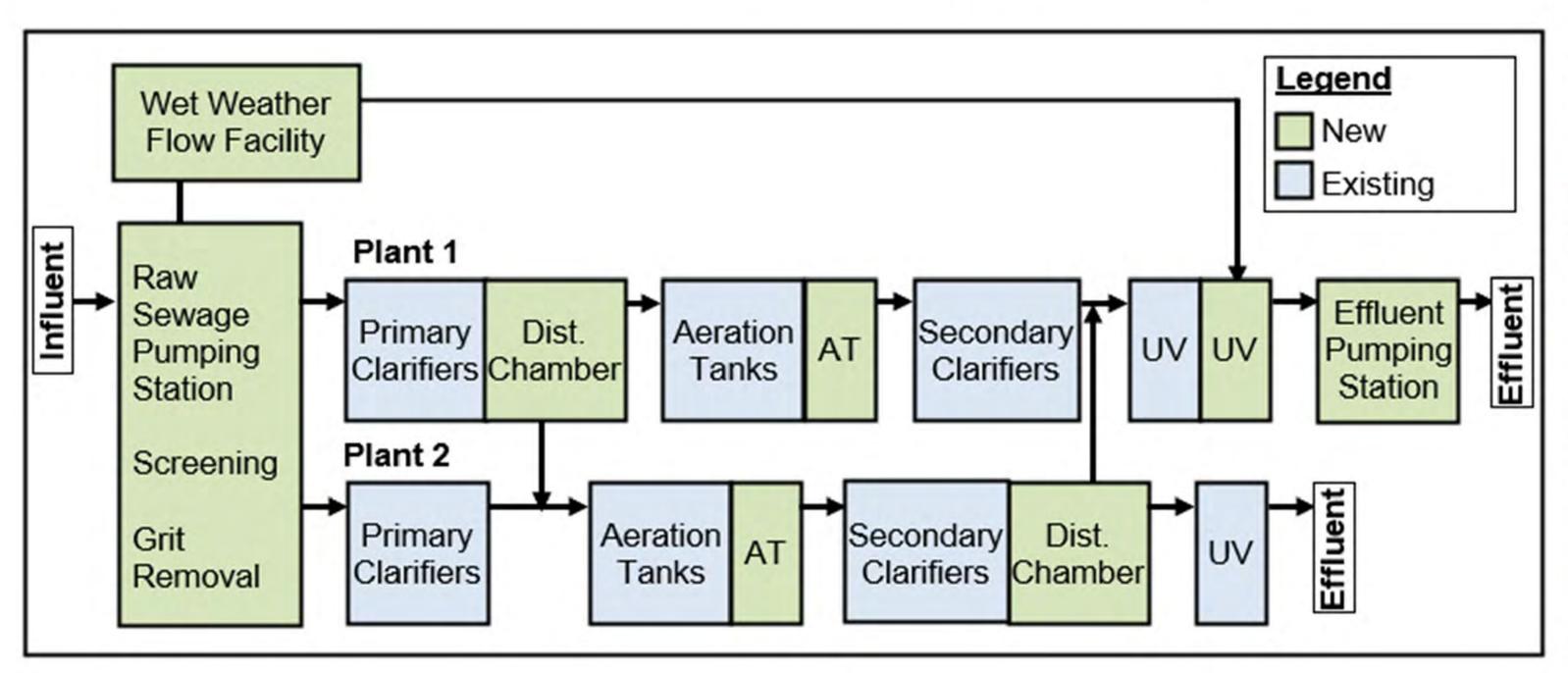
- WWF Management Facility would be constructed to capture, store, and potentially treat flows to mitigate combined sewer overflows
- Location and conceptual design of this WWF Management Facility would be determined as a part the next phase of this study





Alternative Solution No. 6 Upgrade Existing Treatment Trains at LRPCP

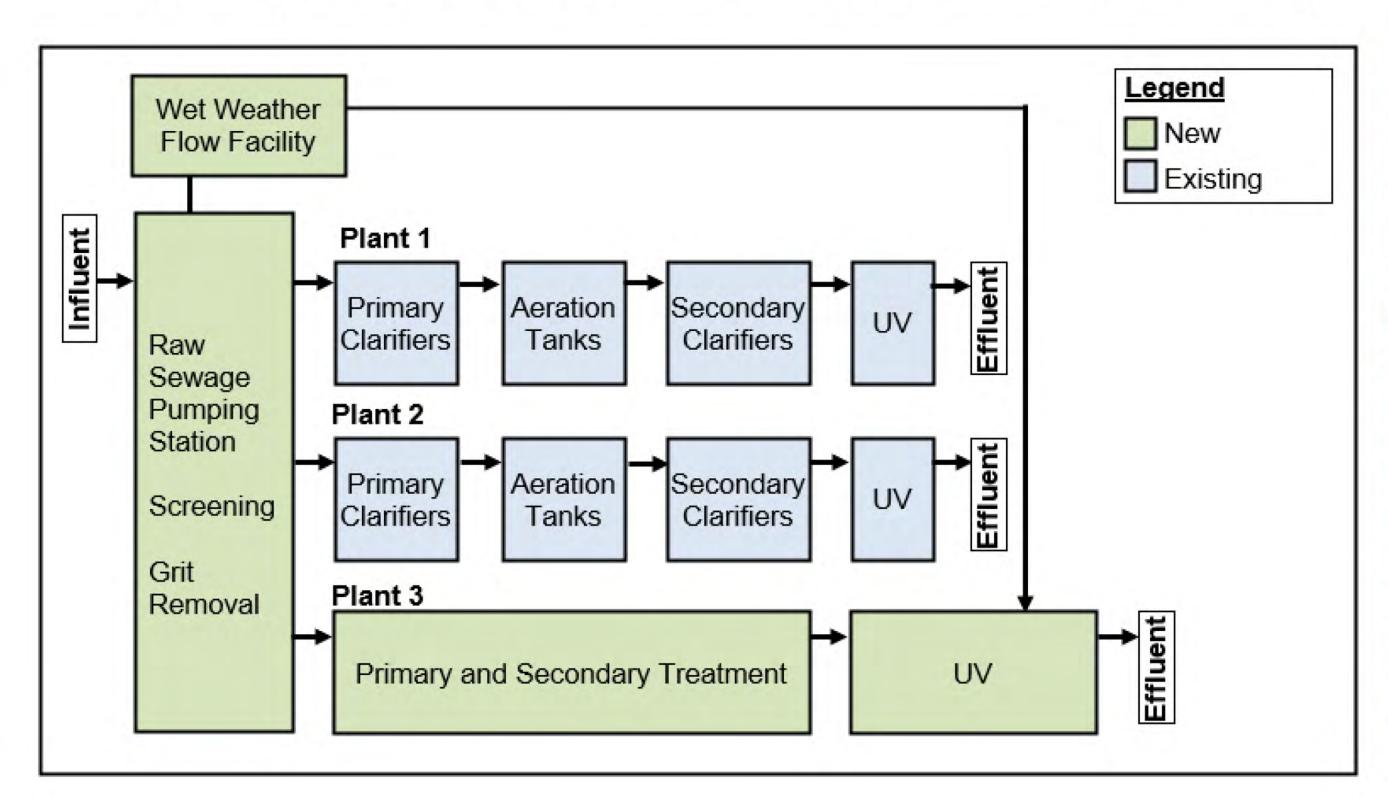
- LRPCP upgraded to accommodate the projected DWFs, assuming that no tertiary treatment (i.e., filtration) is required to comply with new effluent criteria
- This solution will address the needs for the next 15+ years and delay significant capital cost investments which would be required for the ultimate design projections
- Several conceptual design alternatives are available to increase the capacities of the unit processes, to be explored in the next phase of this study





Alternative Solution No. 7 Add an Additional Treatment Train at LRPCP

- Additional treatment train would be added to the LRPCP
- This solution will address the long-term needs for additional wastewater treatment capacity at the LRPCP while providing engineering redundancy and complying with stringent effluent criteria
- Several treatment technology alternatives and site layouts would be available and may be explored in more detail in a future study





Recommended Solution and Phasing Combination of Alternatives

Recommendation is a combination of alternatives, which may be implemented in phases:

- Phase 1 is recommended in the immediate future to address WWF issues at the LRPCP
- Phase 2 is recommended in the short to medium term to address DWF capacity requirements, hydraulic grade line (HGL) concerns, as well as potential poor performance or condition of unit processes at the LRPCP
- Phase 3 is recommended in the long term and would meet ultimate treatment capacity requirements at the LRPCP and provide engineering redundancy

Phase	Planning Horizon	Description of Works
1	Immediate	Alternative 2 - Reduce WWFs through I&I Reduction Efforts
		Alternative 3 - Construct a WWF Facility
2	10-15 Years*	Alternative 6 - Upgrade the Existing Treatment Trains at the LRPCP (assuming that no tertiary treatment is required to comply with new effluent criteria) Otherwise, Alternative 7 would be preferred
3	20-30 Years*	Alternative 7 - Add an Additional Treatment Train at the LRPCP
* May be	subject to change b	ased on the pace at which developments progress within the City of Windsor
and Towr	of Tecumseh.	

Next Steps

Complete Phase 3 and 4 of the Class EA Process:

	Project Component	Date
e 3	Evaluate Alternative Design Concepts for the Preferred Solution (Combination of Alternatives)	April 2025 – August 2025
Phase	Public Information Centre No. 3 - Design Alternatives and Conceptual Design	August 2025
4	Environmental Study Report (ESR)	September 2025 – October 2025
hase	Council Presentation and Resolution – Preferred Design	October 2025
P	Notice of Study Completion	November 2025

Thank You

Please visit the City of Windsor's project website to submit a feedback form.

Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)





NOTICE OF PUBLIC INFORMATION CENTRE NO. 3

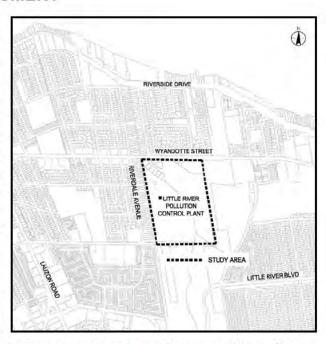
LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document consultation activities and design recommendations.

PROJECT BACKGROUND

In 2020, the City of Windsor endorsed its first comprehensive Sewer and Coastal Flood Protection Master Plan (SMP). The SMP identified treatment



capacity limitations at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. In 2021, the City of Windsor initiated a master servicing plan for the Sandwich South Area (SSMSP) geared towards providing the required municipal infrastructure in support of growth. The SSMSP, outlined limitations of the LRPCP and recommended to increase the capacity to accommodate the development in Sandwich South. Additional information regarding this Class EA can be found on the City's project website:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

PUBLIC INFORMATION CENTRE

NO. 3

Wednesday October 15th, 2025 3:00 p.m. – 6:00 p.m.

WFCU Centre Ontario Room 8787 McHugh Street, Windsor, ON

PUBLIC CONSULTATION

The City is hosting a Public Information Centre (PIC) to present the alternative design concepts and treatment technologies for the Little River Pollution Control Plant Class EA. Consultation is an integral part of the EA process and members of the public, agencies, and other interested persons are invited to participate in the upcoming PIC. Following the PIC, comments are welcomed and will be received until November 15th, 2025.

If you have any questions or if you wish to be added to the study mailing list, please contact:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Chrissy Jung, P. Eng.
Project Manager, Stantec Consulting
2555 Ouellette Avenue, Suite 100
Windsor, Ontario, N8X 1L9
226-704-3037
chrissy.jung@stantec.com

Personal information submitted is collected, maintained, and disclosed under the authority of the *Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act* for transparency and consultation purposes. 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.

LOOKING FOR A JOB OR A CANDIDATE? Visit working.windsorstar.com - to place an ad, select LIST A JOB.

WORKING.COM

WINDSOR STAR

Customer Service

Carriers Needed

to deliver
The Windsor Review
Delivery deadline Thursday' 7pm
If this is something that you feel might
work for you please reach out by email at
jshaver@postmedia.com or call
226-376-2174

Customer Service



Carriers Needed

to deliver
The Windsor Star
Delivery deadline Tuesday-Friday 6 am
and Saturday' 8 am
If this is something that you feel might
work for you please reach out by email at
jshaver@postmedia.com or call
226-376-2174

Classifieds

o place an ad: | Email classifieds@postmedia.com | Phone 1-877-750-505

Accounting and Tax Services

Call for Tender - Audit Services

Westover Treatment Centre, a registered not-for-profit charity and fully-accredited, non-medical addiction treatment centre located in Thamesville, Ontario, is inviting qualified firms or individuals to submit tenders for the provision of external audit services.

Call: 519-692-5110
jelliott@westovertreatmentcentre.ca
www.westovertreatmentcentre.ca

Electronic Entertainment

DVD's

DVD's, Blue Ray's, Box Sets (Poirot) (Sherlock Holmes), Complete Seasons (Friends, Modern Family) Call: 519-980-0653 fatherstim@gmail.com

VINYL RECORDS WANTED

PAYING CASH FOR YOUR RECORDS! SOUL JAZZ ROCK METAL PUNK 80s... Call: 647-884-1720 mroberts523@yahoo.com

Garage Sales

Moving Sale

Sunday, September 28, 2025 2945 Glenwood Ave. Windsor, ON 10:00 a.m. to 3:00 p.m

Yard & Bake Sale FUNDRAISER for Erie Wildlife Rescue Saturday, September 27th; 10am to 3pm. All indoors @ 11168 Tecumseh Rd E., Windsor. Great selection of jewelry, housewares, knickknacks, books, toys and Fall décor. BAKE TABLE. Rain or Shine. Your support will save orphaned and injured wildlife. Cash only.

Legals, Tenders and Notices

THE BANKRUPTCY AND INSOLVENCY ACT NOTICE OF FIRST MEETING IN LOCAL NEWSPAPER

(Section 102(4))

IN THE MATTER OF THE BANKRUPTCY
OF PATRICK LEO GEORGE DEMARCE
of the Town of Tecumseh, in the County of
Essex and Province of Ontario

Notice is hereby given that Patrick Leo George Demarce made an assignment in bankruptcy on the 25th day of September, 2025, and the first meeting of creditors will be held on the 15th day of October, 2025, at 11:00 o'clock in the forenoon, at the office of S. Funtig & Associates Inc. located at 3337 Walker Rd., Suite 100, Windsor, ON.

DATED at Windsor, Ontario this 25th day of September, 2025

S. FUNTIG & ASSOCIATES INC., LICENSED INSOLVENCY TRUSTEE Resident Office: 3337 Walker Rd., Suite 100 Windsor, ON N8W 3R9

Tel: (519) 252-8227 Fax: (519) 252-0855

Wanted



\$\$ A1 \$\$

All Auto will buy! Cash is king! (519) 999-0456 (226) 674-0944

CLASSIFIEDS WORK!

Public Notices

WINDSOR

NOTICE

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION CLASS ENVIRONMENTAL ASSESSMENT

NOTICE OF PUBLIC INFORMATION CENTRE NO. 3

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This study will satisfy Phase No.'s 1 through 4 of the Class EA process and will conclude with an Environmental Study Report to document consultation activities and design recommendations.

The City is hosting a Public Information Centre (PIC) to present the alternative design concepts and treatment technologies for the Little River Pollution Control Plant Class EA. The PIC will be held on Wednesday October 15th, 2025 (3:00 to 6:00 pm) at the WFCU Centre, Ontario Room, 8787 McHugh Street, Windsor, ON.

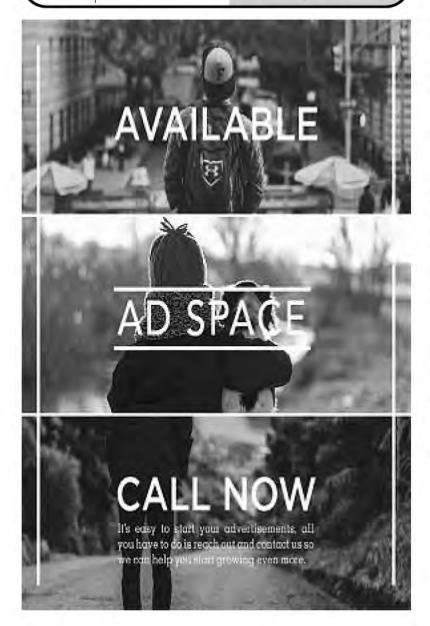
Additional details regarding the PIC are available on the City of Windsor's project webpage: https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx





TTY: 1-866-488-9311

www.citywindsor.ca





Instant Pot Ropa Vieja is a classic Cuban dinner. SCOTT SUCHMAN/FOR THE WASHINGTON POST

ROPA VIEJA IS A MEATY, SAUCY CUBAN CLASSIC

Add some sides and it quickly becomes a fun and tasty meal

AARON HUTCHERSON

Ropa vieja is a classic Cuban dish of shredded beef in a tomato-based sauce with bell peppers. Its name translates to "old clothes," because the toothsome shreds of flank steak are thought to resemble ripped clothing. This version is made in the Instant Pot to save on the braising time. (For a more traditional stovetop version, see variations.) Turn it into a full meal with rice, black beans and fried sweet plantains.

INSTANT POT ROPA VIEJA

Serves: 4

- 1 tbsp (15 mL) extra-virgin olive oil
- 1 large green bell pepper (9 oz/256 g), stemmed, seeded and sliced 1/4-inch (6 mm) thick
- 1 large red bell pepper (9 oz/256 g), stemmed,
- seeded and sliced 1/4-inch (6 mm) thick

 1 large yellow bell pepper (9 oz/256 g),
 stemmed, seeded and sliced 1/4-inch (6 mm)
- 1 medium yellow onion (9 oz/256 g), halved and sliced 1/4-inch (6 mm) thick
- 6 garlic cloves, chopped
- 11/2 tsp (7.5 mL) freshly ground black pepper
- 3/4 tsp (4 mL) fine salt, plus more to taste
 1/2 cup (125 mL) no-salt-added or low-sodium
- beef broth or stock
- 1/2 cup (125 mL) dry white wine, such as Pinot Grigio
- Grigio ■ 1/3 cup (3 oz) tomato paste
- 2 bay leaves
- 2 tsp (10 mL) ground cumin
- 11/2 tsp (7.5 mL) dried oregano ■ 1 lb (454 g) flank steak, halved
- 1/3 cup (80 mL) pimento-stuffed Manzanilla olives, drained and halved crosswise
- 11/2 tsp (7.5 mL) distilled white vinegar ■ 1/2 tsp (2.5 mL) granulated sugar
- 1. Set a programmable multicooker (such as an Instant Pot) to SAUTE (HIGH). When it signals it's ready, add the oil. (or heat the oil until shimmering, then proceed.) Add the bell peppers, onion, garlic, pepper and salt, and cook, stirring occasionally, until the vegetables start to soften, about 7 minutes.
- 2. Add the broth or stock, wine, tomato paste, bay leaves, cumin, and oregano, and stir to combine. Nestle the steak into the vegetables and liquid, making sure both halves are mostly submerged. Press CANCEL to turn off the heat.

 3. Lock the lid in place and set the pressure-re-
- 3. Lock the lid in place, and set the pressure-release knob to "sealing." Select PRESSURE COOK (HIGH), and set the cooking time to 45 minutes.
- 4. Once the cooking cycle is finished, release the pressure manually by moving the pressure-release handle to "venting," covering your hand with a towel and making sure to keep your hand and face away from the vent when the steam releases.

- **5.** Transfer the steak to a large plate. Set the multicooker to SAUTE (HIGH), bring to a simmer and cook, stirring occasionally, until the liquid reduces by about half to a thick, saucelike consistency, about 15 minutes. Meanwhile, shred the steak with two forks.
- **6.** Discard the bay leaves. Return the shredded steak to the multicooker. Add the olives, vinegar and sugar, and stir to combine. Taste, and season with more salt, as desired. Serve warm.

Variations: To make this on the stovetop: Pat the steak dry and sprinkle with salt and pepper on both sides. Place a Dutch oven over medium-high heat and heat 2 tablespoons (30 mL) extra-virgin olive oil until shimmering. Cook the steak until browned on both sides, about 3 minutes per side; remove the steak and set aside.

To the same Dutch oven, add another 1 tablespoon (15 mL) extra-virgin oil, the bell peppers, onion and garlic, and cook, stirring frequently to avoid browning, until the onion starts to turn translucent and the mixture is fragrant, about 5 minutes.

Add the tomato paste and cook, stirring frequently, until it darkens in colour, about 2 minutes. Add 1 cup (250 mL) dry white wine, such as Pinot Grigio, and scrape up any brown bits stuck to the bottom of the pot. Add 4 cups (1 L) no-salt-added or low-sodium beef broth or stock, the bay leaves, cumin, and oregano, and stir to combine.

Return the steak along with any accumulated juices to the pot and bring to a boil. Reduce the heat so the liquid is at a simmer, partially cover, and cook, adjusting the heat as needed to maintain a simmer and stirring occasionally, until the steak is tender and can easily be shredded, I hour 30 minutes to 2 hours. Transfer the steak to a large plate.

Uncover the Dutch oven, increase the heat to bring the liquid to a boil, and cook, stirring frequently, until the liquid reduces by about half to a thick, saucelike consistency, about 15 minutes. Discard the bay leaves, return the shredded steak to the sauce and stir to combine. (The mixture should be saucy but not soupy. If it's still too wet, continue to reduce the liquid until it reaches the desired consistency.) Stir in the olives, vinegar and sugar. Taste, and season with more salt, as desired. Serve warm.

Adapted from My (Half) Latinx Kitchen by Kiera Wright-Ruiz (Harvest, 2025)

CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre October 15th, 2025 – 3:00 p.m. to 6:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
1	Herre Monette		
2	ED SEARS		
3	Michael George		
4	RICK ZANGARI		
5	ADRES GARDON		
6	Rob Parassmotti		
7	STUART WINGHATTER		
8	WALREN SAINT		
9 1	in CAROL NOSELLA		
10	Rob Ceschan		
11	Laurie Boyce		
12	Liana Crowe		

CITY OF WINDSOR CLASS ENVIRONMENTAL ASSESSMENT LITTLE RIVER POLLUTION CONTROL PLANT

PUBLIC INFORMATION CENTRE WFCU Centre

October 15th, 2025 – 3:00 p.m. to 6:00 p.m. SIGN-IN SHEET

No.	Name (Please Print)	Email Address	Telephone Number
13	Sarah Fanterx		
14	Phil Bartnik		
15	Kashy + Refes Simeoni CHRIS MANZON		
16	CHRIS MANZON		
17	to Yours		
18			
19			
20			
21			
22			
23			
24			



PUBLIC INFORMATION CENTRE NO. 3 COMMENT FORM

LITTLE RIVER POLLUTION CONTROL PLANT EXPANSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

THE STUDY

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). This study will satisfy Phase No.'s 1 through 4 of the Class EA process including:

(PHASE 1) review of background information and definition of a problem statement;

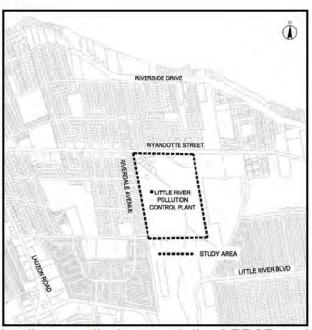
(PHASE 2) evaluation of alternative solutions:

(PHASE 3) evaluation of alternative design concepts;

(PHASE 4) preparation of an environmental study report.

PROJECT BACKGROUND

The City of Windsor Sewer and Coastal Flood Protection Master Plan (SMP) from 2020 and Sandwich South Master Service Plan (SSMSP) from 2021, identified the need to upgrade the existing Little River



Pollution Control Plant (LRPCP). The SMP outlined hydraulic capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow resulting in combined sewer overflows. The SSMSP discussed the treatment capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development. Further to these planning reports, gap analysis has identified the need to evaluate and include considerations for the hydraulic grade line through the LRPCP (effluent pumping requirements), aging infrastructure and equipment, and energy efficiency.

PHASE 3 – EVALUATION OF ALTERNATIVE DESIGN CONCEPTS

The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP. This Class EA will identify, evaluate, and report on the preferred solution and design concepts to address this problem / opportunity statement.

THANK YOU

Thank you for your interest in this project and attendance at this Public Information Centre (PIC). Copies of the material presented at the PIC are available on the project website below:

OR

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

Please return your completed comment form on or before November 15th, 2025, to:

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
519-253-7111 ext. 3274
cwalgama@citywindsor.ca

Chrissy Jung, P. Eng.
Project Manager, Stantec Consulting
2555 Ouellette Avenue, Suite 100
Windsor, Ontario, N8X 1L9
226-704-3037
chrissy.jung@stantec.com



PUBLIC INFORMATION CENTRE NO. 3 COMMENT FORM

	OLLUTION CONTROL PLANT CLASS EA:
NAME	
EMAIL ADDRESS	
- _ TELEPHONE NO.	
DATE	SIGNATURE

Personal information submitted is collected, maintained, and disclosed under the authority of the *Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act* for transparency and consultation purposes. 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.





City of Windsor LITTLE RIVER POLLUTION CONTROL PLANT STUDY

PUBLIC INFORMATION CENTRE NO. 3 WELCOME

Municipal Class Environmental Assessment Study October 15th, 2025

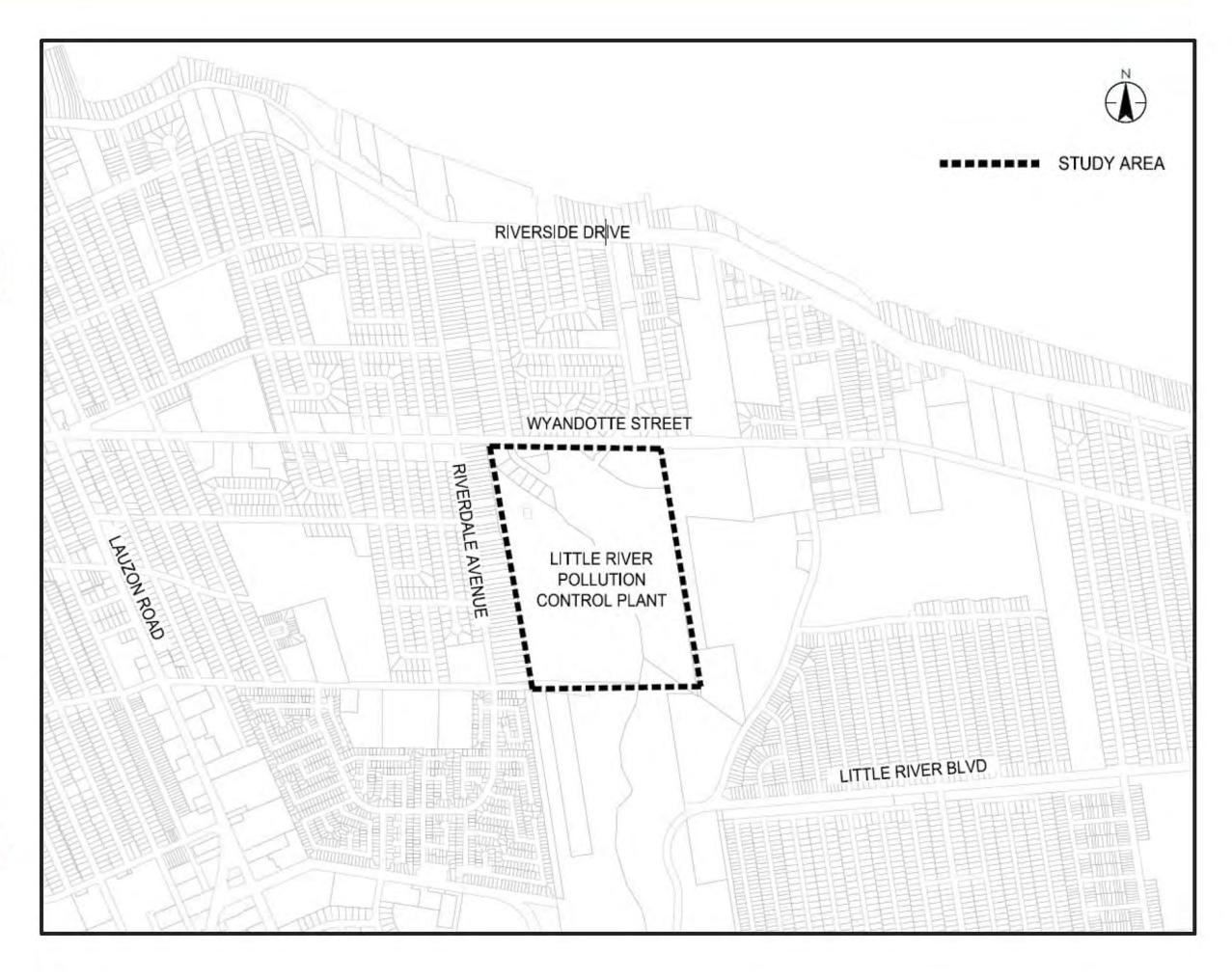
Introduction

Purpose of this Study

The purpose of this study is to determine the preferred solution and conceptual design to address the need for additional wastewater capacity at the Little River Pollution Control Plant (LRPCP).

The purpose of this Public Information Center (PIC) is to:

- Describe the Municipal Class Environmental Assessment (EA) Process
- Review the Study Background and Recommended Design Solution
- Present an Evaluation of and Obtain Public Input on Alternative Design Concepts
- Include Feedback in the Evaluation Process



Introduction

Key Features of the Class EA Process

This study is being conducted in accordance with the Class EA requirements for Schedule 'C' Projects.

Municipal Class EA Phases	
Phase 1 – Review and identify problem or opportun	ity This EA Study
Phase 2 – Alternative solutions to problem	This EA Study
★ Phase 3 – Alternative design concepts for the prefe	rred solution This EA Study
Phase 4 – Prepare Environmental Study Report	This EA Study
Phase 5 – Implementation of the preferred design	Future Work

Problem / Opportunity Statement

Prior planning reports identified the need to upgrade the existing LRPCP:

- The Sewer & Costal Flood Protection Master Plan (SMP)
 outlined immediate wet weather flow capacity issues
 and confirmed that during severe storm events the LRPCP
 is unable to accommodate all flows resulting in combined
 sewer overflows and higher sewer surcharge potential.
- The Sandwich South Master Servicing Plan (SSMSP)
 identified the long-term wastewater treatment capacity
 limitations and confirmed the need to increase capacity of
 the LRPCP to accommodate future development.

In general, the study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional capacity at the LRPCP.



Future Requirements Service Area and LRPCP Capacity

The anticipated wastewater flow in millions of liter per day (MLD) was determined to be:

Flow Projections	2045 (20-Year)	2065+ (Ultimate)
Average Daily Flow (ADF)	77.2 MLD	104 MLD
Peak Dry Weather Flow (DWF)	201 MLD	259 MLD
Peak Wet Weather Flow (WWF)	393 MLD	474 MLD

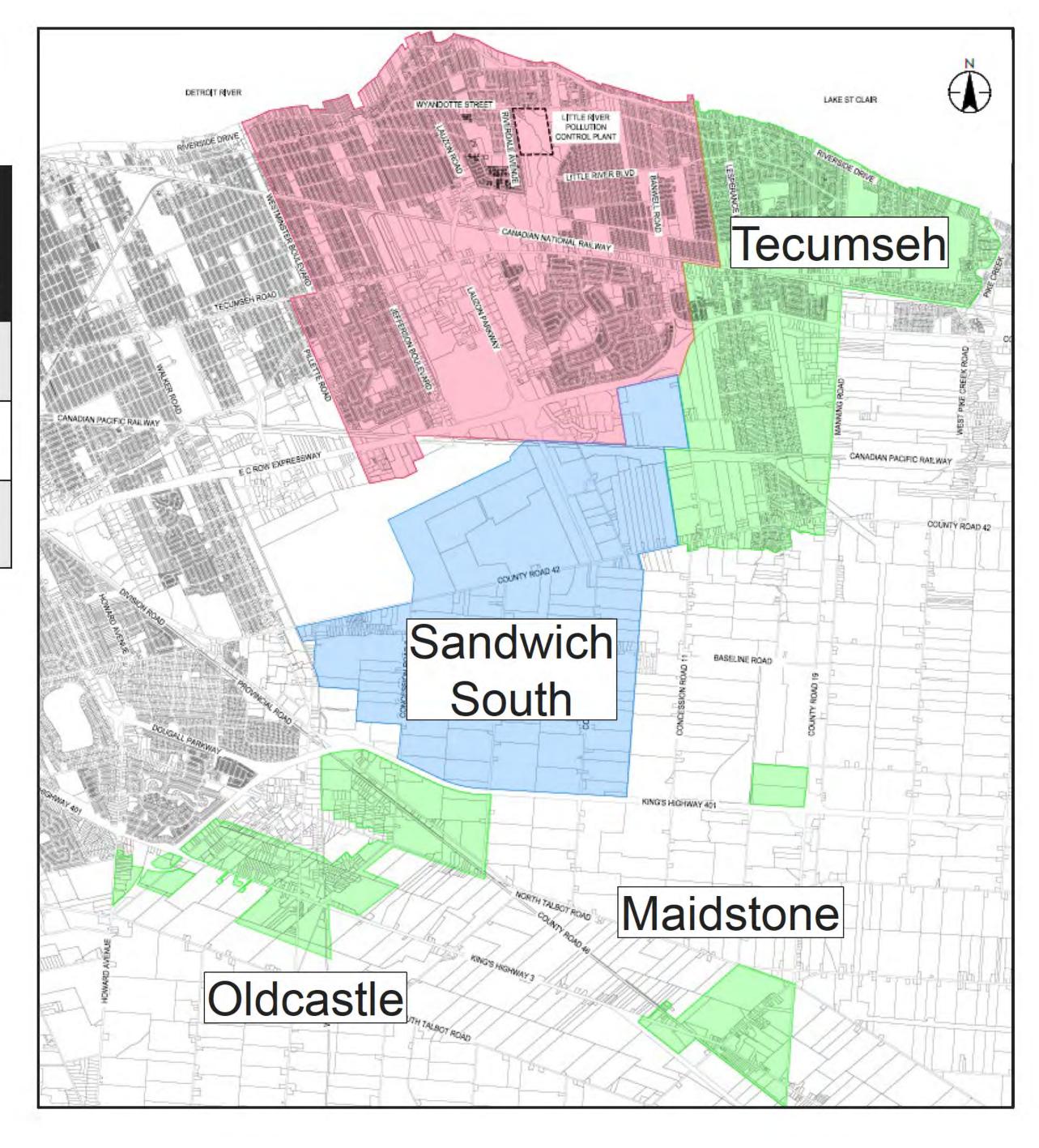
Note: Projections include anticipated flows provided by the Town of Tecumseh. The Peak WWF varies with Inflow and Infiltration (I&I) Reduction Factor (equivalent to ± 13 MLD).

Existing LRPCP Rated Capacity:

ADF = 72.8 MLD

Peak DWF = 90 MLD

Peak WWF = 225 MLD



Phase 1 and 2 of the Class EA Process Completed

The need for additional WWF management and wastewater treatment capacity were reviewed and confirmed. Following consultation with review agencies and the public, the preferred multi-phased solution was determined as follows:

Phase	Planning Horizon	Description of Works
1	Immediate	 Reduce WWF through inflow and infiltration (I&I) Reduction Efforts The City has numerous initiatives, programs, plans, and construction projects aimed at identifying sources and mitigating impacts of I&I These projects will assist in reducing I&I to the sanitary sewer system and therefore would delay the need for LRPCP expansions Construct a WWF Management Facility WWF Management Facility would be constructed to capture, store, and treat flows to mitigate combined sewer overflows Also includes a new headworks facility for the LRPCP
2	10-15 Years*	Upgrade the Existing LRPCP (assuming that no tertiary treatment is required to comply with new effluent criteria). Otherwise, expansion would be required.
3	20-30 Years*	Expand the LRPCP by adding an additional treatment train, also known as a Tandem or Parallel Plant.
* May b	e subject to chang	ge based on the pace at which developments progress within the City of Windsor
and Tov	vn of Tecumseh.	

Phase 3 of the Class EA Process Ongoing

- Review alternative design concepts for the Phase 1, 2, and 3 Upgrades
- Select the preferred design that satisfies wastewater collection and treatment criteria, minimizes undesirable impacts on the natural, social and economic environment, and is acceptable to the public and regulatory agencies

This open house is held as part of Phase 3 of the Class EA Process.

Alternative Design Concepts Evaluation Criteria

Component	Evaluation Criteria
	 Ability to meet current and future service needs
	 Ability for logical and cost-effective expansion
	 Ability to meet effluent limits and objectives
Technical	 Proven technology, proof of successful installations within Canada and Southwestern
Suitability	Ontario (similar climate) within the last 20 years
	 Constructability, implementation timeline, and phasing
	 Flexibility to meet future needs and/or climate change projections
	 No adverse impacts on existing infrastructure (operations and/or maintenance)
	 Impacts to archaeological, built heritage, and cultural
Social	 Noise, vibration, odour, or air pollution emissions
Jocial	 Permanent changes or impacts to society / community
	 Development policies and agreements
	 Impacts to vegetation, fish and wildlife, areas of natural and scientific interest,
Natural	environmentally sensitive areas, and soil / geology
Environment	 Potential for conservation of energy, water and other natural resources
	 Regulatory compliances
	 Development and planning policies
Economic	 Capital, operational and maintenance (O&M) costs
	 Ability for ongoing process optimization

Alternative Design Concepts

Expansion Phase 1 - Construct a WWF Management Facility

The following alternative design concepts were considered for the Phase 1 Expansion:

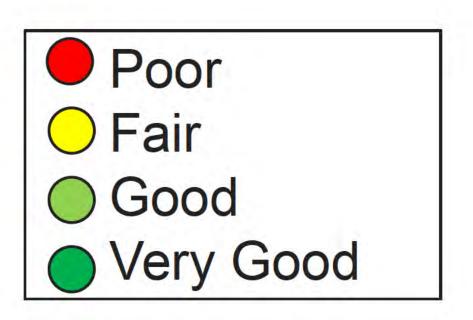
- 1. Site Alternatives
- Construct Multiple Facilities throughout the City
- Construct One Facility at the LRPCP
- 2. WWF Management Facility Alternatives
- Provide Storage for WWFs to be later treated at the LRPCP
- Provide Storage and Treatment of WWFs through the application of a Retention Treatment Basin
- 3. Sizing Alternatives
- Size for Peak Flow of 273 MLD (± 13 MLD)
- Size for Peak Flow of 320 MLD (± 13 MLD)
- 4. Pumping Configuration Alternatives
- Influent Pumping Station
- Effluent Pumping Station

- 5. Screening Technologies Alternatives
- Multi Rake Screens
- Step Screens
- Grinder
- No Screening followed by Screw Pumps
- 6. Pumping Well Alternatives
- Wet Well Configuration
- Dry Well Wet Well Configuration
- 7. Grit Removal Technologies Alternatives
- Aerated Grit Removal
- Vortex Grit Removal

Shaded text indicates the preferred design concept.

Alternative Design Concepts

Expansion Phase 1



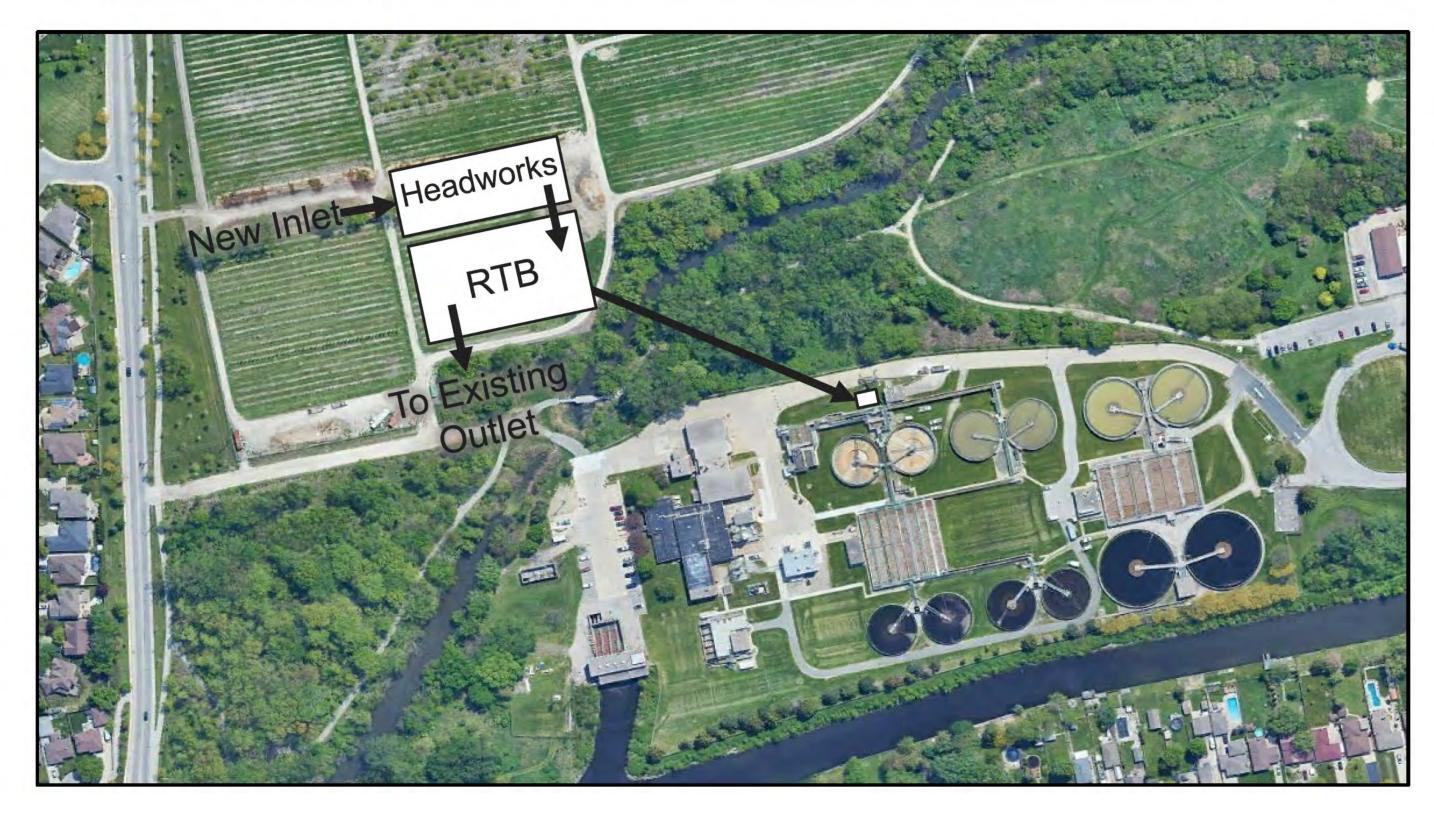
Alternative	Design Concepts	Technical	Social	Natural Environmental	Economic	Result
Cito	Multiple Facilities					
Site	One Facility					
Facility Type	Storage					
	Retention Treatment Basin					
Ci-i	273 MLD (± 13 MLD)					
Sizing	320 MLD (± 13 MLD)					
Pumping	Influent Pumping Station					
Configuration	Effluent Pumping Station					
	Multi Rake Screens					
Screening	Step Screens					
Technologies	Grinder					
	No Screening (Screw Pump)					
D	Wet Well					
Pumping Well	Dry Well – Wet Well					
Grit Removal	Aerated Grit Removal			0		
Technologies	Vortex Grit Removal					

Recommended Conceptual Design

Expansion Phase 1 - Construct a WWF Management Facility

Recommended conceptual design:

- Construct one facility near the LRPCP
- Expansion to include the construction of a new headworks facility for the LRPCP and a Retention Treatment Basin (RTB)
- Size for Peak Flow of 320 ± 13 MLD (3.71 ± 0.15 m³/s)





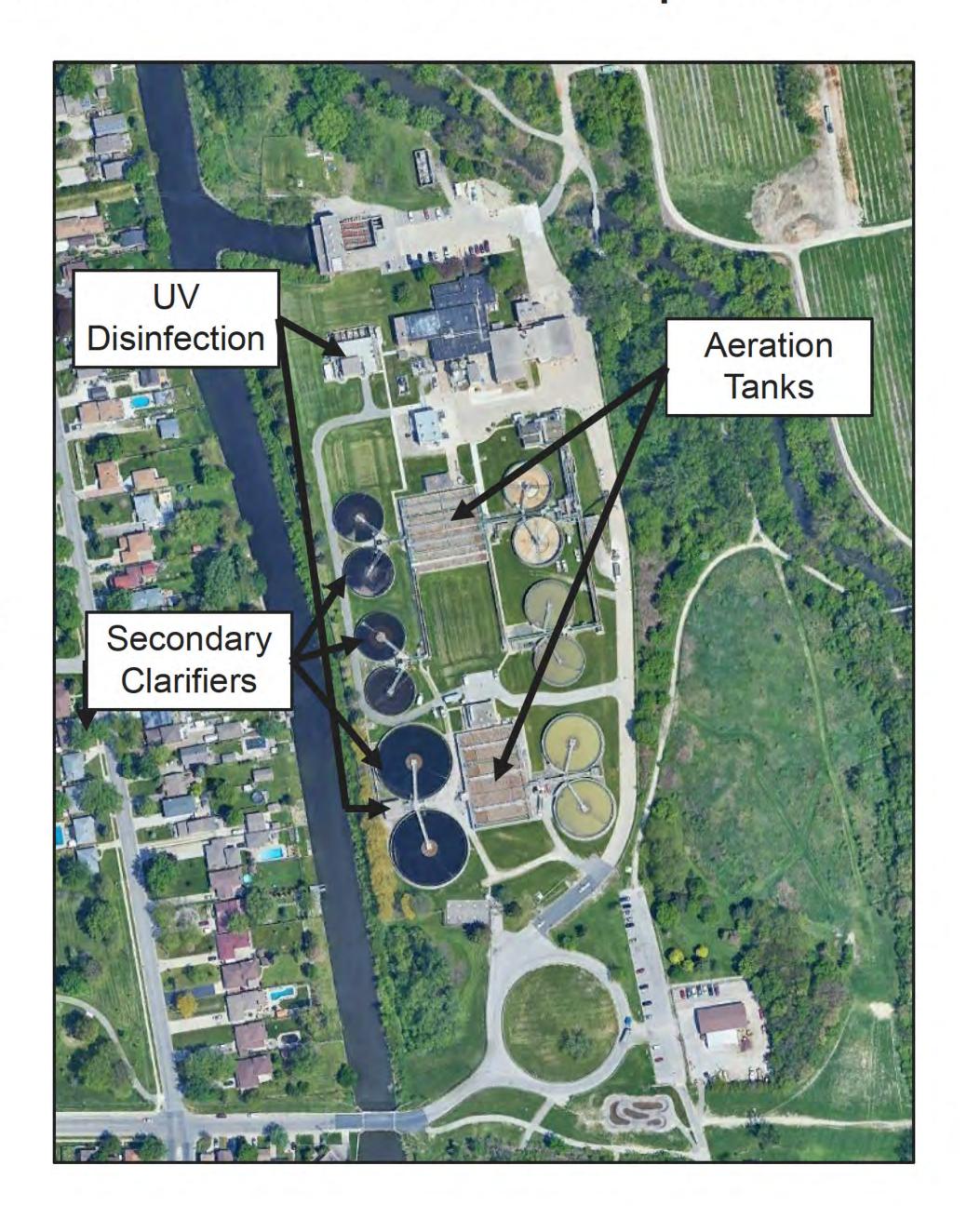
Headworks facility to include:

- Influent Pumping Station with Dry Well – Wet Well Configuration
- Multi Rake Screens
- Vortex Grit Removal

Alternative Design Concepts Expansion Phase 2 - Upgrade the Existing LRPCP

The following alternative design concepts were considered for the Phase 2 Expansion:

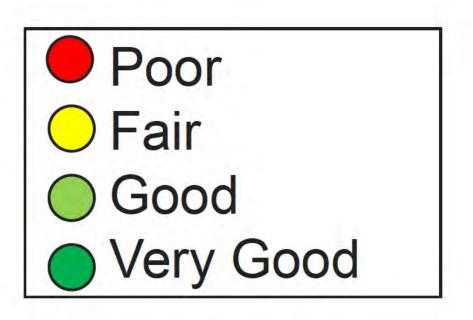
- 1. Aeration Tank Capacity Upgrade Alternatives
- Expanding Existing Aeration Tank
- Integrated Fixed Film Activated Sludge (IFAS) Retrofit
- Membrane Aerated Biofilm Reactor (MABR) Retrofit
- Moving Bed Biological Reactor (MBBR) Pretreatment
- Hydro-Cyclone Sludge Densification
- Combination of Above
- 2. Secondary Clarifier Capacity Upgrade Alternatives
- Expanding Existing Secondary Clarifiers
- Re-Rating Existing Secondary Clarifiers
- 3. UV Capacity Upgrade Alternatives
- Increase the Capacity of Plant 1 UV Disinfection
- Increase the Capacity of Plant 2 UV Disinfection
- Implement a New UV Disinfection Facility



Shaded text indicates the preferred design concept.

Alternative Design Concepts

Expansion Phase 2

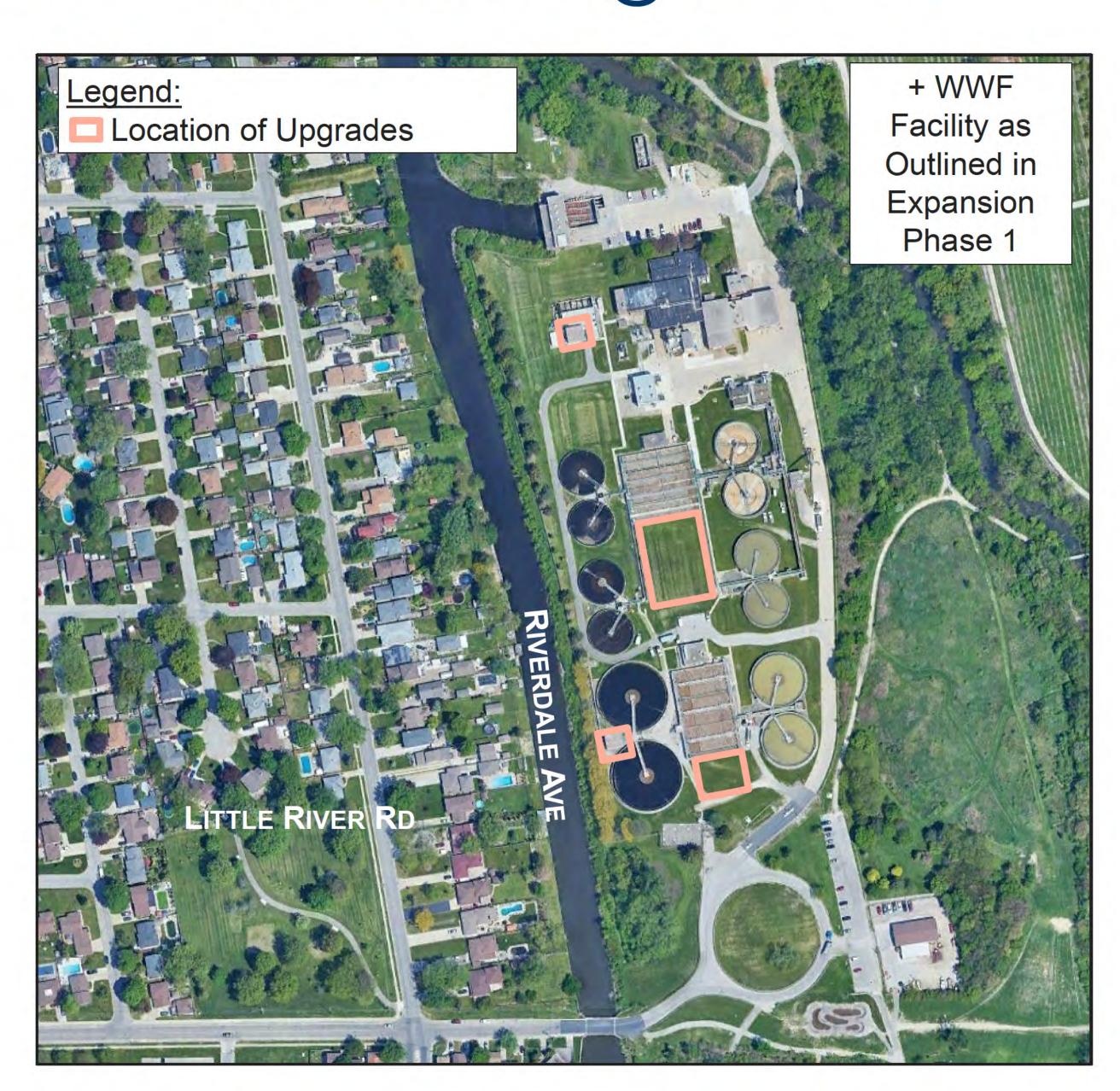


Alternative	Design Concepts	Technical	Social	Natural Environmental	Economic	Result
Aeration Tank	Expanding Existing Aeration Tank IFAS Retrofit					
	MABR Retrofit					
	MBBR Pretreatment					
	Hydro-Cyclone Sludge Densification					
	Combination of Above					
Secondary Clarifier	Expanding Existing Re-Rating Existing					
UV Disinfection	Increase the Capacity of Plant 1 Increase the Capacity of Plant 2 New UV Disinfection Facility					

Recommended Conceptual Design Expansion Phase 2 - Upgrade the Existing LRPCP

Recommended conceptual design:

- Expand existing aeration tanks
 - Increase volume at Plant 1 ~100%
 - Increase volume at Plant 2 ~33%
- Re-Rate Existing Secondary Clarifiers
- Increase the Capacity of Plant 1 and 2 UV Disinfection
- Implement effluent pumping station through provisions in the nearby Pontiac Pumping Station
- Implement flow distribution chambers as needed to redistribute flow between Plant 1 and 2



Alternative Design Concepts

Expansion Phase 3 – Expand the LRPCP

- Involves adding a Plant 3, also referred to as a tandem or parallel treatment plant
- Recommended in 30+ Years
- New facility to meet long-term treatment capacity requirements and provide engineering redundancy for existing LRPCP
- These works would not be covered under the validity period of this MCEA Process
- It is proposed that these upgrades be undertaken in a series of stages based on timing of growth in the region



 Several treatment technology alternatives and site layouts would be available and may be explored in more detail in a future study

Next Steps

Complete Phase 3 and 4 of the Class EA Process:

- Open house being held to present information and solicit public input on recommended conceptual design for the LRPCP
- Distribute draft Environmental Study Report (ESR) to mandatory and discretionary contacts and agencies for review
- Complete the ESR including modifications as necessary to reflect input from the public and review agencies
- Present ESR to City Council for final approval and adoption
- Place ESR on public record and issue Notice of Completion

	Project Component	Date
4	Environmental Study Report (ESR)	November 2025
Phase	Council Presentation and Resolution – Preferred Design	December 2025
	Notice of Study Completion	December 2025

Thank You

Please visit the City of Windsor's project website to submit a feedback form.

Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)



From: Rindlisbacher, Hannah

To:

Subject: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant Expansion, City of

Windsor, Ontario

Date: Friday, September 1, 2023 2:37:00 PM

Attachments: 2.LRPCP Expansion MCEA - Notice of Study Commencement.pdf

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Rindlisbacher, Hannah

Cc: <u>Jung, Chrissy</u>

Subject: 165620295: Notice of Public Information Centre No.3 - Class EA, Little River Pollution Control Plant, City of

Windsor, Ontario

Date: Friday, September 26, 2025 9:43:50 AM
Attachments: 1. Notice of Public Information Centre No. 3.pdf

To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the alternative design concepts and treatment technologies for the Little River Pollution Control Plant Class EA.. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday October 15th, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: <u>Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)</u>

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher P.Eng., LEED Green Associate

Environmental Engineer

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Rindlisbacher, Hannah

Sent: Friday, April 4, 2025 11:12 AM

Subject: 165620295: Notice of Public Information Centre No.2 - Class EA, Little River Pollution

Control Plant, City of Windsor, Ontario

To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA)

for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday April 23rd, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: <u>Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)</u>

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

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From: Rindlisbacher, Hannah

Sent: Monday, February 5, 2024 3:36 PM

Subject: 165620295: Notice of Public Information Centre - Class EA, Little River Pollution Control

Plant, City of Windsor, Ontario

To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday February 28th, 2024 (3:00 to 7:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: <u>Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)</u>

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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MAILOUT PACKAGES TO LOCAL RESIDENTS



October 31st, 2023

Project/File: 165620295

Dear Resident,

Reference: Notice of Study Commencement

Municipal Class Environmental Assessment – Little River Pollution Control Plant Expansion

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The Notice of Study Commencement for the project is attached and additional information is available on the City of Windsor Project Webpage: https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

On behalf of the City of Windsor, we are inviting you to participate in this study and provide input throughout the Class EA process. You are receiving this letter because your residence is located near the existing LRPCP. If you wish to be included and receive further project notifications, please contact Jian Li by email (jian.li@stantec.com) or mail (Attn: Jian Li, Stantec Consulting Ltd., 2555 Ouellette Avenue, Unit 100, Windsor, ON, N8X 1L9).

Sincerely,

Jian Li Ph.D., P. Eng.

Project Manager, Stantec Consulting

Phone: 226-704-3039 jian.li@stantec.com



February 5th, 2024

Project/File: 165620295

Dear Resident,

Reference: Notice of Public Information Centre

Municipal Class Environmental Assessment -

Little River Pollution Control Plant

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday February 28th, 2024 (3:00 to 7:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Jian Li Ph.D., P. Eng.

Project Manager, Stantec Consulting

Phone: 226-704-3039 jian.li@stantec.com



April 1st, 2025

Project/File: 165620295

Dear Resident,

Reference: Notice of Public Information Centre No. 2

Municipal Class Environmental Assessment -

Little River Pollution Control Plant

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a second Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday April 23rd, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Chrussy

Chrissy Jung M.A.Sc., P. Eng.

Project Manager, Stantec Consulting

Phone: 226-704-3037 chrissy,jung@stantec.com



September 24th, 2025

Project/File: 165620295

Dear Resident,

Reference: Notice of Public Information Centre No. 3

Municipal Class Environmental Assessment -

Little River Pollution Control Plant

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a second Public Information Centre (PIC) to present the alternative design concepts and treatment technologies for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday October 15th, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage:

https://www.citywindsor.ca/residents/Construction/Environmental-Assessments-Master-Plans/Pages/Little-River-Pollution-Control-Plant-Expansion-Schedule-C-Municipal-Class-Environmental-Assessment.aspx

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Chrissy Jung M.A.Sc., P. Eng.

Project Manager, Stantec Consulting

Phone: 226-704-3037 chrissy,jung@stantec.com

RESPONSE FROM REVIEW AGENCIES – NOTICE OF PROJECT COMMENCEMENT

From: Southern Region Planning Inbox (MNRF)

To: Rindlisbacher, Hannah

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant Expansion, City of

Windsor, Ontario

Date: Tuesday, September 5, 2023 9:48:12 AM

Attachments: <u>image001.png</u>

2023-09-05 MNRFComments.pdf

Dear Hannah,

We have received your Notice of Study Commencement for the Municipal Class EA at Little River Pollution Control Plant.

See the attached for some sources of MNRF information to support your project. Please let me know if you have any questions about them.

Thanks,

Matthew Shakespeare

Ministry of Natural Resources and Forestry (705) 772-9310

matthew.shakespeare@ontario.ca

As part of providing <u>accessible customer service</u>, please let me know if you have any accommodation needs or require communication supports or alternate formats.

From: MNRF.AYL (MNRF) < MNRF.AYL@ontario.ca>

Sent: September 1, 2023 3:23 PM

To: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com> **Cc:** Southern Region Planning Inbox (MNRF) < SR.Planning@ontario.ca>

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

Good afternoon Hannah,

Thank you for your email received Sept 1, 2023. I have cc'd and forwarded your request to the relevant department.

Have a great weekend,

Melissa Crosby-Belanger

Resources Clerk (548) 388-8351 | melissa.crosby2@ontario.ca



Aylmer-Guelph District Offices

Ministry of Natural Resources and Forestry

615 John Street North Aylmer, ON N5H2S8 MNRF.AYL@ONTARIO.CA

Please Note: As part of providing <u>accessible customer service</u>, please let me know if you have any accommodation needs or require communication supports or alternate formats.

Avis : Conformément à nos politiques concernant <u>l'accessibilité des services</u> à la clientèle, faites-moi savoir si vous avez des besoins en matière d'adaptation ou de communication ou si vous avez besoin d'un format accessible. *Pour les services en français, veuillez contacter 1-800-387-7011*

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From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u>>

Sent: September 1, 2023 2:51 PM

Subject: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study,

please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

Ministry of Natural Resources and Forestry

Land Use Planning and Strategic Issues Section Southern Region

Regional Operations Division 300 Water Street Peterborough, ON K9J 3C7 Tel.: 705 761-4839

Ministère des Richesses naturelleset des Forêts

Section de l'aménagement du territoire et des questions stratégiques Région du Sud

Division des opérations régionales 300, rue Water

Peterborough (ON) K9J 3C7 **Tél.**: 705 761-4839



September 5, 2023

Dear Hannah Rindlisbacher

SUBJECT: Notice of Study Commencement – Class EA Little River Pollution Control Plant Expansion, City of Windsor, Ontario

The Ministry of Natural Resources and Forestry (MNRF) received the Notice of Commencement on September 1, 2023. Thank you for circulating this to our office. Please note that we have not competed a screening of natural heritage or other resource values for the project at this time. This response, however, does provide information to guide you in identifying and assessing natural features and resources as required by applicable policies and legislation, as well as engaging with the Ministry for advice as needed.

Please also note that it is the proponent's responsibility to be aware of, and comply with, all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

Natural Heritage

MNRF's natural heritage and natural resources GIS data layers can be obtained through the Ministry's <u>Land Information Ontario (LIO)</u> website. You may also view natural heritage information online (e.g., Provincially Significant Wetlands, ANSI's, woodlands, etc.) using the <u>Make a Map</u>: Natural Heritage Areas tool.

We recommend that you use the above-noted sources of information during the review of your project proposal.

Natural Hazards

A series of natural hazard technical guides developed by MNRF are available to support municipalities and conservation authorities implement the natural hazard policies in the Provincial Policy Statement (PPS). For example, standards to address flood risks and the potential impacts and costs from riverine flooding are addressed in the *Technical Guide River* and Stream Systems: Flooding Hazard Limit (2002). We recommend that you consider these technical guides as you assess specific improvement projects that can be undertaken to reduce the risk of flooding.

Petroleum Wells & Oil, Gas and Salt Resources Act

There may be petroleum wells within the proposed project area. Please consult the Ontario Oil, Gas and Salt Resources Library website (www.ogsrlibrary.com) or GeoHub for the best-known data on any wells recorded by MNRF. Please reference the 'Definitions and Terminology Guide' listed in the publications on the library website to better understand the well information available. Any oil and gas wells in your project area are regulated by the Oil, Gas and Salt Resource Act, and the supporting regulations and operating standards. If any unanticipated wells are encountered during development of the project, or if the proponent has questions regarding petroleum operations, the proponent should contact the Petroleum Operations Section at POSRecords@ontario.ca or 519-873-4634.

Fish and Wildlife Conservation Act

Please note, that should the project require:

- The relocation of fish outside of the work area, a Licence to Collect Fish for Scientific Purposes under the *Fish and Wildlife Conservation Act* will be required.
- The relocation of wildlife outside of the work area (including amphibians, reptiles, and small mammals), a Wildlife Collector's Authorization under the *Fish and Wildlife Conservation Act* will be required.

Public Lands Act & Lakes and Rivers Improvement Act

Some Project may be subject to the provisions of the *Public Lands Act* or *Lakes and River Improvement Act*. Please review the information on MNRF's web pages provided below regarding when an approval is, or is not, required. Please note that many of the authorizations under the *Lakes and Rivers Improvement Act* are administered by the local Conservation Authority.

- For more information about the Public Lands Act: https://www.ontario.ca/page/crown-land-work-permits
- For more information about the Lakes and Rivers Improvement Act: https://www.ontario.ca/page/lakes-and-rivers-improvement-act-administrative-guide

After reviewing the information provided, if you have not identified any of MNRF's interests stated above, there is no need to circulate any subsequent notices to our office.

If you have any questions or concerns, please feel free to contact me.

Best Regards,

Matthew Shakespeare
Ministry of Natural Resources and Forestry (MNRF)
705-772-9310
matthew.shakespeare@ontario.ca

From: Rindlisbacher, Hannah

To: Alicia Good

Subject: RE: 165620295: Notice of Study Commencement - Class EA Little River Pollution Control Plant Expansion, City of

Windsor, Ontario

Date: Monday, September 11, 2023 1:37:00 PM

Hi Alicia,

Thanks for your interest in the project, James and Tian have been added to the contact list and we will continue to keep you all informed as the project progresses.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Alicia Good <AGood@erca.org> Sent: Friday, September 1, 2023 3:21 PM

To: Rindlisbacher, Hannah < Hannah. Rindlisbacher@stantec.com >

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

Good afternoon Hannah,

Thank you for informing us of this Environmental Assessment. Please continue to circulate our office regarding this Study. You may also add James Bryant (ibryant@erca.org), our Director of Watershed Management, and Tian Martin, (tmartin@erca.org), our Water Resources Engineer, to the circulation list.

Best regards, Alicia Good



Alicia Good (she/her)

Watershed Planner Essex Region Conservation Authority 360 Fairview Avenue West, Suite 311 | Essex, Ontario | N8M 1Y6 P. 519-776-5209 x3794 | F. 519-776-8688 While this email is sent when it is convenient for me, I do not expect a response or action outside of your own regular working hours.

The ERCA Office is now open to the public **Tuesdays**, **Wednesdays and Thursdays** to provide "counter service"; however, services continue to be delivered online and through email. Please consult ERCA's website for more information and direction regarding online services (i.e. permitting, cottage bookings, seasonal passes etc.)

From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u>>

Sent: Friday, September 1, 2023 2:42 PM

Subject: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely.

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Rindlisbacher, Hannah
To: Horrobin, Barry

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant Expansion, City of

Windsor, Ontario

Date: Friday, September 8, 2023 9:50:00 AM

Hi Barry,

Thank you for your response. We will keep you informed as the project progresses.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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From: Horrobin, Barry

 bhorrobin@windsorpolice.ca>

Sent: Tuesday, September 5, 2023 12:05 PM

To: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com>

Cc: Dicarlo, Paolo <pdicarlo@windsorpolice.ca>

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

Hannah:

As the nature of the subject project has minimal direct impact on police service delivery overall, we only have one general comment to bring forward at this time:

If any physical changes ultimately come in to effect to the Little River Pollution
Control Plant property and surrounding area as an outcome from this study, the
Windsor Police Service requests being included in any review of such physical plans
in order to ensure we can maintain an appropriate level of incident response and
service delivery capability going forward.

Respectfully,

Barry Horrobin, B.A., M.A., CLEP, CMM-III Director of Planning & Physical Resources

WINDSOR POLICE SERVICE



Advanced Certified Law Enforcement Planner

From: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com >

Sent: Friday, September 1, 2023 2:42 PM

Subject: 165620295: Notice of Study Commencement - Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

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To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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From: Rindlisbacher, Hannah
To: NSamuel@countyofessex.ca
Cc: Jung, Chrissy; Walgama, Chandana

Subject: RE: Request to be Added to Little River Pollution Control Plant Project Mailing List

Date: Friday, September 8, 2023 9:54:00 AM

Attachments: <u>image002.png</u>

image003.png

Good morning Nithen,

Thank you for your interest in the project, we have added you to our project mailing list. We will keep you informed as the study progresses.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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From: Walgama, Chandana <cwalgama@citywindsor.ca>

Sent: Tuesday, September 5, 2023 11:26 AM **To:** Jung, Chrissy < Chrissy.Jung@stantec.com>

Cc: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com >

Subject: FW: Request to be Added to Little River Pollution Control Plant Project Mailing List

Hi Chrissy

Please see below request. Kindly add Nithen to the email list and acknowledge.

Thanks Chandana

From: Nithen Samuel < NSamuel@countyofessex.ca>

Sent: September 5, 2023 11:21 AM

To: Walgama, Chandana < cwalgama@citywindsor.ca; jian.li@stantec.com

Subject: Request to be Added to Little River Pollution Control Plant Project Mailing List

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Good Morning,

I hope this email finds you well. My name is Nithen Samuel, and I am writing on behalf of the County of Essex. We have a keen interest in the ongoing Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP) project. As this project marks a significant development in our region, we would like to stay informed about its progress and receive updates regarding public consultations and project milestones. Therefore, we kindly request to be added to the study mailing list.

Thank you, Nithen



Nithen Samuel

Environmental Coordinator
County of Essex
360 Fairview Ave. W. Suite 315 | Essex, ON | N8M 1Y6

P: 519-776-6441 ext. 1385 F: 519-776-4455

TTY: 1-877-624-4832

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From: NPP ONT / PPN ONT

To: Rindlisbacher, Hannah

Subject: RE: [External/Externe]: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

Date: Tuesday, September 5, 2023 8:29:49 AM
Attachments: Minor works class – Outfalls and water intakes.pdf

Good morning Hannah,

The <u>Navigation Protection Program (NPP)</u> is responsible for the administration of the <u>Canadian Navigable Waters Act (CNWA)</u>, which prohibits the construction or placement of any "works" in a navigable waterway without complying with the requirements of the Act. Our <u>Project Review Tool</u> can help you determine a proponent's responsibilities under the CNWA.

Under the CNWA, the <u>Minor Works Order</u> allows for works to be constructed, placed, altered, rebuilt, removed, decommissioned, repaired or maintained without approval if the work meets the criteria for the applicable class of works, as well as specific terms and conditions for construction. I've attached a Minor Works Awareness document for Outfalls and Water Intakes. If <u>all</u> of the criteria can be met, approval by Transport Canada is not required and the proponent can proceed with the work. It is the proponent's responsibility to assess the criteria, maintain the project within the criteria, and to follow the General Requirements if they are proceeding in accordance with the Minor Works Order.

If the proponent cannot meet <u>all</u> of the criteria of the Minor Works Order, then there are regulatory requirements under the CNWA. More information is available on our <u>External Submission Site</u>. Feel free to let me know if you have any questions.

Robert Kerr

Officer | Agent

Navigation Protection Program | Programme de protection de la navigation Transport Canada | Transports Canada 100 Front St. South | 100, rue Front Sud Sarnia ON N7T 2M4 519-383-1863 NPPONT-PPNONT@tc.gc.ca

Government of Canada | Gouvernement du Canada

From: Rindlisbacher, Hannah < Hannah. Rindlisbacher@stantec.com>

Sent: Friday, September 01, 2023 2:51 PM

Subject: [External/Externe]: 165620295: Notice of Study Commencement – Class EA Little River

Pollution Control Plant Expansion, City of Windsor, Ontario

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA)

to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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CANADIAN NAVIGABLE WATERS ACT — DESIGNATED CLASS OF MINOR WORKS UNDER THE MINOR WORKS ORDER

Outfalls and Water Intakes

Outfalls and water intakes that meets the following criteria are designated as minor works:

- a) The outfall or water intake does not extend vertically above the bed of the navigable water more than:
 - (i) in the case of a navigable water of less than 15 m in depthⁱ, 5% of the depth of the water, or
 - (ii) in any other case, 1 m;
- b) The outfall or water intake does not alter either the level or the flow of the navigable water to the point of interfering with navigation;
- c) The outfall or water intake is more than 30 m from a navigation channel; and
- d) The outfall or water intake is not associated with an existing or proposed dam, weir or an existing or proposed reservoir of water created by the construction of a dam or weir.

Reposition or remove

If an outfall or water intake designated as a minor work under this class no longer meets the minimum depth criteria identified above, the owner of the outfall or water intake must, as soon as possible, reposition the outfall or water intake to meet the minimum depth criteria or remove the outfall or water intake

General Requirements

Prior notifications

Before beginning the construction, placement, alteration, rebuilding, removal or decommissioning of outfalls or water intakes in, on, over, under, through or across a charted navigable waterⁱⁱ, the owner of the minor work must deposit information on Transport Canada's registry describing the activity and the minor work's location, publish a notice on Transport Canada site entitled "Publish a notification of work " on the <u>external submission site</u> for the Navigation Protection Program, as amended from time to time, unless the minor work has gone through a federal or provincial review process.

Furthermore, the owner of the work must, in writing, notify at least 48 hours before a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction, placement, alteration, rebuilding, removal or decommission of the work is expected to begin. The owner must also notify the Canadian Hydrographic Service and the Canadian Coast Guard Marine Communications and Traffic Services Centre upon completion.

During the construction, placement, alteration, rebuilding, removal decommissioning, repair or maintenance of a minor work, the owner of the work must ensure:



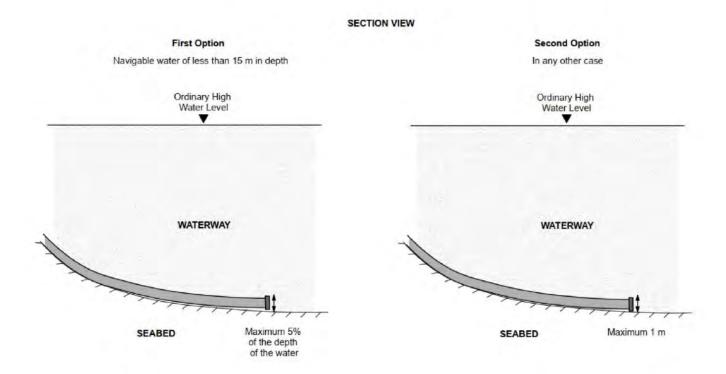
- a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction, placement, alteration, rebuilding, removal, decommission, repair or maintenance of the work, that a suitable means, such as a portage, exists to allow vessels to resume navigation upstream and downstream of the work site;
- b) that the perimeter of the work site is visible from sunset to sunrise and during periods of restricted visibility by the placement of
 - (i) yellow flashing lights,
 - (ii) cautionary buoys with retro-reflective material, or
 - (iii) cautionary buoys with yellow flashing lights.
- c) that any cables or pipes that are in, on, over, through or across the navigable water are not left unattended unless
 - (i) the cable or pipe is lying on the bed of the navigable water, or
 - (ii) the cable meets the requirements of *Overhead Systems*, CAN/CSA C22.3 No. 1, as amended from time to time.

Buoys referred in the *Minor Works Order* must meet the following criteria:

- a) The part of the buoy that shows above the surface of the water is at least 15.25 cm wide and at least 30.5 cm high;
- b) The buoy, including the buoy's anchor, is constructed and maintained in a manner and with materials that ensure that it remains in position after the buoy has been anchored; and
- c) The buoy complies with the requirements set out in the section entitled "Floating Aids to Navigation (Buoys)" of TP 968, entitled *Canadian Aids to Navigation System* and published by the Canadian Coast Guard, as amended from time to time.

The official Minor Works Order can be viewed at: https://laws-lois.justice.gc.ca/eng/regulations/SOR-2021-170/

Contact the Navigation Protection Program (NPP) office in your region with any questions or concerns you may have: https://tc.canada.ca/en/marine/contact-navigation-protection-program-receiver-wreck.



ⁱ Measurements — Depth or height

Unless otherwise indicated, any depth or height referred to in this Order is measured from the ordinary high water level at the site where the minor work is situated.

ii Charted navigable water means navigable waters for which nautical charts are produced by the Canadian Hydrographic Service or the National Oceanic and Atmospheric Administration of the United States.

From: Rindlisbacher, Hannah
To: Harvey, Joseph (MCM)

Cc: Li, Jian; Walgama, Chandana; Jung, Chrissy

Subject: RE: File 0020030: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

Date: Wednesday, September 13, 2023 4:52:00 PM

Good afternoon Joseph,

Thank you for your letter in response to the Notice of Study Commencement for the LRPCP Expansion Class EA.

We will reference the information in this letter throughout the study and during the preparation of the Environmental Study Report. We will continue to keep Karla and yourself informed as the study progresses.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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From: Harvey, Joseph (MCM) <Joseph.Harvey@ontario.ca>

Sent: Wednesday, September 13, 2023 11:07 AM

To: Walgama, Chandana <cwalgama@citywindsor.ca> **Cc:** Rindlisbacher, Hannah <Hannah.Rindlisbacher@stantec.com>; Li, Jian <jian.li@stantec.com>

Subject: FW: File 0020030: 165620295: Notice of Study Commencement – Class EA Little River

Pollution Control Plant Expansion, City of Windsor, Ontario

Chandana Walgama,

Please find attached our initial advice on the above referenced undertaking.

Please note that the responsibility for administration of the *Ontario Heritage Act* and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) to the Ministry of Citizenship and Multiculturalism (MCM). Individual staff roles and contact information remain unchanged. Please continue to send any notices, report and/or documentation to both Karla Barboza and myself.

Please do not hesitate to contact me with any questions or concerns.

Regards,

Joseph Harvey | Heritage Planner

Citizenship, Inclusion and Heritage Division | Heritage Branch | Heritage Planning Unit Ministry of Citizenship and Multiculturalism 613.242.3743

Joseph.Harvey@ontario.ca

From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u>>

Sent: September 1, 2023 2:51 PM

Subject: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

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To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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Ministry of Citizenship and Multiculturalism

Ministère des Affaires civiques et du Multiculturalisme



Heritage Planning Unit Heritage Branch

Citizenship, Inclusion and Heritage Division

5th Flr, 400 University Ave

Tel.: 613.242.3743

Unité de la planification relative au

patrimoine

Direction du patrimoine

Division des affaires civiques, de l'inclusion et du patrimoine

Tél.: 613.242.3743

September 13, 2023

EMAIL ONLY

Chandana Walgama, P. Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor, Ontario, N9C 4A5
cwalgama@citywindsor.ca

MCM File : 0020030

Proponent : City of Windsor

Subject: Municipal Class EA – Schedule C – Notice of Commencement

Project : Little River Pollution Control Plant Expansion

Location : City of Windsor

Dear Chandana Walgama:

Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of Commencement for the above-referenced project.

MCM's interest in this 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 known (previously recognized) and potential cultural heritage resources.

Project Summary

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment for the Little River Pollution Control Plant (LRPCP). In general, the study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

In 2020, the City of Windsor endorsed its first comprehensive Sewer and Coastal Flood Protection Master Plan (SMP). The SMP identified treatment capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. During these events flow in excess of the LRPCP wet weather treatment capacity is by-passed to the

nearby Pontiac Pumping Station and discharged to the Little River as a combined sewer overflow (CSO). The Ministry of Environment, Conservation and Parks has indicated that any future expansion of the LRPCP should eliminate the need for CSO.

In 2021, the City of Windsor initiated a master servicing plan for the Sandwich South Area geared towards providing the required municipal infrastructure in support of growth. The Sandwich South Master Service Plan, a Municipal Class EA discussed the capacity limitations of the existing LRPCP and recommended to increase the capacity to accommodate the future Sandwich South development.

Identifying Cultural Heritage Resources

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation.

Archaeological Resources

This EA project may impact archaeological resources and should be screened using the Ministry's <u>Criteria for Evaluating Archaeological Potential</u> to determine if an archaeological assessment is needed. MCM archaeological sites data are available at <u>archaeology@ontario.ca</u>.

If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) shall be undertaken by an archaeologist licenced under the *Ontario Heritage Act (OHA)*, who is responsible for submitting the report directly to MCM for review.

Built Heritage Resources and Cultural Heritage Landscapes

The Ministry's <u>Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes</u> should be completed to help determine whether this EA project may impact know or potential built heritage resources and/or cultural heritage landscapes.

If there is potential for built heritage resources and/or cultural heritage landscapes on the property or within the project area, a Cultural Heritage Evaluation Report (CHER) should be undertaken by a qualified person to determine the cultural heritage value or interest of the property (or project area). If the property (or project area) is determined to be of cultural heritage value or interest and alterations or development is proposed, MCM recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, be completed to assess potential project impacts. Please send the HIA to MCM (and the local municipality as appropriate) for review and comment and make it available to local organizations or individuals who have expressed interest in review.

with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Assessment Reporting

All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MCM whether any technical cultural heritage studies will be completed for this EA project, and provide them to MCM 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.

Please note that the responsibility for administration of the *Ontario Heritage Act* and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) to the Ministry of Citizenship and Multiculturalism (MCM). Individual staff roles and contact information remain unchanged. Please continue to send any notices, report and/or documentation electronically to both Karla Barboza and myself.

- Karla Barboza, Team Lead Heritage | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-660-1027 | karla.barboza@ontario.ca
- Joseph Harvey, Heritage Planner | Heritage Planning Unit (Citizenship and Multiculturalism) | 613-242-3743 | joseph.harvey@ontario.ca

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

Sincerely,

Joseph Harvey
Heritage Planner
Heritage Planning Unit
joseph.harvey@Ontario.ca

Copied to: Jian Li, Project Manager, Stantec Consulting
Hannah Rindlisbacher, Environmental Engineer in Training, Stantec Consulting

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. The Ministry of Citizenship and Multiculturalism (MCM) 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 MCM 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.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.

From: ONT Environment / Environmement ONT

To: Rindlisbacher, Hannah

Subject: RE: [External/Externe]: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

Date: Friday, September 15, 2023 12:55:36 PM

Attachments: 2.LRPCP Expansion MCEA - Notice of Study Commencement.pdf

Greetings,

Thank you for your correspondence.

Please note Transport Canada does not require receipt of all Individual or Class EA related notifications. We request that project proponents self-assess whether their project:

- 1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at at www.tbs-sct.gc.ca/dfrp-rbif/; and
- 2. Will require approval and/or authorization under any Acts administered by Transport Canada* available at http://www.tc.gc.ca/eng/acts-regulations/menu.htm.

Proposed projects that will occur on federal property (including reserve lands or lands owned by federal departments other than Transport Canada) will be subject to an Impact Assessment per Section 82 of the *Impact Assessment Act, 2019* prior to exercising a federal power (including full or partial funding), and/or performing a function or duty (e.g. regulatory approval or issuance of a lease) in relation to that project.

If the criteria above do not apply, Transport Canada's Environmental Assessment program should not be included in any further correspondence, and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded to: EnviroOnt@tc.gc.ca with a **brief description of Transport Canada's expected role**.

*Below is a summary of the most common Acts that apply to projects in an Environmental Assessment context:

- Canadian Navigable Waters Act (CNWA) the Act applies primarily to works constructed or placed in, on, over, under, through, or across navigable waters set out under the Act. The Navigation Protection Program administers the CNWA through the review and authorization of works affecting navigable waters. Information about the Program, CNWA and approval process is available at: http://www.tc.gc.ca/eng/programs-621.html. Inquiries can be directed to NPPONT-PPNONT@tc.gc.ca or by calling (519) 383-1863.
- Railway Safety Act (RSA) the Act provides the regulatory framework for railway safety, security, and some of the environmental impacts of railway operations in Canada. The Rail Safety Program develops and enforces regulations, rules, standards and procedures governing safe railway operations. Additional information about the Program is available at: https://www.tc.gc.ca/eng/railsafety/menu.htm. Inquiries can be directed to RailSafety@tc.gc.ca or by calling (613) 998-2985.

- Transportation of Dangerous Goods Act (TDGA) the transportation of dangerous goods by air, marine, rail and road is regulated under the TDGA. Transport Canada, based on risks, develops safety standards and regulations, provides oversight and gives expert advice on dangerous goods to promote public safety. Additional information about the transportation of dangerous goods is available at: https://www.tc.gc.ca/eng/tdg/safety-menu.htm. Inquiries can be directed to TDG-TMDOntario@tc.gc.ca or by calling (416) 973-1868.
- Aeronautics Act this Act and the associated Canadian Aviation Regulations (CARs) govern civil aviation in Canada. Transport Canada should be notified of projects involving aerodromes and associated structures, or activities that could affect aviation safety. Elevated structures, such as wind turbines and communication towers, are examples of projects that must be assessed for lighting and marking requirements in accordance with the CARs. Transport Canada also has an interest in projects that have the potential to cause interference between wildlife and aviation activities. One example would be waste facilities, which may attract birds into commercial and recreational flight paths. Additional guidance can be found in the Land Use In The Vicinity of Aerodromes publication, available at: https://www.tc.gc.ca/eng/civilaviation/publications/tp1247-menu-1418.htm. Information about Transport Canada's Civil Aviation program can be found at: https://tc.canada.ca/en/aviation. Inquires can be directed to aviation.ont@tc.gc.ca or by calling 1 (800) 305-2059 / (416) 952-0230.

Please advise if additional information is needed.

Thank you,

Environmental Assessment Program, Ontario Region

Transport Canada / Government of Canada / 4900 Yonge St., Toronto, ON M2N 6A5 EnviroOnt@tc.gc.ca

Programme d'évaluation environnementale, Région de l'Ontario

Transports Canada / Gouvernement du Canada / 4900, rue Yonge, Toronto, ON, M2N 6A5 EnviroOnt@tc.gc.ca

From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u>>

Sent: Friday, September 01, 2023 2:51 PM

Subject: [External/Externe]: 165620295: Notice of Study Commencement – Class EA Little River

Pollution Control Plant Expansion, City of Windsor, Ontario

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an

environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

From: Rindlisbacher, Hannah
To: Badali, Mark (MECP)

Cc: Wilson, Marcelina (MECP); Bechard, Marc (MECP); Li, Jian; Walgama, Chandana; Jung, Chrissy

Subject: RE: City of Windsor, MEA Class EA, Little River Pollution Control Plant Expansion

Date: Friday, October 6, 2023 11:35:00 AM

Good morning Mark,

Thank you for your letter in response to the Notice of Study Commencement for the LRPCP Expansion Class EA.

We will continue to inform you as the study progresses. Throughout the study and the preparation of the Environmental Study Report we will reference the information in the letter.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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From: Badali, Mark (MECP) < Mark.Badali1@ontario.ca>

Sent: Thursday, October 5, 2023 12:43 PM

To: Walgama, Chandana < cwalgama@citywindsor.ca>

Cc: Wilson, Marcelina (MECP) < Marcelina. Wilson@ontario.ca>; Bechard, Marc (MECP)

<Marc.Bechard@ontario.ca>; Rindlisbacher, Hannah <Hannah.Rindlisbacher@stantec.com>; Li, Jian
<jian.li@stantec.com>

Subject: RE: City of Windsor, MEA Class EA, Little River Pollution Control Plant Expansion

Good afternoon.

Please find the attached letter of acknowledgement and supporting attachments in response to the Notice of Commencement of the Little River Pollution Control Plant Expansion project being undertaken by the City of Windsor in accordance with the Municipal Class Environmental Assessment (Schedule C).

Best regards,

Mark Badali (<u>he/him</u>) | Senior Project Evaluator Environmental Assessment Program Support | Environmental Assessment Branch

Ontario Ministry of the Environment, Conservation and Parks Mark.Badali1@ontario.ca | (416) 457-2155

From: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com >

Sent: September 1, 2023 2:49 PM

To: EA Notices to SWRegion (MECP) < eanotification.swregion@ontario.ca

Subject: City of Windsor, MEA Class EA, Little River Pollution Control Plant Expansion

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

Environmental Assessment

Branch

Direction des évaluations environnementales

1st Floor Rez-de-chaussée

 135 St. Clair Avenue W
 135, avenue St. Clair Ouest

 Toronto ON M4V 1P5
 Toronto ON M4V 1P5

 Tel.: 416 314-8001
 Tél.: 416 314-8001

 Fax.: 416 314-8452
 Téléc.: 416 314-8452

October 5, 2023

Chandana Walgama
Pollution Control Project Engineer
City of Windsor
cwalgama@citywindsor.ca

BY EMAIL ONLY

Re: Little River Pollution Control Plant Expansion

City of Windsor

Municipal Class Environmental Assessment, Schedule C

Acknowledgement of Notice of Commencement

Dear Chandana Walgama,

This letter is in response to the Notice of Commencement for the above noted project. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Windsor (proponent) has indicated that the study is following the approved environmental planning process for a Schedule C project under the Municipal Class Environmental Assessment (Class EA).

The updated (August 2022) attached "Areas of Interest" document provides guidance regarding the ministry's interests with respect to the Class EA process. Please address all areas of interest in the EA documentation at an appropriate level for the EA study. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule. Further information is provided at the end of the Areas of Interest document relating to recent changes to the Environmental Assessment Act through Bill 197, Covid-19 Economic Recovery Act 2020.

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 authorizing 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 consultation process.

The 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 the proposed project, the MECP is delegating the procedural aspects of rights-based consultation to the proponent 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 provided to date and the Crown's preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by the proposed project:

- Aamjiwnaang First Nation
- Bkejwanong (Walpole Island)
- Caldwell First Nation
- Chippewas of Kettle and Stony Point
- Chippewas of the Thames First Nation
- Oneida Nation of the Thames

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process". Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments.

Please also refer to the attached document "A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities" for further information, including the MECP's expectations for EA report documentation related to consultation with communities.

The proponent must contact the Director of Environmental Assessment Branch (EABDirector@ontario.ca) under the following circumstances after initial discussions with the communities identified by the 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 with Indigenous communities or other stakeholders has reached an impasse; or
- A Section 16 Order request is expected based on impacts to Aboriginal or treaty rights

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.

A draft copy of the report should be sent directly to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments.

Please also ensure a copy of the final notice is sent to the ministry's Southwest Region EA notification email account (eanotification.swregion@ontario.ca) after the draft report is reviewed and finalized.

Should you or any members of your project team have any questions regarding the material above, please contact me at Mark.Badali1@ontario.ca.

Sincerely,

Mark Badali

Senior Project Evaluator

Mark Budeli

Environmental Assessment Program Support, Environmental Assessment Branch

Cc: Marcelina Wilson, Supervisor, Windsor Area Office, MECP

Marc Bechard, Water Compliance Supervisor, Sarnia District Office, MECP

Jian Li, Project Manager, Stantec Consulting Ltd.

Hannah Rindlisbacher, Environmental Engineer in Training, Stantec Consulting Ltd.

Enclosed: Areas of Interest

Attached: Client's Guide to Preliminary Screening for Species at Risk

A Proponent's Introduction to the Delegation of Procedural Aspects of Consultation

with Aboriginal Communities

AREAS OF INTEREST (v. August 2022)

It is suggested that you check off each section after you have considered / addressed it.

□ Planning and Policy

- Applicable plans and policies should be identified in the report, and the proponent should describe how the proposed project adheres to the relevant policies in these plans.
 - Projects located in MECP Central, Eastern or West Central Region may be subject to A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020).
 - Projects located in MECP Central or Eastern Region may be subject to the <u>Oak</u>
 <u>Ridges Moraine Conservation Plan</u> (2017) or the <u>Lake Simcoe Protection Plan</u>
 (2014).
 - Projects located in MECP Central, Southwest or West Central Region may be subject to the Niagara Escarpment Plan (2017).
 - Projects located in MECP Central, Eastern, Southwest or West Central Region may be subject to the <u>Greenbelt Plan</u> (2017).
 - Projects located in MECP Northern Region may be subject to the <u>Growth Plan</u> for Northern Ontario (2011).
- The <u>Provincial Policy Statement</u> (2020) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the report, and the proponent should <u>describe</u> how the proposed project is consistent with these policies.
- In addition to the provincial planning and policy level, the report should also discuss the planning context at the municipal and federal levels, as appropriate.

☐ Source Water Protection

The Clean Water Act, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e.

systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- In October 2015, the MEA Parent Class EA document was amended to include reference to the Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. **Given this requirement, please include a section in the report on source water protection.**
 - The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area.
 - o If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the report how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.
- While most source protection plans focused on including policies for significant drinking
 water threats in the WHPAs and IPZs it should be noted that even though source protection
 plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk
 to impacts and within these areas, activities may impact the quality of sources of drinking
 water for systems other than municipal residential systems.
- In order to determine if this project is occurring within a vulnerable area, proponents can use Source Protection Information Atlas, which is an online mapping tool available to the public. Note that various layers (including WHPAs, WHPA-Q1 and WHPA-Q2, IPZs, HVAs, SGRAs, EBAs, ICAs) can be turned on through the "Map Legend" bar on the left. The

mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.

 For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. Please consult with the local source protection authority to discuss potential impacts on drinking water. Please document the results of that consultation within the report and include all communication documents/correspondence.

More Information

For more information on the *Clean Water Act*, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to Conservation Ontario's website where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in <u>section 1.1 of Ontario Regulation 287/07</u> made under the *Clean Water Act*. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

☐ Climate Change

The document "Considering Climate Change in the Environmental Assessment Process" (Guide) is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. Proponents should review this Guide in detail.

• The MECP expects proponents of Class EA projects to:

- 1. Consider during the assessment of alternative solutions and alternative designs, the following:
 - a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
 - b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
- 2. Include a discrete section in the report detailing how climate change was considered in the EA.

How climate change is considered can be qualitative or quantitative in nature and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered.

• The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "Community Emissions Reduction Planning: A Guide for Municipalities" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

☐ Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, a quantitative air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern.
 Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.
- If a quantitative Air Quality Impact Assessment is not required for the project, the MECP expects that the report contain a qualitative assessment which includes:
 - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
 - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
 - A discussion of local air quality impacts that could arise from this project during both construction and operation; and
 - A discussion of potential mitigation measures.
- As a common practice, "air quality" should be used an evaluation criterion for all road projects.
- Dust and noise control measures should be addressed and included in the construction
 plans to ensure that nearby residential and other sensitive land uses within the study area
 are not adversely affected during construction activities.
- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to <u>Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from</u>

<u>Construction and Demolition Activities</u> report prepared for Environment Canada. March 2005.

• The report should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

☐ Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The report should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.
- Natural heritage and hydrologic features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:
 - Key Natural Heritage Features: Habitat of endangered species and threatened species, fish habitat, wetlands, areas of natural and scientific interest (ANSIs), significant valleylands, significant woodlands; significant wildlife habitat (including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars.
 - o Key Hydrologic Features: Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.
 - Other natural heritage features and areas such as: vegetation communities, rare species of flora or fauna, Environmentally Sensitive Areas, Environmentally Sensitive Policy Areas, federal and provincial parks and conservation reserves, Greenland systems etc.

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, for projects located in Central Region you may consider the provisions of the Rouge Park Management Plan if applicable.

☐ Species at Risk

- The Ministry of the Environment, Conservation and Parks has now assumed responsibility of Ontario's Species at Risk program. Information, standards, guidelines, reference materials and technical resources to assist you are found at https://www.ontario.ca/page/speciesrisk.
- The Client's Guide to Preliminary Screening for Species at Risk (Draft May 2019) has been attached to the covering email for your reference and use. Please review this document for next steps.

• For any questions related to subsequent permit requirements, please contact SAROntario@ontario.ca.

☐ Surface Water

- The report must include enough information to demonstrate that there will be no negative
 impacts on the natural features or ecological functions of any watercourses within the study
 area. Measures should be included in the planning and design process to ensure that any
 impacts to watercourses from construction or operational activities (e.g. spills, erosion,
 pollution) are mitigated as part of the proposed undertaking.
- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's Stormwater Management Planning and Design Manual (2003) should be referenced in the report and utilized when designing stormwater control methods. A Stormwater Management Plan should be prepared as part of the Class EA process that includes:
 - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
 - Watershed information, drainage conditions, and other relevant background information
 - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
 - Information on maintenance and monitoring commitments.
- Ontario Regulation 60/08 under the Ontario Water Resources Act (OWRA) applies to the
 Lake Simcoe Basin, which encompasses Lake Simcoe and the lands from which surface
 water drains into Lake Simcoe. If a proposed sewage treatment plant is listed in Table 1 of
 the regulation, the report should describe how the proposed project and its mitigation
 measures are consistent with the requirements of this regulation and the OWRA.
- Any potential approval requirements for surface water taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, except for certain water taking activities that have been prescribed by the Water Taking EASR Regulation – O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please

review the <u>Water Taking User Guide for EASR</u> for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

☐ Groundwater

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the report.
- If the potential construction or decommissioning of water wells is identified as an issue, the report should refer to Ontario Regulation 903, Wells, under the OWRA.
- Potential impacts to groundwater-dependent natural features should be addressed. Any
 changes to groundwater flow or quality from groundwater taking may interfere with the
 ecological processes of streams, wetlands or other surficial features. In addition,
 discharging contaminated or high volumes of groundwater to these features may have
 direct impacts on their function. Any potential effects should be identified, and appropriate
 mitigation measures should be recommended. The level of detail required will be
 dependent on the significance of the potential impacts.
- Any potential approval requirements for groundwater taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information.
- Consultation with the railroad authorities is necessary wherever there is a plan to use construction dewatering in the vicinity of railroad lines or where the zone of influence of the construction dewatering potentially intercepts railroad lines.

■ Excess Materials Management

• In December 2019, MECP released a new regulation under the Environmental Protection Act, titled "On-Site and Excess Soil Management" (O. Reg. 406/19) to support improved management of excess construction soil. This regulation is a key step to support proper management of excess soils, ensuring valuable resources don't go to waste and to provide

clear rules on managing and reusing excess soil. New risk-based standards referenced by this regulation help to facilitate local beneficial reuse which in turn will reduce greenhouse gas emissions from soil transportation, while ensuring strong protection of human health and the environment. The new regulation is being phased in over time, with the first phase in effect on January 1, 2021. For more information, please visit https://www.ontario.ca/page/handling-excess-soil.

- The report should reference that activities involving the management of excess soil should be completed in accordance with O. Reg. 406/19 and the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014).
- All waste generated during construction must be disposed of in accordance with ministry requirements

☐ Contaminated Sites

- Any current or historical waste disposal sites should be identified in the report. The status of
 these sites should be determined to confirm whether approval pursuant to Section 46 of
 the EPA may be required for land uses on former disposal sites. We recommend referring to
 the MECP's D-4 guideline for land use considerations near landfills and dumps.
 - Resources available may include regional/local municipal official plans and data;
 provincial data on <u>large landfill sites</u> and <u>small landfill sites</u>; Environmental Compliance
 Approval information for waste disposal sites on <u>Access Environment</u>.
- Other known contaminated sites (local, provincial, federal) in the study area should also be identified in the report (Note – information on federal contaminated sites is found on the Government of Canada's website).
- The location of any underground storage tanks should be investigated in the report.
 Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.
- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the appropriate MECP District Office for further consultation if contaminated sites are present.

□ Servicing, Utilities and Facilities

- The report should identify any above or underground utilities in the study area such as transmission lines, telephone/internet, oil/gas etc. The owners should be consulted to discuss impacts to this infrastructure, including potential spills.
- The report should identify any servicing infrastructure in the study area such as wastewater, water, stormwater that may potentially be impacted by the project.
- Any facility that releases emissions to the atmosphere, discharges contaminants to ground
 or surface water, provides potable water supplies, or stores, transports or disposes of waste
 must have an Environmental Compliance Approval (ECA) before it can operate lawfully.
 Please consult with MECP's Environmental Permissions Branch to determine whether a new
 or amended ECA will be required for any proposed infrastructure.
- We recommend referring to the ministry's <u>environmental land use planning guides</u> to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

☐ Mitigation and Monitoring

- Contractors must be made aware of all environmental considerations so that all
 environmental standards and commitments for both construction and operation are met.
 Mitigation measures should be clearly referenced in the report and regularly monitored
 during the construction stage of the project. In addition, we encourage proponents to
 conduct post-construction monitoring to ensure all mitigation measures have been effective
 and are functioning properly.
- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.
- The proponent's construction and post-construction monitoring plans must be documented in the report, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

☐ Consultation

• The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the report that identifies concerns that were raised and describes how they have been addressed by the proponent throughout

the planning process. The report should also include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments (as directed by the Class EA to include full documentation).

• Please include the full stakeholder distribution/consultation list in the documentation.

□ Class EA Process

- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. The Master Plan should clearly indicate the selected approach for conducting the plan, by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the Environmental Assessment Act, although the plan itself would not be. Please include a description of the approach being undertaken (use Appendix 4 as a reference).
- If this project is a Master Plan: Any identified projects should also include information on the MCEA schedule associated with the project.
- The report should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.
- The Class EA requires the consideration of the effects of each alternative on all aspects of
 the environment (including planning, natural, social, cultural, economic, technical). The
 report should include a level of detail (e.g. hydrogeological investigations, terrestrial and
 aquatic assessments, cultural heritage assessments) such that all potential impacts can be
 identified, and appropriate mitigation measures can be developed. Any supporting studies
 conducted during the Class EA process should be referenced and included as part of the
 report.
- Please include in the report a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, MTO permits and approvals under the *Impact Assessment Act*, 2019.
- Ministry guidelines and other information related to the issues above are available at http://www.ontario.ca/environment-and-energy/environment-and-energy. We encourage you to review all the available guides and to reference any relevant information in the report.

Amendments to the EAA through the Covid-19 Economic Recovery Act, 2020

Once the EA Report is finalized, the proponent must issue a Notice of Completion providing a minimum 30-day period during which documentation may be reviewed and comment and input can be submitted to the proponent. The Notice of Completion must be sent to the appropriate MECP Regional Office email address.

The public can request a higher level of assessment on a project if they are concerned about potential adverse impacts to constitutionally protected Aboriginal and treaty rights. In addition, the Minister may issue an order on his or her own initiative within a specified time period. The Director (of the Environmental Assessment Branch) will issue a Notice of Proposed Order to the proponent if the Minister is considering an order for the project within 30 days after the conclusion of the comment period on the Notice of Completion. At this time, the Director may request additional information from the proponent. Once the requested information has been received, the Minister will have 30 days within which to make a decision or impose conditions on your project.

Therefore, the proponent cannot proceed with the project until at least 30 days after the end of the comment period provided for in the Notice of Completion. Further, the proponent may not proceed after this time if:

- a Section 16 Order request has been submitted to the ministry regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, or
- the Director has issued a Notice of Proposed order regarding the project.

Please ensure that the Notice of Completion advises that outstanding concerns are to be directed to the proponent for a response, and that in the event there are outstanding concerns regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, Section 16 Order requests on those matters should be addressed in writing to:

Minister David Piccini
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch Ministry of Environment, Conservation and Parks 135 St. Clair Ave. W, 1st Floor Toronto ON, M4V 1P5 EABDirector@ontario.ca



A PROPONENT'S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982.* Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown - the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers

issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;

- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;

- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;

- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigates any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

Client's Guide to Preliminal	y Screening	for S	pecies	at Risk
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Ministry of the Environment, Conservation and Parks
Species at Risk Branch, Permissions and Compliance
DRAFT - May 2019

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1.0 Purpose, Scope, Background and Context

1.1 Purpose of this Guide

This guide has been created to:

- help clients better understand their obligation to gather information and complete a preliminary screening for species at risk before contacting the ministry,
- outline guidance and advice clients can expect to receive from the ministry at the preliminary screening stage,
- help clients understand how they can gather information about species at risk by accessing publicly available information housed by the Government of Ontario, and
- provide a list of other potential sources of species at risk information that exist outside the Government of Ontario.

It remains the client's responsibility to:

- carry out a preliminary screening for their projects,
- obtain best available information from all applicable information sources,
- conduct any necessary field studies or inventories to identify and confirm the presence or absence of species at risk or their habitat,
- consider any potential impacts to species at risk that a proposed activity might cause,
 and
- comply with the Endangered Species Act (ESA).

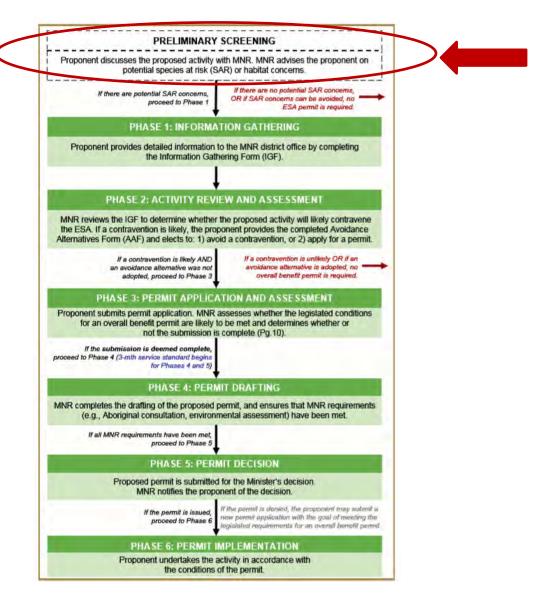
To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide, at a minimum, <u>prior to</u> contacting Government of Ontario ministry offices for further information or advice.

1.2 Scope

This guide is a resource for clients seeking to understand if their activity is likely to impact species at risk or if they are likely to trigger the need for an authorization under the ESA. It is not intended to circumvent any detailed site surveys that may be necessary to document species at risk or their habitat nor to circumvent the need to assess the impacts of a proposed activity on species at risk or their habitat. This guide is not an exhaustive list of available information sources for any given area as the availability of information on species at risk and their habitat varies across the province. This guide is intended to support projects and activities carried out on Crown and private land, by private landowners, businesses, other provincial ministries and agencies, or municipal government.

1.3 Background and Context

To receive advice on their proposed activity, clients <u>must first</u> determine whether any species at risk or their habitat exist or are likely to exist at or near their proposed activity, and whether their proposed activity is likely to contravene the ESA. Once this step is complete, clients may contact the ministry at <u>SAROntario@ontario.ca</u> to discuss the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. At this stage, the ministry can provide advice and guidance to the client about potential species at risk or habitat concerns, measures that the client is considering to avoid adverse effects on species at risk or their habitat and whether additional field surveys are advisable. This is referred to as the "Preliminary Screening" stage. For more information on additional phases in the diagram below, please refer to the *Endangered Species Act Submission Standards for Activity Review and 17(2)(c) Overall Benefit Permits* policy available online at https://www.ontario.ca/page/species-risk-overall-benefit-permits



2.0 Roles and Responsibilities

To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide <u>prior to</u> contacting Government of Ontario ministry offices for further information or advice.

Step 1: Client seeks information regarding species at risk or their habitat that exist, or are likely to exist, at or near their proposed activity by referring to all applicable information sources identified in this guide.

Step 2: Client reviews and consider guidance on whether their proposed activity is likely to contravene the ESA (see section 3.4 of this guide for guidance on what to consider).

Step 3: Client gathers information identified in the checklist in section 4 of this guide.

Step 4: Client contacts the ministry at SAROntario@ontario.ca to discuss their preliminary screening. Ministry staff will ask the client questions about the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. Ministry staff will also ask the client for their interpretation of the impacts of their activity on species at risk or their habitat as well as measures the client has considered to avoid any adverse impacts.

Step 5: Ministry staff will provide advice on next steps.

Option A: Ministry staff may advise the client they can proceed with their activity without an authorization under the ESA where the ministry is confident that:

- no protected species at risk or habitats are likely to be present at or near the proposed location of the activity; or
- protected species at risk or habitats are known to be present but the activity is not likely to contravene the ESA; or
- through the adoption of avoidance measures, the modified activity is not likely to contravene the ESA.

Option B: Ministry staff may advise the client to proceed to Phase 1 of the overall benefit permitting process (i.e. Information Gathering in the previous diagram), where:

- there is uncertainty as to whether any protected species at risk or habitats are present at or near the proposed location of the activity; or
- the potential impacts of the proposed activity are uncertain; or
- ministry staff anticipate the proposed activity is likely to contravene the ESA.

3.0 Information Sources

Land Information Ontario (LIO) and the Natural Heritage Information Centre (NHIC) maintain and provide information about species at risk, as well as related information about fisheries, wildlife, crown lands, protected lands and more. This information is made available to organizations, private individuals, consultants, and developers through online sources and is often considered under various pieces of legislation or as part of regulatory approvals and planning processes.

The information available from LIO or NHIC and the sources listed in this guide should not be considered as a substitute for site visits and appropriate field surveys. Generally, this information can be regarded as a starting point from which to conduct further field surveys, if needed. While this data represents best available current information, it is important to note that a lack of information for a site does not mean that species at risk or their habitat are not present. There are many areas where the Government of Ontario does not currently have information, especially in more remote parts of the province. The absence of species at risk location data at or near your site does not necessarily mean no species at risk are present at that location. Onsite assessments can better verify site conditions, identify and confirm presence of species at risk and/or their habitats.

Information on the location (i.e. observations and occurrences) of species at risk is considered sensitive and therefore publicly available only on a 1km square grid as opposed to as a detailed point on a map. This generalized information can help you understand which species at risk are in the general vicinity of your proposed activity and can help inform field level studies you may want to undertake to confirm the presence, or absence of species at risk at or near your site.

Should you require specific and detailed information pertaining to species at risk observations and occurrences at or near your site on a finer geographic scale; you will be required to demonstrate your need to access this information, to complete data sensitivity training and to obtain a Sensitive Data Use License from the NHIC. Information on how to obtain a license can be found online at https://www.ontario.ca/page/get-natural-heritage-information.

Many organizations (e.g. other Ontario ministries, municipalities, conservation authorities) have ongoing licensing to access this data so be sure to check if your organization has this access and consult this data as part of your preliminary screening if your organization already has a license.

3.1 Make a Map: Natural Heritage Areas

The Make a Natural Heritage Area Map (available online at http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR NHLUPS NaturalHeritage e&viewer=NaturalHeritage&locale=en-US provides public access to natural heritage information, including species at risk, without the user needing to have Geographic Information System (GIS) capability. It allows users to view and identify generalized species at risk information, mark areas of interest, and create and print a custom map directly from the web application. The tool also shows topographic information such as roads, rivers, contours and municipal boundaries.

Users are advised that sensitive information has been removed from the natural areas dataset and the occurrences of species at risk has been generalized to a 1-kilometre grid to mitigate the risks to the species (e.g. illegal harvest, habitat disturbance, poaching).

The web-based mapping tool displays natural heritage data, including:

- Generalized Species at risk occurrence data (based on a 1-km square grid),
- Natural Heritage Information Centre data.

Data cannot be downloaded directly from this web map; however, information included in this application is available digitally through Land Information Ontario (LIO) at https://www.ontario.ca/page/land-information-ontario.

3.2 Land Information Ontario (LIO)

Most natural heritage data is publicly available. This data is managed in a large provincial corporate database called the LIO Warehouse and can be accessed online through the LIO Metadata Management Tool at

https://www.javacoeapp.lrc.gov.on.ca/geonetwork/srv/en/main.home. This tool provides descriptive information about the characteristics, quality and context of the data. Publicly available geospatial data can be downloaded directly from this site.

While most data are publicly available, some data may be considered highly sensitive (i.e. nursery areas for fish, species at risk observations) and as such, access to some data maybe restricted.

3.3 Additional Species at Risk Information Sources

- The Breeding Bird Atlas can be accessed online at http://www.birdsontario.org/atlas/index.jsp?lang=en
- eBird can be accessed online at https://ebird.org/home
- iNaturalist can be accessed online at https://www.inaturalist.org/
- The Ontario Reptile and Amphibian Atlas can be accessed online at https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas
- Your local Conservation Authority. Information to help you find your local Conservation
 Authority can be accessed online at https://conservationontario.ca/conservation-authority/
 - Local naturalist groups or other similar community-based organizations
- Local Indigenous communities
- Local land trusts or other similar Environmental Non-Government Organizations
- Field level studies to identify if species at risk, or their habitat, are likely present or absent at or near the site.
- When an activity is proposed within one of the continuous caribou ranges, please be sure to consider the caribou Range Management Policy. This policy includes figures and maps of the continuous caribou range, can be found online at https://www.ontario.ca/page/range-management-policy-support-woodland-caribou-conservation-and-recovery

3.4 Information Sources to Support Impact Assessments

- Guidance to help you understand if your activity is likely to adversely impact species at
 risk or their habitat can be found online at https://www.ontario.ca/page/categorizing-and-protecting-habitat-under-endangered-species-act
- A list of species at risk in Ontario is available online at
 https://www.ontario.ca/page/species-risk-ontario. On this webpage, you can find out more about each species, including where is lives, what threatens it and any specific habitat protections that apply to it by clicking on the photo of the species.

4.0 Check-List

Please feel free to use the check list below to help you confirm you have explored all applicable information sources and to support your discussion with Ministry staff at the preliminary screening stage.

✓	Land Information Ontario (LIO)
✓	Natural Heritage Information Centre (NHIC)
✓	The Breeding Bird Atlas
✓	eBird
✓	iNaturalist
✓	Ontario Reptile and Amphibian Atlas
✓	List Conservation Authorities you contacted:
✓	List local naturalist groups you contacted:
✓	List local Indigenous communities you contacted:
√	List any other local land trusts or Environmental Non-Government Organizations you
	contacted:
✓	List and field studies that were conducted to identify species at risk, or their habitat, likely
	to be present or absent at or near the site:
✓	
	habitat (e.g. damage or destruction of habitat, killing, harming or harassing species at
	risk):

From: Walgama, Chandana
To: "Phil Bartnik"

Cc: Rindlisbacher, Hannah; Li, Jian; Nepszy, Chris; Brian Hillman; John Henderson

Subject: RE: 165620295: Notice of Study Commencement - Class EA Little River Pollution Control Plant Expansion, City of

Windsor, Ontario

Date: Tuesday, September 19, 2023 11:03:56 AM

Good morning Phil

Thank you for your letter in response to the Notice of Study Commencement for the LRPCP Expansion Class EA. We will keep you informed as the study progresses.

Thank you,

Chandana Walgama, P.Eng. | POLLUTION CONTROL - PROJECT ENGINEER



Infrastructure Services – Pollution Control 4155 Ojibway Parkway, Windsor ON, N9C 4A5 (519) 253-7111 ex 3274

www.citywindsor.ca

From: Phil Bartnik <pbartnik@tecumseh.ca>

Sent: September 19, 2023 8:48 AM

To: Rindlisbacher, Hannah < Hannah. Rindlisbacher@stantec.com >; Walgama, Chandana

<cwalgama@citywindsor.ca>; Li, Jian <jian.li@stantec.com>; Nepszy, Chris

<jhenderson@tecumseh.ca>

Subject: RE: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control

Plant Expansion, City of Windsor, Ontario

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Good morning Chandana, Please see the attached letter. Thank you,

Phil Bartnik, P. Eng.
Director Public Works & Engineering Services
The Corporation of the Town of Tecumseh

From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u> >

Sent: Friday, September 1, 2023 2:42 PM

Subject: 165620295: Notice of Study Commencement – Class EA Little River Pollution Control Plant

Expansion, City of Windsor, Ontario

To Whom It May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to address the need for additional wastewater treatment capacity at the Little River Pollution Control Plant. This study will satisfy Phase's No.1 through 4 of the Class EA process which involves: identification of the problem, evaluation of alternative solutions and design concepts and the preparation of an environmental study report. A copy of the Notice of Study Commencement for the project is attached.

On behalf of the City of Windsor, we are inviting you to participate in this project and to assist us in identifying the environmental, social, and cultural values your community may have within the Project Area.

If you have any comments or concerns regarding this project and wish to provide input into the Study, please contact the undersigned below or one of the individuals named in the attached Notice of Commencement

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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Phil Bartnik

Director Public Works & Engineering Services

pbartnik@tecumseh.ca

Town of Tecumseh - 917 Lesperance Rd. - Tecumseh, ON. - N8N1W9

Phone: 519 735-2184 ,148 Fax: 519 735-6712

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The Corporation of the Town of Tecumseh

September 19, 2023

EMAILED September 19, 2023

Chandana Walgama P.Eng.
Pollution Control Project Engineer, City of Windsor
4155 Ojibway Parkway
Windsor Ontario
N9C 4A5

Dear Mr. Walgama:

The Town of Tecumseh is in receipt of the attached Notice of Study Commencement for the "Little River Pollution Control Plant Expansion, Municipal Class Environmental Assessment". Given the consultative obligations under the Act and the respective obligations pursuant to the existing 2004 Wastewater Agreement between the City and the Town, the Town is respectfully asking to be and remain as an active participant throughout the Municipal Class Environmental Assessment (EA) process. As a major stakeholder thereof, the Town also requests that it be given sufficient time and opportunity to review the study documentation at each of the critical milestones throughout the EA process.

The Town's contacts for this study will be:

- Phil Bartnik, P.Eng. Director Public Works & Engineering Services
 - o pbartnik@tecumseh.ca
- John Henderson, P.Eng. Manager Engineering Services
 - o jhenderson@tecumseh.ca

Il I kut

- Brian Hillman, MA, MCIP, RPP Director Development Services
 - o bhillman@tecumseh.ca

We look forward to working with you on this important infrastructure study. In the meantime if you have any questions or comments regarding the same please feel free to contact us at any time.

Thank you,

Phil Bartnik, P.Eng.

Director Public Works & Engineering Services The Corporation of the Town of Tecumseh

Attached: Notice of Study Commencement, Little River Pollution Control Plant Expansion

cc: Jian Li, Ph.D., P.Eng. – Project Manager, Stantec Consulting
Chris Nepszy, P.Eng. – City Engineer & Commissioner Infrastructure Services, City of Windsor
John Henderson, P.Eng. – Manager Engineering Services, Town of Tecumseh
Brian Hillman, MA, MCIP, RPP – Director Development Services



The Corporation of the Town of Tecumseh

October 24, 2023

EMAILED October 24, 2023

The City of Windsor, Pollution Control 4155 Ojibway Parkway Windsor, ON N9C 4A5

Attention: Mr. Chandana Walgama P.Eng. – Pollution Control Project Engineer

RE: Little River Pollution Control Plant Expansion, Municipal Class Environmental Assessment

Projected Servicing Requirements for the Town of Tecumseh

Dear Mr. Walgama,

The Town is in receipt of Stantec Consulting's draft Section 3.1.4 outlining the projected servicing requirements for the Town of Tecumseh, as noted:

3.1.4 Projected Servicing Requirements – Town of Tecumseh

The servicing requirements for the Town of Tecumseh are outlined in **Table 3.5**. The 20-Year Design Average and Wet Weather Design Flows were estimated based on the values presenting in the 2018 Water and Wastewater Master Plan. The 2036+ Flow from the Master Plan was projected forward for the 20-Year Design (2043) by assuming a linear growth rate equivalent to that from 2016 to 2036 (i.e., average flow rate increased from 11.0 MLD to 28.0 MLD which is equivalent to an annual growth of 0.85 MLD per year). The Peak Dry Weather Sewage Flow and Peak Wet Weather Sewage Flow was calculated based on the equivalent population, Harmons population peaking factor, average daily sewage generation rate of 363 L/cap/day, and extraneous flow allowance of 0.156 L/s/ha.

We have reviewed the preceding information and agree with the assumptions, but would like the following information incorporated in Section 3.1.4:

- 1) Please project an additional 4.5 MLD by 2026/2027 on top of the annual growth of 0.85 MLD per year, resulting in the '20-Year Design' being 32.5 MLD; and
- 2) Please ensure that Tecumseh's total plant capacity of 38 MLD (8.37 MIGD), as identified within the 2004 Wastewater Agreement, is accounted for in servicing projections beyond the '20-Year Design'.

Please contact me should you have any questions.

Thank you,

Phil Bartnik, P.Eng.

Director Public Works & Engineering Services The Corporation of the Town of Tecumseh

cc: Jian Li, Ph.D., P.Eng. – Project Manager, Stantec Consulting
Chris Nepszy, P.Eng. – City Engineer & Commissioner Infrastructure Services, City of Windsor
John Henderson, P.Eng. – Manager Engineering Services, Town of Tecumseh
Brian Hillman, MA, MCIP, RPP – Director Development Services



October 25, 2023 File: 165620295

Attention: Phil Bartnik, P.Eng.

Director Public Works & Engineering Services The Corporation of the Town of Tecumseh 917 Lesperance Road Tecumseh, Ontario N8N 1W9

Dear Mr. Bartnik,

Reference: Little River Pollution Control Plant, Municipal Class Environmental Assessment Projected Servicing Requirements for the Town of Tecumseh

Thank you for your review of the Draft Technical Memo *Section 3.1.4* 'Projected Servicing Requirements for the Town of Tecumseh'. This letter is in response to your comments which were received on October 24th, 2023.

We would like confirmation regarding the 20-Year Design Flow (2043):

• In the Draft Technical Memo, the average daily sewage flow for the 20-Year Design (2043) was estimated to be 33.6 MLD based on annual growth.

$$Q_{2043} = \frac{(28 \, MLD - 11.9 \, MLD)}{(2036 - 2016)} \times (2043 - 2036) + 28 \, MLD = 33.6 \, MLD$$

• In your letter, you indicated that an additional flow of 4.5 MLD is to be expected by 2026/2027, in addition to the annual growth, resulting in a desired 20-Year Design Flow of 32.5 MLD.

This 20-Year Design Flow is lower than our original estimate; therefore, we would like to re-confirm that the desired design flow for this expansion is 32.5 MLD.

The Town of Tecumseh's ultimate servicing requirement of 38.0 MLD, as identified within the 2004 Wastewater Servicing Agreement, is accounted for in the servicing projection for the Ultimate Design (i.e., beyond '20-Year Design'). *Table 3.5: Town of Tecumseh – Projected Servicing Requirements* is inserted below for your reference.

	Master Plan		Projected	
Characteristic	2016	Projected (2036+)	20-Year Design	Ultimate Design
Average Daily Sewage Flow	11.9 MLD	28.0 MLD	33.6 MLD	38.0 MLD
Peak Dry Weather Sewage Flow	30,8 MLD	64.0 MLD	74.5 MLD	82.4 MLD
Peak Wet Weather Sewage Flow	73.9 MLD (855 L/s)	135 MLD (1,563 L/s)	156 MLD (1,811 L/s)	194 MLD (2,243 L/s)

October 25, 2023 Phil Bartnik, P.Eng. Page 2 of 2

Reference:

Little River Pollution Control Plant, Municipal Class Environmental Assessment Projected Servicing Requirements for the

Town of Tecumseh

If you have any questions, please let me know.

Thank You,

Stantec Consulting Ltd.

Chrissy Jung M.A.Sc., P.Eng. Environmental Engineer

Phone: 519-567-9537 chrissy.jung@stantec.com Jian Li Ph.D., P.Eng., PE Project Manager Phone: (519) 562-7541 jian.li@stantec.com

jians)

c. Chandana Walgama, P. Eng. – Pollution Control Project Engineer
 Chris Nepszy, P.Eng. – City Engineer & Commissioner Infrastructure Services, City of Windsor John Henderson, P.Eng. – Manager Engineering Services, Town of Tecumseh
 Brian Hillman, MA, MCIP, RPP – Director Development Services

RESPONSE FROM REVIEW AGENCIES – PUBLIC INFORMATION CENTRE NO.1

 From:
 Jenna Maidment

 To:
 Rindlisbacher, Hannah

 Cc:
 Zack Hamm; Jung, Chrissy

Subject: Re: Caldwell First Nation Environment and Consultation Department Interest in 165620295: Notice of PIC - Class

EA, Little River Pollution Control Plant

Date: Friday, February 16, 2024 9:03:22 AM

Boozhoo Hannah,

We have had feedback on that challenge with the Consultation Tool. I will leave it for Zack to provide advice on how to proceed when dealing with that submission issue, but I will share that our department is in the process of transitioning to NationsConnect so this issue won't be carrying on much longer. Once that transition is finalised you and other proponents will be notified of course.

A meeting with the first PIC information would be appreciated potentially in the next two weeks, by the sounds of it we would only need to set a 30 min meeting. Due to staff capacity we are rarely able to attend PICs in person, which makes virtual meetings the best alternative.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation

14 Orange Street

Leamington | ON | N8H 1P5

Phone: +1 226-936-1093

landguardian@caldwellfirstnation.ca

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On Mon, Feb 12, 2024 at 3:40 PM Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com> wrote:

Good afternoon Jenna,

I have submitted the Notice of Public Information Centre No.1 through <u>consultwithcaldwell.ca</u>. However, we run into an issue with your online consultation tool as we are unable to complete project submissions without submitting archaeological assessment reports. For each EA we open a new consultation on your website as soon as the Notice of Commencement is issued, but the archaeological assessment reports are normally completed later in the Class EA process so that ends up delaying the submission of our project for CFN's review. Please let me know if you have any suggestions on how to get around this problem as our submission status is still currently "Incomplete".

Stantec would be happy to arrange a meeting with CFN, Stantec and the City. As this Class EA is currently in Phase 1, this first PIC will just focus on background information and defining the problem. We can forward the slideshow and feedback form that will be provided at the PIC for CFN's review and follow up to see if a meeting is required at this stage.

As part of this Class EA process, three additional PICs will be held following PIC No.1, as listed below:

PIC No. 2 – Alternative Solutions (Spring 2024)

PIC No. 3 and 4 – Alternative Design Concepts (Summer 2024)

Please let us know your thoughts.

Thanks.

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9
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From: Japan Maidmont landguardian@aaldwallfirstnation.co

From: Jenna Maidment < <u>landguardian@caldwellfirstnation.ca</u>>

Sent: Monday, February 12, 2024 12:56 PM

To: Rindlisbacher, Hannah < Hannah Rindlisbacher@stantec.com >

Cc: Zack Hamm < ecd.manager@caldwellfirstnation.ca>

Subject: Caldwell First Nation Environment and Consultation Department Interest in

165620295: Notice of PIC - Class EA, Little River Pollution Control Plant

Boozhoo Hannah,

I have recently been forwarded your email regarding the Feb 28th PIC on the Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). As per our Consultation Protocols, please submit all project details to our consultation tool, <u>consultwithcaldwell.ca</u>, if you have not done so already.

Due to the high volume of projects and staff capacity in our department it is unlikely that we will be able to attend PIC #1. Alternatively, CFN Environment and Consultation Department (ECD) requests a meeting with representatives from the City of Windsor and Stantec Consulting Ltd. to share the presentation materials and answer preliminary questions. Little River is of significance to CFN, therefore ECD will be engaging during the Class EA phases for the LRPCP.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation

14 Orange Street

Leamington | ON | N8H 1P5

Phone: +1 226-936-1093

landguardian@caldwellfirstnation.ca

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From: Kwusen Support on behalf of NationsConnect

To: Rindlisbacher, Hannah

Subject: NationsConnect: Notice of Public Information Centre No.1 regarding Little River Pollution Control Plant Expansion

Class EA

Date: Thursday, February 22, 2024 3:30:13 PM

A reply has been sent and you have been involved in the conversation or were indicated as a person to notify.

Subject: Notice of Public Information Centre No.1

Hi Hannah,

Thank you for the invitation to the PIC #1. We look forward to reviewing the information online, if we have any comments I will follow up by March 28th.

Body:

Thank you,

Fallon Burch Consultation Coordinator Chippewas of the Thames First Nation View message and reply via NationsConnect

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From: Rindlisbacher, Hannah

To: Alicia Good

Cc: <u>Katie Stammler</u>; <u>Jung, Chrissy</u>

Subject: RE: EA - Little River Pollution Control Plant
Date: Wednesday, March 27, 2024 9:21:00 AM

Good morning Alicia,

Thank you for reviewing the presentation material from PIC No.1. We will keep ERCA informed throughout this study.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Alicia Good <AGood@erca.org>

Sent: Wednesday, March 27, 2024 9:19 AM

To: Rindlisbacher, Hannah < Hannah. Rindlisbacher@stantec.com >

Cc: Katie Stammler < KStammler@erca.org > **Subject:** EA - Little River Pollution Control Plant

Good morning Hannah,

Thank you for circulating our office with the Schedule 'C' Municipal Class Environmental Assessment for the Little River Pollution Control Plant. We have received and reviewed the PIC materials identifying the problem and opportunity statement, and do not have comments to provide at this time. Please continue to circulate our office as the EA progresses, as we may have comments to provide in the next stages.

Best regards, Alicia Good



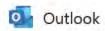
While this email is sent when it is convenient for me, I do not expect a response or action outside of your own regular working hours.

The ERCA Office is now open to the public **Tuesdays**, **Wednesdays** and **Thursdays** to provide "counter service"; however, services continue to be delivered online and through email. Please consult ERCA's website for more information and direction regarding online services (i.e. permitting, cottage bookings, seasonal passes etc.)

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RE: 165620295: Notice of Public Information Centre - Class EA, Little River Pollution Control Plant, City of Windsor, Ontario

From Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com>

Date Tue 2/6/2024 9:33 AM

To Harvey, Joseph (MCM) < Joseph. Harvey@ontario.ca>

Cc Jung, Chrissy < ChrissyJung@stantec.com>

Good morning Joseph,

Thank you for your response to the Notice of Public Information Centre.

This Environmental Assessment (EA) is still in Phase 1 of the Class EA Process, so there have not been any archaeological assessment reports completed yet. We will follow the Ministry's screening process and provide the PIF number(s) following completion of archaeological assessment report(s) for this EA.

Thanks,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec 100-2555 Ouellette Avenue Windsor ON N8X 1L9





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From: Harvey, Joseph (MCM) < Joseph. Harvey@ontario.ca>

Sent: Tuesday, February 6, 2024 9:18 AM

To: Rindlisbacher, Hannah < Hannah. Rindlisbacher@stantec.com>

Subject: RE: 165620295: Notice of Public Information Centre - Class EA, Little River Pollution Control Plant, City of

Windsor, Ontario

Hi Hannah,

Thanks for providing us with the attached notice.

To assist us in tracking archaeological assessment reports, please provide us with the Project Information Form (PIF) number(s) of any archaeological assessments being prepared for this project.

Please let us know if the project has been screened for impacts to known (previously recognized) or potential built heritage resources and cultural heritage landscapes. We continue to recommend that The Ministry's <u>Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes</u> be completed to help determine whether this EA project may impact know or potential built heritage resources and/or cultural heritage landscapes.

Thanks,

Joseph Harvey | Heritage Planner

Citizenship, Inclusion and Heritage Division | Heritage Branch | Heritage Planning Unit Ministry of Citizenship and Multiculturalism

613.242.3743

Joseph.Harvey@ontario.ca

From: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com>

Sent: February 5, 2024 3:36 PM

Subject: 165620295: Notice of Public Information Centre - Class EA, Little River Pollution Control Plant, City of

Windsor, Ontario

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday February 28th, 2024 (3:00 to 7:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec 100-2555 Ouellette Avenue Windsor ON N8X 1L9

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September 4, 2024

Town of Tecumseh 917 Lesperance Road Tecumseh, Ontario, N8N 1W9

Attention: Mr. Phil Bartnik, P.Eng., PMP, Director of Public Works and Environmental

Services

RE: CLASS EA STUDY FOR LITTLE RIVER POLLUTION CONTROL PLANT

ISSUES OF CONCERN FOR THE TOWN OF TECUMSEH

Dear Mr. Bartnik:

Further to your email request on August 19, 2024, we wish to advise as follows:

1 WASTEWATER TREATMENT CAPACITY

The following table outlines the Town's wastewater flow contributions to the Little River PCP (LRPCP) over the period from 2021 to 2023. These values are taken as the sum of the measured flows from the Gauthier (Cedarwood Drive) outlet, the Shawnee (County Road 22) outlet, and the 8th Concession Road Outlet.

Table 1 Annual Average Day Flow to LRPCP

Year		location for y Agreement)	Plant C	apacity	Measured Annual Average Daily Flow
	(MGD)	(MLD)	(MGD)	(MLD)	(MLD)
2021	4.37	19.84	16.0	72.64	7.869
2022	4.37	19.84	16.0	72.64	7.074
2023	4.37	19.84	16.0	72.64	7.467
Average					7.470

The Town's Average Annual Daily Flow rate over the last three (3) years is less than 40% of the allowable flow contribution in accordance with Article 4.A of the Wastewater Agreement and represents approximately 10% of the rated capacity of the LRPCP.





In addition, we have reviewed the flow data available for each of the outlets and have compared the measured Instantaneous Peak Discharge rates at each outlet to the permitted peak instantaneous discharge rates as outlined in the Wastewater Agreement.

Table 2 Instantaneous Peak Discharge Rates

Year	Cedarwood Outlet (L/s)		(07.00)		8 th Concession Road Outlet (L/s)		
	Measured	Permitted	Measured Permitted		Measured	Permitted	
2021	717	935	250	982	11	325	
2022	441	935	250	982	16	325	
2023	549	935	250	982	33	325	

We note that the measured flow rate at WWM-02 (Shawnee Outlet) appears to be constrained by a maximum reporting rate of 250 L/s and, as such, this reported rate may not be accurate. However, given the local sewer capacity at that location, discharge rates significantly above this reported rate would result in extensive upstream sewer surcharges. Please advise if there has been reported instances of basement flooding within Tecumseh hamlet over the period from 2021 through 2023. Additionally, we would recommend that the Town investigate the flow meter at the Shawnee Outlet to identify and correct any deficiencies which may be required to confirm actual peak flow discharges to the Windsor system.

2 DEMAND PROJECTIONS PER 2024 DC BACKGROUND STUDY

Based on the 2021 to 2023 data summarized above, the average daily wastewater flow from the Town directed to the LRPCP is 7.470 MLD. According to the Town's 2024 Development Charges Background Study, the existing 2021 population (including census undercount) in Tecumseh was 24,040. As such, the Average Sewage Generation Rate, including infiltration, for the existing residents of Tecumseh was 310.7 L/cap/day.

The 2018 Water and Wastewater Master Plan recommended a Design Domestic Sewage Generation Rate of 300 L/cap/day, plus infiltration for new developments within Tecumseh. The Master Plan identified a Peak Infiltration Rate of 16,415 L/ha/day for design purposes, in accordance with the 2004 I&I Reduction Study. For the purposes of this evaluation, we have used the recommended domestic sewage generation rate, and added an average infiltration allowance of 90 L/cap/d for a Design Sewage Discharge Rate of 390 L/cap/d. We note that this assumed Design Rate is approximately 25% higher than current measured Sewage Discharge Rate.

Based on the above, CIMA+ has updated the projected wastewater contributions to the LRPCP based on the following assumptions:



- 1. Existing developments within Tecumseh will continue to generate wastewater at an Average rate of 7.470 MLD.
- 2. Projected residential population growth is in accordance with Schedule 1 of the 2024 Development Charge Background Study.
- 3. Equivalent population for Employment lands growth in accordance with Schedule 9a of the 2024 Development Charge Background Study.

Table 3 Projected Wastewater Demands

Year	Pı	Projected Population (cap)				
	Residential	ICI (equivalent)	Total	Average Daily Flow (m³/d)		
2024	24,470	487	24,957	7,828		
2034	30,600	5,939	36,539	12,345		
2044	36,000	11,174	47,174	16,492		
Buildout	49,270	24,040	73,310	26,685		

A review of the above table indicates that the Town of Tecumseh will not exceed its current allocated capacity at the Little River Pollution Control Plant until sometime after 2044, assuming growth in the Town follows the growth projections in the 2024 DC Background Study (Watson & Associates Economists Ltd., May 2024).

3 INFORMATION REQUEST

In order to properly review the City of Windsor's Class EA Study, we would request that the City of Windsor provide the following information:

- Average Day Flows (ADF), Peak Day Flows (PDF) and Peak Instantaneous Flows (PIF) by calendar month and year over the period of 2021, 2022, and 2023.
- 2021-2023 LRPCP By-Pass Events: Duration, Total Volume and Peak Flows.
- 2021-2023 Overflow Events: Duration, Total Overflow Volume and Peak Flows.
- Total volume, mass (wet and dry) of sludge hauled to LRWRP by calendar month and year over the period 2021, 2022 and 2023.
- All MECP orders or directives with respect to LRPCP performance or operation.
- All MECP orders or directives with respect to LRPCP By-Passes or Overflow Events.
- Updated Uncommitted Reserve Capacity Calculation for the LRPCP Service Area.
- The 20-year population projections for the Windsor areas serviced by the LRPCP.
- Total Operating Cost for the Years 2021, 2022, and 2023.
- A copy of the report on the St. Paul and Pontiac Pump Stations (Dillon, 2018).



4 LIST OF QUESTIONS FOR THE CITY OF WINDSOR

Based on the information presented at PIC#1 on February 28, 2024, the average daily flow to the LRPCP over the period 2017 to 2023 period was approximately 45 MLD or 62% of the rated capacity of the plant. As such, it appears that the LRPCP has ample capacity to treat existing flows and it is unclear why the City is proceeding with the Planning for an Upgrade to the LRPCP at this time. Could the City confirm why they are proceeding with this Study at this time?

It appears that a large driver for the expansion of the LRPCP is to reduce/eliminate current and future by-passes and overflows at the LRPCP. When the information is available, we would like to understand:

- The Alternative Solutions reviewed and considered to reduce and manage wet weather inflows to the LRPCP.
- The anticipated reduction in wet weather flows achievable.
- The estimated cost of the improvements at the LRPCP influent pumping station and the LRPCP related to current and anticipated wet weather flows at the planning horizon.
- Operational strategies to be employed at the LRPCP to enable wet weather treatment at the LRPCP to be brought on-line and operational in the event of an approaching or sudden storm event.

5 2024 MONITORING RESULTS

We have attached a summary of the daily monitoring results for the four (4) wastewater flow monitors contributing flow to the Windsor system. The monitoring results confirm that the Town is continuing to comply with the Average Daily flow rate and Peak Flow Rate limitations established within the Wastewater Agreement.

We trust the above is sufficient for your needs at this time; however, should you have any questions or need any clarifications, please do not hesitate to contact me directly.

Sincerely,

CIMA Canada Inc.

Salanho

Stuart Winchester, P.Eng.

Partner, Senior Director, Infrastructure

Stuart.winchester@cima.ca

Encl. Flow Monitoring Summary

cc: John Henderson, Town of Tecumseh



WASTEWATER FLOW MONITORING DATA SUMMARY

Project: **Tecumseh Advisory Services** Project No.:

T001971A

360 File:

August 31, 2024 Date:

Matthew Goodyear, EIT Prepared By:

Date:

September 3, 2024

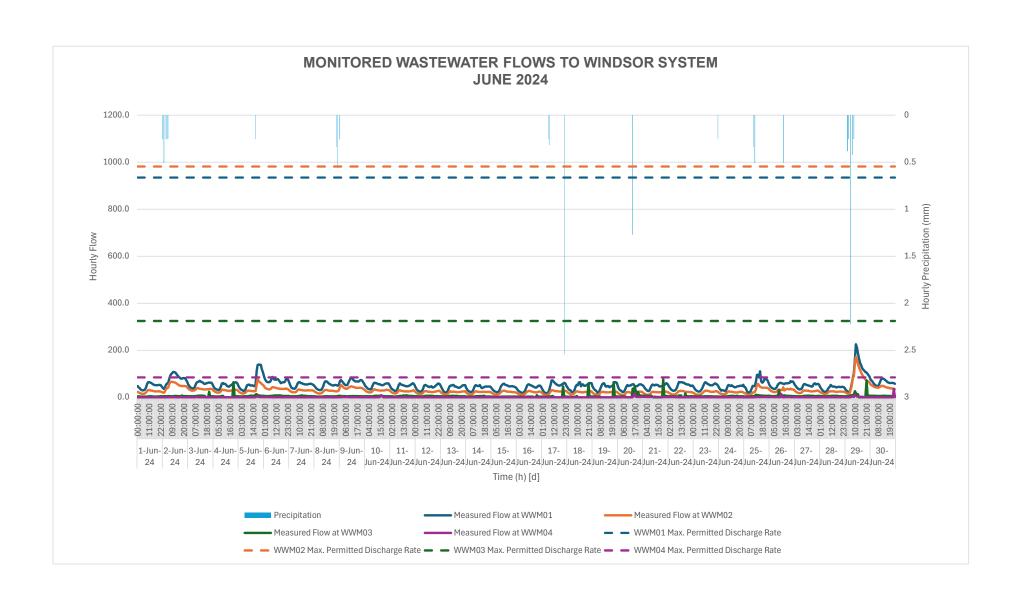
Stuart Winchester, P.Eng. Checked By:

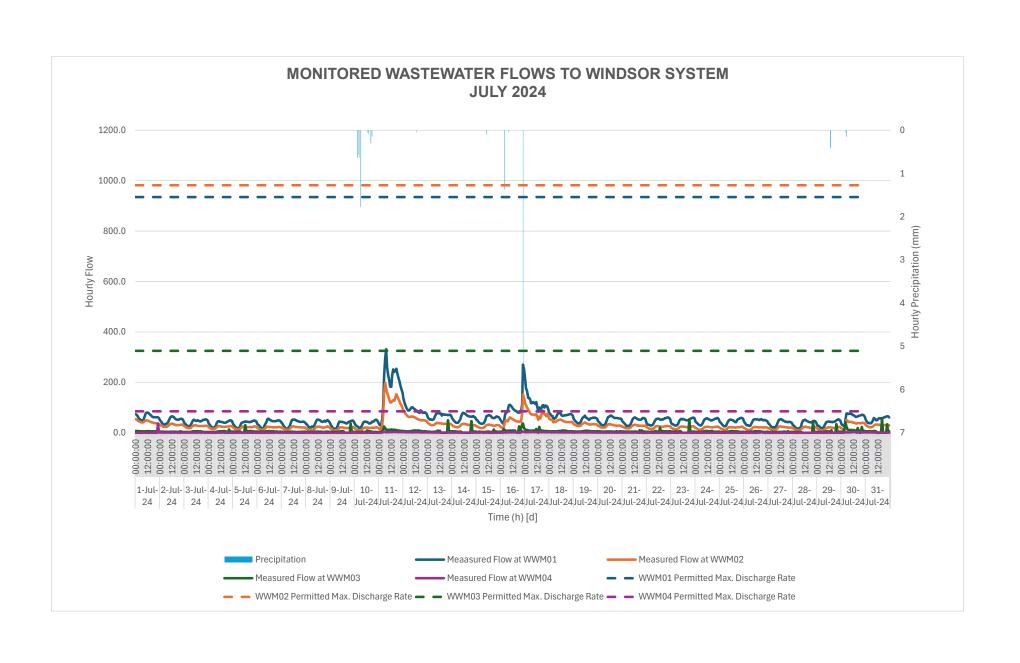
> Date: September 3, 2024

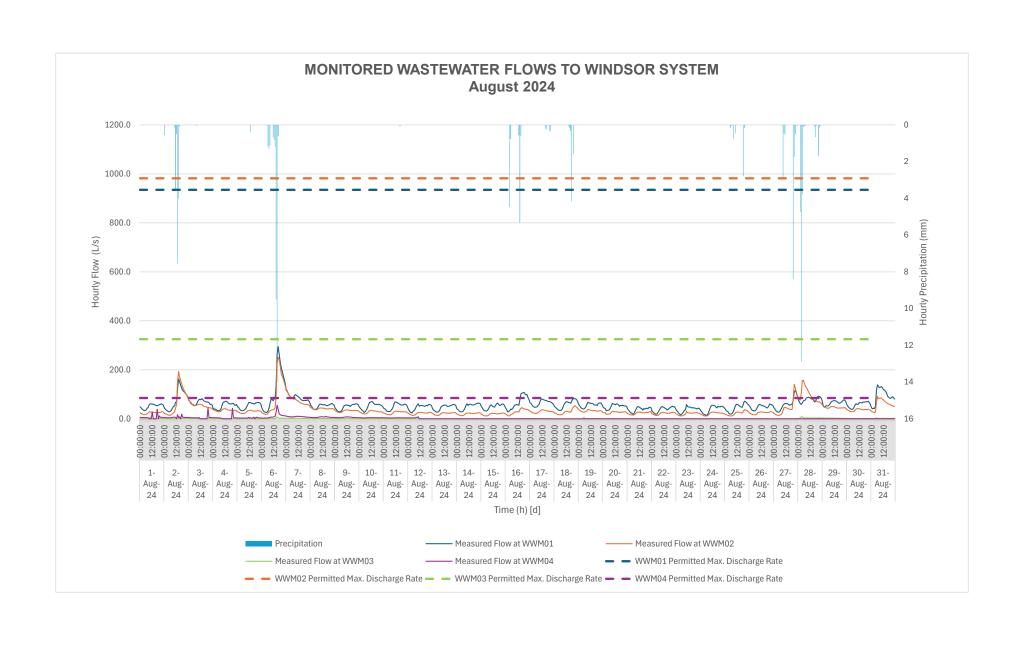
		DISCHARGE TO LITTLE RIVER PCP							DISCHA	RGE TO L	OU ROMA	NO WRP
Period	Monthly Ave Flow Rat	,	Cedarwo	od Outlet	Peak Discharge Rate (L/s) Shawnee Outlet (WWM02)		8th Conc.R		Monthly Average Daily Flow Rate (MLD)			ate (L/s) ¹ pad Outlet M03)
	Allowable ²	Measured	Allowable ³	Measured	Allowable ⁴	Measured	Allowable ⁴	Measured	Allowable ⁵	Measured	Allowable ⁶	Measured
Jun-24	18.16	7.12	935.0	225.6	982.0	172.8	325.0	16.9	2.72	0.47	85.0	76.7
Jul-24	18.16	7.77	935.0	331.4	982.0	197.2	325.0	36.9	2.72	0.48	85.0	53.9
Aug-24	18.16	8.36	935.0	294.4	982.0	251.4	325.0	8.10	2.72	0.19	85.0	55.6
Sep-24	18.16		935.0		982.0		325.0		2.72		85.0	
Oct-24	18.16		935.0		982.0		325.0		2.72		85.0	
Nov-24	18.16		935.0		982.0		325.0		2.72		85.0	
Dec-24	18.16		935.0		982.0		325.0		2.72		85.0	

Notes:

- 1 Peak Flow Rate calculated from the daily Peak Hour flow divided by 3,600 sec/hr.
- 2 Article 4-A of the Windsor/Tecumseh Wastewater Servicing Agreement identifies the limitation based on Annual Average Daily Flow Rate
- 3 From Article 5.2 of the Windsor/Tecumseh Wastewater Servicing Agreement
- 4 From Article 5.3 of the Windsor/Tecumseh Wastewater Servicing Agreement
- 5 From Article 4-B of the Windsor/Tecumseh Wastewater Servicing Agreement
- 6 Article 5.4 of the Windsor/Tecumseh Wastewater Servicing Agreement identifies the limitation based on Annual Average Daily Flow Rate







From: Warren Saint
To: Simpson, David

Cc: Valdez, Ed; Renaud, Jake; Walgama, Chandana; Li, Jian; Jung, Chrissy; Phil Bartnik; John Henderson; Kirby McArdle (Town of

Tecumseh); Stuart Winchester; Jordan Gerber

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

Date: Tuesday, December 17, 2024 5:05:44 PM

Attachments: <u>image007.png</u>

image008.png image009.png image010.png image012.png image001.png

Hi David,

The following information is to provide clarification to your recent inquiries:

The **Average Daily Flow** was contained within our September 4, 2024 letter, and also contained details on how that value was calculated. While there was some general discussions at the October 17, 2024 meeting re: 'sewage flow generation rate and metered consumption', it was not the method utilized in determining this parameter and is not consistent with the information provided in our previous letter. If there was a good understanding of the quantity of metered water returned to the collection system, it would be more applicable as a method to help determine the I/I contribution to total flows in the collection system. Therefore, the ADF calculation remains unchanged from our September letter and an ADF of 16.5 MLD and 26.7 MLD is projected for 2044 and 2064, respectively.

The **Peak Dry Weather Flow** and **Peak Wet Weather Flow** were provided in our November 20, 2024 email. This was calculated using the information provided for the Average Daily Flow, historical precipitation data from the Government of Canada weather historian.

Using the precipitation data, a list of dry weather dates within the historical time period was defined. For this analysis, a dry weather date was previously defined by Stantec as a day with 0 mm of precipitation on it as well as both of the two (2) preceding days. Based on this analysis, a dry weather PHF was defined for the historical time period. Peak Factors (PF) were calculated for the current wet and dry weather PHF values as Peak Flow/ADF. This yielded PFs of 8.9 for wet weather and 2.9 for dry weather.

Future peak wet weather flows for 2044 and 2064 (Build Out) were calculated using the following process:

- Future Peak Flow = Current Peak Flow + (Future ADF Current ADF) * Typical PF
- A typical PF of 3.5 was applied to future flow contributions. This is justified by the assumption that future flows will originate from newer sewers which will generally be less prone to significant inflow & infiltration (I&I).

The following Design Criteria Summary that was discussed at the October 17, 2024 meeting has been updated with the Town's information (in red text below)

Design Criteria	City of Windsor	Town of Tecumseh
Average Daily	Historic:	Historic:
Sewage Flow (ADF)	Measured Flow	Average of Measured Flow
	New Development:	2021 to 2023
	Number of Units and / or	20-Year+:
	Population Density based on	 Historic + (Future Pop'ln
	Planning Projections	Equivalent Growth)*390
	Sewage Generation Rate = 363	L/cap/day
	L/cap/day	
Peak Hourly Dry	Historic:	Historic:
Weather Sewage	Measured Flow	 Measured Dry Weather
Flow	New Development:	Flow 2021 to 2023
	 Harmons Peaking Factor 	New Development:
		 Historic Measured Dry
		Weather Flow
Peak Hourly Wet	Historic:	Historic:
Weather Sewage	Measured Flow	 Measured Flow to
Flow	New Development:	determine PHF
	Extraneous Flow Allowance =	New Development:
	0.156 L/s/ha	 Historic PHF + (Future
		ADF-Current ADF)*3.5
I&I Reduction factor	The City of Windsor is currently	TBD - Town to review
	reviewing infrastructure projects to	
	determine an appropriate I&I	
	Reduction Factor, which is	
	discussed in more detail in Phase 2.	

Apologies for the delay in getting this to you and we trust the above is satisfactory. If additional information is required, please let us know.

Regards,

-Warren

From: Warren Saint

Sent: December 9, 2024 11:34 AM

To: Simpson, David <<u>dsimpson@citywindsor.ca</u>>

Cc: 'Li, Jian' < jian.li@stantec.com >; 'Jung, Chrissy' < Chrissy.Jung@stantec.com >; Valdez, Ed

<<u>evaldez@citywindsor.ca</u>>; Renaud, Jake <<u>irenaud@citywindsor.ca</u>>; Walgama, Chandana

<<u>cwalgama@citywindsor.ca</u>>; Phil Bartnik <<u>pbartnik@tecumseh.ca</u>>; John Henderson

<ihenderson@tecumseh.ca>; Kirby McArdle <kmcardle@tecumseh.ca>; Stuart Winchester

<stuart.winchester@cima.ca>; Jordan Gerber <Jordan.Gerber@cima.ca>

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

Hi David,

We've consulted with the Town and we'll review the questions below and provide the flow estimations background over this coming week.

Regards,

-Warren

From: Simpson, David <dsimpson@citywindsor.ca>

Sent: December 5, 2024 11:53 AM

 $\textbf{To:} \ Warren \ Saint < \underline{Warren.Saint@cima.ca} >; \ 'Jung, \ Chrissy' < \underline{Chrissy.Jung@stantec.com} > \\$

Cc: 'Li, Jian' < <u>jian.li@stantec.com</u>>; Valdez, Ed < <u>evaldez@citywindsor.ca</u>>; Renaud, Jake

<<u>irenaud@citywindsor.ca</u>>; Walgama, Chandana <<u>cwalgama@citywindsor.ca</u>>; Phil Bartnik

<pbartnik@tecumseh.ca>; John Henderson <<u>ihenderson@tecumseh.ca</u>>; Kirby McArdle

<kmcardle@tecumseh.ca>; Stuart Winchester <stuart.winchester@cima.ca>; Jordan Gerber

<<u>Jordan.Gerber@cima.ca</u>>

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

Warren/Chrissy - assuming this has been further discussed, do we have CIMA+ resubmission on updated Tecumseh design criteria to which we can apply to generate the flow estimates for validation.

Please let me know

Thanks

David

David Simpson P.Eng., PMP (he/him)

Commissioner of Infrastructure Services / City Engineer

Infrastructure Services

1266 McDougall Ave. | Windsor, ON | N8X 3M7

Office: (519) 255-6100 ext. 6356

Cell: (519) 819-9218

From: Simpson, David

Sent: Wednesday, November 20, 2024 10:46 AM

To: 'Warren Saint' < Warren.Saint@cima.ca >; 'Jung, Chrissy' < Chrissy.Jung@stantec.com >

Cc: 'Li, Jian' < jian.li@stantec.com >; Valdez, Ed < evaldez@citywindsor.ca >; Renaud, Jake

<irenaud@citywindsor.ca>; Walgama, Chandana <cwalgama@citywindsor.ca>; 'Phil Bartnik'

<pbartnik@tecumseh.ca>; 'John Henderson' <jhenderson@tecumseh.ca>; 'kmcardle@tecumseh.ca'

kmcardle@tecumseh.ca; 'Stuart Winchester' < stuart.winchester@cima.ca; 'Jordan Gerber'

<Jordan.Gerber@cima.ca>

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

Further, it does not seem that the ADF values provided have been adjusted and remain the same as what was afforded with the Sep 4, 2024 letter received from the Town.

David Simpson P.Eng., PMP (he/him)

Commissioner of Infrastructure Services / City Engineer

Infrastructure Services

1266 McDougall Ave. | Windsor, ON | N8X 3M7

Office: (519) 255-6100 ext. 6356

Cell: (519) 819-9218

From: Simpson, David

Sent: Wednesday, November 20, 2024 10:41 AM

To: 'Warren Saint' <<u>Warren.Saint@cima.ca</u>>; Jung, Chrissy <<u>Chrissy.Jung@stantec.com</u>>
Cc: Li, Jian <<u>jian.li@stantec.com</u>>; Valdez, Ed <<u>evaldez@citywindsor.ca</u>>; Renaud, Jake
<<u>irenaud@citywindsor.ca</u>>; Walgama, Chandana <<u>cwalgama@citywindsor.ca</u>>; Phil Bartnik

<pbartnik@tecumseh.ca>; John Henderson <jhenderson@tecumseh.ca>; kmcardle@tecumseh.ca; Stuart

Winchester < stuart.winchester@cima.ca >; Jordan Gerber < Jordan.Gerber@cima.ca >

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

Hi all

As discussed, if you could please also forward the design criteria that was applied to generate these flow estimates for validation.

Of note, I believe you had suggested that ww flow generation rate was based on a rate that was equal to that of total metered consumption, given non-consumptive water uses which form part of overall metered demand. We had suggested an 80% estimate of total meter consumption to be more representative of domestic ww generation.

Regards

David

David Simpson P.Eng., PMP (he/him)

Commissioner of Infrastructure Services / City Engineer

Infrastructure Services

1266 McDougall Ave. | Windsor, ON | N8X 3M7

Office: (519) 255-6100 ext. 6356

Cell: (519) 819-9218

From: Warren Saint < <u>Warren.Saint@cima.ca</u>>
Sent: Wednesday, November 20, 2024 9:47 AM
To: Jung, Chrissy < <u>Chrissy.Jung@stantec.com</u>>

Cc: Li, Jian <<u>jian.li@stantec.com</u>>; Simpson, David <<u>dsimpson@citywindsor.ca</u>>; Valdez, Ed

<evaldez@citywindsor.ca>; Renaud, Jake <irenaud@citywindsor.ca>; Walgama, Chandana

<<u>cwalgama@citywindsor.ca</u>>; Phil Bartnik <<u>pbartnik@tecumseh.ca</u>>; John Henderson

<jhenderson@tecumseh.ca>; kmcardle@tecumseh.ca; Stuart Winchester <stuart.winchester@cima.ca>;

Jordan Gerber < <u>Jordan.Gerber@cima.ca</u>>

Subject: RE: 165620295: LRPCP Municipal Class Environmental Assessment Project Review Meeting Minutes

You don't often get email from warren.saint@cima.ca. Learn why this is important

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Chrissy,

Please see below the requested flows:

Characteristic	Historic Flow (2024)	Projected 20-Year Design (2044)	Projected Ultimate Design (2064+)
Average Daily Flow	7.83 MLD	16.5 MLD	26.7 MLD
Peak Dry Weather Hourly Flow	23.0 MLD	48.4 MLD	78.3 MLD
Peak Wet Weather Hourly Flow	69.7 MLD	100 MLD	135.7 MLD

If you have any questions, please contact us.

Regards,

-Warren

WARREN SAINT, P.Eng

Associate Partner / Director / Infrastructure – Water Engineering

T 519-772-2299 C 519-573-9002 F 519-772-2298 900-101 Frederick Street, Kitchener, ON N2H 6R2 CANADA





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CONFIDENTIALITY WARNING This email is confidential. If you are not the intended recipient, please notify the sender immediately and delete it in its entirety.

From: Jung, Chrissy < Chrissy.Jung@stantec.com>

Sent: October 23, 2024 4:47 PM

To: Phil Bartnik pbartnik@tecumseh.ca>; kmcardle@tecumseh.ca; John Henderson

<ihenderson@tecumseh.ca>; Stuart Winchester <stuart.winchester@cima.ca>; Warren Saint

<<u>Warren.Saint@cima.ca</u>>; Simpson, David <<u>dsimpson@citywindsor.ca</u>>; Walgama, Chandana

<<u>cwalgama@citywindsor.ca</u>>; Renaud, Jake <<u>irenaud@citywindsor.ca</u>>; Ed Valdez <<u>evaldez@citywindsor.ca</u>>

Cc: Li, Jian < iian.li@stantec.com>

EXTERNAL EMAIL

Hello Everyone,

Thank you for your attendance at the Project Review Meeting for the Little River Pollution Control Plant (LRPCP) Municipal Class Environmental Assessment (EA) Study, which was held on Thursday October 17th, 2024. Attached are the meeting minutes and slideshow presentation for your future reference and action. Please note that subsequent to the meeting, the City of Windsor indicated that one (1) Public Information Centre during Phase 3 of the Class EA Process will be sufficient for this project. Note that this will make for a total of three (3) PICs instead of the originally planned four (4) PICs.

If you have any questions or concerns, please contact the undersigned.

Thanks.

Chrissy Jung M.A.Sc., P.Eng.

Windsor Treatment Team Lead, Environmental Engineer

Direct: +1 (519) 966-2250 Direct: +1 (226) 704-3037 ext chrissy.jung@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9





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Phil Bartnik

Director Public Works & Engineering Services

pbartnik@tecumseh.ca

Town of Tecumseh - 917 Lesperance Rd. - Tecumseh, ON. - N8N1W9

Phone: 519 735-2184 x148 Fax: 519 735-6712

www.tecumseh.ca

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RESPONSE FROM PUBLIC – PUBLIC INFORMATION CENTRE NO.1



PUBLIC INFORMATION CENTRE NO. 1 COMMENT FORM

PLEASE PROVIDE YOUR COMMENTS OR CONCERNS ON THE PRESENTED MATERIAL FOR THE LITTLE RIVER POLLUTION CONTROL PLANT CLASS EA:

My concern is, will this expansion correct the smell issues and the air quality, or will I have more sewage smell where it affects my outdoor enjoyment on my property and where opening windows is prohibited due to the smell. I am also worried about sewer backup because I never had a issue in 24 years. The smell is not all the time, but I am very concered for my health breathing this odour and possible covid contamination as I read was found in sewage water. This odour is worse at different times of the day when it happens. My property is less than 100 metres from the sewage treatment plant and I read as per the Ministry of Environment stated years past, that a buffer zone has to be 300 metres from residential properties. When did this buffer zone change from 300 metres? I purchased this property to enjoy my retirement near the water, and I did not expect to have a sewage odor smell or possible health concerns. I pay over \$4300 in taxes and I should be able to enjoy my property without the odor. Thankyou for your time and I hope that I am given all the information I am looking for, and that the odor goes away completely. Thankyou

Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act for transparency and consultation purposes. 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.



Office of the Commissioner of Infrastructure Services / City Engineer

April 24, 2024



Dear

RE: Little River Pollution Control Plant (LRPCP) Municipal Class Environmental Assessment (Class EA)

Thank you for providing your comments and concerns regarding the Little River Pollution Control Plant (LRPCP) Municipal Class Environmental Assessment (Class EA). Further, we would like to extend our appreciation for your attendance at the Public Information Centre (PIC) that was held on Wednesday, February 28th, 2024.

This letter is in response to your feedback form, which was received by email on March 14th, 2024. Please note that your feedback will be taken into consideration throughout the Class EA Process and will be included in the Environmental Study Report. We hope this letter works to provide clarification regarding your concerns around the LRPCP.

Concern No. 1: Odour and Air Quality

Your concern regarding odour and air quality issues at the LRPCP have been noted and will be taken into consideration throughout this Class EA study. The proposed infrastructure upgrades at the LRPCP will be designed in accordance with all applicable regulatory codes and standards including the Ontario Ministry of Environment, Conservation, and Parks (MECP) requirements for odour and air quality controls. These standards will be imposed to ensure impacts from the LRPCP will be regulated and appropriate mitigation measures are in place.

Concern No. 2: Sewer Backups

To better understand the causes and to develop solutions to reduce the risk of flooding, the City carried out a comprehensive study known as the Sewer & Coastal Flood Protection Master Plan (SMP) in 2020. The purpose of the SMP study was to understand the causes of flooding; identify locations of flooding; and evaluate and recommend infrastructure improvements.

One of the recommendations outlined in the SMP was to improve the inlet capacity of the LRPCP to provide additional relief to the sanitary sewer system during severe storm



events. The infrastructure improvements proposed through this study will work to fulfill this recommendation and lower the risk of sewer backups throughout the City of Windsor.

Concern No. 3: Buffer Zone

In 1995, under the *Planning Act*, the Ontario Ministry of Environment, Conservation, and Parks provided recommendations for buffer zones between sewage treatment facilities and residential properties. The MECP defines the buffer zone or separation zone as the distance between noise or odour producing structures and residential properties. The recommended buffer zone for each facility is to be determined on a case-by-case basis and typically ranges from 100 m to 150 m.

The Little River Pollution Control Plant was originally constructed in 1966 and has undergone two major expansions, one in 1974 and one in the early 1990's. The LRPCP and the residential properties on Riverdale Avenue pre-date the recommendations established in the *Planning Act*. At the time of the second expansion, consultation was held with the MECP and a buffer zone of 300 meters was established on the east side of the site to provide space for potential future expansions. The buffer zone on the west side of the site was recognized as the existing separation distance of approximately 100 m. These buffer zones have not changed since their establishment in the early 1990's and are not anticipated to change as a result of this study.

A second Public Information Centre regarding the Little River Pollution Control Plant Class EA will be held in May 2024. This PIC will focus on alternative design solutions to address wet weather flow issues and increase the capacity of the LRPCP. You are encouraged to attend to learn more about the potential improvements at the LRPCP and will receive an invitation in the weeks leading up to this PIC by email and mail.

Should you have any questions or concerns at this time, please contact Chandana Walgama, Pollution Control Project Administrator, at cwalgama@citywindsor.ca.

Sincerely,

Mark Winterton, P. Eng.

City Engineer

RESPONSE FROM REV	IEW AGENCIES – PUBL	IC INFORMATION CE	NTRE NO.2

From: Abrazhevich, Anastasia (MCM)

To: Jung, Chrissy; Barboza, Karla (She/Her) (MCM)
Cc: cwalgama@citywindsor.ca; Rindlisbacher, Hannah

Subject: RE: Notice of Public Information Centre No.2 - Class EA, Little River Pollution Control Plant, City of Windsor,

Ontario

Date: Wednesday, April 9, 2025 2:26:03 PM

Attachments: image001.png image002.png

Hi Chrissy,

Thank you very much for the update, I am acknowledging receipt of your email.

Please note: as I am now the staff lead for this file, please send any future correspondence to myself and Karla.

Best regards,

Anastasia Abrazhevich

Heritage Planner | Citizenship, Inclusion and Heritage Division Ministry of Citizenship and Multiculturalism | Ontario Public Service 437 240 2379 anastasia.abrazhevich@ontario.ca



Taking pride in strengthening Ontario, its places and its people

From: Jung, Chrissy < Chrissy.Jung@stantec.com>

Sent: Wednesday, April 9, 2025 11:02 AM

To: Barboza, Karla (She/Her) (MCM) < Karla.Barboza@ontario.ca>

Cc: Abrazhevich, Anastasia (MCM) <Anastasia.Abrazhevich@ontario.ca>; cwalgama@citywindsor.ca; Rindlisbacher, Hannah <Hannah.Rindlisbacher@stantec.com>

Subject: RE: Notice of Public Information Centre No.2 - Class EA, Little River Pollution Control Plant, City of Windsor, Ontario

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Hello Karla,

Thank you for the update! We will update our contact list accordingly.

The project is being screened for impacts to known and potential cultural heritage resources using the screening checklist provided. Further, we are in the process of preparing a Cultural Heritage Overview Memo, which we will provide to your team for review once it becomes available.

If you have any questions or concerns, please let me know.

Thanks,

Chrissy Jung M.A.Sc., P.Eng.

Windsor Treatment Team Lead, Environmental Engineer

Direct: +1 (519) 966-2250 Direct: +1 (226) 704-3037 ext christy.jung@stantec.com

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From: Barboza, Karla (She/Her) (MCM) < <u>Karla.Barboza@ontario.ca</u>>

Sent: Friday, April 4, 2025 5:35 PM

To: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u>>

Cc: Jung, Chrissy < Chrissy < Chrissy.Jung@stantec.com>; cwalgama@citywindsor.ca; Abrazhevich, Anastasia

(MCM) < <u>Anastasia. Abrazhevich@ontario.ca</u>>

Subject: RE: Notice of Public Information Centre No.2 - Class EA, Little River Pollution Control Plant, City of Windsor, Ontario

Hi Hannah.

Thanks for sending the Notice of Public Information Centre for the above referenced project to the Ministry of Citizenship and Multiculturalism (MCM).

Please note that Joseph Harvey has moved to another position. We would appreciate if you could update this project's contact list to remove Joseph and include Anastasia Abrazhevich, MCM Heritage Planner (copied). Please continue to copy me.

Could you please advise if the project has been screened for impacts to known or potential cultural heritage resources? Please refer to the screening checklist in our initial letter (dated September 13, 2023). Please advise us if technical cultural heritage studies are being undertaken for this project.

Thanks in advance, Karla

Karla Barboza, MCIP, RPP, CAHP (she/her)

Team Lead, Heritage | Heritage Operations Branch | Citizenship, Inclusion and Heritage Division Ministry of Citizenship and Multiculturalism | Ontario Public Service 416-660-1027 | karla.barboza@ontario.ca



Taking pride in strengthening Ontario, its places and its people

From: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u> >

Sent: Friday, April 4, 2025 11:12 AM

Subject: 165620295: Notice of Public Information Centre No.2 - Class EA, Little River Pollution

Control Plant, City of Windsor, Ontario

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To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday April 23rd, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: <u>Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)</u>

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

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100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Rindlisbacher, Hannah

Sent: Monday, February 5, 2024 3:36 PM

Subject: 165620295: Notice of Public Information Centre - Class EA, Little River Pollution Control

Plant, City of Windsor, Ontario

To Whom it May Concern,

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the *Environmental Assessment Act* to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the project background and problem statement for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday February 28th, 2024 (3:00 to 7:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: <u>Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)</u>

If you have any comments or concerns regarding this project, please contact the undersigned.

Sincerely,

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

hannah.rindlisbacher@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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9 May 2025

By e-mail: cwlalgama@citywindsor.ca

Mr. Chandana Walgama, P.Eng. Pollution Control Project Engineer City of Windsor 4155 Ojibway Parkway Windsor Ontario, N9C 4A5

Subject: Little River PCP - Class EA Study

Y/Ref.:

O/Ref.: T001971A

Mr. Walgama,

As requested by the Town of Tecumseh, Laurie Boyce (L³ ESP Ltd.), Warren Saint, and I attended the Public Information Centre hosted by the City of Windsor on April 23, 2025.

Based on our review of the information presented, we have the following questions / requests for clarifications to assist us all in understanding the City's plan to upgrade the Little River PCP.

Flow Projections

The City has updated their future flow estimates from the first PIC on February 28, 2024. It is assumed these updates were based on the flow projections provided by the Town; however, it is unclear how the future Flow Projections on the "Future Requirements" panel were estimated, and/or if any adjustments to the City's population projections were incorporated into the updated flow projections.

Flow	Rated	PIC	C#1	PIC	#2
Projections (MLD)	LRPCP Capacity	2045 (20 Year)	Ultimate Design	2045 (20 Year)	Ultimate Design
ADF	72.8	86.0	111	77.2	104
Peak DWF	90	217	255	201	259
Peak WWF	225	470	557	393	474

The "Future Requirements" panel also includes the following text: "Flow values were updated since last PIC based on new projections in the Town of Tecumseh. The Peak WWF varies with Inflow and Infiltration (I&I) Reduction Factor (equivalent to \pm 13 MLD)."





9 May 2025

We trust that the City of Windsor understands that Tecumseh will adhere to the capacity requirements of the Wastewater Servicing Agreement (November 1, 2004) however, any Tecumseh forecasted flow values are subject to change, based on the pace of development within the Town boundaries.

The City further indicated, through discussions at PIC #2, that they are still defining the LRPCP upgraded ADF capacity. The City recognized that expanding the LRPCP from 72.8 to 77.2 MLD is minor, and it would be more cost effective to increase capacity by addressing specific process limitations, and assuming no tertiary treatment is required to comply with the new effluent criteria.

Identifying the future rated capacity of the LRPCP and new effluent criteria, and the assumptions used in developing this projection, is a critically important component of the Problem Definition for the EA.

We note that increasing the rated capacity of the plant to 77.2 MLD is a smaller capacity increase than the first capacity expansion considered in the 2004 Wastewater Agreement between Windsor and Tecumseh. We have no objection to this interim step.

Questions Related to Flow Projections:

- How will the City of Windsor monitor and confirm that they are achieving their projected I&I Reduction Factor, and confirm that the overall flow projections will remain valid?
- On behalf of the Town, we request that the City provide updates on the data and assumptions used to estimate future flows from the City of Windsor.
- On behalf of the Town, we request that a copy of the Unit Process Capacity Assessment (if completed) for the LRPCP be provided. This Assessment should identify the unit process limitations within the existing system, and the projected improvements that could be achieved on the existing site.
- When does the City expect to establish the ADF capacity of the LRPCP? Will the City provide the Town with this information when it becomes available?

Effluent Quality Compliance Limits

At the Town's meeting with the City on October 17, 2024, the City of Windsor presented proposed future effluent quality compliance limits as follows:





9 May 2025

Parameter	Current Effluent Limits (monthly Average)	Proposed Future Effluent Limits (monthly Average)
CBOD5 (mg/L)	15	10
TSS (mg/L)	15	10
TP (mg/L)	1.0	0.8
TAN (mg/L)	6	5

It was unclear what ADF was being considered when proposing the future effluent limits. At PIC 2, staff advised the Town that an Assimilative Capacity Study (ACS) had not been undertaken to date, since the magnitude of the projected capacity increase had not yet been confirmed.

Questions/ Clarifications

 On behalf of the Town, please provide the Town with the updated ACS including confirmation of acceptance by MECP once completed.

Recommended Solution and Phasing

The city provided a long list of alternative solutions, evaluation criteria, and a screening of alternative solutions. We have no comments and agree that the evaluation meets the intent of the MEA Class EA Process for Phase 2.

The City recommended a 3-phased approach to address immediate wet weather flow capacity issues and long-term treatment capacity limitations:

- 1. Phase 1: Immediate Reduce WWFs Through I&I reduction efforts and construction of a WWF Management Facility.
- 2. Phase 2: 10 to 15 years Upgrade the Existing Treatment Trains at the LRPCP, assuming no tertiary treatment is required. If Tertiary Treatment is required, Alternative 7 would be preferred.
- 3. Phase 3: 20-30 Years: Add an Additional Train at the LRPCP. The new treatment train will be located on land to the east of the existing PCP. This Phase would meet the ultimate treatment capacity requirements at the LRPCP and provide engineering redundancy.

In general, we agree that the approach seems reasonable, with the understanding that design basis and conceptual details for the WWF and LRPCP interim upgrades will be established in Phase 3 of the EA. The capacity and concept for the additional treatment train will not be established as part of this EA but will be subject to future study.





9 May 2025

Questions and Clarifications Related to Recommended Solution

- On behalf of the Town, please clarify how the City of Windsor intends to proceed with the design of the WWF Management Facility. We assume that the City would use a long-term simulation of projected wet-weather flows to ensure that the size of the detention facility is suitable for a minimum twenty-year planning horizon. Could the City provide a copy of the simulation to the Town for review and comment before finalizing the design intent for this facility?
- How does the City of Windsor propose to quantify their achieved reductions in I&I? Will the 10% reduction be considered in sizing the new WWF management facility? These initiatives and I&I reduction factor should also be considered for the Tecumseh Flows should the Town proceed with these same initiatives.
- Could the City clarify their intent related to the design approach for the WWM Facility? Is the plan to develop a single WWF Management facility, or will a series of WWF management facilities distributed throughout the collection system be considered?
- From the text included on Slide 13, it appears that Phase 3 will upgrade the Plant to its "Ultimate" Capacity, which (according to the 2004 Wastewater Agreement between Tecumseh and Windsor) is 32 MIGD (145.28 MLD). We assume that the Phase 3 expansion will be undertaken in a series of upgrades, consistent with the intent of the 2004 Wastewater Agreement to minimize the capital impacts of the upgrades on both the Town and the City.
- If Phase 3 is intended to upgrade the plant to its ultimate capacity of 32 MIGD from the current 16 MIGD, this scope of upgrade is not consistent with the 2004 Wastewater Agreement between Windsor and Tecumseh. The Agreement considered four (4) incremental upgrades of 4 MIGD (18.16 MLD) per upgrade. This change could result in a very initial high capital cost completing the full upgrade and double the treatment capacity at one time. We would recommend that the City commit to a "roadmap" on the staging of future upgrades so that the town has time to budget for the projected capital expenditures.
- The Town would like to understand the projected costs for the WWF Management Facility and the Interim Upgrades, and if the City intends to allocate costs between the Town and the City in accordance with the 2004 Wastewater Agreement.
- What is the expected type of tertiary treatment considered and what is the anticipated size of the facility necessary to provide tertiary treatment for existing flow rates. An overlay of the proposed facility size overlaid on an aerial site plan indicating the boundaries of the existing site would assist in understanding the limitations of the existing site with respect to accommodating tertiary treatment on the existing site.





Mr. Chandana Walgama, P.Eng.

Referencing the "Alternative Solution No. 2" panel, can the City of Windsor clarify the anticipated timelines for the Priority 1 and Priority 2 projects and what, if any, long term capacity demands would be realized?

Next Steps

The city plans to present the Phase 3 assessment and recommended concepts for the WWR and LRPCP upgrades, including estimated capital and operating costs at PIC #3, scheduled for August 2025.

Requests

- On behalf of the Town, we request that the Preliminary Design and Preliminary cost estimates for the Preferred Design be provided to the Town of Tecumseh at least two weeks prior to hosting the next Public Information Centre. The costs should be detailed to clearly identify the costs that the City of Windsor intends to allocate to the Town of Tecumseh.
- A meeting between the City of Windsor and the Town of Tecumseh should be convened; ideally before the next PIC, to review and discuss the above information before the preferred design concepts are presented to the public.

Thank you for the opportunity to provide comments on the progress of this Study. Should you have any questions or require any clarification related to the above comments, please do not hesitate to contact me directly.

Stuart Winchester, P.Eng. Senior Director, Infrastructure

Manhort

SW/rc

Encl.:

c.c.: Phil Bartnik, Town of Tecumseh

Chrissy Jung, Stantec Warren Saint, CIMA+ Laurie Boyce, L³ ESP ltd.





THE CORPORATION OF THE CITY OF WINDSOR

Office of the Commissioner of Infrastructure Services Pollution Control

July 18, 2025

By e-mail: stuart.winchester@cima.ca

Attention: Stuart Winchester, P.Eng. Senior Director, Infrastructure CIMA+ 900–101 Frederick Street Kitchener, Ontario, N2H 6R2

Dear Mr. Winchester,

Reference: Little River Pollution Control Plant (LRPCP), Municipal Class Environmental Assessment (MCEA) Study- Response to Public Information Centre No. 2 Comments

Thank you for attending the Public Information Centre held on April 23, 2025. This letter responds to the questions and requests for clarification submitted via email on May 9, 2025.

Flow Projections

Regarding the projected Inflow and Infiltration (I&I) Reduction Factor, the City of Windsor is currently implementing its \$5 B Sewer and Costal Flood Protection Master Plan (SMP) as part of a 50-year strategy to reduce the impact and risk of flooding from both sewer overflows and high-water levels along the Detroit River and Lake St. Clair. Notable funded initiatives to date include but are not limited to sanitary maintenance hole cover sealing (low lying and high flooding risk areas), installation of backflow prevention in storm sewers (that cross the existing Riverside Drive flood protection landform barrier), InfoWorks hydraulic sewer model update and multiple capital works projects to address areas prone to flooding, drainage complications and sewer capacity issues. These projects will assist in reducing wet weather flows to the sanitary sewer system and therefore delay the timing of the LRPCP expansion and/or reduce immediate future capacity expansion requirements of the LRPCP.

The City is furthering an I&I Reduction Work Plan, that will assess existing data, delineate areas of concern, define wastewater flow and private contribution I&I, and recommend future reduction measures. A key focus will be understanding the causes of I&I through flow monitoring programs. Following implementation, ongoing flow monitoring and data analysis will validate both the projected I&I Reduction Factor of 10% and the associated flow projections. The Town of Tecumseh will similarly be required to achieve an I&I reduction factor of 10%. Should the Town be unable to

achieve such I&I flow reductions, then the concomitant flows below this threshold would be allocated to the overall flows, and sole cost, that the Town is responsible.

The methodology and assumptions used to develop the flow projections for the LRPCP and the capacity of each unit process at the LRPCP, along with the limitations within the existing system are outlined in the Technical Memorandums, which will be shared with the Town of Tecumseh in due course. Potential improvements to the existing site will be evaluated in Phase 3 of the MCEA process and presented at Public Information Centre No. 3.

The average daily flow (ADF) capacity of the LRPCP upon completion of the proposed Phase 2 (Interim) Capacity Expansion (i.e., expansion to the existing LRPCP treatment trains) will be a minimum of 77.2 MLD. As noted, improvements to the existing site will be evaluated in Phase 3 of the MCEA process and presented at Public Information Centre No. 3.

The alternative solutions will consider interim and ultimate capacity expansions of LRPCP which will seek to target the most feasible strategies to achieve the greatest economies of scale and cost possible.

Effluent Quality Compliance Limits

Effluent limits will not change until the implementation of the proposed Phase 2 Expansion (anticipated in 10–15 years). As such, the assimilative capacity study (ACS) and MECP acceptance of new effluent limits are not part of this Class EA Study.

Recommended Solution and Phasing

The preferred design of the Wet Weather Flow (WWF) Management Facility will be determined in Phase 3 of the MCEA process. A detailed review of historical wastewater bypass and overflow events at the LRPCP indicated that storing wastewater for return to the LRPCP is not feasible due to the large storage volume required and the lack of suitable land. Therefore, a Retention Treatment Basin (RTB) is recommended, supported by the effectiveness of a similar facility in Windsor-Essex. The RTB will be designed based on projected peak WWF rates to comply with MECP's Procedure F-5-5 treatment requirements.

The City of Windsor will quantify I&I reductions through the upcoming Work Plan and Action Plan projects. Peak WWF generated from the City of Windsor is currently presented as a range, based on the I&I Reduction Factor, and will be used for preliminary sizing of the WWF Management Facility. For peak WWF contributed by the Town of Tecumseh, the City is using projections provided by the Town.

The current design approach is to develop a single WWF Management Facility on the designated expansion lands adjacent to the LRPCP. Although multiple in-line storage facilities were considered, a review of available properties found no significant land within the City of Windsor suitable for such infrastructure. Therefore, in-line storage was deemed impractical.

The proposed Phase 3 (ultimate) Capacity Expansion of the LRPCP will be undertaken in stages. The timing of these stages will be determined based on growth as actual development is realized over time. The City of Windsor will continue to collaborate with the Town of Tecumseh regarding future phased expansions.

A preliminary opinion of the probable cost for the WWF Management Facility and interim capacity expansion of the LRPCP will be developed in Phase 3 and provided ahead of Public Information Centre No. 3. Should the Town remain compliant with the terms of the Wastewater Servicing

Agreement, costs allocated to the Town of Tecumseh will follow the cost-sharing agreement outlined in the same.

The anticipated type of tertiary treatment for the LRPCP will be reviewed in Phase 3. Following this review, a preliminary layout will be included in the Environmental Study Report and Progress Technical Memorandums.

The final phase of the Priority 1 projects - sanitary maintenance hole cover sealing will be completed in 2026 while Priority 2 projects - sanitary sewer rehabilitation will be undertaken over the next 10 years, pending approvals and funding. Such projects will assist in reducing wet weather flows to the sanitary sewer system and therefore expected to delay the timing of the LRPCP interim/ultimate capacity expansions and/or reduce future capacity expansion requirements for the same.

Next Steps

The City of Windsor will review draft Technical Memorandums (including a preliminary opinion of probable cost) and draft presentation materials with the Town of Tecumseh prior to the Public Information Centre No. 3.

If you have any questions or require further clarification, please contact the undersigned.

Thank you,

Chandana Walgama

Pollution Control Project Engineer, P.Eng

cc: Phil Bartnik, Town of Tecumseh

Chrissy Jung, Stantec Warren Saint, CIMA+ Laurie Boyce, L³ESP Ltd.

From: <u>Jung, Chrissy</u>

To: "Alicia Good"; Chandana Walgama, City of Windsor

Cc: Katie Stammler

Subject: RE: ERCA Comments Little River Pollution Control Plant Study PIC 3

Date: Tuesday, November 25, 2025 10:48:00 AM

Hello Alicia,

Thank you for your response and review of the information presented at the Public Information Centre No. 3

Stantec has reviewed your feedback and will incorporate the information into the Draft Environmental Study Report accordingly.

Thanks,

Chrissy Jung M.A.Sc., P.Eng.

Windsor Treatment Team Lead, Environmental Engineer

Direct: +1 (519) 966-2250 Direct: +1 (226) 704-3037 chrissy.jung@stantec.com

Stantec

100-2555 Ouellette Avenue Windsor ON N8X 1L9



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From: Alicia Good <AGood@erca.org>

Sent: Thursday, November 13, 2025 2:31 PM

To: Chandana Walgama, City of Windsor < cwalgama@citywindsor.ca>; Jung, Chrissy

<Chrissy.Jung@stantec.com>

Cc: Katie Stammler < KStammler@erca.org>

Subject: ERCA Comments Little River Pollution Control Plant Study PIC 3

Good afternoon,

Please find attached ERCA's comments regarding the Little River Pollution Control Plan Study Public Information Centre 3.

Best regards, Alicia

Alicia Good (she/her)

Watershed Planner



Essex Region Conservation Authority
Conservation Authority
360 Fairview Avenue West, Suite 311 | Essex, Ontario | N8M 1Y6
P. 519-776-5209 x3794 | F. 519-776-8688

agood@erca.org www.essexregionconservation.ca

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October 22, 2025 ERCA File: 2304-25 planning@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

Chandana Walgama, P. Eng.

Pollution Control Project Engineer, City of Windsor 4155 Ojibway Parkway Windsor, Ontario, N9C 4A5 cwalgama@citywindsor.ca

Chrissy Jung, P. Eng.

Project Manager, Stantec Consulting 2555 Ouellette Avenue, Suite 100 Windsor, Ontario, N8X 1L9 chrissy.jung@stantec.com

Re: Little River Pollution Control Plant Study Public Information Centre No. 3

Thank you for circulating our office with the slides for the Little River Pollution Control Plant Study Public Information Centre No. 3. Our office understands that this project is a Municipal Class Environmental Assessment. The purpose of this study is to determine the preferred solution and conceptual design to address the need for additional wastewater capacity at the Little River Pollution Control Plant (LRPCP).

Our office supports the recommended conceptual design which proposes to expand in three stages. We understand that Phase 1 proposes to construct a new Wastewater Management Facility near the existing facility, Phase 2 proposes to upgrade the existing Little River Pollution Control Plant, and Phase 3 proposes to expand the Little River Pollution Control Plant, adding a Plant 3. We understand that the upgrades are proposed to be undertaken in stages based on regional growth.

We understand that some construction activities may take place within areas subject to our Regulation under the Conservation Authorities Act (Ontario Regulation No. 41/24). Approvals from our office are required prior to any construction or site alteration or other activities affected by Section 28 of the Conservation Authorities Act. Additionally, please be advised that stormwater management is generally subject to Conservation Authority approval. Any proposed works within the Essex Region Conservation Authority's (ERCA) Limit of Regulated Area or that may impact the downstream receivers may require the issuance of an approval from our office.

The study area falls within vulnerable areas identified in the Essex Region Source Protection Plan, which came into effect October 1, 2015. The Source Protection Plan was developed to provide measures to protect Essex Region's municipal drinking water sources and includes policies that relate to the proposed study. As such, comments from the Essex Region Source Protection Authority will be provided under separate cover.



LRPCP PIC 3, 2025

Our office will be pleased to review the final study for this project. Please circulate this study to the following email address: planning@erca.org .

We note that depending on the scope and scale of our review, the associated fee for our review may be \$1500.00 per line item 25 of the 2025 Board Approved ERCA Fee Schedule.

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Alicia Good

Watershed Planner

/alg



Essex Region Conservation

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kstammler@erca.org P.519.776.5209 F.519.776.8688 360 Fairview Avenue West Suite 311, Essex, ON N8M 1Y6

November 13, 2025 ERCA File: 2304-25

Chandana Walgama, P. Eng.

Pollution Control Project Engineer, City of Windsor 4155 Ojibway Parkway Windsor, Ontario, N9C 4A5 cwalgama@citywindsor.ca Chrissy Jung, P. Eng.

Project Manager, Stantec Consulting 2555 Ouellette Avenue, Suite 100 Windsor, Ontario, N8X 1L9 chrissy.jung@stantec.com

Re: Little River Pollution Control Plant Study Public Information Centre No. 3

Thank you for the opportunity to review the information related to the above-named study as part of the Municipal Class Environmental Assessment (EA) process as it relates to Source Water Protection in the Essex Region. The proposed project falls within two vulnerable areas in the Essex Region Source Protection Area - Windsor Intake Protection Zone 2 (IPZ-2) and the Event Based Area (EBA). There are several identified significant drinking water threats (SDWT) in these vulnerability areas that are managed by policies in the Essex Region Source Protection Plan, which came into effect October 1, 2015. As a result of these policies, new projects in these areas may require approval by the Essex Region Risk Management Official (RMO) or amendment of existing prescribed instruments (e.g. environmental compliance approvals) to ensure that appropriate actions are taken to mitigate any potential drinking water threats.

Significant Drinking Water Threats

The study area is located within the **Event Based Area (EBA)** of the A.H. Week's Water Treatment Plant. In this area, the above grade handling and storage of liquid fuel in volumes of 15,000 L or greater is identified as a SDWT. Should fuel of this volume be required, the proponent will need to notify the Risk Management Official to develop a Section 58 Risk Management Plan to mitigate this threat to drinking water. If a Risk Management Plan has previously been negotiated on the subject property, it will be the responsibility of the new owner to contact the Risk Management Official to establish an updated Risk Management Plan.

The study area is also located within **Intake Protection Zone 2 (IPZ-2)** of the A.H. Week's Water Treatment Plant. There are several activities identified as SDWTs related to the study in this vulnerable area with related policies set out in the Source Protection Plan. Each SDWT activity has specific conditions under which the activity is considered to be a threat and most are managed either with an existing Provincial Instrument and/or through the development of a Section 58 Risk Management Plan with the Essex Region's Risk Management Official.





SDWT activities in Windsor's IPZ-2 that may be related to the study include combined sewer discharge, sewage treatment plant bypass discharge to surface water and stormwater management. These activities would most likely be managed through the City of Windsor's Consolidated Linear Infrastructure Environmental Compliance Approval (CLI-ECA) for which templates can be provided. Additional SDWTs in this area that are unlikely to occur as a result of the study and eventual Works include industrial effluent discharges, application of septage to land, application of pesticides, application and/or storage of agricultural and non-agricultural source material, and livestock grazing. The proponents are encouraged to consult the Essex Region Source Protection Plan and related documents for more information. Given the nature of the study and the potential resulting Works, the proponent is encouraged to work with the Essex Region Source Protection Authority prior to completion of any Works to ensure that all policies in the Source Protection Plan are adhered to.

Transport Pathways

The Event Based Area (EBA) and other vulnerable areas are delineated using the best available mapping of drains and other watercourses. The proposed project may include the creation, relocation or removal of drains and/or other open watercourses and sewers, which could alter the delineation of vulnerable areas in the Essex Region. Should the project plan result in any of the above actions that could affect the delineation of the vulnerable area, the proponent is asked to inform the Essex Region Source Protection Authority. Once the project is complete and these changes are finalized, Essex Region Source Protection staff may need to adjust the delineation of the vulnerable areas. Any changes to these delineations would need to be included in formal updates to the Source Protection Plan and Assessment Report using the provisions of the *Clean Water Act* (s.34 or s. 36) or its Regulations (s.51).

<u>Groundwater</u>

The proposed project area is not within any Significant Ground Water Recharge Areas or Highly Vulnerable Aquifers.

Again, we thank you for the opportunity to provide comments on this project and look forward to hearing more as it progresses. For any questions regarding Source Water Protection and the applicable source protection plan policies that may apply to the site, please contact the Essex Region Risk Management Official.

Sincerely,

Katie Stammler, PhD

Source Water Protection Project Manager





3 November 2025

By e-mail: cwalgama@citywindsor.ca

Mr. Chandana Walgama, P.Eng. Pollution Control Project Engineer City of Windsor 4155 Ojibway Parkway Windsor, Ontario, N9C 4A5

Subject: Little River Pollution Control Plant - Class EA Study

Y/Ref.:

O/Ref.: T001971A

Mr. Walgama,

As requested by the Town of Tecumseh, Laurie Boyce (L3 ESP Ltd.), Warren Saint, and I attended Public Information Centre No. 3 hosted by the City of Windsor on Wednesday, October 15, 2025.

Based on our review of the information presented at the PIC, as well as Technical Memo No. 4, we have the following questions / requests for clarifications to assist us all in understanding the City's plan to upgrade the Little River PCP.

Comments on Technical Memorandum 4

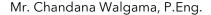
The City of Windsor provided a draft of Section 6 of the Environmental Study Report (ESR) for the expansion to the Little River Pollution Control Plant (LRPCP) to accommodate flows from the City of Windsor and Tecumseh and identified this draft document as Technical Memo No. 4. As the LRPCP has a rated capacity of 72.8 MLD and the current annual average flows are approximated 45 MLD (62% of rated capacity), the need for the initial (Phase 1) expansion of the LRPCP is driven by the overflows and bypasses that the LRPCP has experienced and not by dry weather treatment constraints.

This memo reviews the Section 6 Alternative Design Concepts (dated September 16, 2025) information received from the City of Windsor by email on September 26th.

Section 6.1

This Section identifies that the alternatives were evaluated based on a variety of social, natural environmental, economic, and technical criteria. However, there was no discussion of Natural Environment or Social Environment Impacts for any of the alternatives. Accordingly, it is not possible to determine the relative merits of any of the Alternatives.





In particular, the Conceptual layout of the LRPCP RTB and New Headworks Facilities shown on Figure 6.1 indicates direct intrusion into the naturalized corridor associated with the Little River Drain, yet no information has been provided indicating the impacts or mitigating measures required to minimize impacts to the natural environment.

In addition, there is no information provided to complete a quantifiable assessment of the economic impacts of the Alternatives. The discussions of Capital Costs are presented in relative terms only and only based on the author's opinion. Detailed estimates should be presented so that a proper evaluation of the Alternatives can be made.

Section 6.2.1 Site Alternatives WWFRF Storage and Treatment Alternatives

Alternative No. 1 - Although the report indicates that a review of available lands for In-Line Storage was completed, this review is not documented in Section 6. More information should be presented at the EA stage to understand why sites are limited, if there are potential sites available and where these sites are, and the social, natural, and economic impacts of this alternative. Mapping should be provided to show what sites could potentially have provided in-line storage, and an assessment of the social, natural, and economic environmental impacts for each should be documented.

In-line storage within the collection system may not completely solve the LRPCP high flow issue but may contribute significantly to the solution. Collection system wet weather storage tanks can be cost effective especially if they avoid the requirement to upsize the downstream trunk sewers and may reduce the size of the WWFRF at the LRPCP site.

An evaluation of In-Line Storage vs Off-Line storage should be provided as part of the EA, using the technical, social, natural and economic criteria identified. This should be presented in table form similar to Table 6.3 (Evaluation of Alternative Screening Technologies).

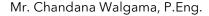
Section 6.2.2

Table 6.1 presents Bypass events only; however, all Overflow events should be considered and tabulated.

In assessing the "pure storage" solution, a tankage depth of 3.5m was selected, which results in a very large footprint for the storage facility. Increasing tank depths would decrease the facility footprint and potentially the capital cost. We request that the City provide the rationale for the selection of the 3.5m tank depth limitation.

Chemically enhanced primary treatment has been selected as the treatment component of the RTB; however, no alternative methods of Primary Treatment have been considered in this memo. Consideration of alternative methods of treatment such as split flow treatment with CEPT, or side stream treatment with Actiflo® or Densadag® have not been documented nor evaluated.





3

3 November 2025

An evaluation of Pure Storage Facility vs RTB should be provided as part of the EA, using the technical, social, natural and economic criteria identified. This should be presented in table form similar to Table 6.3 (Evaluation of Alternative Screening Technologies).

Section 6.2.3 RTB Sizing Alternatives

No comments on this section.

Section 6.2.3 Design Loadings

The selected Service Overflow Rate (SOR) of 20 m/hr (480 m/d) appears to be too high. The document titled "High-Rate Treatment Technologies for Wet Weather Flows, Water Environment Federation, 2012" cites SORs of 60 to 150 m/d for chemically enhanced high-rate clarification systems. Depths of 3.5m appear too shallow as design standards recommend depths of 5-7 m with deeper depths offering more advantages. As the influent is pumped up to the Headworks, deeper depths should be achievable.

Section 6.2.4 Pumping Configuration Alternatives

In general, we have no comments on this Section. We agree it is probably better to pump at the Inlet to the Plant to a new Headworks facility than to construct a deep headworks facility. Given that the inlet sewers are likely deep and potentially below the groundwater table, this assessment reasonable; however, no information was provided as to the depth of the incoming sewers to properly assess this alternative.

Section 6.2.5 Screening Alternatives

CIMA+ agrees with the Assessment that the use of Multi-Rake Screens would be the preferred screening technology; however, we are concerned that installation of the screens upstream of the inlet pumping station could result in higher initial capital costs, as well as higher O&M costs to lift screenings from the deeper installation.

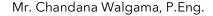
Section 6.2.6 Pumping Well Alternatives

No comments on this section. We agree that a dry-pit wet-well configuration is appropriate for this pump station.

Section 6.2.7 Grit Removal Technologies Alternatives

No comments on this section.





Section 6.3.3 - RTB Operation

Sub-section 1 indicates that "flow from the inlet sewer is conveyed to the new LRPCP Screening Facility and then further conveyed to the wet well of the new influent raw sewage pumping station". The depth of the inlet sewer may require a very deep screening facility, with long conveyance of the screenings and grit to the surface for disposal. Consideration should be given to pumping flows up to screen and grit. Please refer to our comments in Section 6.2.5.

Sub-section 2 implies that the flow is lifted twice. Is this the intent?

Sub-section 3 indicates that flows to the RTB will not be de-gritted. Consideration should be given to de-gritting all flows since grit accumulations in the RTB will be difficult to remove.

Sub-section 4 - Clarification should be provided on how the settled solids and grit are intended to be removed from the RTB and how they will be transported and treated in the LRPCP.

Sub-section 6 indicates that "Treated effluent flows from the effluent chamber to the existing LRPCP outfall to the Little River Drain". There is no indication that the treated effluent from the RTB is disinfected before discharge to the environment. According to MECP Policy 5-5-5, effluent disinfection is "required where the effluent affects swimming and bathing beaches or other areas where there are public health concerns", and that the Local Medical Officer of Health identifies public health concerns. We suggest that the City obtain written confirmation from the local Medical Officer of Health that disinfection of the effluent from the RTB is not required before finalizing the FSR.

Section 6.3.5 Connections to Inlet Sewers

A plan showing the inlet sewer locations and inverts would be beneficial to understand the scope (and cost) of the required sewer relocations.

Section 6.3.6 Conceptual Layout

Figure 6.1 lacks sufficient detail determine the scope and costs of the proposed works. Additional drawings are requested. The size of the Headworks and RTB appear to be considerable and much larger than expected / required. To estimate the cost of the facilities at a conceptual level, additional drawings with details will be required and should be included in this ESR.





Section 6.4, Section 6.5 and Section 6.6 - Phase 2 and Phase 3 Expansion Phases

The details of the Phase 2 Expansion and Phase 3 Expansion were not reviewed in significant detail as Phase 2 is stated to occur sometime after 2035 and Phase 3 sometime after 2055. It is understood that Phase 3 will be on the existing site as the Headworks and RTB; how the future works integrate with the new works should be considered in the current design. A layout of the Headworks and RTB with the conceptual design of the Phase 3 Expansion should be completed in this ESR.

Comments on PIC 3 Presentation Boards

Panel 1: Purpose of this Study

No comments

Panel 2: Key Features of the Class EA process

Note: May have been beneficial to indicate on the panel that a key feature of the Class EA is also consultation with affected parties (public, agencies, stakeholders and First Nations), and that the City has consulted with these key audiences through the process. While we acknowledge that the City has hosted three (3) Public Open Houses, what other consultation activities have and are being undertaken as part of the EA - what agencies and First Nations have been involved?

Panel 3: Problem/Opportunity Statement

- The Problem Opportunity Statement indicates that the objective of the Study is to "arrive at an environmentally responsible and cost-effective solution to address the need for additional capacity at the LRPCP".
- The EA seems to be seeking approval for solving the immediate wet weather flow capacity issues only, and not treatment limitations at the LRPCP at this stage. If addressing the need for additional capacity at the LRPCP is part of the problem statement, why isn't approval for Phase 2 expansion of the LRPCP also being sought as part of this EA?

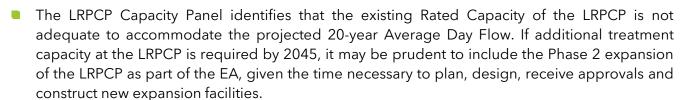
Panel 4: Service Area and LRPCP Capacity

Panel 4 identifies the 2045 (20 Year) and 2065+ (Ultimate) flow projections, as follows:

Flow Projection	2045 (20 Year)	2065+ (Ultimate)
Average Daily Flow	77.2 MLD	104 MLD
Peak Dry Weather Flow	201 MLD	259 MLD
Peak Wet Weather Flow	393 MLD	474 MLD







■ The Ultimate Design Flow is not consistent with Article A iii) of the Wastewater Agreement, which projects an Ultimate Design Capacity of 32 MIGD (145.47 MLD). Could the City provide an explanation why there is a change to the planned Ultimate Capacity at the LRPCP?

Panel 5: Phase 1 and 2 of the Class EA Process

- Phase 2 of the multi-phased solution assumes that no tertiary treatment is required to comply with new effluent criteria. An Assimilative Capacity study is required to confirm if this is the case or not. The assimilative capacity study would establish new effluent criteria based on higher flow rates and if tertiary treatment is required to meet these new effluent criteria. We understand that this Study has not been undertaken.
- Phase 2 of the multi-phased solution may need to occur within 10-15 years, depending upon the pace of growth in Windsor and in Tecumseh. This further supports the need to consider including expansion of the LRPCP as part of the EA.

Panel 6 Phase 3 of the Class EA

No comments

Panel 7 Evaluation Criteria

- The Evaluation Criteria presented meet EA requirements. However, while the evaluation criteria have been provided there are no panels on the existing natural, social and cultural conditions in the study area to help understand the impacts of alternatives. No information has been provided on the existing conditions in and around the study area, at this PIC nor at PIC Nos. 1 and 2.
- Were desktop studies, including natural features studies and Stage 1 archaeological assessment completed as part of the EA, and will this information be presented in the ESR? Will the City provide the Town with copies of these studies?
- From an Economic Impact Assessment, some very subjective information was provided; however, no capital cost or ongoing O&M cost estimates were provided, nor was a Financial Plan identified. No indication has been provided regarding financial expectations from the Town of Tecumseh for this planned expansion.



Mr. Chandana Walgama, P.Eng.

Panels 8-10: Phase 1 Expansion - WWF Management Facility

- Panel 8 list the alternative design concepts for the Phase 1 Expansion, comments on these design concepts are provided in the first section of this letter - Comments on Technical Memorandum 4
- Some assessment of the relative standings for the various components of the Phase 1 design concept is provided on Panel 9, but these assessments are very limited in detail. The next panel immediately jumps to the identification of the Preferred Design Concept for the Phase 1 Works, making it difficult to understand how the Preferred Concept was identified.
- What are the potential natural, social and cultural impacts associated with this recommended solution and what measures will be mitigated to control impacts?

Panels 11-13 Phase 2 Expansion - Upgrade the Existing LRPCP

- Panel 11 identifies the alternatives that were considered in the Phase 2 Expansion, followed by a high-level review of these alternatives with no information to justify the relative scores, making it difficult to understand how the recommended concept was selected and developed.
- What is the planned design capacity of the upgraded LRPCP that was used to develop and assess alternatives?
- What are the potential natural, social and cultural impacts associated with this recommended solution and what measures will be mitigated to control impacts?

Panel 14 Phase 3 Expansion - Expand the LRPCP

Panel 14 identifies the general scope of the Phase 3 Expansion but defers any consideration or assessment of this expansion to "Future Study". We agree that the Phase 3 Expansion is beyond the planning period for this study and has been presented as the long-term vision for meeting future wastewater treatment needs for the City of Windsor and Town of Tecumseh.

Panel 15 - Next Steps

This panel identifies that a Draft ESR will be circulated to "mandatory and discretionary contacts and agencies" for review, then it will be presented to City Council for review and adoption. As a Key Stakeholder in this Project, we would request that this document be presented to Town of Tecumseh Council, with ample time for review and comment before being presented to Windsor Council, so that Windsor Council is aware of any concerns raised by Tecumseh prior to adopting the recommendations of the Study.





Mr. Chandana Walgama, P.Eng.

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We thank you for the opportunity to review the documentation provided to date and look forward to seeing how the Town of Tecumseh's concerns are addressed in the final Environmental Study Report.

Stuart Winchester, P.Eng.

Partner, Senior Director, Infrastructure

SW/rc

Encl.:

c.c.: Mr. Phil Bartnik, P.Eng, Town of Tecumseh

Mr. Warren Saint, P.Eng., CIMA+ Ms. Laurie Boyce, L3 ESP Ltd.



THE CORPORATION OF THE CITY OF WINDSOR

Office of the Commissioner of Infrastructure Services Pollution Control

November 24, 2025

By email: "Stuart Winchester" <stuart.winchester@cima.ca>

Attention: Stuart Winchester, P.Eng. Senior Director, Infrastructure CIMA+ 900–101 Frederick Street, Kitchener, Ontario, N2H 6R2 Dear Mr. Winchester,

Reference: Little River Pollution Control Plant, Municipal Class Environmental Assessment Response to Public Information Centre No. 3 Comments

Thank you for your attendance at the Public Information Centre that was hosted on October 15th, 2025. This letter is provided in response to the questions and requests for clarifications submitted by letter (e-mail) on November 3rd, 2025.

Comments on Technical Memorandum No. 4 - Section 6.1: Introduction

Additional discussion regarding the natural environmental and social impacts has been included in the Draft Environmental Study Report (ESR). Further, the natural environmental impacts associated with this the interconnection of the new LRPCP RTB and Headworks facility to the existing LRPCP as well as proposed mitigation measures are outlined in a separate section of the ESR.

The discussion of capital costs is presented in relative terms based on comparable works and vendor quotations in sufficient detail to assess the economic impacts of the alternatives. A detailed cost estimate for each of the alternative design concepts would require detailed design information and comprehensive cost estimating, which was beyond the scope of this Class Environmental Assessment (Class EA).

Section 6.2.1: Site Alternatives WWFRF Storage and Treatment Alternatives

The City of Windsor conducted a review of lands within the service area and determined that there are no feasible lands for an In-Line Storage Facility. Due to the lack of available land, an evaluation of the social, natural environmental, and economic criteria is not possible to outline in greater detail than that provided in the ESR.

Section 6.2.2: WWFRF Storage and Treatment Alternatives

The ESR will be updated to include the overflow events at the LRPCP in Table 6.1 and the corresponding discussion in Section 6.2.2.

Flow equalization tanks for wastewater applications typically vary in depth from 3.0 to 5.0 m. In the evaluation for the storage solution a tank depth of 3.5 m was selected as it is within the typical range and offers a conservative approach for deciding the approximate footprint. Application of a cast-in-place or prestressed concrete above grade tank with depth of 7.5 to 9 m may be used to minimize the footprint required for storage; however, presents a number of challenges including increased structural complexity, maintenance and safety implications, increased settled solids handling requirements, and higher pumping requirements.

The exact requirements for the LRPCP RTB are to be reviewed and refined during the detailed design phase. At such a time, additional consideration can be given to alternative primary treatment methods (as deemed necessary by the City of Windsor).

An evaluation table comparing the two (2) alternatives, storage and storage-treatment, will be added to the ESR.

Section 6.2.3: Design Loadings

As noted, the exact design criteria and dimensions are to be further reviewed and validated during the detailed design phase. The discussion presented in the ESR is based on the Mario Sonego RTB system that has proven successful operation within the City of Windsor. Information presented in the publication entitled 'Wet Weather Design and Operation in Water Resource Recovery Facilities, Water Environment Federation, 2014' supports the proposed design criteria.

Section 6.2.5: Screening Alternatives

The assessment recognizes that installing Multi-Rake Screens upstream of the inlet pumping station may involve higher initial capital costs and increased O&M requirements due to the deeper installation and lifting of screenings. It will be noted in the ESR report that, during the detailed design phase, further consideration shall be given to the exact layout, including whether screening should be located before or after the raw influent pumping station. A comprehensive cost analysis, including lifecycle costs, will also be completed at that stage to confirm the most cost-effective configuration.

Section 6.3.3: RTB Operation

See note above regarding Section 6.2.5.

The flow is lifted once only from the wet well of the new influent raw sewage pumping station to the influent distribution chamber.

Similarly to the Mario Sonego RTB in operation since 2010, the proposed RTB is to be designed with a flushing system to flush the settled solids which would then drain back to the headworks through the plant inlet sewer. The proposed approach for settled solids flushing and conveyance shall be further reviewed and refined during the detailed design phase to ensure optimal performance and cost-effectiveness.

The requirement for disinfection of the RTB effluent is to be determined through consultation with the MECP as a part of this Class EA. The existing Mario Sonego RTB does not include disinfection. Provision for disinfection of the new RTB effluent will be evaluated and incorporated as appropriate during the detailed design phase.

Page 2 of 5

Reference: Little River Pollution Control Plant, Municipal Class Environmental Assessment Response to Public Information Centre No. 3 Comments

Section 6.3.5: Connections to Inlet Sewers

The exact layout and requirements for the inlet sewer relocation are to be reviewed and refined during the detailed design phase.

Section 6.3.6: Conceptual Layout

The exact layout, capacity, and requirements for the LRPCP RTB and Headworks are to be reviewed and refined during the detailed design phase. The description in Section 6.3 is intended to outline the scope and costs of the proposed works in sufficient detail to advance to Phase 5 of the Class EA Process (Implementation).

Section 6.4, Section 6.5 and Section 6.6 - Phase 2 and Phase 3 Expansion Phases

The exact requirements for future connection between the Phase 1 and Phase 2/3 Expansions are to be reviewed and refined during the detailed design phase. The Class EA study will be revisited every 10 years in accordance with MCEA requirements, allowing for adjustments based on evolving technologies and updated standards. It is not necessary to include detailed layouts for Phase 2 and Phase 3 at this stage, as these future expansions may change significantly over time. The current design provides sufficient scope and cost detail to advance to Phase 5 of the Class EA Process (Implementation), while maintaining flexibility for future integration during subsequent reviews and detailed design phases.

Comments on PIC 3 Presentation Boards

Panel 2: Key Features of the Class EA process

Additional information regarding consultation activities with mandatory and discretionary contacts is included in the ESR.

Panel 3: Problem/Opportunity Statement

The purpose of this Class EA is to determine a solution to address long-term needs for additional capacity at the LRPCP, while also meeting immediate requirements to mitigate wet weather flow overflows, as raised by the MECP. Although we are not seeking approval for the Phase 2 and Phase 3 Expansions of the LRPCP at this time, the resulting ESR outlines the long-term solution and forms a guide for the City of Windsor in collaboration with the Town of Tecumseh.

Discussion on the timing and approval of the Phase 2 Expansion is provided in the following responses.

Panel 4: Service Area and LRPCP Capacity

The 20-Year Average Day Flow (ADF) projection is approximately 6% greater than the existing rated capacity of the LRPCP; therefore, there is a significant allowance for development in the service area within this timeline. It is anticipated that the implementation of Phase 1 upgrades will recover additional ADF capacity at the LRPCP and delay the need for the Phase 2 Expansion beyond the original estimate. It is recommended that results of the Phase 1 Expansion and development in the region are monitored such that the Phase 2 Expansion is planned, approved, and implemented accordingly. Furthermore, The Class EA study will be revisited every 10 years in accordance with MCEA requirements, allowing for adjustments based on evolving technologies and updated standards. As a result, it is not necessary to seek approval for the Phase 2 expansion of the LRPCP at this stage, since future expansions may change significantly over time.

Ultimate Design ADF is not consistent with the Wastewater Agreement as the City of Windsor is anticipating that development in their portion of the service area will be lower than originally anticipated. This projection may continue to be updated in the future as development progresses in the City of Windsor.

Panel 5: Phase 1 and 2 of the Class EA Process

An Assimilative Capacity Study has not been completed as a part of this Class EA Study. It is recommended to be completed during the planning phase for the Phase 2 Expansion.

Panel 7: Evaluation Criteria

The natural environmental, social, and cultural impacts associated with this recommendation as well as proposed mitigation measures are outlined in the ESR. Desktop studies including a Natural Heritage Assessment, Cultural Heritage Assessment, and Stage 1 Archaeological Assessment were completed and are included in the ESR.

Information regarding cost is provided in the ESR. The cost allocated to the Town of Tecumseh will be reviewed and established in accordance with the cost sharing agreement outlined in the Wastewater Servicing Agreement.

Panels 8-10: Phase 1 Expansion - WWF Management Facility

Additional details related to the scoring of alternatives are included in the ESR.

The natural environmental, social, and cultural impacts associated with this recommendation as well as proposed mitigation measures are outlined in the ESR.

Panels 11-13 Phase 2 Expansion - Upgrade the Existing LRPCP

Additional details related to the scoring of alternatives are included in the ESR.

The conceptual design alternatives for the upgraded LRPCP were evaluated based on their ability to accommodate the projected 20-Year design flow projection of 77.2 MLD. That said, it is anticipated that the selected conceptual design would be able to accommodate more than this projected flow, allowing for more flexibility for the City and Town at the time of design and implementation.

The natural environmental, social, and cultural impacts associated with this recommendation as well as proposed mitigation measures are outlined in the ESR.

Panel 15 - Next Steps

The Draft Environmental Study Report (ESR) is anticipated to be circulated to mandatory and discretionary contacts (including the Town of Tecumseh) in early December, with a comment deadline in early January. The ESR will then be updated and presented to Windsor City Council in February 2026.

Following the City Council meeting, the City Clerk will send the Council Report and Final ESR to the Town of Tecumseh Council under Communications. Stantec Consulting Ltd. would then be available to provide a presentation to the Town of Tecumseh Council at their next meeting in February or March 2026.

If you have any questions or require further clarification, please contact the undersigned.

Thank You,

Chandana Walgama P. Eng Pollution Control Project Engineer

c.c.: Phil Bartnik, P.Eng, Town of Tecumseh Chrissy Jung P. Eng, Stantec Consulting



INDIGENOUS CONSULTATION LOG

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
Ministry of Indigenous Affairs and First Nations Economic Reconciliation	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1 st , 2023, and published in the Windsor Star, on September 2 nd , 2023.	No feedback or comments received to date.
Molly Mann molly.mann@ontario.ca Manager, Indigenous Relations Unit	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
Heather Levecque heather.levecque@ontario.ca Director, Indigenous Relations Unit	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
Suite 400, 160 Bloor Street East Toronto, ON M7A 2E6	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
M/A 2E6	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Ministry of Indigenous Affairs and First Nations Economic Reconciliation to solicit comments and input at 3:00 pm on December 3 rd , 2025. The call was automatically forwarded to a messaging machine which prompted the project team to leave a message regarding the project details for Ministry consideration and review. An additional follow up phone call was placed to the Ministry at 9:30 am on December 4 th , 2025; however, the phone call was automatically forwarded to the voice messaging machine and the team did not leave an additional voicemail.	No feedback or comments received to date.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Southern First Nations Secretariat Ms. Jennifer Whiteye	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023.	No feedback or comments received to date.
jenwhiteye@sfns.on.ca Executive Director 22361 Austin Line Bothwell, ON NOL 1Y0	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1 st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5 th , 2024. The Notice of 1 st Open House was published in the Windsor Star on February 10 th , 2024. The 1 st Open House was held on February 28 th , 2024.	No feedback or comments received to date.
	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Southern First Nations Secretariat office to solicit comments and input at 3:10 pm on December 3 rd , 2025. The project team spoke with the director who noted that notifications and consultation with the Southern First Nations Secretariat is not necessary, and they would no longer require to be notified regarding this Class Environmental Assessment.	No feedback or comments received to date.

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
Walpole Island First Nation / Bkejwanong Territory Alicia Blackeagle alicia.blackeagle@wifn.org 117 Tahgahoning Road, R.R. #3 Wallaceburg, ON	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1 st , 2023, and published in the Windsor Star, on September 2 nd , 2023.	No feedback or comments received to date.
	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
N8A 4K9	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
	3 rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Follow Up Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Walpole Island First Nation to solicit comments and input at 10:15 am on December 3 rd , 2025. The project team spoke with Alicia Blackeagle, who indicated that there has been turnover on the consultation team and requested that the four (4) previous notices be forwarded to alicia.blackeagle@wifn.org for further coordination. It was noted that this phone call is being placed ahead of the upcoming notification of Draft ESR, which is expected to be posted in the next few weeks.	Following the phone call an email was sent to Alicia Blackeagle for further coordination. No feedback or comments received to date.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Métis Nation of Ontario Consultations mno@metisnation.org	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1 st , 2023, and published in the Windsor Star, on September 2 nd , 2023.	No feedback or comments received to date.
	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Windsor-Essex Office of the Metis First Nation of Ontario to solicit comments and input at 10:30 am on December 3 rd , 2025. The project team spoke with Mitchell Delosio who indicated that the local office does not typically provide feedback on Municipal Class Environmental Assessments. It was noted that this is completed at the regional level and response would be provided via email if the project is	No feedback or comments received to date.

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
		of interest to the group. It was confirmed that the appropriate email address was used for the project notifications thus far. Further Mitchell indicated that he would reach out internally within the organization to draw attention to this project and confirm that notices have been received. It was noted that this phone call is being placed ahead of the upcoming notification of Draft ESR, which is expected to be posted in the next few weeks.	
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Caldwell First Nation Michelle McCormack consultation@caldwellfirstnation.ca	Notice of Commencement Date: September 1st, 2023 Method: Newspaper, Email and Online Consultation Tool	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023. In addition, the project was submitted online through the online consultation tool: www.consultwithcaldwell.ca	No feedback or comments received to date.
Consultation@caldwellfirstnation.ca Consultation Coordinator Zach Hamm ecd.manager@caldwellfirstnation.ca	1st Open House Date: February 5th, 2024 Method: Newspaper, Email and Online Consultation Tool	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024. In addition, the project was submitted online through the online consultation tool: www.consultwithcaldwell.ca	The City of Windsor received an email from the Caldwell First Nation (CFN) on February 12th, 2024, requesting a one-on-one meeting regarding this Municipal Class Environmental Assessment. This meeting was held on March 4th, 2024, to present information related to Phase 1 of the MCEA.
14 Orange Street Leamington, ON N8H 1P5	2 nd Open House Date: April 4 th , 2025 Method: Newspaper, Email and Online Consultation Tool	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025, and submitted through the online consultation tool https://nationsconnect.ca/ . The 2 nd Open House was held on April 23 rd , 2025.	Note: CFN transitioned to using NationsConnect as their online consultation tool.
	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025, and submitted through the online consultation tool https://nationsconnect.ca/ . The 3 rd Open House was held on October 15 th , 2025.	The City continued to provide notifications and project updates in continuation of the MCEA process and no further responses were received from CFN.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Aamjiwnaang First Nation Cathleen O'Brien	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023.	No feedback or comments received to date.
cobrien@aamjiwnaang.ca Environmental Coordinator Courtney Jackson	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
<u>cjackson@aamjiwnaang.ca</u> Environment Worker	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
978 Tashmoo Avenue Sarnia, ON N7T 7H5	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Aamjiwnaang First Nation to solicit comments and input at 10:45 am on December 3 rd , 2025. The project team spoke with the receptionist who indicated that all consultation activities and notifications should continue to be sent to Courtney Jackson via email at (cjackson@aamjiwnaang.ca) as she would not be available via phone and her voicemail inbox is full.	No feedback or comments received to date.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Delaware Nation (Moravian of the Thames) Consultations	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023.	No feedback or comments received to date.
info@delawarenation.on.ca 14760 School House Line Thamesville ON	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
NOP 2K0	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
	3rd Open House Date: October 15th, 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Delaware First Nation to solicit comments and input at 11:00 am and 2:40 pm on December 3 rd , 2025. The project team spoke with the receptionist who indicated that all consultation notifications should continue to be sent to info@delawarenation.on.ca and responses would be provided by the community as deemed necessary. It was noted that this phone call is being placed ahead of the upcoming notification of Draft ESR, which is expected to be posted in the next few weeks.	No feedback or comments received to date.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
Chippewas of Kettle and Stony Point First Nation Kimberly Bressette	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023.	No feedback or comments received to date.
kimberley.bresette@kettlepoint.org Chief	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
Emily Ferguson consultation@kettlepoint.org Consultation Advisor 6247 Indian Lane, R.R. #2 Forest, ON NON 1J1	2 nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	The City of Windsor received an email from the Chippewas of Kettle and Stony Point First Nation (CKSPFN) represented by the Three Fires Group (TFG) on June 18th, 2025, regarding this Municipal Class Environmental Assessment. This letter noted that they have minimal concerns about this specific project based on community perspectives and priorities; however, they are concerned about the cumulative impacts of all development and land use change in their territory. Further they indicated that they understand this concern extends beyond this individual project but would want proponents to be aware and welcome collaboration or support in our community-led assessments on cumulative impacts. CKSPFN do not foresee any negative impacts with this proposed project but do wish to stay informed of any changes and updates as the project progresses.
	3rd Open House Date: October 15th, 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	The City continued to provide notifications and project updates in continuation of the MCEA process and no further responses were received from CKSPFN.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Chippewas of the Thames First Nation Jacqueline French jfrench@cottfn.com Chief Kelly Riley	Notice of Commencement Date: September 1st, 2023 Method: Newspaper, Email and Online Consultation Tool	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023. In addition, the project was submitted online through the online consultation tool: https://nationsconnect.ca/	The City of Windsor received an email from the Chippewas of the Thames First Nation (COTFN) on September 6th, 2023, regarding this Municipal Class Environmental Assessment. This letter noted that they have minimal concerns with the information presented at this time, look forward to future opportunities to learn more about the project, and would like to continue to provide updates as the planning phase of this project is carried out.
kriley@cottfn.com Director of Treaties, Lands & Environment Fallon Burch	1st Open House Date: February 5th, 2024 Method: Newspaper, Email and Online Consultation Tool	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024, and submitted through the online consultation tool https://nationsconnect.ca/ . The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
fburch@cottfn.com Consultation Coordinator	2nd Open House Date: April 4 th , 2025 Method: Newspaper, Email and Online Consultation Tool	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025, and submitted through the online consultation tool https://nationsconnect.ca/ . The 2 nd Open House was held on April 23 rd , 2025.	Further on June 2nd, 2025, the City received a notification via NationsConnect.ca requesting a one-on-one meeting. This meeting was held on July 8th, 2025, to present information related to Phase 1, 2, and 3 of the MCEA.

Contact Information	Date/Method of Communication	Correspondence Received and/or Project Information Distributed	Consultant Response
320 Chippewa Road Muncey, ON NOL 1Y0	3rd Open House Date: October 15 th , 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025, and submitted through the online consultation tool https://nationsconnect.ca/ . The 3 rd Open House was held on October 15 th , 2025.	The City continued to provide notifications and project updates in continuation of the MCEA process and no further responses were received from COTFN.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD
Oneida Nation of the Thames ONYOTA'A:KA Janelle Cornelius	Notice of Commencement Date: September 1st, 2023 Method: Newspaper and Email	The Notice of Commencement was sent to the contacts listed via Email on September 1st, 2023, and published in the Windsor Star, on September 2nd, 2023.	No feedback or comments received to date.
environment@oneida.on.ca Environmental Coordinator 2212 Elm Avenue	1st Open House Date: February 5th, 2024 Method: Newspaper and Email	The Notice of 1st Open House was emailed to individual Indigenous communities to solicit comments and inputs on February 5th, 2024. The Notice of 1st Open House was published in the Windsor Star on February 10th, 2024. The 1st Open House was held on February 28th, 2024.	No feedback or comments received to date.
Southwold, ON NOL 2G0	2nd Open House Date: April 4 th , 2025 Method: Newspaper and Email	The Notice of 2 nd Open House was emailed to individual Indigenous communities to solicit comments and inputs on April 4 th , 2025. The Notice of 2 nd Open House was published in the Windsor Star on April 5 th , 2025. The 2 nd Open House was held on April 23 rd , 2025.	No feedback or comments received to date.
	3rd Open House Date: October 15th, 2025 Method: Newspaper and Email	The Notice of 3 rd Open House was emailed to individual Indigenous communities to solicit comments and inputs on September 26 th , 2025. The Notice of 3 rd Open House was published in the Windsor Star on September 27 th , 2025. The 3 rd Open House was held on October 15 th , 2025.	No feedback or comments received to date.
	Progress Updates Date: December 3 rd , 2025 Method: Phone	A follow up phone call was placed to the Oneida Nation to solicit comments and input at 11:15 am and 2:45 pm on December 3 rd , 2025. The project team spoke with the receptionist who indicated that all consultation notifications should continue to be sent to environment@oneida.on.ca and responses would be provided as deemed necessary. It was noted that this phone call is being placed ahead of the upcoming notification of Draft ESR, which is expected to be posted in the next few weeks.	Following the phone call an email was sent to Janelle Cornelius for further coordination. No feedback or comments received to date.
	Draft ESR Date: TBD Method: Email	TBD	TBD
	Notice of Completion Date: TBD Method: Email	TBD	TBD



320 Chippewa Road Muncey, ON, NOL 1Y0 Tel: 519-289-5555 Fax: 519-289-2230 info@cottfn.com

Project Name:

Little River Pollution Control Plant Expansion Class EA

FN Consultation ID:

165620295

Consulting Org Contact:

Hannah Rindlisbacher

Consulting Organization:

Stantec

Date Received:

Wednesday, September 6, 2023

September 13, 2023

Dear: Hannah,

We have received information concerning the Little River Pollution Control Plant Expansion Class EA, dated September 6, 2023. The proposed project is located within McKee Treaty (1790) area to which Chippewas of the Thames First Nation (COTTFN) is a signatory. It is also located within the Big Bear Creek Additions to Reserve (ATR) land selection area, as well as COTTFN Traditional Territory.

After reviewing the Little River Pollution Control Plant Expansion Class EA, we have minimal concerns with the information that has been presented to us at this time. We look forward to future opportunities to learn more about the project. Please continue to provide updates as the planning phase of this project is carried out. If there is a Stage 2 Archaeology Assessment, we require notification and the opportunity to actively participate by sending First Nation Field Liaisons on behalf of this First Nation.

We look forward to continuing this open line of communication. To implement meaningful consultation, COTTFN has developed its own protocol - a document and a process that will guide positive working relationships. We would be happy to meet with you to review COTTFN's Consultation Protocol. As per 'Appendix C' of the Wiindmaagewin, we will be sending an invoice that will reflect the filing fee for the submission of your project. The invoice will come from COTTFN's Finance Department.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Original Signed
Fallon Burch
Consultation Coordinator
Chippewa of the Thames First Nation
320 Chippewa Road, Muncey, ON, NOL 1Y0
(519) 289-5555 Ext 251

11/26/25, 9:45 AM NationsConnect



Notice of Public Information Centre No.2



Little River Pollution Control Plant Expansion Class EA
Consultation

Subject: Notice of Public Information Centre No.2

Participants:



Stantec



Chippewas of the Thames First Nation





A HR

Hannah Rindlisbacher



Created: 04-Apr-2025

The City of Windsor is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). The study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional wastewater treatment capacity at the LRPCP.

The City is hosting a Public Information Centre (PIC) to present the alternative design solutions for the Little River Pollution Control Plant Class EA. The PIC will include a self-paced poster presentation and individuals from the City of Windsor and Stantec Consulting Ltd. will be available to answer questions.

The PIC will be held on Wednesday April 23rd, 2025 (3:00 to 6:00 pm) at the WFCU Centre, 8787 McHugh Street, Windsor, ON (Second Floor – Ontario Room). A copy of the Notice of Public Information Centre for the project is attached and additional information regarding the project is available on the City Webpage: Little River Pollution Control Plant Expansion Schedule C Municipal Class Environmental Assessment (citywindsor.ca)

JN FB

(1) 1. Notice of Public Information Centre No. 2.pdf

∧ EL Erna Leclair 66

Created: 02-Jun-2025

Hello,

Thank you for providing the invite to the last two PICs. COTTFN unfortunately could not attend these because of previous commitments. We would like to schedule a meeting to get a project overview and updates regarding the LRPCP expansion project. We were hoping to book in the first or second week of July.

11/26/25, 9:45 AM NationsConnect

Erna

JM HF FB

A HR Hannah Rindlisbacher 66 Created: 03-Jun-2025

Hi Erna,

We are proposing the following dates for a virtual meeting:

- July 8th after 1PM
- July 9th after 2:30PM
- July 11th between 9AM and 3PM
- July 15th before 12PM
- July 16th before 11AM
- July 19th between 9AM and 3PM

Please let us know if any of these dates work for you.

Thanks,

Hannah

JM ELFB

↑ EL Erna Leclair 🔐 Created: 12-Jun-2025

Hi Hannah,

Apologies for the late reply, I was off sick last week and couldn't come in to work to check our wall schedule. I have decided that I will be taking vacation the week of July 14th now to use up some hours. So if July 8, 9 or 11th are still available, one of those days could work for us. Let us know what day/time you prefer and send a meeting invite along. That would be appreciated.

Erna

JM HF FB

A HR Hannah Rindlisbacher Created: 17-Jun-2025

Hi Erna,

Glad you are feeling better! Would July 8th at 1:30pm work for you? If so, can you please provide me with a list of your team's email addresses who will attend the meeting so I can send

11/26/25, 9:45 AM NationsConnect

the invite?

Thank you, Hannah

JM ELFB

^ EL Erna Leclair 66 Created: 18-Jun-2025

Hello Hannah,

Works for me!

It will probably just be me on this call due to the fact that Windsor doesn't pay their Consultation invoices and we have to prioritize our time. My email is emleclair@cottfn.com

Have a good day,

Erna

JM HFFB

■ REPLY

 From:
 Jenna Maidment

 To:
 Rindlisbacher, Hannah

 Cc:
 Zack Hamm; Jung, Chrissy

Subject: Re: Caldwell First Nation Environment and Consultation Department Interest in 165620295: Notice of PIC - Class

EA, Little River Pollution Control Plant

Date: Wednesday, February 28, 2024 8:44:17 AM

You don't often get email from landguardian@caldwellfirstnation.ca. Learn why this is important

Boozhoo Hannah,

No problem. Some dates the following week would be Monday the 4th anytime, Tuesday the 5th after 1:30 pm, or Friday the 8th anytime after 12 pm.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation

14 Orange Street

Leamington | ON | N8H 1P5

Phone: +1 226-936-1093

landguardian@caldwellfirstnation.ca

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On Tue, Feb 27, 2024 at 5:04 PM Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com> wrote:

Hi Jenna,

Unfortunately, we are not available the morning of Thursday February 29th. Please propose a few dates/times that you are available to meet at the end of this week or next week.

Thanks, Hannah

From: Jenna Maidment < landguardian@caldwellfirstnation.ca>

Sent: Tuesday, February 27, 2024 3:51 PM

To: Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u> > **Cc:** Zack Hamm < <u>ecd.manager@caldwellfirstnation.ca</u> >; Jung, Chrissy

< Chrissy.Jung@stantec.com>

Subject: Re: Caldwell First Nation Environment and Consultation Department Interest in

165620295: Notice of PIC - Class EA, Little River Pollution Control Plant

You don't often get email from landguardian@caldwellfirstnation.ca. Learn why this is important

Good afternoon Hannah,

I apologize I have been out of office and did not get to this email before the days off. Does 10 am work on Thursday? If so please send a calendar invite. I look forward to virtually meeting with you.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation
14 Orange Street
Leamington ON N8H 1P5
Phone: +1 226-936-1093
landguardian@caldwellfirstnation.ca
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On Tue, Feb 20, 2024 at 3:36 PM Rindlisbacher, Hannah < <u>Hannah.Rindlisbacher@stantec.com</u> > wrote: Good afternoon Jenna,
We are available next week for a meeting in the afternoon on Monday, Tuesday, or Thursday (February 26 th , 27 th or 29 th).
Please let us know if any of those days work for you and we can coordinate with the City.
Thanks,
Hannah
From: Jenna Maidment < landguardian@caldwellfirstnation.ca > Sent: Friday, February 16, 2024 8:49 AM To: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com > Cc: Zack Hamm < ecd.manager@caldwellfirstnation.ca > ; Jung, Chrissy < Chrissy.Jung@stantec.com > Subject: Re: Caldwell First Nation Environment and Consultation Department Interest in

165620295: Notice of PIC - Class EA, Little River Pollution Control Plant

Boozhoo Hannah,

We have had feedback on that challenge with the Consultation Tool. I will leave it for Zack to provide advice on how to proceed when dealing with that submission issue, but I will share that our department is in the process of transitioning to NationsConnect so this issue won't be carrying on much longer. Once that transition is finalised you and other proponents will be notified of course.

A meeting with the first PIC information would be appreciated potentially in the next two weeks, by the sounds of it we would only need to set a 30 min meeting. Due to staff capacity we are rarely able to attend PICs in person, which makes virtual meetings the best alternative.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation

14 Orange Street

Leamington | ON | N8H 1P5

Phone: +1 226-936-1093

landguardian@caldwellfirstnation.ca

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On Mon, Feb 12, 2024 at 3:40 PM Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com> wrote:

Good afternoon Jenna,

I have submitted the Notice of Public Information Centre No.1 through <u>consultwithcaldwell.ca</u>. However, we run into an issue with your online consultation tool as we are unable to complete project submissions without submitting archaeological assessment reports. For each EA we open a new consultation on your website as soon as the Notice of Commencement is issued, but the archaeological assessment reports are normally completed later in the Class EA process so that ends up delaying the submission of our project for CFN's review. Please let me know if you have any suggestions on how to get around this problem as our submission status is still currently "Incomplete".

Stantec would be happy to arrange a meeting with CFN, Stantec and the City. As this Class EA is currently in Phase 1, this first PIC will just focus on background information and defining the problem. We can forward the slideshow and feedback form that will be provided at the PIC for CFN's review and follow up to see if a meeting is required at this stage.

As part of this Class EA process, three additional PICs will be held following PIC No.1, as listed below:

PIC No. 2 – Alternative Solutions (Spring 2024)

PIC No. 3 and 4 – Alternative Design Concepts (Summer 2024)

Please let us know your thoughts.

Thanks.

Hannah Rindlisbacher E.I.T., LEED Green Associate

Environmental Engineer in Training

Direct: 226-704-3060 Fax: 519-966-2253

Haman.mulispacher@stantec.com
Stantec 100-2555 Ouellette Avenue Windsor ON N8X 1L9
?
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Please consider the environment before printing this email.
From: Jenna Maidment < landguardian@caldwellfirstnation.ca> Sent: Monday, February 12, 2024 12:56 PM To: Rindlisbacher, Hannah < Hannah.Rindlisbacher@stantec.com> Cc: Zack Hamm < ecd.manager@caldwellfirstnation.ca> Subject: Caldwell First Nation Environment and Consultation Department Interest in 165620295: Notice of PIC - Class EA, Little River Pollution Control Plant
Boozhoo Hannah,
I have recently been forwarded your email regarding the Feb 28th PIC on the Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP). As per our Consultation Protocols, please submit all project details to our consultation tool, <u>consultwithcaldwell.ca</u> , if you have not done so already.

Due to the high volume of projects and staff capacity in our department it is unlikely that we will be able to attend PIC #1. Alternatively, CFN Environment and Consultation Department (ECD) requests a meeting with representatives from the City

of Windsor and Stantec Consulting Ltd. to share the presentation materials and answer preliminary questions. Little River is of significance to CFN, therefore ECD will be engaging during the Class EA phases for the LRPCP.

Miigwech,

Jenna Maidment (she/her)

Land Guardian - Environment and Consultation Coordinator

Environment and Consultation Department (ECD)



Caldwell First Nation

14 Orange Street

Leamington | ON | N8H 1P5

Phone: +1 226-936-1093

landguardian@caldwellfirstnation.ca

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18-Jun-2025 14:11 EDT

Little River Pollution Control Plant Expansion Class EA 2

Re:

Thank you for sharing information regarding the proposed project: Little River Pollution Control Plant Expansion Class EA 2. We have minimal concerns about this specific project based on community perspectives and priorities. However, we are concerned about the cumulative impacts of all development and land use change in our territory. While this concern extends beyond this individual project, we want proponents to be aware and welcome collaboration or support in our community-led assessments on cumulative impacts. We do not foresee any negative impacts with this proposed project but do wish to stay informed of any changes and updates as the project progresses.

If future projects may impact CKSPFN reserve lands or traditional territory, we would welcome future notices be shared via NationsConnect. If you have any questions or concerns, please let us know.

Regards,

Chippewas of Kettle and Stony Point Consultation

cc: Jessica Wakefield, Major Projects and IBAs

cc: Jana George, Consultation and Monitoring Coordinator

Appendix E FIELD INVESTIGATIONS

- 1. Natural Heritage Impact Assessment Report
- 2. Stage 1 Archaeological Assessment Report
- 3. Heritage Overview Memo



Project Number: 165620295

NATURAL HERITAGE IMPACT ASSESSMENT REPORT

Little River Pollution Control Plant Environmental Assessment: Natural Heritage Assessment

Final Report

November 21, 2025

Prepared for: City of Windsor

Prepared by: Stantec Consulting Ltd. 100-2555 Ouellette Windsor, ON N8X 1L9

Project Number: 165620295



Limitations and Sign-off

The conclusions in the Report titled Little River Pollution Control Plant: Natural Heritage Assessment are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from the City of Windsor (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by:	Prepared by:				
	Signature	Signature			
	Mitch Ellah, B.Sc. Aquatic Biologist	Brian Miller, Tech. Dipl. Terrestrial Ecologist			
	Printed Name and Title	Printed Name and Title			
Reviewed by:		Reviewed by:			
	Signature	Signature			
	Melissa Straus, M.Sc. Senior Ecologist	Joe Keene, B.Sc., M.Sc. Biologist			
	Printed Name and Title	Printed Name and Title			



İ

Little River Pollution Control Plant Environmental Assessment: Natural Heritage Assessment Limitations and Sign-off November 21, 2025

Approved by:	
	Signature
	Andrew Taylor, B.Sc. Senior Ecologist
	Printed Name and Title



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Abbreviations

ARU Autonomous Recording Unit

AMO Atlas of the Mammals of Ontario

cm Centimetres

DBH Diameter-at-breast-height

DFO Department of Fisheries and Oceans Canada

EA Environmental Assessment

ECCC Environment and Climate Change Canada

ELC Ecological Land Classification

END Endangered

ERCA Essex Region Conservation Authority

ESA Endangered Species Act (Ontario)

Ha Hectares

HDD Horizontal Directional Drill

Km Kilometres

LRPCP Little River Pollution Control Plant

M Metres

MBCA Migratory Birds Convention Act

MECP Ministry of the Environment, Conservation and Parks

MNR Ministry of Natural Resources

MNRF Ministry of Natural Resources and Forestry

NHA Natural Heritage Assessment

NHIC Natural Heritage Information Centre

OBA Ontario Butterfly Atlas

OMA Ontario Moth Atlas

OMAFRA Ontario Ministry of Agriculture, Food and Rural Affairs

OMNR Ontario Ministry of Natural Resources

OMNRF Ontario Ministry of Natural Resources and Foresty

PSW Provincially Significant Wetland

SAR Species at Risk



νi

Little River Pollution Control Plant Environmental Assessment: Natural Heritage Assessment Abbreviations

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SARA Species at Risk Act (Canada)

SARO Species at Risk in Ontario

SC Special Concern

SCA Species Conservation Act

SOCC Species of Conservation Concern

SWH Significant Wildlife Habitat

THR Threatened

VES Visual Encounter Surveys



1 Introduction

The City of Windsor (City) retained Stantec Consulting Ltd. (Stantec), to conduct a Municipal Class Environmental Assessment (EA) for the Little River Pollution Control Plant (LRPCP) Expansion (the Project). The Project is classified as a Schedule C project under the Municipal Class EA process. Schedule C projects require the preparation and filing of an Environmental Study Report for review by the public and relevant agencies.

The LRPCP is located at 9400 Little River Road in the City of Windsor, Ontario, Figure 1, Appendix A. The LRPCP provides secondary level treatment of municipal and industrial wastewater from the eastern portions of the City and from the Municipality of Tecumseh.

Completion of a Natural Heritage Assessment (NHA) is a requirement of the EA to document the natural heritage systems, features and ecological communities that may interact with, and/or be impacted by, the Project. The findings of the NHA are used to inform the Environmental Study Report for the Project.

The NHA was completed for lands within the proposed Site plus adjacent lands within 120 metres (m), collectively known as the Study Area (Figure 1, Appendix A). The NHA was designed and scoped to investigate the ecological communities in the Study Area and the potential Project related impacts on those communities. The NHA included the following components: a desktop review of natural heritage background information and field studies, including the delineation of vegetation communities using Ecological Land Classification (ELC), three-season botanical surveys, breeding bird surveys, bat community surveys, breeding amphibian surveys, and a fish habitat assessment.

The purpose of this report is to present the methods and results of the NHA (terrestrial and aquatic desktop and field studies) conducted in 2025 and to identify habitat for species at risk (SAR), significant wildlife habitat (SWH), including habitat for species of conservation concern (SOCC), and fish habitat in the Study Area. The report also provides a review of potential Project impacts on natural heritage features and species, proposed mitigation to reduce those impacts and anticipated natural heritage related permitting requirements.



2 Methods

2.1 Natural Heritage Background Review

2.1.1 Information Sources

Background documents and information sources were consulted to identify natural heritage designations and features (Provincially Significant Wetlands (PSWs), Areas of Natural and Scientific Interest (ANSIs), watercourses, and woodlands) for the Study Area (Figure 2, Appendix A). The following information sources were reviewed:

- Natural Heritage Information Centre (NHIC) (Ministry of Natural Resources [MNR] 2025a)
- Ontario GeoHub database (MNR 2025b)
- Ontario Ministry of Agriculture, Food and Rural Affairs AgMaps (OMAFRA) (OMAFRA 2025)
- Essex Region Conservation Authority (ERCA) Public Interactive Mapping (ERCA 2025)
- City of Windsor Official Plan East Riverside Planning Area (City of Windsor 2019)
- Little River Pollution Control Plant By-Pass Improvements at Pontiac Pumping Station Schedule "C" Municipal Class Environmental Assessment - Natural Heritage Impact Assessment (Stantec 2022)

Online natural heritage databases, wildlife atlases and SAR mapping were reviewed to identify flora and fauna records for the Study Area. Records of SAR and SOCC, occurrences of amphibians, reptiles, birds, mammals, insects, and fish and fish habitat data were obtained from the following sources:

- Natural Heritage Information Centre (NHIC) (MNR 2025a)
- Ontario GeoHub database (MNR 2025b)
- Species at Risk in Ontario (SARO) List (MECP 2024a)
- Species List on Schedule 1 of the Species at Risk Act (SARA) (Government of Canada 2025)
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Map (DFO 2025)
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature 2019)
- Ontario Breeding Bird Atlas (OBBA) (Cadman et al. 2007)
- Atlas of Mammals of Ontario (AMO) (Dobbyn 1994)
- Ontario Butterfly Atlas (OBA) (OBA 2025a)
- Ontario Moth Atlas (OMA 2025b)
- Ontario Odonata Atlas (MNR 2025c)
- eBird Online Database (Sullivan et al. 2009)
- iNaturalist Online Observations (iNaturalist 2025)



These resources do not provide the exact locations of a species occurrence, with accuracy ranging from 1-km² (i.e., NHIC) to 10-km² (wildlife atlases). As such they are used as an indicator of potential occurrence in the Study Area.

2.1.2 Species at Risk and Species of Conservation Concern

In this context of this NHA, terrestrial species include amphibians, birds, insects, mammals, and plants and aquatic species include fish.

SAR are terrestrial and aquatic species listed as Threatened (THR) or Endangered (END) on the Species at Risk in Ontario (SARO) list (i.e., species that are protected by the *Endangered Species Act, 2007* [ESA]) and aquatic species listed on Schedule 1 of the *Species at Risk Act* (SARA), *2002*.

SOCC are those species that are provincially rare (S1-S3 ranked species), listed as Special Concern (SC) on the SARO list, or terrestrial species listed as SC, THR, or END on Schedule 1 of the SARA. SOCC are reviewed under the context of Significant Wildlife Habitat (SWH), in which only terrestrial species are considered. Fish are not considered SOCC within the SWH framework (OMNR 2000). Fish and fish habitat are assessed separately under the *Fisheries Act* requirements.

Status rankings (S-ranks) for wildlife are based on the number of occurrences in Ontario and have the following meanings (OMNR 2000):

- S1: extremely rare; usually 5 or fewer occurrences in the province
- S2: very rare; usually between 5 and 20 occurrences in the province
- S3: rare to uncommon; usually between 20 and 100 occurrences in the province
- S4: common; usually more than 100 occurrences in the province
- S5: secure; the species is widespread, abundant, and not at risk of extinction or extirpation in the province
- S#B: breeding status rank
- S#N: Non-breeding status rank

2.2 Field Surveys

2.2.1 Ecological Land Classification

Vegetation communities in the Study Area were delineated and classified using the Ecological Land Classification (ELC) System for Southern Ontario (Lee et al. 1998) and updates from the 2008 ELC code catalogue. Vegetation communities were delineated on aerial imagery prior to field work and later verified or refined during field work. Vegetation assessments provided in this report include a general description of each vegetation community based on the dominant species in the canopy / sub-canopy, understory, and ground layers.



The provincial rarity of vegetation community types is based on the list of vegetation communities available on the NHIC database (MNR 2025c).

2.2.2 Botanical Surveys

Botanical inventories were conducted over three seasons: Spring (May 29), summer (August 8), and late summer/fall (September 19) in 2025. The focus of the botanical inventories was inside the Site, but accessible areas within 120m of the Site were also surveyed to obtain a more complete inventory of vascular flora in the immediate area. Flora nomenclature and the provincial status (e.g. S-Rank, SAR, SOCC) for each plant species is based on the vascular plant list available in the NHIC database (MNR 2025c). Status of regionally rare plant species in Essex County is based on the List of the Vascular Plants of Ontario's Carolinian Zone (Oldham 2017).

Identification of potentially sensitive native plant species is based on their assigned coefficient of conservatism value, as determined by Oldham et al. (1995). This C value, ranging from 0 (low) to 10 (high), is based on a species' tolerance of disturbance and fidelity to a specific natural habitat. Species with a C value of 8, 9 or 10 exhibit a high degree of fidelity to a narrow range of habitat parameters.

2.2.3 Breeding Bird Surveys

The breeding bird surveys were completed using autonomous recording units (ARU). The ARU type used for the surveys was the Wildlife Acoustics Song Meter SM4.

ARU's were deployed in the Study Area from May 29 to June 16, 2025. Three (3) bird ARU stations were established in the Study Area (BB-01 to BB-03) (Figure 3, Appendix A), with a focus on areas where Project components overlapped with natural habitat. The ARUs were programmed to record bird songs from 7:30 am until 9:30 am each day of the survey period. The ARUs recorded bird song and call data on memory cards for desktop analysis following the survey period.

Potential habitat for Eastern Meadowlark (*Sturnella magna*) was identified at the Site during field work planning. Therefore, ARU establishment and data analysis followed the provincial protocol for Eastern Meadowlark (Survey Protocol for Eastern Meadowlark in Ontario [MNRF 2013]), comprised of three surveys, 7 to 10 days from one another, from April 21 to July 3, on calm mornings with little to no precipitation and a ten-minute point count anytime from sunrise to four hours after sunrise.

Historical weather data (Time and Date 2025) were reviewed to choose a suitable survey date which met the weather criteria in the survey protocol (MNRF 2013). Three dates were chosen from the recorded data to complete the breeding bird surveys, May 30, June 7, and June 15, 2025. On each of these days, a tenminute recording that started at 7:30 am was analyzed by a qualified biologist from Stantec, and birds heard by song or call were recorded. All recorded birds were assumed to be breeding in the Study Area.

Survey dates, times and weather conditions identified during the ARU analysis period are shown in Table 1.



Table 1 Survey Information for the Breeding Bird ARU Surveys Completed for the Study Area

Survey Date and Time	Air Temperature (°C)	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation (yes/no - current/last 24 hours)	Data Analysis Personnel
May 30, 2025 Start: 07:30 End: 07:40	13	3	70	no/no	Mitch Ellah
June 7, 2025 Start: 07:30 End: 07:40	14	2	0	no/no	Mitch Ellah
June 15, 2025 Start: 07:30 End: 07:40	15	3	0	no/no	Mitch Ellah

2.2.4 Breeding Amphibian Surveys

Three breeding amphibian call surveys were completed to assess amphibian populations within the Study Area. Six survey stations were established in the Study Area (Figure 3, Appendix A) adjacent to candidate habitat, including wetland, watercourse, and open pond habitat. At each station, calling toads and frogs were identified and recorded during a 3-minute period, using protocols outlined in the Marsh Monitoring Program (Bird Studies Canada 2009) as a guide. Call levels were categorized as Levels 1, 2, or 3 as follows:

- Level 1 individuals can be counted, and calls are not simultaneous.
- Level 2 calls were distinguishable with some simultaneous calling.
- Level 3 a full chorus where calls were continuous and overlapping.

The distance and direction from the survey station was estimated and recorded for each individual or chorus detected.

Survey dates, times and weather recorded during breeding amphibian surveys are shown in Table 2.



Table 2 Survey Information for the Breeding Amphibian Surveys Completed for the Study Area

Survey Date and Time	Air Temperature (°C)	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation (yes/no - current/last 24 hours)	Surveyor
April 3, 2025 Start: 20:30 End: 21:10	11	3	30%	no/yes	Brian Miller
May 12, 2025 Start: 21:00 End: 21:50	21	3	35	no/no	Brent Reeves
June 10, 2025 Start: 21:05 End: 21:40	19	3	60	no/no	Brent Reeves

2.2.5 Bat Surveys

2.2.5.1 Bat Maternity Roost Tree Assessments

ELC was used to delineate potential maternity roost habitat within the Site. Based on recent guidance from the Ministry of the Environment, Conservation and Parks (MECP) (MECP, personal communication, July 28, 2025), bat maternity roosts are described as:

- live or dead trees more than 10 cm in diameter at breast height (DBH), as well as those trees exhibiting exfoliating bark, cracks, knots, holes, and cavities, and
- shrubs that are more than 1 m in height.

All ecosites which had tree or shrub communities and met these criteria were considered suitable habitat for bat maternity roost.

2.2.5.2 Bat Community Surveys

Bat community surveys were completed using ARUs. The ARU type used for the surveys was the Wildlife Acoustics Song Meter SM4BAT FS. The ARUs recorded bat echolocation calls and call data were saved on memory cards for desktop analysis following the survey period. ARU surveys took place from May 29 to June 16, 2025 (16 nights of surveys occurred).

Four (4) bat ARU stations (BAT-01 to BAT-04) were established in ecosites identified as potential bat maternity roost habitat (Figure 3, Appendix A). The ARU surveys followed the survey methodology from the MNRF's Bat and Bat Habitat: Guidelines for Wind Power Projects (OMNR 2011) which recommends



ten nights of surveys in good weather (warm/mid nights, air temperature above 10 °C, low winds [< 22 km/h] and no precipitation) in June. Although MNRF recommends ten nights of surveys, all nights recorded were analyzed. Historic weather data confirms that the surveys were undertaken in suitable weather conditions to meet the survey protocol (Time and Date 2025).

ARUs were collected after the survey period and recorded data were analyzed with Wildlife Acoustics Kaleidoscope Pro software. The data processing involves running the software's automatic identification, which screens out noise files and provides a suggested species for each bat call file. For each species of bat identified by the software, a subset of calls was manually reviewed to confirm the species identification.

2.2.6 Reptile Visual Encounter Surveys

Reptile visual encounter surveys were conducted within the Study Area on May 8 and on June 10, 2025, following survey methodology from the Survey Protocol for Ontario's Species at Risk Snakes (OMNRF 2016). Visual encounter surveys (VES) were conducted by slowly walking through suitable habitat while watching for basking and foraging snakes, searching under cover objects such as rocks or logs, and listening for the sound of snakes moving through vegetation or leaves (OMNRF 2016). Watercourses were also visually surveyed for the presence of turtles. Visual encounter surveys were completed under sunny conditions and when air temperature was between 10 and 25 °C or under overcast conditions and when air temperature is between 15 and 30 °C (OMNRF 2016).

2.2.7 Fish Habitat Surveys

A fish habitat assessment was completed on May 7, 2025, for a watercourse in the Study Area, known as the Old Little River (Figure 3, Appendix A). The assessment was completed by walking the watercourse edge through the Study Area and recording qualitative aquatic habitat conditions. The fish habitat assessment generally followed methods outlined in the Ontario Stream Assessment Protocol (Stanfield 2017). The following habitat features were recorded during the fish habitat assessment: channel dimensions and morphology, bank stability, water velocity, in-stream cover, substrate, riparian habitat, fish migratory obstructions and observations of fish.

2.2.8 Incidental Wildlife Observations

While conducting field work at the Site, incidental wildlife observations (species not targeted during that field visit) were recorded. This included observations of individuals, tracks, scat, cavities, or other evidence of a species using habitat at the Site.



3 Results

3.1 Natural Heritage Background Review

3.1.1 Physiography

The Study Area is in the City of Windsor in Essex County and is situated within Ecoregion 7E (Ecodistrict 7E-1) and within the Carolinian Forest region (Rowe 1972). The western boundary of Ecoregion 7E occurs near the community of Amherstburg and extends east to the community of Duart. Middle Island marks the southern limit, and in the north the boundary is near the community of Sombra (Wester et al. 2018).

The Site includes lands where the current LRPCP is located and lands to the east of the LRPCP, within an area used as a tree nursery for the City. The tree nursery grounds are within a larger naturalized City park comprised of natural features (ponds, natural vegetation communities, watercourses, wetlands), and walking trails for City resident use. The surrounding landscape (Study Area) is a combination of these natural areas and residential development. The Site is relatively isolated within the larger context of the City.

The Study Area is in the St. Clair Clay Plains physiographic region and within that region, is in the Essex Clay Plain (Chapman and Putnam 1973). The most common soil type in the Essex Clay Plain is a Brookston Clay Loam (Chapman and Putnam 1973). The Brookston Clay Loam is a heavy-textured, poorly drained soil that consists of a top layer of clay loam overlying a predominantly mottled, blue-grey, gritty clay and clay loam subsoil (Evans and Cameron 1983).

3.1.2 Natural Features and Designated Areas

Natural features and designated areas in the Study Area that are publicly available in background data as Geographic Information System (GIS) layers are shown on Figure 2, Appendix A.

Under the City of Windsor East Riverside Planning Area (Windsor 2019), the Site is mapped as Open Space and as a Regional Park. The Park is named the Little River Corridor which includes natural heritage features, walking trails, wildflower meadows, and other recreational amenities (City of Windsor 2024).

The NHIC maps woodlands and unevaluated wetlands in the Study Area (MNR 2025a). The woodland is situated on either side of a mapped watercourse known as Old Little River.

The ERCA public interactive mapping (ERCA 2025) shows the entire Site is within the ERCA regulated area and identifies the woodlands on the Old Little River corridor as 'existing natural features.'

There are no PSW's, ANSI's, Environmentally Significant Areas, or Significant Valley Lands in the Study Area (ERCA 2025, MNR 2025a).



3.1.3 Species of Conservation Concern

Based on the background review, there are records of 27 terrestrial SOCC in the vicinity of the Study Area, including five (5) vascular plants, nine (9) birds, three (3) reptiles, and ten (10) insects (Table 3).

Barn Swallow (*Hirundo rustica*), climbing prairie rose (*Rosa setigera*), muskingum sedge (*Carex muskingumensis*), grey-headed prairie coneflower (*Ratibida pinnata*), Monarch (*Danaus plexippus*), Zabulon skipper (*Lon zabulon*), Differential Grasshopper (*Melanoplus differentialis*), Black-crowned Nightheron (*Nycticorax nycticorax*), Midland Painted Turtle (*Chrysemys picta marginata*) and Snapping Turtle (*Chelydra serpentina*) have been previously recorded in the Study Area (iNaturalist 2025).

Table 3 Species of Conservation Concern Identified as Potentially Present in the Study Area

Group	Common Name	Scientific Name	Provincial SARO Status	Federal SARA Status	Provincial Conservation Status (S-Rank)
	Barn Swallow	Hirundo rustica	sc	THR	S4B
	Black-crowned Night-heron	Nycticorax nycticorax	-	-	S3B,S2N,S4M
	Common Nighthawk	Chordeiles minor	SC	SC	S4B
	Eastern Wood-Pewee	Contopus virens	SC	SC	S4B
Birds	Forster's Tern	Sterna forsteri	-	-	S3B
	Great Egret	Ardea alba	-	-	S2B,S3M
	Purple Martin	Progne subis	-	-	S3B
	Tufted Titmouse	Baelophus bicolor	-	-	S3B
	Wood Thrush	Hylocichla mustelina	SC	THR	S4B
	Differential Grasshopper	Melanoplus differentialis	-	-	S3
	Elusive Clubtail	Stylurus notatus	-	-	S3
Insects	Inconsolable Underwing Moth	Catocala insolabilis	-	-	S3
	Judith's Underwing Moth	Catocala judith	-	-	S2S3



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Group	Common Name	Scientific Name	Provincial SARO Status	Federal SARA Status	Provincial Conservation Status (S-Rank)
	Monarch	Danaus plexippus	sc	END	S2N,S4B
	Oldwife Underwing Moth	Catocala palaeogama	-	-	S3
	Serene Underwing Moth	Catocala serena	-	-	S3
	Sycamore Tussock Moth	Halysidota harrisii	-	-	S1S2
	Variegated Meadowhawk	Sympetrum corruptum	-	-	S3
	Zabulon Skipper	Lon zabulon	-	-	S1
	Climbing Prairie Rose	Rosa setigera	sc	sc	S2S3
	Grey-headed Prairie Coneflower	Ratibida pinnata	-	-	S3
Plants	Missouri Ironweed	Vernonia missurica	-	-	S3?
	Winged Loosestrife	Lythrum alatum	-	-	S3
	Muskingum Sedge	Carex muskingumensis	-	-	S3
	Midland Painted Turtle	Chrysemys picta marginata	sc	-	S4
Reptiles	Northern Map Turtle	Graptemys geographica	sc	sc	S3
	Snapping Turtle	Chelydra serpentina	SC	sc	S4

Note:

SC: Special Concern THR: Threatened END: Endangered



3.1.4 Species at Risk

Based on the background review, there are records of 22 SAR in the vicinity of the Study Area, including seven (7) birds, one (1) fish, one (1) insect, seven (7) mammals, three (3) plants, and three (3) reptiles.

Kentucky coffee-tree (*Gymnocladus dioicus*), pumpkin ash (*Fraxinus profunda*) and willowleaf aster (*Symphyotrichum praealtum*) have been previously recorded in the Study Area (iNaturalist 2025).

Table 4 Species at Risk Identified as Potentially Present in the Study Area

Species Group	Common Name	Scientific Name	Provincial SARO Status	Federal SARA Status	Provincial Conservation Status(S-Rank)
	Bank Swallow	Riparia riparia	THR	THR	S4B
	Bobolink	Dolichonyx oryzivorus	THR	THR	S4B
	Chimney Swift	Chaetura pelagica	THR	THR	S3B
Birds	Eastern Meadowlark	Sturnella magna	THR	THR	S4B,S3N
	Least Bittern	Ixobrychus exilis	THR	THR	S4B
	Louisiana Waterthrush	Parkesia motacilla	THR	THR	S2B
	Red-headed Woodpecker	Melanerpes erythrocephalus	END	END	S3
Fish	Northern Madtom	Noturus stigmosus	END	END	S1
Insects	Reversed Haploa Moth	Haploa reversa	THR	END	S1
	Eastern Red Bat	Lasiurus borealis	END	-	S4
	Eastern Small- footed Myotis	Myotis leibii	END	-	S2S3
	Hoary Bat	Lasiurus cinereus	END	-	S4
Mammals	Little Brown Myotis	Myotis lucifugus	END	END	S3
	Northern Myotis	Myotis septentrionalis	END	END	S3
	Silver-haired Bat	Lasionycteris noctivaqans	END	-	S4
	Tri-colored Bat	Perimyotis subflavus	END	END	S3?



Species Group	Common Name	Scientific Name	Provincial SARO Status	Federal SARA Status	Provincial Conservation Status(S-Rank)
Plants	Kentucky Coffee- tree	Gymnocladus dioicus	THR	THR	S2
	Pumpkin Ash	Fraxinus profunda	END	-	S1
	Willowleaf Aster	Symphyotrichum praealtum	THR	THR	S2
Reptiles	Blanding's Turtle	Emydoidea blandingii	THR	END	S3
	Butler's Gartersnake	Thamnophis butleri	END	END	S2
	Eastern Foxsnake	Pantherophis vulpinus pop.2	THR	END	S2

Note:

THR: Threatened END: Endangered

3.1.5 Fish Habitat

Two watercourses are present in the Study Area: Little River and Old Little River (MNR 2025b). Little River is located to the west, and Old Little River is located to the east of the current LRPCP, respectively (Figure 3, Appendix A).

Little River is recorded as a municipal drain with a permanent flow regime and is designated a Class E drain (MNR 2025b, OMAFRA 2025). Class E drains are reported to have sensitive fish species present and a spring restricted activity timing window (DFO 2017). Little River is mapped to provide habitat for a fish SAR, the Northern Madtom (*Noturus stigmosus*) (DFO 2025) (Figure 2, Appendix A).

Old Little River is located to the east of the LRPCP. Old Little River is recorded as a municipal drain with an intermittent flow regime and is designated a Class F drain (MNR 2025b, OMAFRA 2025). Class F drains are reported to have an intermittent flow regime and do not support sensitive fish species (DFO 2017). Old Little River is mapped to drain into Little River proper. There are no fish community data available for Old Little River. Aquatic fish SAR are not mapped to occur in Old Little River (DFO 2025).

3.2 Field Surveys

The sections below provide the results of the field surveys. A photographic record of the Site is provided in Appendix B. Wildlife discussed in this report are listed with their respective scientific name. Scientific names for plants discussed in this report are provided in the Plant List (Appendix C).



3.2.1 Ecological Land Classification

The LRPCP Site is occupied by the City of Windsor Municipal tree nursery. Meadow occupies most of this area with plantings of tree saplings grouped together occur in various areas. Woodlands immediately west of the Site are characterized by mature eastern cottonwood, Manitoba maple, and planted silver maple. The shrub layer is characterized by dense Maack's honeysuckle and rough-leaved dogwood. The woodland immediately east of the Site contains a variety of planted trees and a similar shrub layer as the woodlands to the west. The Little River Corridor trail system occupies areas to the west, south and east of the Site.

None of the vegetation communities observed during 2025 surveys are rare in Ontario. A list of each community, as well as a description of the dominant vegetation present in each is provided in Table 5. Locations of each vegetation community are shown on Figure 3, Appendix A.

Table 5 Ecological Land Classification and Vegetation Communities Identified in the Study Area

ELC Type	Community Description			
Anthropogenic Areas				
CGL Greenlands	A large mound of soil within the Site is occupied by broad-leafed weeds such as velvetleaf, great ragweed, and Devil's beggarticks.			
CGL_2 Parkland	Manicured parkland at the north end of the Study Area with occasional planted trees such as Austrian pine, eastern white pine, swamp white oak, thornless honey locust, and Norway spruce. The CGL_2 in the southwest corner of the Study Area is occupied by City of Windsor building infrastructure for parks and recreation and other recreational features.			
CGL_4 Recreational	Hiking / recreational trails and greenspace that is part of the Little River Corridor trail system.			
CVI_1 Transportation	Little River Road and Wyandotte Street East			
CVI_3 Sewage and Water Treatment	Occupied by the existing LRPCP			
CVR_3 Single Family Residential	Single family residences at the north and west edges of Study Area.			



ELC Type	Community Description				
Meadow (ME)					
MEFM1 Dry – Fresh Forb Meadow	This small meadow is dominated by Canada goldenrod, grass-leaved goldenrod, common teal and occasional tall boneset and New England aster. Saplings of black walnut and red ash, as well as staghorn sumac shrubs also occur here.				
MEMM3 Dry – Fresh Mixed Meadow	The Site is primarily occupied by mixed meadow. The dominant species are orchard grass, wild carrot, red clover, Canada thistle, Canada goldenrod, Kentucky bluegrass, tall ryegrass, annual fleabane and bird's-foot trefoil. These meadow species also extend into the tree planting areas.				
MEMM3 / SAGM5 Dry – Fresh Mixed Meadow / Nursery	The same mixed meadow that occupies the Site occurs here. There are also sparse plantings of bur oak, Freeman's maple, and Chinquapin oak.				
Thicket (TH)					
THDM2-1 Sumac Deciduous Shrub Thicket	This small thicket is dominated by dense staghorn sumac shrubs.				
THDM5 Fresh – Moist Deciduous Thicket	This small thicket is dominated by dense rough-leaved dogwood. A few semi-mature trees stand above the shrub thicket such as red ash, eastern cottonwood, and swamp pin oak.				
Plantation (TAG)					
TAGM3 / THDM2 Deciduous Plantation / Dry – Fresh Deciduous Shrub Thicket	This woodland area is dominated by a variety of planted deciduous trees and a dense understory of shrubs under the trees and in the larger openings. Semi-mature trees form an open to semi-open canopy of Manitoba maple, common hackberry, thornless honey locust, eastern cottonwood plane tree, black walnut resh ash, white mulberry and swamp pin oak occur frequently. Planted trees such as sweet-gum, maidenhair tree and red maple occur sporadically. The shrub layer is dominated by dense rough-leaved dogwood and Maack's honeysuckle. Riverbank grape, Amur maple, great ragweed, Manitoba maple, and staghorn sumac occur frequently.				
Tree Nursery					
SAGM5a Nursery	This portion of the tree nursery is dominated by planted thornless honey locust saplings.				
SAGM5b Nursery	This portion of the tree nursery is dominated by planted Kentucky coffee-tree saplings.				
SAGM5c Nursery	This portion of the tree nursery is dominated by densely planted oak tree saplings (e.g., bur oak).				
SAGM5d Nursery	This portion of the tree nursery is dominated by loosely arranged sugar maple saplings.				
SAGM5e Nursery	This portion of the tree nursery is dominated by planted Callery pear saplings.				



ELC Type	Community Description
SAGM5f	This portion of the tree nursery is dominated by planted Freeman's maple and little-
Nursery	leaved linden saplings.
SAGM5g	This portion of the tree nursery is dominated by a narrow row of planted thornless
Nursery	honey locust saplings.
Woodland (WO)	
WODM5a	This woodland is dominated by a semi-open canopy of mature and semi-mature
Fresh – Moist	eastern cottonwood with occasional Freeman's maple. The understory is dominated by dense rough-leaved dogwood, staghorn sumac and saplings of white elm and
Deciduous Woodland	Manitoba maple.
WODM5b	This woodland is dominated by a semi-open canopy of large mature eastern
Fresh – Moist	cottonwood. The understory is dominated by Manitoba maple with sparse black walnut. The understory is dominated by dense Maack's honeysuckle shrubs.
Deciduous Woodland	Manitoba maple and red ash saplings occur occasionally in the understory. The
	ground layer is dominated by the exotic orange daylily.
WODM5c	This woodland is dominated by eastern cottonwood and silver maple in the canopy.
Fresh – Moist	The silver maple may have been planted. The understory is dominated by shrubs of Maack's honeysuckle and rough-leaved dogwood and saplings of red ash and
Deciduous Woodland	European buckthorn.
WODM5d	This woodland is dominated by Manitoba maple with associates of black locust,
Fresh – Moist	common hackberry, eastern cottonwood, and black walnut. The understory is
Deciduous Woodland	dominated by European buckthorn, Maack's honeysuckle and rough-leaved dogwood.
WODM5de	This moist woodland is dominated by silver maple and Manitoba maple with
Fresh – Moist	associates of swamp pin oak and a couple of eastern white pine. The silver maple
Deciduous Woodland	and swamp pin oak may have been planted. The understory is dominated by dense Maack's honeysuckle and rough-leaved dogwood with occasional saplings of red ash and white elm.
Forest (FO)	
FODM11	This hedgerow is dominated by mature, open grown eastern cottonwood and silver
Naturalized Deciduous	maple. The silver maple appears to have been planted. The understory is absent, and
Hedgerow	the ground layer is disturbed, which gives this hedgerow an open appearance.
Marsh (MA)	
MAMM1-12	These marshes at the south end of the Study Area are dominated by common reed
Common Reed	(Phragmites). Canada goldenrod and common teasel also occur occasionally. Tree
Graminoid Mineral	saplings of cottonwood, white elm and silver maple occur sporadically.
Meadow Marsh	
MASM1-12	This shallow marsh occurs along the Old Little River. It is dominated by dense
Common Reed	Phragmites.
Mineral Shallow Marsh	



ELC Type	Community Description				
Shallow Water (SA) and Open Aquatic (OA)					
OA Open Water	Open water associated with Little River.				
SA Shallow Water	Ponds associated with the greenspace to the east.				
SAF_1-3 Duckweed Floating-leaved Shallow Aquatic	This community defines the stretch of Old Little River in the Study Area. The shallow, stagnant water that occurs in this old drain contains a layer of duckweed across the water's surface.				

3.2.2 Botanical Surveys

The following is a floristic summary of the vascular plant species observed during 2025 botanical surveys completed for the Study Area. A detailed list with scientific plant names and species statuses is provided in Appendix C.

- A total of 147 species of vascular plants were recorded. This total includes taxa identified to species, subspecies, and variety level.
- 76 (52%) of the recorded species are native to Ontario, and 71 (48%) are exotic species not native to Ontario.
- 59 native species have a provincial rank of S5, indicating they are common with a secure population in Ontario.
- 12 native species have a provincial rank of S4, indicating they are uncommon, but not rare in the province and populations are secure.
- 5 SOCC plant species with a provincial rank of S2 or S3 were observed during botanical surveys.
 Of these, two species are not naturally occurring and are planted in the City nursery. Details of their locations are as follows and shown on Figure 3, Appendix A:
 - Thornless honey locust (S2) Saplings planted throughout the nursery in SAGM5a and SAGM5g. Also planted in the TAGM3.
 - Kentucky coffee-tree (S2) THR Saplings planted throughout the nursery in SAGM5b.
 - Winged loosestrife (S3) Located along west boundary of the Site.
 - Climbing prairie rose (SC on the ESA and S2S3) Located in the WODM5f and TAGM3.
 - Missouri ironweed (S3?) Located in one location near the west boundary of the Site.
- One plant SAR was observed during botanical surveys: Kentucky coffee-tree (listed as THR on the ESA). The Kentucky coffee-tree does not occur naturally in the Study Area. It is planted in the nursery and is the dominant planted tree in the SAGMb community. The location of the Kentucky coffee-tree is shown on Figure 3, Appendix A.



- 1 native species (Kentucky coffee-tree) is rare in Essex County (Oldham 2017) and is previously described.
- 1 native species (Common Hackberry) has a high coefficient of conservatism value of 8. It occurs outside of the Site within Study Area.

3.2.3 Breeding Bird Surveys

Thirteen (13) bird species were recorded within the Study Area during ARU breeding bird surveys (Table 6). Three birds were observed incidentally from past studies (Stantec 2022) including one potential bird SOCC, the Barn Swallow. A potential Barn Swallow nest was observed on buildings in the current LRPCP.

Table 6 Breeding Bird Survey Results

Common Name	Scientific Name	S-Rank	Ontario ESA Status	SARA Status	Station
			-	-	BB-01
American Robin	Turdus migratorius	S5			BB-02 BB-03
Gray Catbird	Dumetella carolinensis	S5B, S3N	-	-	BB-03
-			-	-	BB-01
Yellow Warbler	Setophaga petechia	S5B			BB-02
					BB-03
			-	-	BB-01
Northern Cardinal	Cardinalis cardinalis	S5			BB-02
					BB-03
Chipping Sparrow	Spizella passerina	S5B, S3N	-	-	BB-01
			-	-	BB-01
Song Sparrow	Melospiza melodia	S5			BB-02
Dad winged			-	-	BB-01
Red-winged Blackbird	Agelaius phoeniceus	S5			BB-02
					BB-03
Common Grackle	Quiscalus quiscula	S5	-	-	BB-01
	Quitouru				BB-03



Common Name	Scientific Name	S-Rank	Ontario ESA Status	SARA Status	Station
American Goldfinch	Spinus tristis	S5	-	-	BB-02 BB-03
Warbling ∀ireo	Vireo gilvus	S5B	-	-	BB-01 BB-02 BB-03
Indigo Bunting	Passerina cyanea	S5B	-	-	BB-01
Savannah Sparrow	Passerculus sandwichensis	S5B,S3N	-	-	BB-01 BB-02
Mallard	Anas platyrhynchos	S5	-	-	BB-02

3.2.4 Breeding Amphibian Surveys

Four species of amphibians were observed during the breeding amphibian call count surveys: American Toad (*Anaxyrus americanus*), Green Frog (*Lithobates clamitans*), Northern Leopard Frog (*Lithobates pipiens*), and American Bullfrog (*Lithobates catesbeianus*). American Toad was the most abundant amphibian documented breeding in the Study Area, with 40 toads recorded breeding in the Old Little River (Stations AMP-01, 02, and 03). Green Frog, Northern Leopard Frog and American Bullfrog were documented in low abundance (from one to two individuals calling per station and survey). There were no amphibians documented breeding in Old Little River at AMP-04.

The amphibians documented breeding in the Study Area are common species with provincial conservation rankings of S4 to S5 (common and secure).

The results of the amphibian call count surveys for each survey station are provided in Table 7.

Table 7 Breeding Amphibian Call Count Survey Results

Station (AMP#)	Survey Round	Species Present (Highest Call Code – Estimated Number of Individuals)				
		American Toad	Green Frog	Northern Leopard Frog	American Bullfrog	
1	1					
	2	2-15				
	3		1-1			



Station (AMP#)	Survey Round	Species Present (Highest Call Code – Estimated Number of Individuals)				
		American Toad	Green Frog	Northern Leopard Frog	American Bullfrog	
	1					
2	2	2-15				
	3					
	1					
3	2	2-10				
	3					
	1					
4	2					
	3					
	1					
5	2					
	3		1-1		1-2	
6	1			1-1		
	2		1-1			
	3		1-1			

Notes:

Call Description and Example

Call level 1 - individuals could be counted and calls were not simultaneous

Call level 2 - calls were distinguishable with some simultaneous calling, but individuals could be counted

Call level 3 - Level 3 indicated a full chorus where calls were continuous and overlapping, and individuals could not be estimated

Example: 1 - 1 - call level 1 and 1 individual was counted

2 - 15 - call level 2 and 15 individuals were counted

3.2.5 Bat Surveys

3.2.5.1 Bat Maternity Roost Assessment

Ecosites described in Table 5 with trees >10 cm DBH or shrubs >1 m tall is considered potential bat SAR maternity roost habitat under the current definition of bat maternity roost habitat (Section 2.2.5.1). Bat SAR habitat is shown on Figure 6, Appendix A and includes thicket, plantation, tree nursery, hedgerow, woodland, and forested areas.



3.2.5.2 Bat Community Surveys

The bat community survey documented five (5) bat species in the Study Area (Table 8). Of those species, four (4) species are SAR that are listed on the SARO list as END: (Little Brown Myotis (*Myotis lucifugus*), Hoary Bat (*Lasiurus cinereus*), Eastern Red Bat (*Lasiurus borealis*), and Silver-haired Bat (*Lasionycteris noctivagans*).

The total number of recordings shown in Table 8 does not represent the total number of individual bats but does depict the relative abundance of the species within the community. Big Brown Bat (*Eptesicus fuscus*) was the most abundant species, followed by Hoary Bat, and Silver-haired Bat. Eastern Red Bat and Little Brown Myotis were the least common species documented.

Bats are potentially using the treed areas in the Site for maternity roosting and foraging over the open meadows in the Site and aquatic areas.

Table 8 Bat Community Survey Results – Total Number of Recorded Calls by Species

Station	Big Brown Bat	Eastern Red Bat	Hoary Bat	Silver-haired Bat	Little Brown Myotis
Bat-01	2207	146	471	219	7
Bat-02	3065	150	526	189	5
Bat-03	3605	128	1422	424	1
Bat-04	1834	152	1304	426	4
Total	10,711	576	3,723	1,258	17

3.2.6 Reptile Visual Encounter Surveys

No snakes were observed during the reptile visual encounter surveys. iNaturalist (2025) shows records of Eastern Gartersnake (*Thamnophis sirtalis sirtalis*) in the Study Area. Although snakes were not observed, the Site provides suitable habitat for snakes, potentially including both Butler's Gartersnake (*Thamnophis butleri*) and Eastern Foxsnake (*Pantherophis vulpinus pop.2*). Both species are known to occur in the Windsor area (MNR 2025a, ORAA 2019). Both species are listed as END under the ESA and receive habitat and individual protection.

A potential reptile hibernaculum was identified in the WODM5c ecosite (Figure 3, Appendix A). This feature was a large pile of rock and logs, partially buried and with crevices and cavities. Brush piles were observed along the Old Little River vegetated corridor, which provide suitable habitat for snakes.

Further discussion of Butler's Gartersnake and Eastern Foxsnake is provided in Section 5.6.2.

One Snapping Turtle and five Painted Turtles were observed in the Old Little River watercourse during field surveys in 2025 (Figure 3, Appendix A). Snapping Turtle and Painted Turtle are SOCC, with Snapping Turtle listed on the ESA as SC and Painted Turtle listed as SC on the SARA.



3.2.7 Fish Habitat Survey

On May 7, 2025, Old Little River water velocity was slow or stagnant and the channel was dominated by flat morphology. Average wetted width of the channel was 10 m, average bankfull width was 11 m and average depth was 0.5m. Water in the Old Little River was turbid, resulting in poor water clarity. Based on observable bank substrates, the watercourse substrate was estimated to be comprised of silt, muck, clay, and detritus. There was abundant in-water cover for fish provided by floating woody debris. The riparian area was comprised of trees, shrubs, and herbaceous plants (see Table 5 - WODM5). Common Carp were observed in the watercourse. Garbage was commonly observed throughout the watercourse.

Old Little River was confirmed to provide fish habitat. However, by late summer (during the fall botanical survey), water level in the watercourse was observed to be low with only isolated pools of water remaining in the channel. The intermittent flow regime reported in the background documents was confirmed.

The Old Little River was observed to by hydrologically connected to the Little River via a culvert at the north end of the watercourse channel. This connection may permit fish to move between the Little River and Old Little River, which would include the potential movement of Northern Madtom (listed END on the ESA) into the Old Little River when conditions are suitable. Further discussion of potential Project related impacts to fish SAR and fish and fish habitat are discussed in Sections 5.6.4 and Section 7.1, respectively.

Little River was not assessed in the field as Phase 1 of the Project does not involve in-water works within or nearby the Little River.

3.2.8 Incidental Wildlife Observations

The following list of wildlife were observed incidentally during field surveys:

Birds

- Mallard (Anas platyrhynchos) observed foraging in Old Little River (June 10, 2025)
- Wood Duck (Aix sponsa) six juveniles observed in Old Little River (August 8, 2025)
- Red-tailed Hawk (Buteo jamaicensis) observed within the Study Area (April 13, 2022)
- Swallow nests
 – observed on buildings within the existing LRPCP (April 13, 2022)

Mammals

- White-tailed Deer (Odocoileus virginianus) observed at the edge of the Site boundary (May 29, 2025)
- Eastern Cottontail (Sylvilagus floridanus) observed within the Site boundary (May 29, 2025)

The bird and mammal species observed incidentally are common species with provincial conservation rankings of S4 to S5 (common and secure).



3.3 Significant Wildlife Habitat

Candidate SWH within the Study Area was determined based on analysis of the field survey results and compared these results to the SWH criteria schedule for the geographical region, titled "Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E" (MNRF 2015). SWH criteria are broken down into four types: seasonal concentration areas of animals, animal movement corridors, rare vegetation communities or specialized habitats, and habitat for SOCC. A determination of the presence of SWH in the Study Area including a habitat suitability assessment for the SOCC identified in the background review is provided in Appendix D. The following types of SHW are potentially present or confirmed in the Study Area:

3.3.1 Seasonal Concentration Areas

Seasonal concentration areas are those sites where large numbers of a species gather at one time of the year, or where several species congregate. Only the best examples of these concentration areas are usually designated as SWH. Two types of seasonal concentration was identified as potentially occurring within the Study Area:

- Bat Maternity Colonies (Candidate) qualifying vegetation ecosites (deciduous and mixed forests) present in the Study Area include the WODM5 units. Presence of qualifying species (Big Brown Bat) was documented near the qualifying ecosites (at BAT-01, BAT-02, BAT-04 stations) which indicate Bat Maternity Colonies may be present.
- Reptile Hibernaculum (Candidate): A candidate reptile hibernaculum was identified in the WODM5 ecosite (Figure 3, Appendix A). This feature may support snake hibernation. Further surveys to determine use are recommended.
- Turtle Wintering Areas (Candidate): Candidate turtle wintering areas are present in the Study
 Area including in the Little River, Old Little River (if sufficient water is present) and ponds on the
 eastern edge of the Study Area.

3.3.2 Habitat for Species of Conservation Concern

There are four types of SOCC: those which are rare, those whose populations are significantly declining, those which have been identified as being at risk from certain common activities and those with relatively large populations in Ontario compared to the remainder of the globe.

Of the 28 SOCC identified in the background review, five (5) species were confirmed to be present in the Study Area through field observation, 16 species were identified as potentially present in the Study Area, and 10 species were identified as absent from the Study Area (Appendix D).

The five species confirmed present in the Study Area during field surveys included: Snapping Turtle, Painted Turtle, climbing prairie rose, Missouri ironweed, and winged loosestrife. Habitat where SOCC were found is considered confirmed SWH, which includes the following areas (Figure 4, Appendix A):



Little River Pollution Control Plant Environmental Assessment: Natural Heritage Assessment 3 Results

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- Habitat for Snapping Turtle and Painted Turtle: A Snapping Turtle and Painted Turtles were observed in the Old Little River (ELC community SAF_1-3).
- Habitat for climbing prairie rose: Climbing prairie rose was observed growing in the TAGM3
 ecosite.
- Habitat for Missouri ironweed and winged loosestrife: these plants were observed growing in the WODM5c ecosite.
- Habitat for winged loosestrife: observed along west boundary of the Site.

Habitat for SOCC based on background records (e.g., iNaturalist 2025) and the results of the habitat suitability assessment (Appendix D) identified the following candidate habitats as potentially present in the Study area for the following species:

- Barn Swallow
- Black-crowned Night Heron
- Eastern Wood-pewee
- Differential Grasshopper
- Elusive Clubtail
- Inconsolable Underwing Moth
- Judith's Underwing Moth
- Monarch
- Oldwife Underwing Moth
- Serene Underwing Moth
- Zabulon Skipper
- Grey-headed prairie coneflower
- Muskingum sedge
- Northern Map Turtle.



4 Project Description

The City of Windsor Sewer and Coastal Flood Protection Master Plan (City of Windsor 2020) and Sandwich South Master Service Plan (City of Windsor 2023) identified the need to upgrade the existing LRPCP. The Sewer and Coastal Flood Protection Master Plan outlined hydraulic capacity issues at the LRPCP and confirmed that, during severe wet weather conditions, the facility is unable to treat all wet weather flow resulting in combined sewer overflows. The Sandwich South Master Service Plan discussed the treatment capacity limitations of the existing LRPCP and recommended increasing the capacity to accommodate the future Sandwich South development. Further to these planning reports, gap analysis for the EA has identified the need to evaluate and include considerations for the hydraulic grade line through the LRPCP (effluent pumping requirements), aging infrastructure and equipment, and energy efficiency.

To mitigate impact of combined sewer overflows and accommodate development in Sandwich South, the City of Windsor has initiated this Schedule 'C' Class EA for the Expansion of the Little River Pollution Control Plant. In general, the study objective is to follow the planning process defined under the Environmental Assessment Act to arrive at an environmentally responsible and cost-effective solution to address the need for additional capacity at the LRPCP. This ESR will identify, evaluate, and report on the preferred design solution and design concepts to address this problem / opportunity statement.

The recommended design solution identified through this Class EA study is comprised of three (3) implementation phases. Phase 1 is recommended to be implemented in the immediate future (within 5 years) to address immediate wet weather flow (WWF) capacity issues at the LRPCP. This Phase would include the implementation of a WWF Management Facility and other necessary upgrades to the sanitary system and LRPCP to accommodate the facility. Phase 2 is recommended to be implemented in the short to medium term (15+ years) to address DWF capacity requirements, HGL concerns, as well as potential poor performance or condition of unit processes at the LRPCP through process upgrades of the existing Plant 1 and 2. Phase 3 is recommended to be implemented in the long term (30+ years) and would meet ultimate treatment capacity requirements at the LRPCP and provide engineering redundancy through the implementation of a Plant 3. The proposed development area boundary for each Phase is shown on Figure 4, Appendix A.

The proposed upgrades will require installation of new infrastructure connections (i.e., inlet sewers and interconnection piping) under the Old Little River Corridor. To avoid open cut installation and minimize environmental impact, these works are proposed to be completed with a horizontal directional drill (HDD). The installation of these pipes are anticipated to occur during the Phase 1 and 3 Expansions.



5 Impact Assessment

The impact assessment is focused on Phase 1 of the Project as this Phase is to occur immediately and, as such, the natural heritage conditions are known at the Site (per this Study) and acquired data are relevant to current applicable legislation and policy. Given that Phases 2 and 3 are anticipated to be initiated in the next 15 to 30 years, these Phases will undergo an NHA when Phases 2 and 3 are being implemented. The proposed development area boundary for each Phase is shown on Figure 5, Appendix A.

5.1 Natural Features and Designated Areas

Phase 1 boundary is located outside of the woodlands and unevaluated wetlands identified on the NHIC (MNR 2025a) and ERCA mapping (ERCA 2025).

Phase 1 is within the ERCA regulated area. Recommendations for permitting to construct within the ERCA regulated area are discussed in Section 7.2.3.

5.2 Vegetation Communities

The Phase 1 boundary overlaps with three ELC ecosites: MEMM3, FODM11, and CGL. The vegetation communities MEMM3, FODM11, and CGL are not rare and do not support the SAR or SOCC plants identified during botanical surveys. However, these ecosites may provide habitat to SAR wildlife (Section 5.6). Detailed descriptions of these ecosites are provided in Table 5. The approximate anticipated permanent loss of these ecosites is as follows:

MEMM3: 0.69 haFODM11: 0.06 ha

CGL: 0.17 ha

Potential indirect impacts to habitats that are adjacent to the Phase 1 boundary include inadvertent vegetation disturbance, soil compaction, sedimentation, contamination from spills, noise, and dust generation. These indirect impacts are associated with the construction phase of the Project and are temporary. Standard mitigation is available to prevent inadvertent encroachment into these areas and provide sediment and erosion control (Section 6).

5.3 Migratory Birds

Vegetation within the Phase 1 boundary may provide habitat for breeding birds (trees, shrubs, and herbaceous ground cover are present, providing suitable nesting habitat). Vegetation removal has the potential to directly impact migratory birds and their nests, which receive protection under the Migratory Bird Convention Act (MBCA). The MBCA is discussed further in Section 6.1.2.



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Cup nest scars were observed during the 2022 field visit (Stantec 2022). The nests were identified as swallow species and were located on buildings associated with LRPCP. These nests potentially belong to Barn Swallow. Species/Project interactions are not anticipated as the Project Components are located outside of the area where the cup nests were observed.

5.4 Significant Wildlife Habitat

5.4.1 Bat Maternity Colonies

Candidate habitat to support bat maternity colonies is potentially present in the Study Area (WODM5 ecosites). There is no candidate SWH for bat maternity colonies in the Phase 1 boundary. No impacts to bat maternity colonies are anticipated. Mitigation to protect bats is provided in Section 6.1.3

5.4.2 Reptile Hibernaculum

A candidate reptile (snake) hibernaculum was identified in the WODM5c. The Phase 1 boundary does not overlap the location of the hibernaculum; therefore, direct impacts are not anticipated. Indirect impacts may occur as snakes may congregate in this area, resulting in Project / snake interactions. It is recommended that additional field surveys occur during a spring season to determine the use of this feature by snakes prior to design and implementation of the Project. Hibernaculum use surveys should follow the methodology in the Survey Protocol for Ontario's Species at Risk Snakes (OMNRF 2016).

5.4.3 Turtle Wintering Areas

Turtle wintering habitat may occur in aquatic features in the Study Area including ponds and the Old Little River (if sufficient water is present) and Little River watercourses. The Project does not involve in-water work and therefore direct impacts to Turtle Wintering Areas are not anticipated. The Project may interact with turtles that come out of their aquatic habitat to move overland in search of nesting sites. Mitigation to protect turtles during Project activities is provided in Section 6.1.3.

5.4.4 Habitat for Species of Conservation Concern

Of the confirmed SOCC (Snapping Turtle, climbing prairie rose, Missouri ironweed, winged loosestrife) in the Study Area, habitat in the Phase 1 boundary is potentially suitable for climbing prairie rose, and Missouri ironweed. As neither of these species were documented inside the Phase 1 boundary, direct impacts to SWH for confirmed SOCC habitat are not anticipated.

Of the candidate SOCC (Section 3.3.2), habitat in the Phase 1 boundary is potentially suitable for Differential Grasshopper, Monarch, Zabulon Skipper, and grey-headed prairie coneflower (all can be found in meadow habitat). Grey-headed prairie coneflower was not observed in the Phase 1 boundary during the botanical surveys and is therefore considered absent and no impacts to this species are anticipated. Differential Grasshopper, Monarch, and Zabulon Skipper. If present, direct impacts and/or habitat loss to SOCC insects may occur in the Phase 1 development. An abundance of meadow habitat



in the Study Area would provide suitable refuge habitat if these species were displaced from habitat within Phase 1.

Mitigation to protect SWH in the Study Area is provided in Section 6.

5.5 Fish and Fish Habitat

Fish habitat was confirmed present in the Old Little River and Little River watercourses. Fish are also assumed to be present in the ponds on the east side of the Study Area. There is no proposed in-water work to facilitate Phase 1. To connect Phase 1 with the current LRPCP, infrastructure, such as transmission pipelines and conduits, will be required to be installed beneath the Old Little River watercourse. At the time of this report, this infrastructure is to be installed by HDD. Because HDD methods do not involve in-water work, and because no planned components of Phase 1 involve in-water work, no impacts to fish or fish habitat are anticipated because of the Project. Mitigation to protect fish and fish habitat during construction is provided in Section 6.1.4. Discussion of fisheries permitting requirements is discussed in Section 7.1.1.

5.6 Species at Risk

A habitat suitability assessment was completed for SAR that were identified in the background review and for those SAR that were confirmed present with field surveys (Appendix E).

The following SAR or their habitat were identified as present or potentially present in the Study Area:

- Bat SAR: Little Brown Myotis, Eastern Red Bat, Hoary Bat, Silver-haired Bat confirmed present with field surveys, potential roosting habitat present based on habitat suitability assessment
- Reptile SAR: Blanding's Turtle, Butler's Gartersnake, Eastern Foxsnake potentially present based on habitat suitability assessment
- Plant SAR: Kentucky Coffee-tree confirmed present with field survey but not protected,
 willowleaf aster and pumpkin ash background records confirmed present in the Study Area
 but not in the Phase 1 boundary
- Fish SAR: Northern Madtom potentially present in the Little River and Old Little River (DFO 2025)

Impacts to these species will be confirmed through processes described in Sections 7.2.1 and 7.2.2.

5.6.1 Bat Species at Risk

Bat SAR (Little Brown Myotis, Eastern Red Bat, Hoary Bat, Silver-haired Bat) were documented as present in the Study Area including at BAT-01 which is adjacent to the Phase 1 boundary. It is unknown if bat SAR are using the vegetation within Phase 1 for roosting. The only ecosite within Phase 1 which meets the habitat description for bat SAR is the FODM11. This ecosite is a treed hedgerow with large cottonwood and silver maple. This hedgerow potentially provides maternity roost habitat. The 0.06 ha of



area proposed for removal is small and, as such, the removal of these trees is not anticipated to impact the bat SAR using the habitat in the Study Area. Larger treed areas in the Study Area such as in the WODM5a, WODM5b, and WODM5c would also provide suitable tree roosting habitat for bat SAR. Candidate foraging habitat (MEMM3) loss is not anticipated to impact bat SAR due to the presence of open habitats elsewhere in the Study Area.

The Phase 1 development and associated vegetation clearing is not anticipated to impact the bat SAR community documented to occur in the Study Area provided mitigation measures outlined in Section 6.1.3 are implemented.

5.6.2 Reptile Species at Risk

There is potential for project interactions with Blanding's Turtle, Butler's Gartersnake, and Eastern Foxsnake at the Site.

5.6.2.1 Blanding's Turtle

Blanding's Turtle inhabits shallow lakes, ponds and wetlands with clean water and mucky bottoms, they hibernate in the soft bottoms of water bodies (MacCulloch 2002). Nesting occurs up to 410 m from any body of water, in loose substrates including sand, organic soil, gravel and cobblestone, nesting may also occur along gravel roadways (COSEWIC 2005).

Blanding's Turtle is known to occur in the Windsor region (WPC 2025). However, the Blanding's Turtle have large home ranges (10 to 60 ha) with a mean home range length between 1000 to 2500 m (COSEWIC 2016). Given the broad range, the species is highly susceptible to threats such as habitat fragmentation and road mortality (COSEWIC 2016). As the habitat in the Little River Corridor is surrounded by urbanization, there is a low likelihood of occurrence in the Study Area but cannot be excluded due to the presence of potentially suitable waterbodies.

Within the Study Area, the Little River and Old Little River has been identified as potential habitat for Blanding's Turtle (Figure 6, Appendix A). Blanding's Turtle may move overland from the Little River through the Site for nesting purposes. Blanding's Turtle may use the Old Little River as a movement corridor into the Site.

There is a low likelihood of impact on this species from the Phase 1 development. Impacts and Project / species interactions can be mitigated with exclusion fencing (Section 6.1.2).

5.6.2.2 Butler's Gartersnake and Eastern Foxsnake

In Windsor, Butler's Gartersnake occur in small parks and abandoned sites in urban areas (COSEWIC 2010). Butler's Gartersnake habitat is described as "open prairie-like areas with dense grasses, including tall-grass prairie, along drainage swales, seasonally dry marshes and other small bodies of water." Butler's Gartersnakes hibernate in crayfish burrows, ant mounds, small mammal burrows, and loose fill (COSEWIC 2010). Butler's Gartersnake have small home range, allowing the species to persist in fragmented habitat (COSEWIC 2010). If the Butler's Gartersnake was historically present along the Little



River corridor, it may utilize any of the natural habitat in the Study Area. Potential habitat for Butler's Gartersnake in the Study Area is shown on Figure 6, Appendix A.

The Eastern Foxsnake (Carolinian population) use sparsely forested, or unforested, early successional vegetation communities including old field, prairie, marsh wetland, coastal marsh, creek floodplain, forest edge, hedgerows, and dune-shoreline during the active season (COSEWIC 2021). Eastern Foxsnake hibernate in groups in deep cracks in the bedrock and in suitable anthropogenic structures (COSEWIC 2021). Home range size of Eastern Foxsnake has been shown to vary, from 2 to 441 hectares with a home range length of 1,186 m (COSEWIC 2021). Eastern Foxsnake can persist in human altered environments and populations are present in Windsor (COSEWIC 2021). The Little River corridor natural area may be large enough to support Eastern Foxsnake and the habitat present in the Study Area is suitable for the species. However, Eastern Foxsnake are threatened by fragmentation of habitat and road mortality (COSEWIC 2021), and, given the Little River corridor natural area is isolated, being surrounded by development and road networks, the presence of the Eastern Foxsnake in the Study Area is low. The lands in the Study Area have been determined to be potential habitat for Eastern Foxsnake, as shown on Figure 6, Appendix A.

Ecosites in the Phase 1 boundary may be suitable for the Butler's Gartersnake and Eastern Foxsnake, but likely limited to foraging habitat since these vegetation communities are regenerating tree nursery lands that would have been historically disturbed through land management.

A potential reptile (snake) hibernaculum was identified in the WODM5c ecosite (Figure 6, Appendix A). Further investigation is recommended to determine the use of this feature by Butler's Gartersnake and/or Eastern Foxsnake.

Removal of suitable habitat for Butler's Gartersnake and Eastern Foxsnake may be in contravention of the ESA (Section 7.2.1). Impact mitigation and permitting considerations for Butler's Gartersnake and Eastern Foxsnake are provided in Section 6.1.3 and Section 7.2.1.

5.6.3 Plant Species at Risk

5.6.3.1 Kentucky Coffee-tree

Kentucky coffee-tree does not occur naturally in the Study Area. It is planted in the nursery and is the dominant planted tree in the SAGMb community. The location of the Kentucky coffee-tree is shown on Figure 3, Appendix A.

Nursery trees can be removed without contravention of the ESA, under Section 12 of O. Reg 242/08 - "Commercial cultivation of vascular plants, etc." It is recommended that the trees be transplanted to a suitable location prior to removal.



5.6.3.2 Willowleaf Aster

Willowleaf aster is found in openings of oak savannahs, along railways, roadsides and abandoned farm fields (MECP 2021). Populations of willowleaf aster are known to occur in Windsor (MECP 2021).

Willowleaf aster is reported to occur in the Study Area (iNaturalist 2025). These observations are outside of the Phase 1 boundary, and no Project related impacts to the species are anticipated. Willowleaf aster was not documented inside the Phase 1 boundary during the 2025 botanical surveys.

5.6.3.3 Pumpkin Ash

Pumpkin ash grows in swamps, wet floodplain forests and, occasionally, in coastal swamps (MECP 2024b).

Pumpkin ash is reported to occur in the Study Area (iNaturalist 2025). These observations are outside of the Phase 1 boundary, and no Project related impacts to the species are anticipated. Pumpkin ash was not documented inside the Phase 1 boundary during the 2025 botanical surveys.

5.6.4 Fish Species at Risk

5.6.4.1 Northern Madtom

Northern Madtom is mapped to occur in Little River within the Study Area (DFO 2025) and may also occur in the Old Little River (Figure 6, Appendix A).

This species is sensitive to degradation of habitat. Direct Project/species interaction is not anticipated; however, the Project should consider this species when undergoing approvals from regulatory agencies (see Section 7).



6 Mitigation Measures and Recommendations

6.1 Standard Mitigation Measures

The following standard mitigation measures and best practices are recommended to reduce potential impacts to natural heritage features during construction:

- Delineate the work areas with tree protection fencing prior to construction to reduce impacts to adjacent natural features.
- Wash, refuel and/or service equipment a minimum of 30 m from watercourses and wetlands to reduce the risk of deleterious substances from entering the features. Check machinery regularly for fluid leaks.
- Develop a clean equipment protocol to prevent the spread of highly invasive species such as *Phragmites* during construction.
- Develop a Spill Management Plan and have it on site for implementation in the event of an accidental spill. Keep an emergency spill kit on site.

6.1.1 Erosion and Sediment Control

An erosion and sediment control (ESC) plan should be developed and employed during construction to reduce the risk of erosion and the entry of sediment into watercourses and wetlands. Mitigation included in the plan should include the following measures:

- Implement project-specific temporary ESC measures per prior to starting work (e.g., silt fence and/or sediment logs).
- Keep additional ESC materials available on site to provide a contingency supply in the event of an emergency.
- Monitor and maintain erosion and sediment controls, as required. Controls are to be removed only after the soils of the construction area have stabilized and vegetation cover has reestablished.
- Stabilize materials requiring stockpiling (fill, topsoil) and keep a safe distance (> 30 m) from watercourses and wetlands.
- Stabilize and re-vegetate areas of disturbed/exposed soil, as soon as practicable with native seed mixes and woody vegetation.

6.1.2 Protection of Migratory Birds

The federal *Migratory Birds Convention Act* (MBCA) provides legal protection of migratory birds and their nests in Canada. Construction timing must consider restrictions imposed by the MBCA. The Migratory Birds Regulation, 2022, further defines when nests of migratory bird species are protected, with special provisions (e.g. year-round protection) in place for bird species that reuse their nests (e.g., Pileated



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Woodpecker, Great Blue Heron). There was no breeding birds documented in the Study Areas that receive year-round nest protection by the MBR. To avoid damaging or disturbing bird nests and contravening the MBCA, the timing of any vegetation clearing should occur outside of the primary nesting period (i.e., the period when the percent of total nesting species is greater than 10% based on Environment Canada's Nesting Calendars and the period for which due diligence mitigation measures are generally recommended).

The primary nesting period identified for southern Ontario is April 1 - August 31, although nesting also infrequently occurs outside of this period (ECCC Canada 2014). Vegetation removal during this core nesting period is not recommended; however, if required, a nest survey may be carried out by a qualified person in simple habitats such as an urban park, a vacant lot with few possible nest sites, a previously cleared area, or a structure (ECCC 2019). If a migratory bird nest is located within the work area at any time, a no-disturbance buffer should be delineated. This buffer should be maintained for the entire duration of the nest activity, which should be determined using periodic checks by the avian biologist. The radius of the buffer varies from 5 m - 60 m depending on the sensitivity of the nesting species. Work should not resume within the nest buffer until the nest is confirmed to be no longer active.

Spoil (soil) piles onsite should be managed in a way to prevent Bank Swallow from nesting. Follow the Best Management Practices for the Protection, Creation and Maintenance of Bank Swallow Habitat in Ontario (OMNRF 2017).

6.1.3 Protection of Wildlife

The following mitigation measures are recommended to avoid impacts to wildlife during construction and should be implemented in accordance with requirements for SAR (see Section 7.2.2):

- To reduce risk of harm to individual bats, removal of suitable bat maternity roost trees and shrubs (trees greater than 10 cm DBH or shrubs greater than 1 m height) should not occur during the active roosting season (between April 1 and November 30).
- A visual search of the work area should be conducted before work commences each day, particularly for the period when most wildlife is active (April 1 to October 31). Visual inspections should locate and avoid snakes and turtles. Visual searches should include inspection of machinery and equipment left in the work area overnight or left idle for one hour prior to starting equipment, as snakes may use them for thermoregulation.
- If wildlife is encountered, work at that location will stop, and the animal(s) should be permitted reasonable time to leave the work area on their own.



- Contractors should be made aware of the potential to encounter reptile SAR and SOCC on the Site including the Butler's Gartersnake, Eastern Foxsnake, Blanding's Turtle, Snapping Turtle, and Midland Painted Turtle. Contractors should receive an education and awareness training of the potential presence of these species. The education and awareness training should provide information on the species, what to do in an encounter, and who to contact if the animal needs to be moved or if the animal has been injured. A trained biologist should be called in the event for the need to move an animal and can only be done under appropriate permitting (e.g., Wildlife Scientific Collector's Authorization).
- Fencing used for ESC can also serve as wildlife exclusionary fencing. Sediment fencing should be installed along the limits of the work zone prior to construction to reduce the potential for snakes and turtles to enter the construction area. The fencing should be installed to the specifications outlined in the Best Practices Technical Note Reptile and Amphibian Exclusion Fencing (MECP 2025b). In particular, the fencing needs to meet the installation criteria for Eastern Foxsnake, which is provided in the MECP (2025b) document (a fence that excludes Eastern Foxsnake will also exclude Butler's Gartersnake and turtles). The exclusion fencing is to be installed prior to May 15 to avoid turtle nesting in the work area and maintained for the duration of the snake and turtle SAR active season (late March to late October) and checked daily to identify any repairs that may be needed. Damaged fencing should be repaired immediately.
- If a nesting turtle is encountered during construction at any time, the turtle should not be
 disturbed. Work in the area must stop until the turtle has completed nesting and/or vacated the
 area. The nest site should be noted, and a biologist or other qualified professional should be
 contacted for direction. Turtle nests are protected under the Fish and Wildlife Conservation Act;
 therefore, and nests should not be disturbed.
- Sediment and erosion control measures, such as fencing or blankets, utilized on the site during construction will avoid products with plastic mesh due to risk of entanglement of snakes or other wildlife.
- Observations of SAR (Butler's Gartersnake, Eastern Foxsnake, Blanding's Turtle) should be reported to the Ministry of Environment, Conservation and Parks (MECP) within 48 hours. SAR should not be handled, harassed, or moved in any way, unless they are in immediate danger.
- If injured or deceased reptile SAR are found, the specimen must be placed in a non-airtight container maintained at an appropriate temperature, and both the MECP and a certified wildlife rehabilitation facility will be contacted immediately.

6.1.4 Protection of Fish and Fish Habitat

Although no in-water work is proposed for Phase 1 of the Project, construction should follow the DFO Measures to Protect Fish and Fish Habitat (DFO 2025) while planning works associated with the HDD of the Old Little River. The following applicable measures to HDD are recommended by the DFO to protect fish and fish habitat while working within 30 m of a watercourse:



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- Maintain riparian vegetation do not clear riparian vegetation adjacent to the Old Little River watercourse
- Use sediment and erosion control
 - Erect and maintain sediment and erosion control fencing around the site to reduce potential runoff and sedimentation into the Old Little River during construction
 - Avoid introducing sediment into the watercourse do not pump sediment-laden water from
 the work area into the Old Little River. Any onsite water pumping should be discharged into a
 sediment bag first before release into the natural environment or Old Little River
- Prevent entry of deleterious substances in water
 - Avoid depositing any deleterious substances in the watercourse
 - Develop a spill response plan to be implemented in the event of a spill of a deleterious substance
 - Keep an emergency spill kit on site
 - Stop work and contain deleterious substances to prevent dispersal
 - Reporting any spills of a deleterious substance to the MECP Spills Action Centre and the DFO whether near or directly into the watercourse
 - Clean up and appropriately dispose of the deleterious substances
 - Maintaining machinery onsite in a clean condition and free from fluid leaks
 - Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering a watercourse
 - Disposing of waste materials appropriately and away from the watercourse



7 Permitting Considerations

7.1 Federal Context

7.1.1 Fisheries Act

The *Fisheries Act* is a federal statute that regulates and protects fisheries and fish habitat in Canada, including the management, conservation, and protection of fish and the waters that support them. The *Fisheries Act* prohibits the harmful alteration, disruption, or destruction of fish habitat, unless authorized by the Minister and it prohibits the deposit of deleterious substances into water where fish are present.

A review of the Project under the *Fisheries Act* is not required because the installation of infrastructure under the Old Little River will be completed by HDD and there are no in-water works proposed for the Phase 1 development. If the Project will involve in-water work (i.e., if the infrastructure installation changes methods from HDD to open-cut across Old Little River, the Project will need to be reviewed by the DFO through the submission of a Request for Review (RfR) form. If an RfR is submitted to the DFO for the Project, the potential presence of Northern Madtom should be considered for the Old Little River. If a Project-related spill of a deleterious substance occurs into the Old Little River, the DFO must be informed of the incident as it is a legal obligation to do so under the *Fisheries Act*.

7.1.2 Species at Risk Act

The federal *Species at Risk Act*, 2002 (SARA) protects wildlife species listed as extirpated, endangered, or threatened under Schedule 1 of the *Act* from harm, harassment, killing or capture or collection. SARA also prohibits the damage or destruction of the residence of listed species, and the destruction of their critical habitat. SARA protections also extend to migratory birds, some SAR on non-federal land and to aquatic SAR. Permits for prohibited activities may be issued under Section 73 of the SARA.

The Project is not anticipated to require permitting under the SARA. No migratory bird SAR were identified and no interaction with the aquatic habitat (Little River or Old Little River) is proposed for Project activities. If the Project will require in-water work in the Little River or Old Little River, the DFO will need to review the proposed works through the submission of an RfR with consideration of the Northern Madtom (Section 7.1.1). If a Project-related spill of a deleterious substance occurs into the Old Little River, the DFO must be informed of the incident as it may be considered a contravention of the SARA.

7.2 Provincial Context

7.2.1 Endangered Species Act

The provincial ESA prohibits the killing, harming, capturing or taking of a living member of a species listed as threatened, endangered or extirpated by the Species at Risk in Ontario (SARO) list (Ontario Regulation 230/08) (Section 9), or the damage to habitat of similarly designated species (Section 10). A



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permit may be issued under Section 17(2) of the ESA or eligible activities can be registered under Ontario Regulation 242/08 to authorize work that is otherwise prohibited.

The Phase 1 development may result in the damage of habitat for Butler's Gartersnake, Eastern Foxsnake, and bat SAR (Little Brown Myotis, Eastern Red Bat, Hoary Bat, Silver-haired Bat).

The bat SAR habitat proposed for removal is a small area of potential maternity roost habitat (trees in the FODM11) and small area of potential foraging habitat (meadow in the MEMM3). This loss of this habitat is not anticipated to impact the bat community as both areas are small and there is abundant similar habitat in the surrounding landscape. Bat SAR were confirmed to be present in the Study Area, and as such, consultation with the MECP is recommended.

Butler's Gartersnake and Eastern Foxsnake were not observed during field surveys, however, the targeted surveys completed for snakes (i.e., VES) may not be sufficient to determine species presence or absence.

A potential snake hibernaculum was identified outside, but nearby, the Phase 1 boundary (Figure 6, Appendix A). It is recommended that additional field surveys occur in the spring of 2026 to determine the use of this feature by snake SAR. Hibernaculum use surveys should follow the methodology in the Survey Protocol for Ontario's Species at Risk Snakes (OMNRF 2016).

It is recommended that Butler's Gartersnake and Eastern Foxsnake are included in the MECP consultation to evaluate the potential Project impacts on these species. The MECP may determine presence / absence surveys are required prior to construction.

Blanding's Turtle habitat was determined to be potentially present in the Study Area. Impacts to the Blanding's Turtle are not anticipated with implementation of mitigation; however, Blanding's Turtle is recommended to be included in the MECP consultation.

Under Section 12 of the ESA, Section 9(1)(a) and (b) that prohibits the harm or killing of a SAR does not apply to vascular plants if the plant is under commercial cultivation, provided it was not taken from the wild, cultivated in the wild, or done in a manner likely to spread disease. As the documented Kentucky coffee-trees are part of a commercial nursery, these are not protected under the ESA.

The ESA is currently under transition, whereby the ESA is planned to be repealed and replaced with a new Act, the *Species Conservation Act* (SCA).

7.2.2 Species Conservation Act, 2025

The *Protect Ontario by Unleashing our Economy Act*, 2025 (Bill 5) received Royal Assent on June 5, 2025, and as a result, the ESA was amended and will be in effect until such time as the *Species Conservation Act* (SCA) is proclaimed. Draft legislative and regulatory amendments to enable the SCA were posted on September 26, 2025, and proposes to use a "registration-first approach" where specific exemption conditions are met. Once in effect, the SCA would replace the ESA.



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The current recommendation for consultation with MECP under the ESA (when impacting SAR or SAR habitat) may be replaced by a registration or streamlined notice system. The final regulations for the SCA are pending.

7.2.3 Conservation Authorities Act

Development within the Essex Region Conservation Authority (ERCA) regulation limit is subject to the policies outlined in Ontario Regulation 41/24, under the *Conservation Authorities Act*. The ERCA regulated area overlaps with the entire Site including over the Phase 1 boundary. Prior to any new development in regulated areas, including the placement or removal of fill material, grading activities, and the erection of any buildings or structures, and/or the alteration of regulated features, written approval (i.e., a Permit or a Letter of Permission) will be required from the respective conservation authority. Consultation with ERCA is recommended to determine permitting requirements for the Project.



8 Summary

Results of the background records review and field investigations conducted within the Study Area in 2025 determined the following natural heritage features are present within the Study Area:

Natural Features

- Little River Corridor Regional Park located inside the Phase 1 boundary
- Mapped Woodlands and unevaluated wetlands located outside of the Phase 1 boundary
- ERCA regulated area overlaps the Site located inside the Phase 1 boundary
- The Little River and Old Little River watercourses located outside of the Phase 1 boundary

The natural heritage features support SOCC, SAR and provide SWH including:

Species of Conservation Concern

- Snapping Turtle and Painted Turtle observed in the Old Little River may nest in uplands in the Site mitigation to protect turtle SOCC provided
- Climbing prairie rose located outside of the Phase 1 boundary no impacts anticipated
- Missouri ironweed located outside of the Phase 1 boundary no impacts anticipated
- Winged loosestrife located outside of the Phase 1 boundary no impacts anticipated

Significant Wildlife Habitat

- Bat Maternity Colonies candidate habitat for bat maternity colonies was identified for the woodland habitats in the Study Area. Woodlands are located outside of the Phase 1 boundary – no impacts anticipated
- Reptile Hibernaculum a potential reptile hibernaculum feature was identified in the WODM5c
 ecosite, which is outside of, but nearby the Phase 1 boundary additional surveys are
 recommended to determine use by snakes in the spring of 2026 following a provincially published
 survey protocol
- Turtle Wintering Areas candidate habitat in the Old Little River, Little River and ponds in the Study Area – located outside of the Phase 1 boundary – no impacts anticipated
- Habitat for SOCC Habitat for Snapping Turtle, climbing prairie rose, Missouri ironweed, and winged loosestrife - located outside of the Phase 1 boundary – no impacts anticipated

Species at Risk

- Little Brown Myotis species confirmed present candidate habitat may be impacted
- Eastern Red Bat species confirmed present candidate habitat may be impacted
- Hoary Bat species confirmed present candidate habitat may be impacted



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- Silver-haired Bat species confirmed present candidate habitat may be impacted
- Blanding's Turtle potentially present habitat impacts not anticipated
- Butler's Gartersnake potentially present habitat may be impacted potential snake hibernaculum nearby the Phase 1 boundary – hibernaculum surveys recommended, additional species presence / absence may be required
- Eastern Foxsnake potentially present habitat may be impacted potential snake hibernaculum nearby the Phase 1 boundary – hibernaculum surveys recommended, additional species presence / absence may be required
- Kentucky coffee-tree confirmed present planted nursery trees not protected but located outside of Phase 1 lands– no impacts anticipated
- Willowleaf aster absent from the Site, may occur in the Study Area no impacts anticipated
- Pumpkin Ash absent from the Site, may occur in the Study Area no impacts anticipated

Phase 1 of the Project overlaps with regenerating meadow habitat, a weedy spoil pile, and a treed hedgerow within the tree nursery grounds. Project Components will result in loss of an anticipated 0.69 ha of meadow, 0.06 ha of treed hedgerow and 0.17 ha of weedy spoil pile (CGL). These ecosites may be suitable habitat for the bat SAR and snake SAR identified in this NHA. To be comprehensive in the SAR review with the MECP, the IGF should include all the SAR species identified in this NHA. Impacts to SAR are considered low for Phase 1 of the Project.

Authorization considerations identified for the Project include:

- Fisheries Act, 1985 The Project should be reviewed by the DFO if in-water works are proposed.
 HDD under Old Little River does not require a review by the DFO, assuming the Project can follow the Measures to Protect Fish and Fish Habitat during the HDD activity and throughout the Project
- Endangered Species Act, 2007 Design plans will be assessed to identify potential impacts to SAR and their habitats and determine authorization requirements due to the potential presence of:
 - Bat SAR (Little Brown Myotis, Eastern Red Bat, Hoary Bat, Silver-haired Bat)
 - Reptile SAR (Butler's Gartersnake, Blanding's Turtle, Eastern Foxsnake)
 - Consultation with MECP is recommended which should include the SAR identified in this NHA as present or potentially present in the Study Area
- Conservation Authorities Act, 1990 Consultation with ERCA is recommended to determine permitting requirements for the Project

It is recommended that when Phase 2 and Phase 3 of the Project are being implemented a review is undertaken for the requirement for an updated NHA.



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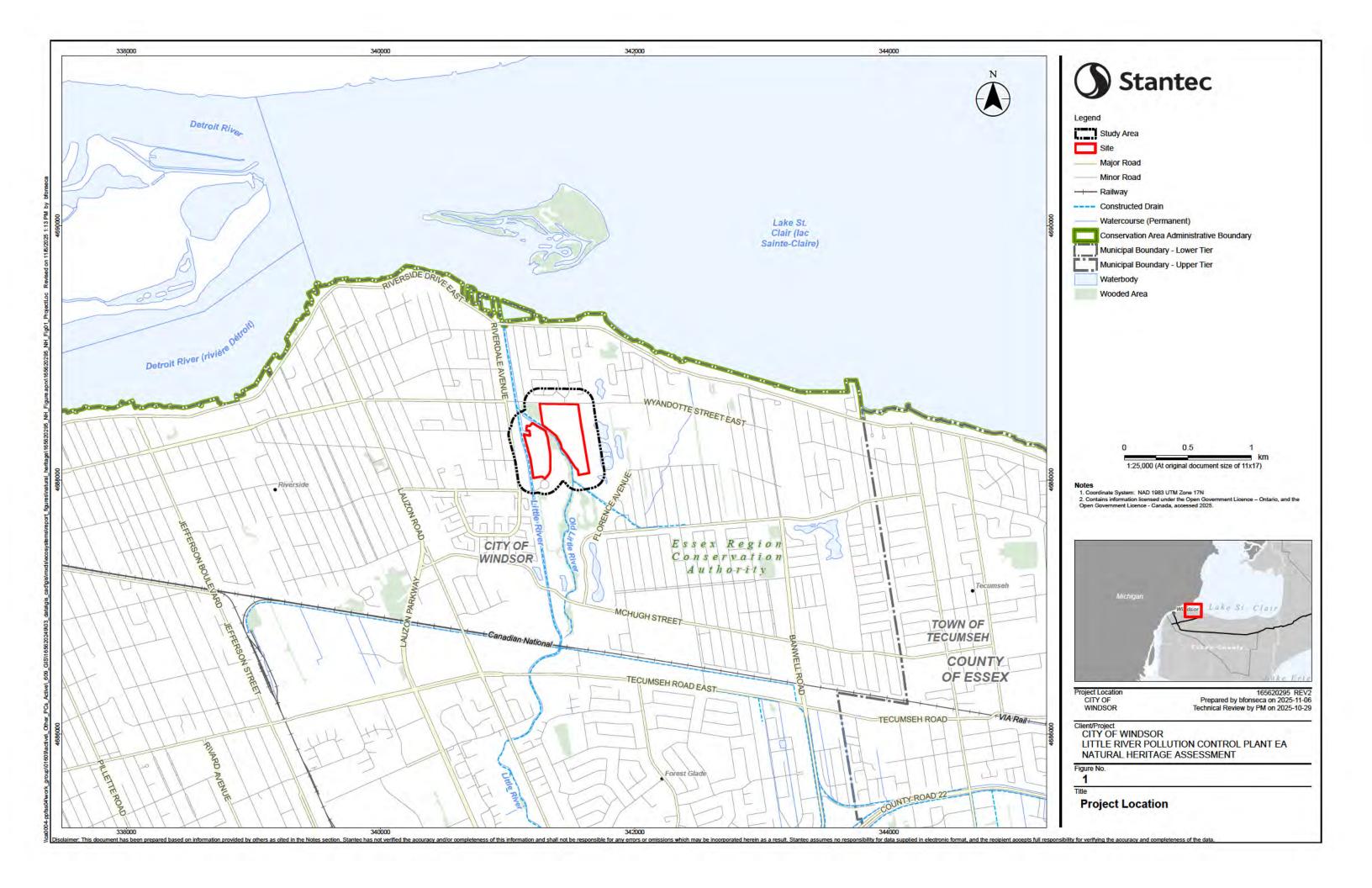


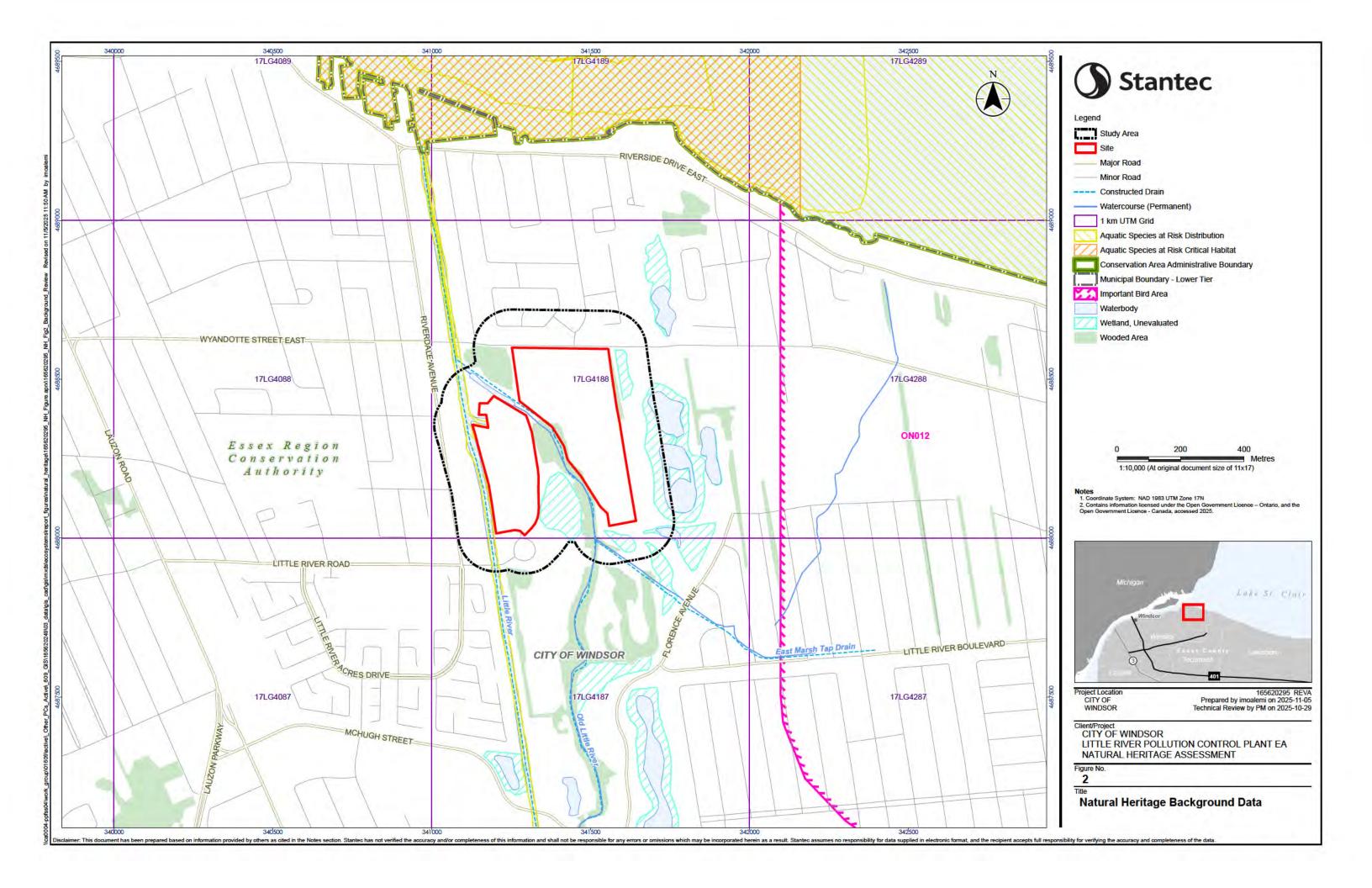
Appendices

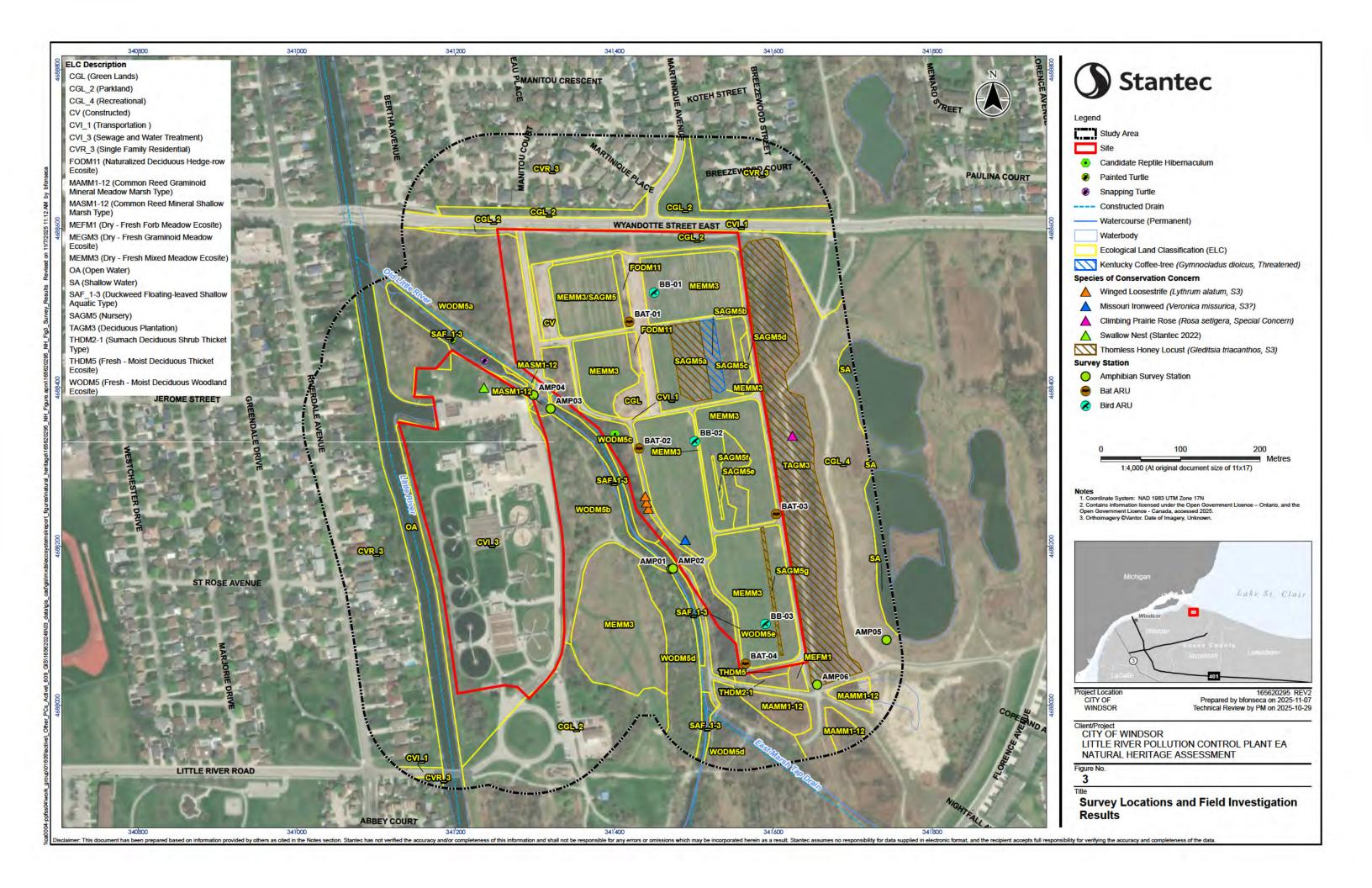


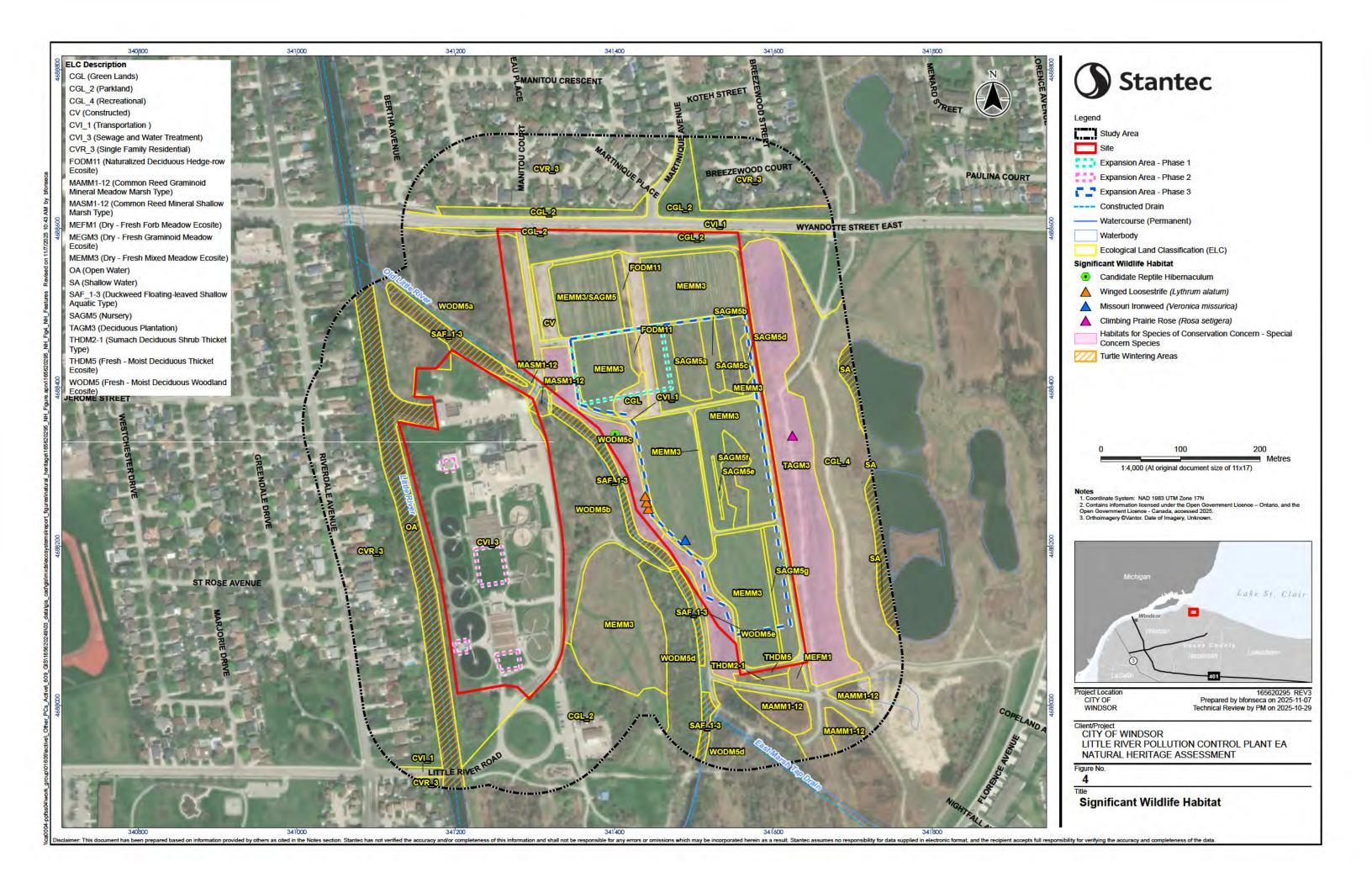
Appendix A Figures

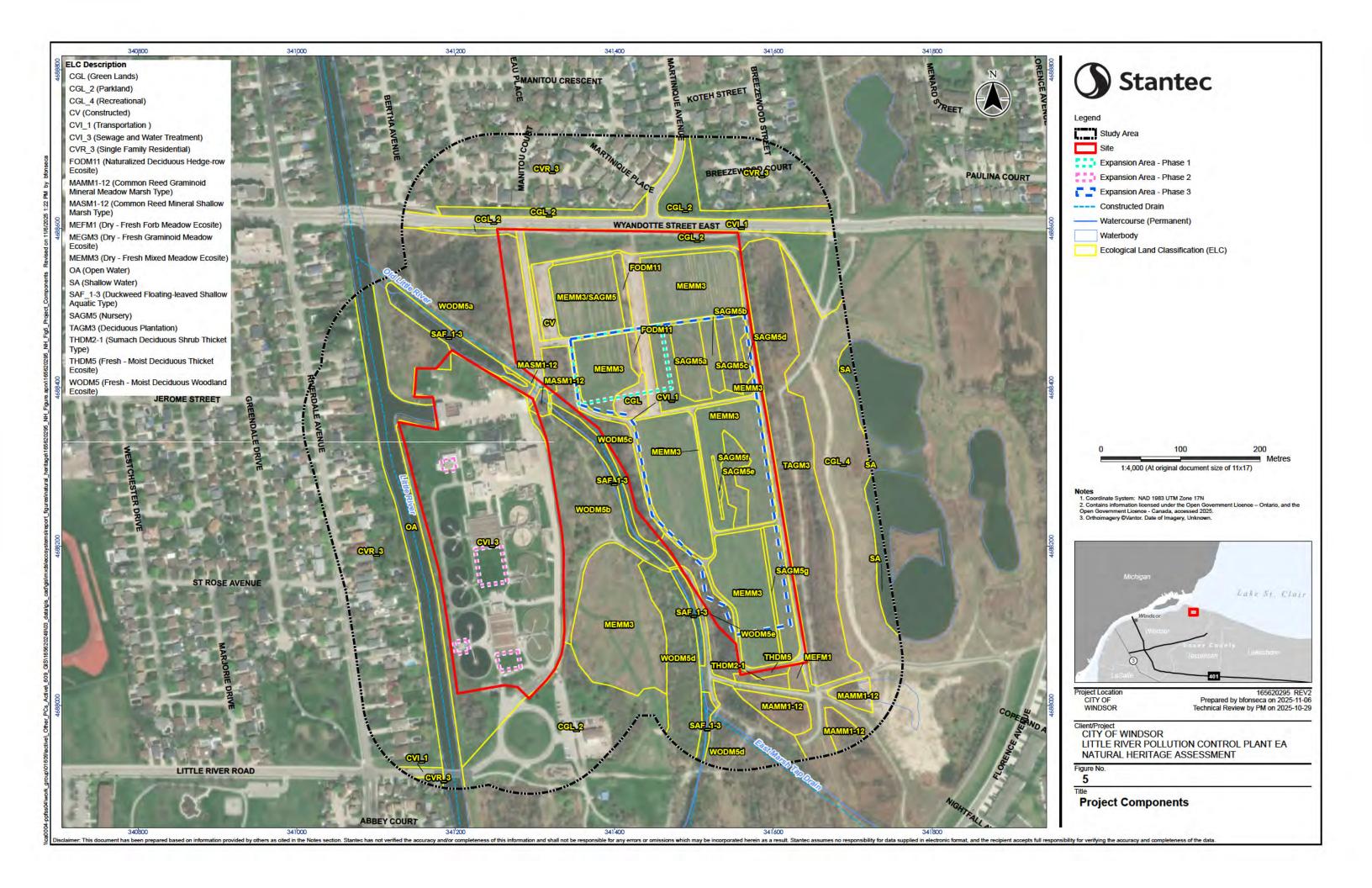


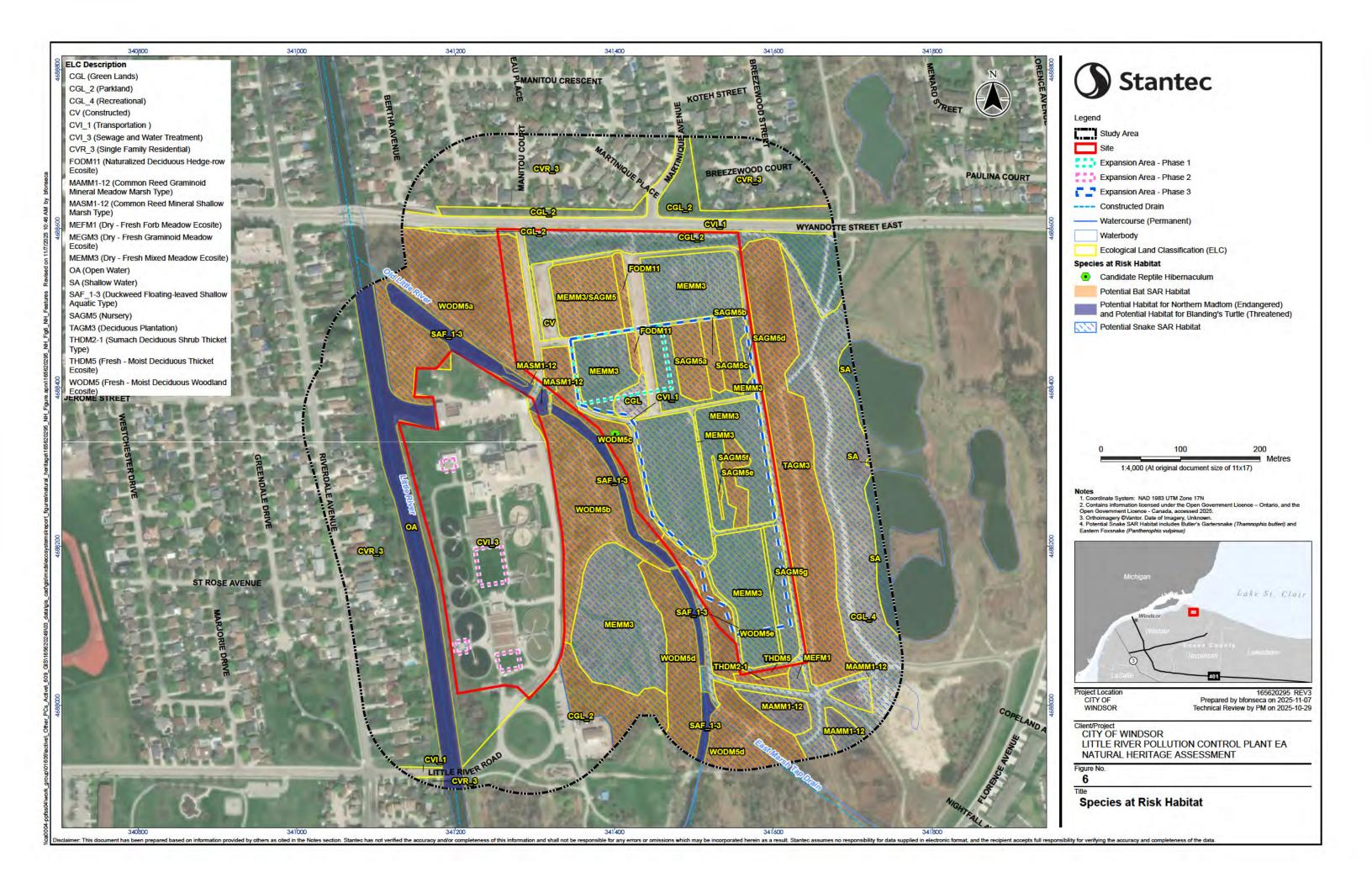












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Appendix B Photographic Record





Photo 1: May 29, 2025: View of the Site from the north side of the SAGM5c ecosite. Southwest aspect.



Photo 3: April 3, 2025: Showing the AMP01 station. North aspect.



Photo 5: April 3, 2025: Showing the AMP03 station. East aspect.



Photo 2: April 3, 2025: Showing the AMP05 station. Northeast aspect.



Photo 4: April 3, 2025: Showing the AMP02 station. South aspect.



Photo 6: April 3, 2025: Showing the AMP04 station. Northwest aspect.



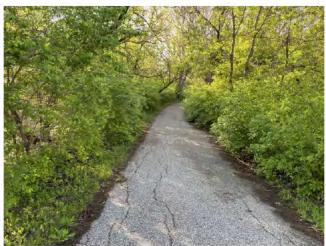


Photo 7: May 7, 2025: Pedestrian path, showing WODM5b ecosite. South aspect.



Photo 8: May 7, 2025: Upper reach of Old little River, showing SAF1-3 ecosite. Northwest aspect.



Photo 9: May 29, 2025: View of the Site from the north side of the MEMM3 ecosite. Southeast aspect



Photo 10: May 29, 2025: At BB-01, showing habitat in the MEMM3 ecosite. East aspect.



Photo 11: May 29, 2025: At BB-02, showing habitat in the MEMM3 ecosite. West aspect.



Photo 12: May 29, 2025: At BB-03, showing habitat in the MEGM3 ecosite. East aspect.



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Photo 13: May 29, 2025: At BAT-03, showing habitat in the MEMM3 ecosite. West aspect



Photo 15: May 29, 2025: View of the Site from the north side of the MEMM3 ecosite. Southeast aspect.



Photo 17: April 13, 2022: View of the LRPCP outfall from south bank. North aspect



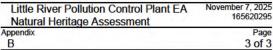
Photo 14: May 29, 2025: View of the Site from the north side of the SAGM5a ecosite. Northeast aspect.



Photo 16: April 13, 2022: View of the LRPCP from the north side of the building with evidence of fallen cup nests. Northwest aspect



Photo 18: April 13, 2022: Little River. West aspect



Title



Appendix C Plant List



EXPANSION LANDS LRPCP	120m STUDY AREA	SCIENTIFIC NAME	COMMON NAME	PROVINCIAL STATUS (S-RANK)	SARO STATUS	COSEWIC STATUS	REGIONAL STATUS IN ESSEX CO.	PLANTED?	COEF. OF CONSERVATISM (CC)	COEF. OF WETNESS (CW)
		PTERIDOPHYTES (FERNS &	FERN ALLIES)							
X		Equisetum arvense	Field Horsetail	S5					0	0
		GYMNOSPERMS (CONIFERS	, GINGKO)							
	x	Gingko biloba	Maidenhair Tree					Yes		
	X	Juniperus virginiana	Eastern Red Cedar	S5					4	3
	X	Picea abies	Norway Spruce	SE3				Yes		5
	X	Pinus nigra	Austrian Pine	SE3				Yes		5
	X	Pinus strobus	Eastern White Pine	S5				Yes	n/a	3
		ANGIOSPERMS (DICOTS)								
X		Abutilon theophrasti	Velvetleaf	SE5						3
	X	Acer ginnala	Amur Maple	SE1				Yes		5
	X	Acer negundo	Manitoba Maple	S5					0	0
- 4	X	Acer rubrum	Red Maple	S5				Yes	n/a	0
X	х	Acer saccharinum	Silver Maple	S5				Yes	n/a	-3
X		Acer saccharum	Sugar Maple	S5				Yes	n/a	3
	X	Acer x freemanii	Freeman's Maple	S5	7	-			6	-5
X	X	Ailanthus altissima	Tree-of-heaven	SE5						5
	x	Alliaria petiolata	Garlic Mustard	SE5						0
X		Ambrosia artemisiifolia	Common Ragweed	S5					0	3
X	X	Ambrosia trifida	Great Ragweed	S5					0	0
X		Apocynum cannabinum	Hemp Dogbane	S5					3	0
X	X	Arctium minus	Common Burdock	SE5						3
X		Asclepias incarnata	Swamp Milkweed	S5					6	-5
X		Asclepias syriaca	Common Milkweed	S5					0	5
X		Bidens frondosa	Devil's Beggarticks	S5					3	-3
X		Calystegia sepium	Hedge False Bindweed	S5					2	0
	X	Campanula rapunculoides	Creeping Bellflower	SE5				200		5
	X	Catalpa speciosa	Northern Catalpa	SE1				Yes		3
X	X	Celastrus cf. scandens	Climbing Bittersweet	S5					3	3
	X	Celtis occidentalis	Common Hackberry	S4					8	0
X		Centaurium pulchellum	Branching Centaury	SE3						0
X		Cerastium fontanum	Mouse-ear Chickweed	SE5						3
X		Cercis canadensis	Eastern Redbud	SX				Yes	n/a	3

EXPANSION LANDS LRPCP	120m STUDY AREA	SCIENTIFIC NAME	COMMON NAME	PROVINCIAL STATUS (S-RANK)	SARO STATUS	COSEWIC STATUS	REGIONAL STATUS IN ESSEX CO.	PLANTED?	COEF. OF CONSERVATISM (CC)	COEF. OF WETNESS (CW)
X		Cirsium arvense	Canada Thistle	SE5			-			3
X		Cirsium vulgare	Bull Thistle	SE5						3
X		Convolvulus arvensis	Field Bindweed	SE5						5
X	X	Cornus drummondii	Rough-leaved Dogwood	S4					4	0
	X	Cornus racemosa	Grey Dogwood	S5					2	0
	X	Corylus colurna	Turkish Hazel	SE				Yes		
	X	Crataegus sp.	Hawthorn Species							
X		Datura stramonium	Jimsonweed	SE5				1		5
X		Daucus carota	Wild Carrot	SE5						5
	X	Dipsacus fullonum	Common Teasel	SE5						3
	X	Elaeagnus angustifolia	Russian Olive	SE3						3
	x	Epilobium parviflorum	Small-flowered Hairy Willowherb	SE4						3
X		Erigeron annuus	Annual Fleabane	S5					0	3
X	X	Erigeron philadelphicus	Philadelphia Fleabane	S5					1	-3
X		Eupatorium altissimum	Tall Boneset	S4					3	5
X		Euphorbia nutans	Nodding Spurge	S4					0	3
X	X	Euthamia graminifolia	Grass-leaved Goldenrod	S5					2	0
X	X	Frangula alnus	Glossy Buckthorn	SE5						0
	x	Fraxinus pennsylvanica	Red Ash	S4					3	-3
	X	Galium aparine	Common Bedstraw	S5		1			4	3
	x	Geum canadense	Canada Avens	S5					3	0
X	X	Glechoma hederacea	Ground-ivy	SE5						3
x	x	Gleditsia triacanthos var. inermis	Thornless Honey Locust	S2?				Yes	n/a	0
X		Gymnocladus dioicus	Kentucky Coffee-tree	S2	THR	THR		Yes	n/a	3
	X	Hackelia virginiana	Virginia Stickseed	S5					5	3
	X	Helianthus cf. giganteus	Giant Sunflower	S5					6	-3
X	X	Hesperis matronalis	Dame's Rocket	SE5						3
	X	Impatiens capensis	Spotted Jewelweed	S5					4	-3
	X	Juglans nigra	Black Walnut	S4?					5	3
X		Lactuca serriola	Prickly Lettuce	SE5						3
X	-	Lamium purpureum	Purple Dead-nettle	SE3						5
	X	Leonurus cardiaca	Common Motherwort	SE5						5
X		Lepidium campestre	Field Peppergrass	SE5						5
	X	Liquidambar styraciflua	Sweet-gum	SE				Yes		

EXPANSION LANDS LRPCP	120m STUDY AREA	SCIENTIFIC NAME	COMMON NAME	PROVINCIAL STATUS (S-RANK)	SARO STATUS	COSEWIC STATUS	REGIONAL STATUS IN ESSEX CO.	PLANTED?	COEF. OF CONSERVATISM (CC)	COEF. OF WETNESS (CW)
	X	Lonicera maackii	Maack's Honeysuckle	SE2		- 4	-			5
	X	Lonicera x bella	(L. morrowii X L. tatarica)	SE						3
X		Lotus corniculatus	Bird's-foot Trefoil	SE5						3
X	X	Lycopus americanus	American Water-horehound	S5					4	-5
X		Lythrum alatum	Winged Loosestrife	S3					5	-5
X	X	Lythrum salicaria	Purple Loosestrife	SE5						-5
X	-	Medicago lupulina	Black Medick	SE5						3
X	X	Melilotus officinalis	Yellow Sweet-clover	SE5						3
X	X	Morus alba	White Mulberry	SE5						0
X	X	Parthenocissus vitacea	Thicket Creeper	S5					4	3
X	X	Pastinaca sativa	Wild Parsnip	SE5						5
X		Plantago lanceolata	English Plantain	SE5	1					3
X		Plantago rugelii	Rugel's Plantain	S5					1	0
X	X	Platanus sp.	Plane Tree Species	SE				Yes		
X	X	Populus deltoides	Eastern Cottonwood	S5					4	0
X		Potentilla anserina	Silverweed	S5	2.1				5	-3
X		Prunella vulgaris	Common Self-heal	S5					0	0
X	X	Pyrus calleryana	Callery Pear	SE				Yes		
	X	Quercus bicolor	Swamp White Oak	S4				Yes	n/a	-3
X	x	Quercus macrocarpa	Bur Oak	S5				Yes	n/a	3
X		Quercus muehlenbergii	Chinquapin Oak	S4				Yes	n/a	3
	x	Quercus palustris	Swamp Pin Oak	S4				Yes	n/a	-3
X	X	Rhamnus cathartica	European Buckthorn	SE5						0
	x	Rhus aromatica	Fragrant Sumac	S4				Yes	n/a	5
x	X	Rhus typhina	Staghorn Sumac	S5					1	3
	X	Robinia pseudoacacia	Black Locust	SE5				Yes		3
	X	Rosa setigera	Climbing Prairie Rose	S2S3	sc	sc		177	5	3
	x	Rubus idaeus ssp. strigosus	N. American Red Raspberry	S5					2	3
X	X	Rubus occidentalis	Black Raspberry	S5					2	5
X		Rumex crispus	Curled Dock	SE5						0
	X	Salix eriocephala	Cottony Willow	S5					4	-3
	X	Salix interior	Sandbar Willow	S5					1	-3
	X	Sanicula cf. canadensis	Canada Sanicle	S4					7	3
X		Securigera varia	Purple Crown-vetch	SE5						5
x	1	Senecio vulgaris	Common Ragwort	SE5						5

EXPANSION LANDS LRPCP	120m STUDY AREA	SCIENTIFIC NAME	COMMON NAME	PROVINCIAL STATUS (S-RANK)	SARO STATUS	COSEWIC STATUS	REGIONAL STATUS IN ESSEX CO.	PLANTED?	COEF. OF CONSERVATISM (CC)	COEF. OF WETNESS (CW)
X	X	Solidago canadensis	Canada Goldenrod	S5					1	3
X	X	Sonchus arvensis ssp. uliginosus	Smooth Sow-thistle	SE5						3
	X	Symphyotrichum ericoides	White Heath Aster	S5					4	3
X	X	Symphyotrichum lanceolatum	Panicled Aster	S5					3	-3
X	x	Symphyotrichum novae-angliae	New England Aster	S5					2	-3
X	x	Symphyotrichum pilosum var. pilosum	Old Field Aster	S5					1	3
	X	Syringa reticulata	Japanese Tree Lilac	SE1				Yes		
X		Taraxacum officinale	Common Dandelion	SE5						3
X		Thlaspi arvense	Field Pennycress	SE5						5
X		Tilia cordata	Little-leaved Linden	SE1				Yes		5
X	X	Toxicodendron radicans	Poison Ivy	S5					2	0
X	-	Tragopogon pratensis	Meadow Goatsbeard	SE5						5
X		Trifolium hybridum	Alsike Clover	SE5						3
X		Trifolium pratense	Red Clover	SE5						3
X		Trifolium repens	White Clover	SE5	- 1					3
	x	Ulmus americana	White Elm	S5					3	-3
	х	Ulmus pumila	Siberian Elm	SE3						3
X		Verbascum blattaria	Moth Mullein	SE5						3
	X	Verbena urticifolia	White Vervain	S5					4	0
X		Vernonia missurica	Missouri Ironweed	S3?	-				4	0
X		Vicia cracca	Tufted Vetch	SE5		- 1				5
X	x	Vitis riparia	Riverbank Grape	S5					0	0
		ANGIOSPERMS (MONOCOTS)								
x	x	Agrostis gigantea	Redtop	SE5						-3
	x	Bromus inermis	Smooth Brome	SE5						5
	X	Carex cristatella	Crested Sedge	S5					3	-3
	x	Carex granularis	Limestone Meadow Sedge	S5					3	-3
	x	Carex pellita	Woolly Sedge	S5					2	-5
X		Carex vulpinoidea	Fox Sedge	S5					3	-5
x	X	Dactylis glomerata	Orchard Grass	SE5						3
X		Echinochloa crus-galli	Large Barnyard Grass	SE5						-3
	X	Eleocharis sp.	Spikerush Species							
X		Eleusine indica	India Goosegrass	SE3						3
	x	Elymus virginicus	Virginia Wildrye	S5					5	-3

EXPANSION LANDS LRPCP	120m STUDY AREA	SCIENTIFIC NAME	COMMON NAME	PROVINCIAL STATUS (S-RANK)	SARO STATUS	COSEWIC STATUS	REGIONAL STATUS IN ESSEX CO.	PLANTED?	COEF. OF CONSERVATISM (CC)	COEF. OF WETNESS (CW)
X		Eragrostis cilianensis	Stinkgrass	SE5		- 1				3
X		Eragrostis pectinacea	Tufted Lovegrass	S5					0	0
	X	Hemerocallis fulva	Orange Daylily	SE5						5
X		Hordeum jubatum	Foxtail Barley	S5?					0	0
X	х	Juncus dudleyi	Dudley's Rush	S5					1	-3
	X	Lemna sp.	Duckweed Species	S4S5						
X		Lolium arundinaceum	Tall Ryegrass	SE5						3
X		Lolium pratense	Meadow Ryegrass	SE5	= :			1		3
X		Panicum capillare	Common Panicgrass	S5					0	0
	X	Phalaris arundinacea	Reed Canarygrass	S5					0	-3
X		Phleum pratense	Common Timothy	SE5	. 1					3
X	X	Phragmites australis ssp. australis	European Reed	SE5						-3
X	X	Poa compressa	Canada Bluegrass	SE5						3
X		Poa pratensis	Kentucky Bluegrass	S5					0	3
X		Scirpus pendulus	Hanging Bulrush	S5		1		1 == 1	3	-5
X		Setaria faberi	Giant Foxtail	SE4						3
X	X	Setaria pumila	Yellow Foxtail	SE5						0
	X	Typha latifolia	Broad-leaved Cattail	S5					1	-5

FLORISTIC SUMMARY	TOTAL
Total Species	147
Native Species	76
Introduced (exotic) species	71
Species at Risk in Ontario (END, THR or SC	2
Species at Risk in Canada (END, THR or SC	2
Rare in Ontario (S1, S2 or S3	5
Uncommon to common in Ontario (S4	12
Common to very common in Ontario (S5	59
Rare in Essex County	0
hly sensitive plant species with C value of 8, 9 or 10	1
Wetland Plant Species (-5, -4 or -3	31

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Appendix D Significant Wildlife Habitat Assessment



Appendix D Significant Wildlife Habitat Assessment for the Little River Pollution Control Plant Expansion Study Area

Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Seasonal Concentration Areas			
Waterfowl Stopover and Staging Area (Terrestrial)	Fields with sheet water during spring (mid-March to May), or annual spring melt water flooding found in any of the following Community Types: Meadow (CUM1), Thicket (CUT1). Agricultural fields with waste grains are commonly used by waterfowl, and these are not considered SWH unless they have spring sheet water available.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Waterfowl Stopover and Staging Areas (Terrestrial).	Absent. There were no features identified in the Study Area that were suitable to support waterfowl stopover and staging areas (terrestrial).
Waterfowl Stopover and Staging Area (Aquatic)	The following Community Types: Meadow Marsh (MAM), Shallow Marsh (MAS), Shallow Aquatic (SA), Deciduous Swamp (SWD). Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. The combined area of the ELC ecosites and a 100 m radius area is the SWH. Sewage treatment ponds and storm water ponds do not qualify as a SWH; however, a reservoir managed as a large wetland or pond/lake does qualify.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Waterfowl Stopover and Staging Areas (Aquatic).	Absent. There were no features identified in the Study Area that were suitable to support waterfowl stopover and staging areas (aquatic).
Shorebird Migratory Stopover Area	Shorelines of lakes, rivers, and wetlands, including beach areas, bars, and seasonally flooded, muddy, and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of amour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a significant wildlife habitat. The following community types: Meadow Marsh (MAM), Beach/Bar (BB), or Sand Dune (SD)	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Shorebird Migratory Stopover Areas.	Absent. There were no shoreline features identified in the Study Area that were suitable to support shorebird stopover areas.
Raptor Wintering Area	At least one of the following Forest Community Types: Deciduous Forest (FOD), Mixed Forest (FOM) or Coniferous Forest (FOC), in combination with one of the following Upland Community Types: Meadow (CUM), Thicket (CUT), Savannah (CUS), Woodland (CUW) (<60% cover) that are >20 ha and provide roosting, foraging and resting habitats for wintering raptors. Upland habitat (CUM, CUT, CUS, CUW), must represent at least 15 ha of the 20-ha minimum size.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Raptor Wintering Areas.	Absent. There was no upland habitat in the Study Area large enough to meet the size criteria for raptor wintering areas.
Seasonal Concentration Areas			
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations, and karsts. May be found in these Community Types: Crevice (CCR), Cave (CCA).	ELC surveys and background review were used to determine the presence of candidate Bat Hibernacula.	Absent. There were no candidate bat hibernaculum features identified in the Study Area.
Bat Maternity Colonies	Maternity colonies considered significant wildlife habitat are found in forested ecosites. Either of the following Community Types: Deciduous Forest (FOD) or Mixed Forest (FOM), that have>10/ha wildlife trees >25cm diameter at breast height (dbh). Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH). Maternity Colonies are confirmed where they are in use by 10 Big Brown Bats and/or 5 Adult Female Silver-haired Bats.	ELC surveys and targeted bat maternity roost tree assessments were used to determine the presence of candidate Bat Maternity Colonies.	Present. Woodland communities in the Study Area provide candidate SWH for bat maternity colonies.
Turtle Wintering Areas	Snapping and Midland Painted turtles utilize ELC community classes: Swamp (SW), Marsh (MA) and Open Water (OA). Shallow water (SA), Open Fen (FEO) and Open Bog (BOO). Northern Map turtle- open water areas such as deeper rivers or streams and lakes can also be used as over-wintering habitat. Water has to be deep enough not to freeze and have soft mud substrate. Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen.	ELC surveys and aquatic habitat assessments were used to assess features within the Study Area that may support areas of permanent standing water but not deep enough to freeze.	Present. The Little River, Old Little River (if sufficient water is present) and ponds on the eastern edge of the Study Area may provide suitable overwintering habitat for turtles.



Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Seasonal Concentration Areas			
Snake Hibernacula	Hibernation occurs in sites located below frost lines in burrows, rock crevices, broken and fissured rock and other natural features. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Any ecosite in southern Ontario other than very wet ones may provide habitat. The following Community Types may be directly related to snake hibernacula: Talus (TA), Rock Barren (RB), Crevice (CCR), Cave	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Snake Hibernacula.	Absent. No natural snake hibernacula features were identified in the Study Area.
	(CCA), and Alvar (RBOA1, RBSA1, RBTA1).		
Colonial-Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, or barns found in any of the following Community Types: Meadow (CUM), Thicket (CUT), Bluff (BL), Cliff (CL). Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil, or aggregate stockpiles. Does not include a licensed/permitted Mineral Aggregate Operation.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Colonial-Nesting Bird Breeding Habitat (Bank and Cliff).	Absent. No habitat to support colonial bank/cliff nesting breeding birds was identified in the Study Area.
Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs)	Identification of stick nests in any of the following Community Types: Mixed Swamp (SWM), Deciduous Swamp (SWD), Treed Fen (FET). The edge of the colony and a minimum 300 m area of habitat or extent of the Forest Ecosite containing the colony or any island <15.0 ha with a colony is the SWH. Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs).	Absent. No stick nests to support colonial tree/shrub nesting breeding birds were identified in the Study Area.
Colonial-Nesting Bird Breeding Habitat (Ground)	Any rocky island or peninsula within a lake or large river. For Brewer's Blackbird close proximity to watercourses in open fields or pastures with scattered trees or shrubs found in any of the following Community Types: Meadow Marsh (MAM1-6), Shallow Marsh (MAS1-3), Meadow (CUM), Thicket (CUT), Savannah (CUS).	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Colonial-Nesting Bird Breeding Habitat (Ground).	Absent. No habitat to support colonial ground nesting breeding birds was identified in the Study Area.
Seasonal Concentration Areas			
Migratory Butterfly Stopover Areas	Located within 5 km of Lake Ontario or Lake Erie A combination of ELC communities, one from each land class is required: Field (CUM, CUT, CUS) and Forest (FOC, FOM, FOD, CUP) Minimum of 10 ha in size with a combination of field and forest habitat present	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Migratory Butterfly Stopover Areas.	Absent. The Study Area is not located within 5 km of Lake Erie.
Landbird Migratory Stopover Areas	The following community types: Forest (FOD, FOM, FOC) or Swamp (SWC, SWM, SWD) Woodlots must be >10 ha in size and within 5 km of Lake Ontario and Lake Erie – woodlands within 2 km of Lake Ontario and Lake Erie are more significant	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Landbird Migratory Stopover Areas.	Absent. The Study Area is not located within 5 km of Lake Erie.
Deer Yarding/Winter Congregation Areas	Woodlots typically > 100 ha in size unless determined by the MNR as significant. (If large woodlots are rare in a planning area >50ha) All forested ecosites within Community Series: FOC, FOM, FOD, SWC, SWM, SWD Conifer plantations much smaller than 50 ha may also be used	No studies required as the MNR determines this habitat.	Absent. There were no designated deer yarding or wintering congregation areas identified on MNR mapping in the Study Area.



Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Rare Vegetation Communities			
Cliffs and Talus Slopes	A Cliff is vertical to near vertical bedrock >3 m in height. A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris Any ELC Ecosite within Community Series: TAO, TAS, TAT, CLO, CLS, CLT Most cliff and talus slopes occur along the Niagara Escarpment	ELC surveys and botanical inventories were used to assess features within the Study Area that would be considered cliffs or talus slopes.	Absent. Cliffs and talus slopes were not present in the Study Area.
Sand Barrens	Sand barrens typically are exposed sand, generally sparsely vegetated and cause by lack of moisture, periodic fires, and erosion. Vegetation can vary from patchy and barren to tree covered but less than 60%. Any of the following Community Types: SBO1 (Open Sand Barren Ecosite), SBS1 (Shrub Sand Barren Ecosite), SBT1 (Treed Sand Barren Ecosite).	ELC surveys and botanical inventories were used to assess features within the Study Area that would be considered to be sand barrens.	Absent. Sand barrens were not present in the Study Area.
Alvars	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plant. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover. Any of the following Community Types: ALO1(Open Alvar Rock Barren Ecosite), ALS1 (Alvar Shrub Rock Barren Ecosite), ALT1 (Treed Alvar Rock Barren Ecosite), FOC1 (Dry-Fresh Pine Coniferous Forest), FOC2 (Dry-Fresh Cedar Coniferous Forest), CUM2 (Bedrock Cultural Meadow), CUS2 (Bedrock Cultural Savannah), CUT2-1 (Common Juniper Cultural Alvar Thicket), or CUW2 (Bedrock Cultural Woodland) An Alvar site > 0.5 ha in size		Absent. Alvars were not present in the Study Area.
Old-growth Forest	Old-growth forests tend to be relatively undisturbed, structurally complex, and contain a wide variety of trees and shrubs in various age classes. These habitats usually support a high diversity of wildlife species. No minimum size criteria t in any of the following Community Types: FOD (Deciduous Forest), FOM (Mixed Forest), FOC (Coniferous Forest) Forests greater than 120 years old and with no historical forestry management was the main criteria when surveying for old-growth forests.	ELC surveys and botanical inventories were used to assess features within the Study Area that would be considered to be old-growth forest communities.	Absent. Old-growth Forest was not present in the Study Area.
Savannahs	A Savannah is a tallgrass prairie habitat that has tree cover between 25 – 60%. In Ecoregion 6E, known Tallgrass Prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario). Any of the following Community Types: TPS1 (Dry-Fresh Tallgrass Mixed Savannah Ecosite), TPS2 (Fresh-Moist Tallgrass Deciduous Savannah Ecosite), TPW1 (Dry-Fresh Black Oak Tallgrass Deciduous Woodland Ecosite), TPW2 (Fresh-Moist Tallgrass Deciduous Woodland Ecosite), CUS2 (Bedrock Cultural Savannah Ecosite).	that would be considered to be savannah communities.	Absent. Savannahs were not present in the Study Area.
Tall-grass Prairies	A Tallgrass Prairie has ground cover dominated by prairie grasses. An open Tallgrass Prairie habitat has < 25% tree cover. In Ecoregion 6E, known Tallgrass Prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario). Any of the following Community Types: TPO1 (Dry Tallgrass Prairie Ecosite), TPO2 (Fresh-Moist Tallgrass Prairie Ecosite).	ELC surveys and botanical inventories were used to assess features within the Study Area that would be considered to be tall-grass communities.	Absent. Tall-grass prairies were not present in the Study Area.



Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG	ELC surveys and botanical inventories were used to assess features within the Study Area that would be considered to be other rare vegetation communities.	Absent. The vegetation communities present on site are common and widespread throughout the region and are not ranked S1-S3.
Specialized Habitat for Wildlife			
Waterfowl Nesting Area	All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD3, SWD4	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Waterfowl Nesting Areas.	Absent. There were no groups of nesting waterfowl associated with rivers o wetlands in the Study Area.
	Note: includes adjacency to Provincially Significant Wetlands		
Specialized Habitat for Wildlife			
Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Nests located on man-made objects are not to be included as SWH (e.g., telephone poles and constructed nesting platforms). ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds, and wetlands	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat.	Absent. No large stick nests or natural perching habitat were observed adjacent to the Little River.
Woodland Raptor Nesting Habitat	All natural or conifer plantation woodland/forest stands combined >30 ha and with >4 ha of interior habitat. Interior habitat determined with a 200 m buffer. Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers hawk nest along forest edges sometimes on peninsulas or small offshore islands. May be found in all forested ELC Ecosites. May also be found in SWC, SWM, SWD and CUP3	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Woodland Raptor Nesting Habitat.	Absent. Forest communities in the Study Area do not meet the minimum interior habitat criteria for woodland raptor nesting.
Turtle Nesting Areas	Exposed mineral soil (sand or gravel) areas adjacent (<100 m) or within the following ELC Ecosites: MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SAS1, SAM1, SAF1, BOO1, FEO1 Best nesting habitat for turtles is close to water, away from roads and sites less prone to loss of eggs by predation from skunks, raccoons, or other animals. For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Turtle Nesting Areas.	Absent. No natural turtle nesting habitat was observed. There is potential for turtles to nest in gravel substrate for walking trails; however, this habitat does not qualify as SWH.
Seeps and Springs	Seeps/Springs are areas where ground water comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs. Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system	ELC surveys and wildlife habitat assessments were used to determine the presence of Seeps and Springs.	Absent. Features were not observed during field investigations.



Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment	
Specialized Habitat for Wildlife				
Amphibian Breeding Habitat (Woodland)	All Ecosites associated with these ELC Community Series; FOC, FOM, FOD, SWC, SWM, SWD Presence of a wetland, lake, or pond within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to	ELC surveys and amphibian call surveys were used to determine the presence of candidate Amphibian Breeding Habitat (Woodland).	Absent. None of the amphibian stations surveyed during field investigations met the criteria for significance (i.e., 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3).	
	be used as breeding habitat.			
	Species listed: Eastern Newt, Blue-spotted Salamander, Spotted Salamander, Gray Treefrog, Spring Peeper, Western Chorus Frog, Wood Frog			
	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3 is required to meet criteria.			
Amphibian Breeding Habitat (Wetland)	ELC Community Classes SW, MA, FE, BO, OA, and SA. Wetland areas >120 m from woodland habitats.	ELC surveys and amphibian call surveys were used to determine the presence of candidate	Absent. None of the amphibian stations surveyed during field investigations met the criteria for significance (i.e., 2 or more of the listed frog species with	
(vveiland)	Wetlands and pools (including vernal pools) >500 m² (about 25 m diameter) supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNR mapping and could be important amphibian breeding habitats.	Amphibian Breeding Habitat (Wetland).	at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3).	
	Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3 is required to meet criteria.			
Woodland Area-sensitive Bird Breeding Habitat	Habitats >30ha where interior forest is present (at least 200 m from the forest edge); typically >60 years old. These include any of the following Community Types: Forest (FO), Treed Swamp (SW)	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Woodland Area-sensitive Bird Breeding Habitat.	Absent. The forest communities in the Study Area did not meet the minimum interior habitat criteria for woodland area-sensitive birds.	
Habitat for Species of Conserva	ation Concern			
Marsh Bird Breeding Habitat	All wetland habitats with shallow water and emergent aquatic vegetation. May include any of the following Community Types: Meadow Marsh (MAM), Shallow Aquatic (SA), Open Bog (BOO), Open Fen (FEO), or for Green Heron: Swamp (SW), Marsh (MA) and Meadow (CUM) Community Types.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Marsh Bird Breeding Habitat.	Absent. Features were not observed during field investigations.	
Open Country Bird Breeding Habitat	Grassland areas > 30 ha, not Class 1 or Class 2 agricultural lands, with no row-cropping or hay or livestock pasturing in the last 5 years, in the following Community Type: Meadow (CUM).	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Open Country Bird Breeding Habitat	Absent. Meadow habitat in the Study Area did not meet the size criteria for open country breeding birds.	
Shrub/Early Successional Bird Breeding Habitat	Oldfield areas succeeding to shrub and thicket habitats >10 ha, not Class 1 or Class 2 agricultural lands, with no row-cropping or intensive hay or livestock pasturing in the last 5 years, in the following Community Types: Thickets (CUT), Savannahs (CUS), or Woodlands (CUW).	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Shrub/Early Successional Bird Breeding Habitat.	Absent. There were no early successional shrub communities large enough to support shrub/early successional bird breeding habitat in the Study Area.	
Terrestrial Crayfish	Meadow marshes and edges of shallow marshes (no minimum size). Vegetation communities include MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3. Construct burrows in marshes, mudflats, meadows Can be found far from water.	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Terrestrial Crayfish habitat.	Absent. Burrowing crayfish chimneys were not observed during field investigations.	



Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Habitat for Other Species of Conservation Concern (Excluding Species Listed as Endangered or Threatened)	Habitats used by Species of Conservation Concern for all or part of their lifecycle. A habitat suitability assessment is provided below for the SOCC identified as potentially present in the Study Area.	ELC surveys, targeted surveys, and wildlife habitat assessments were used to determine the presence of candidate Habitat for Other Species of Conservation Concern. A habitat assessment for SOCC in the Study Area is provided in Appendix C.2.	A habitat suitability assessment was completed for each of the SOCC identified in the background review (see below). A summary of that assessment is as follows: Present: -Missouri Ironweed along the edge of the WODM5 community and southwest of the MEMM3 community -Climbing Prairie Rose in the WODM5 community and west of the MEGM3 community -Winged Loosestrife along the edge of the WODM5 community west of the MEMM3 community -Ninged Loosestrife along the edge of the WODM5 community west of the MEMM3 community -Snapping Turtle and Painted Turtle in the Old Little River Potentially Present: -Northern Map Turtle may occur within the Little River in the Study Area. -Barn Swallow may be present and nest in buildings and structures in the Study Area. -Black-crowned Night-heron may be present and nest in the woodlands surrounding the shallow aquatic community. -Eastern Wood-Pewee may be present and nest in deciduous woodlands and forests. -Differential Grasshopper may be present within the meadow communities of the Study Area. -Ilusive Clubtail may be present within the suitable habitat provided by the Little River within the Study Area. -Inconsolable Underwing Moth may be present within the deciduous woodland and forest communities within the Study Area. -Judith's Underwing Moth may be present within the deciduous woodland and forest communities within the Study Area. -Oldwife Underwing Moth may be present within the deciduous woodland and forest communities within the Study Area. -Serene Underwing Moth may be present within the deciduous woodland and forest communities within the Study Area. -Zabulon Skipper may be present within the woodland, park and meadow communities in the Study Area. -Zabulon Skipper may be present within the meadow and woodland communities of the Study Area. -Muskingum Sedge may be present in the meadow and woodland communities of the Study Area.

Candidate Wildlife Habitat	Criteria	Methods	Candidate SWH Habitat Assessment
Animal Movement Corridors			
Amphibian Movement Corridor	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Amphibian Movement Corridors.	None of the amphibian stations surveyed during field investigations met the criteria for significance; therefore, there are no amphibian movement corridors present in the Study Area.
Deer Movement Corridors	Corridors may be found in all forested ecosites. Determined based on identifying significant deer wintering habitat (MNR).	ELC surveys and wildlife habitat assessments were used to determine the presence of candidate Deer Movement Corridors.	Absent. There were no designated deer yarding or wintering congregation areas identified on MNR mapping in the Study; therefore, deer movement corridors are absent from the Study Area.

Table D2 Species of Conservation Concern Habitat Assessment

Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status (S-Rank)	Habitat Description	Habitat Suitability Assessment Potential Presence in the Study Area
Birds						
Barn Swallow	Hirundo rustica	SC	THR	S4B	Nests on walls or ledges of barns and other human-made structures such as bridges, culverts or other buildings; forages in open areas for flying insects (COSEWIC 2011).	Potentially Present. Buildings and structures in the Study Area have potential to provide suitable habitat for Barn Swallow to nest. Barn Swallow was not observed during field investigations however it was observed within the Study Area in previous years (iNaturalist 2025).
Black-crowned Night Heron	Nycticorax nycticorax	-	-	S3B,S2N,S4M	Black-crowned Night-Herons are common in wetlands across North America, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, canals, reservoirs, and wet agricultural fields. They require aquatic habitat for foraging and terrestrial vegetation for cover (Cornell University 2019.)	Potentially Present. The woodlands surrounding the shallow aquatic community have potential to provide suitable habitat for Black-crowned Nightheron to nest. Black-crowned Nightheron was not observed during field investigations however it was observed within the Study Area in previous years (iNaturalist 2025).
Common Nighthawk	Chordeiles minor	sc	sc	S4B	Generally prefer open, vegetation- free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat rooftops)(COSEWIC 2007; Cadman et al. 2007).	Absent. Open, barren habitat not present in the Study Area.
Eastern Wood-Pewee	Contopus virens	sc	sc	S4B	Associated with deciduous and mixed forests. Within mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges (Cadman et al, 2007).	Potentially Present. Suitable habitat is present within the deciduous woodlands and forests, Eastern Wood-Pewee was not observed during field investigations however it was observed within the Study Area in previous years (iNaturalist 2025).
Fortser's Tern	Sterna forsteri	-	-	S3B	Primarily inhabit coastal Great Lakes wetlands and marshes where they nest in colonies. Some colonies nest directly on floating vegetation, other in high parts of the marshes where there is decaying vegetation deposited (McNicholl et all, 2001).	Absent. Great Lakes wetlands, and marshes not present in the Study Area.
Great Egret	Ardea alba	-	-	S2B,S3M	Great Egrets forage in marshes, swamps, streams, rivers, ponds, lakes, canals, ditches, flooded farm fields and sometimes upland habitats. They nest in colonies in trees or shrubs (McCrimmon et al, 2011).	Absent. Although no nesting colonies of Great Egret were observed within the Study Area, the Little River and adjacent unnamed tributary may provide foraging habitat. However, Great Egret was not observed during field investigations and is considered absent from the Study Area.
Purple Martin	Progne subis	-	-	S3B	Purple Martin's primarily nest in housing provided by humans, such as gourds and condominium-style birdhouses. They prefer nesting near open areas close to water (Brown et al. 2021).	Absent. Human structures for nesting were not observed within the Study Area.

Table D2 Species of Conservation Concern Habitat Assessment

Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status (S-Rank)	Habitat Description	Habitat Suitability Assessment Potential Presence in the Study Area
Tufted Titmouse	Baelophus bicolor	-	-	S3B	nest boxes, or old woodpecker cavities (The	Absent. Suitable habitat is present within the deciduous woodlands and forest communities. However, Tufted Titmouse were not observed during field investigations and is considered absent from the Study Area.
Wood Thrush	Hylocichla mustelina	SC	THR	S4B	well-developed understory layers. Prefers large forest mosaics, but may also nest in small	Absent. Forest and woodland communities within the Study Area may provide habitat. However Wood Thrush were not observed during field investigations and is considered absent from the Study Area.
Insects	T			T		
Differential Grasshopper	Melanoplus differentialis	-	-	S 3	Restricted to southwestern Ontario where it can be locally extremely abundant in late summer and fall. It appears to prefer moist meadows and areas adjacent to bodies of water. Large populations in several parks and conservation areas (Paiero and Marshall 2006)	Potentially Present. Suitable habitat is present within the meadow communities in the Study Area. This species was observed within the Study Area in previous years (iNaturalist 2025).
Elusive Clubtail	Stylurus notatus	-	-	S3	The Elusive Clubtail often likes large rivers and large lakes with sandy bottoms, sometimes also with silt and gravel (WATRI 2021).	Potentially Present. There may be habitat within the Little River in the Study Area.
Inconsolable Underwing Moth	Catocala insolabilis	-	-	S3	Most common in deciduous forests and forest borders. They also rest in caves, under ledges, on rocks, or among leaf litter on the ground (iNaturalist, 2025a).	Potentially Present. There may be habitat within the deciduous woodland and forest communities within the Study Area.
Judith's Underwing Moth	Catocala judith	-	-	S2S3	Found in deciduous forests and woodlands (NatureServe 2025a).	Potentially Present. There may be habitat within the deciduous woodland and forest communities within the Study Area.
Monarch	Danaus plexippus	SC	END	S2N,S4B	Monarch larvae occur only where milkweed exists; adults are more generalized, feeding on	Potentially Present. Suitable habitat is present within the meadow communities in the Study Area. This species was observed within the Study Area in previous years (iNaturalist 2025).
Oldwife Underwing Moth	Catocala palaeogama	-	-	S3		Potentially Present. There may be habitat within the deciduous woodland and forest communities within the Study Area.
Serene Underwing Moth	Catocala serena	-	-	S3	Found in woodlands and forests, including hardwood forests where its food plants such as walnuts and hickories grow (Schmitt and Larsen 2021).	Potentially Present. There may be habitat within the deciduous woodland and forest communities within the Study Area.
Sycamore Tussock Moth	Halysidota harrisii	-	-	S1S2	Primary habitat is dependent on the presence of its host plant, the American Sycamore tree, which is found in the southern parts of Ontario, especially in lowland areas, floodplains, and along streams (NatureServe 2025c).	Absent. American Sycamore trees were not observed within the Study Area during the botanical inventory field investigations

Table D2 Species of Conservation Concern Habitat Assessment

Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status (S-Rank)	Habitat Description	Habitat Suitability Assessment Potential Presence in the Study Area
Variegated Meadowhawk	Sympetrum corruptum	-	-		Habitat consists of non-moving or slow-moving waters, such as ponds, lakes, and slow streams, as well as marshes within abundant emergent vegetation (Paulson 2009).	Absent. Non-moving or slow-moving waters are not present within the Study Area.
	Lon zabulon	-	-	S1	Occurs in second-growth, woodland clearings, roadsides, parks and gardens. It is a rare resident breeding on Pelee Island, and has been reported twice within the Ojibway Prairie in Windsor (Hall et.al 2014).	Potentially Present. Suitable habitat is present within the woodland, park and meadow communities in the Study Area. This species was observed within the Study Area in previous years (iNaturalist 2025).
Plants	T	Т		1	10	T
Climbing Prairie Rose	Rosa setigera	SC	SC		Occurs in old fields and shrub thickets, most commonly on sites with moist heavy soils, but occasionally on sandy or shallow soils that dry out during part of the growing season (COSEWIC 2002).	Present. Climbing Prairie Rose was observed within the WODM5 community west of the MEGM3 community.
Grey-headed Prairie Coneflower	Ratibida pinnata	-	-	S3	Occurs in or near prairie remnants (including roadsides and fencerows), at margins of swamps, and in dry open ground. (Reznicek et al 2011a).	Potentially Present. Suitable habitat is present in the meadow and woodland communities of the Study Area. This species was observed within the CGL_4 community in previous years (iNaturalist 2025).
Missouri Ironweed	Vernonia missurica	-	-	S3?	River bottom (rarely upland) forests; wet prairies, fens, sedge meadows; moist or dry open ground, river banks, fencerows, fields, roadsides (Rezniek et. Al., 2011c).	Present. Missouri Ironweed was observed along the edge of the WODM5 community southwest of the MEMM3 community within the Study Area.
Muskingum Sedge	Carex muskingumensis	-	-		Swamps (deciduous), floodplains, and swales (Rezniek et.al., 2011b).	Potentially Present. Suitable habitat is present in the woodland communities of the Study Area. This species was observed within the WODM5a community in previous years (iNaturalist 2025).
Winged Loosestrife	Lythrum alatum	-	-	S3	Shores and wet meadows, wet prairies, marshy ground, moist sandy openings (Rezniek et.al., 2011d).	Present. Winged Loosestrife was observed within the WODM5 community.
Reptiles	ī	Τ		1	T	Present. Midland Painted Turtle was observed in
Midland Painted Turtle	Chrysemys picta marginata	SC	-	S4	Generally occur in ponds, lakes, marshes and slow-moving creeks (Ontario Nature 2022). Often observed basking on logs or rocks along shorelines (Ontario Nature 2022).	the Old Little River during field surveys, and is documented to be present in the Little River, Old Little River and the ponds in the Study Area (iNaturalist 2025).
Northern Map Turtle	Graptemys geographica	SC	sc	S3	Highly aquatic species, found in deep, large waterbodies, including lakes and large rivers, with abundant basking sites. Emerge onto land only during nesting, which occurs in soft sand or soil. Waterbodies with slow currents, soft mud bottoms and abundant aquatic vegetation are preferred (COSEWIC, 2002).	Potentially Present. Northern Map Turtle may be present within the Little River in the Study Area.
Snapping Turtle	Chelydra serpentina	SC	sc	S4	Generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravely or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits (COSEWIC 2008).	Present. Snapping Turtle was observed in the Old Little River during field surveys and has been documented in many locations across the Study Area (iNaturalist 2025).

Little River Pollution Contro November 21, 2025	ol Plant Environmental Assessment: Natural Heritage Assessment
Appendix E	Species at Risk Habitat Assessment



Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status(S-Rank)	Habitat Description	Habitat Suitability Assessment of Potential Presence in the Study Area
Birds						
Bank Swallow	Riparia riparia	THR	THR	S4B	Bank Swallows excavate nests in exposed earth banks along watercourses and lakeshores, roadsides, stockpiles of soil, and the sides of sand and gravel pits (Falconer et al., 2016). Any suitable habitat may be present if stockpiles of soil are present or in areas of sand/gravel extraction.	Absent. Suitable habitat was absent from the Study Area.
Bobolink	Dolichonyx oryzivorus	THR	THR	S4B	Nests primarily in forage crops with a mixture of grasses and broad-leaved forbs, predominantly hayfields and pastures (COSEWIC 2010b).	Absent. Suitable habitat is present in the large meadow communities within the Study Area. However, Bobolink was not observed during field investigations and is considered absent from the Study Area.
Chimney Swift	Chaetura pelagica	THR	THR	S3B		Absent. Potential habitat may occur in the Study Area but Chimney Swift was not observed during field investigations and is considered absent from the Study Area.
Eastern Meadowlark	Sturnella magna	THR	THR	S4B,S3N	Meadows, hayfields and pastures; also, other open habitat types including mown lawn (COSEWIC 2011). Prefers large (~5 ha), low-lying wet grasslands with abundant litter (COSEWIC 2011).	Absent. Potential habitat within meadow communities within the Study Area. However, Eastern Meadowlark was not observed during field investigations and is considered absent from the Study Area.
Least Bittern	Ixobrychus exilis	THR	THR	S4B	The Least Bittern is a relatively small bird that nests in freshwater marshes and other wetlands, with tall dense aquatic vegetation and interspersed areas of open water (COSEWIC 2009).	Absent. Freshwater marshes and wetlands were not observed within the Study Area.
Louisiana Waterthrush	Parkesia motacilla	THR	THR	S2B	In Ontario, this species prefers deciduous and mixed forests with a strong Eastern Hemlock component, in deeply incised ravines (Cadman et al. 2007). It will also inhabit large, flooded tracts of mature deciduous swamp forest. It shows a preference for nesting along pristine headwater streams and associated wetlands occurring in large expanses of mature forest and less frequently inhabits wooded swamps (COSEWIC 2006).	Absent. Deciduous mixed forests with a strong presence of Eastern Hemlock, or mature deciduous swamp was not observed in the Study Area.
Red-headed Woodpecker	Melanerpes erythrocephalus	END	END	S 3	In woodlands and woodland edges, sometimes on golf courses and cemeteries. Requires dead trees for nesting and perching. Feeds on acorns and beech nuts (MECP 2022)	Absent. Suitable habitat is present in the forest, and woodland communities; however Redheaded Woodpecker was not observed during breeding bird surveys in the Study Area.
Fish						
Northern Madtom	Noturus stigmosus	END	END	S1	Large creeks to big rivers, with clear to turbid water, and moderate to swift current (COSEWIC 2012).	Present. Potential habitat within the Little River.
Invertebrates		1				
Reversed Haploa Moth	Haploa reversa	THR	END	S1	,	Absent. Oak woodland, oak savanna and/or sand dune habitat was not observed in the Study Area.

Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status(S-Rank)	Habitat Description	Habitat Suitability Assessment of Potential Presence in the Study Area			
Mammals	Mammals								
Eastern Red Bat	Lasiurus borealis	-	END	S4	Summer habitat for this migratory bat species includes mostly treed areas for roosting. They roost alone or with pups in foliage in trees and shrubs and prefer to be at the edge of the tree crown for predatory protection. It will occupy both coniferous and deciduous forests of any age (COSEWIC 2023).	woodland, and thicket communities. Eastern Red			
Eastern Small-footed Myotis	Myotis leibii	END	-	S2S3	Primarily roosts under loose rocks on exposed rock outcrops, crevices, and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark (MECP 2023a).	Absent. Suitable habitat is present in the forest, and woodland communities; however, Smallfooted Myotis was not recorded during the bat community survey.			
Hoary Bat	Lasiurus cinereus	-	END	S4	Summer habitat for this migratory bat species includes mostly treed areas for roosting. They roost alone or with pups in foliage in trees and shrubs and prefer to be at the edge of the tree crown for predatory protection. It will occupy both coniferous and deciduous forests of any age (COSEWIC 2023).	woodland, hedgerow, and thicket communities			
Little Brown Myotis	Myotis lucifugus	END	END	S3	Roost in trees and buildings. Often select attics, abandoned buildings and barns. Hibernate in caves or abandoned mines (COSEWIC 2013).	Present. Suitable habitat is present in the forest, and woodland communities. Little Brown Myotis was recorded in the Study Area during the bat community survey.			
Northern Myotis	Myotis septentrionalis	END	END	S3	Associated with boreal forests. Roost under loose bark and in tree cavities. Hibernate in caves or abandoned mines (COSEWIC 2013).	Absent. Suitable habitat is present in the forest, and woodland communities; however, Small-footed Myotis was not recorded during the bat community survey.			
Silver-haired Bat	Lasionycteris noctivaqans	-	END	S 4	Roosting occurs under bark and in tree cavities where large decaying coniferous or deciduous trees are present. Females with maternity roosts will be in small groups. They may also occasionally roost in or on buildings, especially during migration (COSEWIC 2023).	Present. Suitable habitat is present in the forest, woodland and thicket communities. Silver-haired Bat was recorded in the Study Area during the bat community survey.			
Tri-colored Bat	Perimyotis subflavus	END	END	S3?	The Tri-colored Bat roosts in colonies in tree cavities in various deciduous and coniferous forest stands. It is strongly associated with forest watercourses and streamside vegetation (COSEWIC 2013).	Absent. Suitable habitat is present in the forest, and woodland communities; however, Tri-colored Bat was not recorded during the bat community survey.			

Common Name	Scientific Name	SARO Status	SARA Status	Provincial Status(S-Rank)	Habitat Description	Habitat Suitability Assessment of Potential Presence in the Study Area			
Plants	Plants								
Kentucky Coffee-tree	Gymnocladus dioicus	THR	THR	S2	Grows on moist, rich soil, often found in floodplains. Shade-intolerant therefore grows along the edges of woodlots or relies on canopy openings in forests and woodlots (MECP 2023b).	Present. Kentucky coffee-tree was documented in the SAGM5b ecosite. However, these trees are planted as part of the tree nursery and do not receive protection under the ESA.			
Pumpkin Ash	Fraxinus profunda	END	-	S1	Pumpkin Ash grows in wet forests and swamps (Gleason and Cronquist, 1991), restricted in range to the Carolinian zone in Ontario (McCormac et al., 1995).	Absent from the Site during field studies. Potentially present in the Study Area as Pumpkin Ash was documented within the WODM5a ecosite based on background information (iNaturalist 2025).			
Willow-leaved Aster	Symphyotrichum praealtum	THR	THR	S2	This aster is found in thickets, meadows and prairies, as well as in oak savannahs as found in the Windsor area and on Walpole Island. In Ontario it is also reported as found along railways, roadsides and old abandoned fields. Although now found in a variety of open disturbed sites, its typical prairie habitats have been historically reduced and impacted through human disturbance (COSEWIC 2003).	Absent from the Site during field studies. Potentially present in the Study Area as Willow-leaved Aster was documented Within the CGL_4 ecosite based on background information (iNaturalist 2025).			
Reptiles		•							
Blanding's Turtle	Emydoidea blandingii	THR	END	S3	Inhabits shallow lakes, ponds and wetlands with clean water and mucky bottoms. Hibernates in the soft bottoms of water bodies (MacCulloch 2002; COSEWIC 2005).	Present. May use Little River in the Study Area as a movement corridor and nest in exposed areas, including gravel road shoulders, and other disturbed areas.			
Butler's Gartersnake	Thamnophis butleri	END	END	S2	Prefers grasslands, old fields, disturbed sites, urban and industrial sites and tallgrass prairie where a dense cover of grasses or herbs. Often found in close proximity to wet areas (COSEWIC 2010a).	Present. Potential habitat within edges, meadows, and woodland features found within the Study Area.			
Eastern Foxsnake	Pantherophis vulpinus pop.2	THR	END	S2	Eastern Foxsnake in the Carolinian population are usually found in old fields, marshes, along hedgerows, drainage canals and shorelines. During the winter, Eastern Foxsnake hibernate in groups in deep cracks in the bedrock and in some man-made structures (COSEWIC, 2021).	Present . Potential habitat within meadow ecosites and in the Little River and Old River aquatic habitats.			

STAGE 1 ARCHAEOLOGICAL ASSESSMENT REPORT

Stage 1 Archaeological Assessment: Little River Pollution Control Plant Municipal Class Environmental Assessment

Part of Lots 134 to 136, Concession 1 Petite Côte, Geographic Township of Sandwich, former Essex County, now City of Windsor, Ontario

September 26, 2025

Prepared for:

The Corporation of the City of Windsor 350 City Hall Square West, Suite 310 Windsor, Ontario N9A 6S1

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Project Information Form Number: P256-0849-2025
Project/File: 165620295

ORIGINAL REPORT



Limitations and Sign-off

The conclusions in the Report titled Stage 1 Archaeological Assessment: Little River Pollution Control Plant Municipal Class Environmental Assessment are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from The Corporation of the City of Windsor (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Reviewed by:							
-	Signature						
	Parker Dickson, MA Senior Associate, Senior Archaeologist						
	Printed Name and Title						
Approved by:							
	Signature						
	Tracie Carmichael, BA, B.Ed. Principal, Practice Leader, Environmental Services						

Printed Name and Title



Executive Summary

The Corporation of the City of Windsor (the City) is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP) (the Project). The Class EA for the Project has been initiated to mitigate impact of combined sewer overflows and accommodate development in the LRPCP service area. The City retained Stantec Consulting Ltd. (Stantec) to complete the required archaeological assessment for the Project. The study area for the Project comprises the existing LRPCP property, approximately 17.86 hectares, located on part of lots 134 to 136, Concession 1 Petite Côte, Geographic Township of Sandwich, former Essex County, now City of Windsor, Ontario. The Stage 1 archaeological assessment was undertaken in the preliminary planning and design process for the Class EA of the Project under the Ontario *Environmental Assessment Act* (Government of Ontario 1990a).

The Stage 1 archaeological assessment, consisting of background research and a property inspection, was completed under Project Information Form number P256-0849-2025, issued to Parker Dickson, MA, by the Ministry of Citizenship and Multiculturalism (the Ministry). The property inspection was conducted on May 7, 2025, by Andrew O'Shaughnessy, BA (R497).

The Stage 1 archaeological assessment determined that approximately 40.6% of the study area retains low to no archaeological potential due to previous assessment, areas subject to deep and extensive modern disturbances, and permanently low and wet areas. Thus, in accordance with Section 1.3.2 and Section 7.7.4 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for portions of the study area with low to no archaeological potential.**

The Stage 1 archaeological assessment determined that the remainder of the study area, approximately 59.4%, retains archaeological potential. Thus, in accordance with Section 1.3.1 and Section 7.7.4 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for areas of archaeological potential within the study area.**

Full and detailed recommendations are provided in the body of the report.

The Ministry is asked to review the results presented and enter this report into the *Ontario Public Register* of Archaeological Reports.

The Executive Summary highlights key points form the report only; for complete information and findings, the reader should examine the complete report.



Executive Summary September 26, 2025

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Stage 1 Archaeological Assessment: Little River Pollution Control Plant Municipal Class Environmental Assessment

Project Personnel September 26, 2025

Project Personnel

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Windsor

Ministry of Citizenship and Robert von Bitter – Archaeological Data Coordinator

Multiculturalism



1 Project Context September 26, 2025

1 Project Context

1.1 Development Context

The Corporation of the City of Windsor (the City) is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for the Little River Pollution Control Plant (LRPCP) (the Project). The Class EA for the Project has been initiated to mitigate impact of combined sewer overflows and accommodate development in the LRPCP service area.

The City retained Stantec Consulting Ltd. (Stantec) to complete a Stage 1 archaeological assessment for the Project. The study area for the Project comprises the existing LRPCP property, approximately 17.86 hectares, located on part of lots 134 to 136, Concession 1 Petite Côte, Geographic Township of Sandwich, former Essex County, now City of Windsor, Ontario (Figure 1 and Figure 2). The Stage 1 archaeological assessment was undertaken in the preliminary planning and design process for the Class EA of the Project under the Ontario *Environmental Assessment Act* (Government of Ontario 1990a).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out by the Ministry of Citizenship and Multiculturalism (the Ministry) in the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 archaeological assessment are to:

- Provide information about the study area's geography, history, previous archaeological fieldwork, and current land conditions.
- Evaluate the study area's archaeological potential, which will support recommendations for Stage 2 survey for the property.
- Recommend appropriate strategies for Stage 2 survey.

To meet these objectives, Stantec archaeologists:

- Reviewed relevant archaeological, historical, and environmental literature pertaining to the study area.
- Reviewed the land use history of the study area, including pertinent historical maps.
- Examined the Ministry's *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- Queried the Ministry's Ontario Public Register of Archaeological Reports to identify previous archaeological assessments completed within, and within 50 metres of, the study area.
- Completed a property inspection of the study area by a licensed archaeologist.

Permission to enter the study area was granted by the City.



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1.2 Historical Context

"Contact" is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the interaction between Indigenous and European nations. There is no definitive moment of contact and the understanding of when Indigenous and European nations first began to influence one another is evolving with new archaeological and historical studies, and from Indigenous oral tradition and history. Contact in what is now the Province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

1.2.1 Pre-Contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying southern Ontario as the Laurentide glacier receded, as early as 11,000 years ago (Ellis and Ferris 1990:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into archaeological periods based on observed changes in material culture. These archaeological periods are largely based on observed changes to formal lithic tools, and separated into the Early Paleo, Late Paleo, Early Archaic, Middle Archaic, Late Archaic, and Terminal Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, archaeological periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these archaeological periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture is summarized in Table 2, based on Ellis and Ferris (1990). The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 1: Generalized Cultural Chronology for Essex County

Archaeological Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	9000 - 8400 BCE	Spruce parkland/caribou hunters
Late Paleo	Hi-Lo Projectiles	8400 - 8000 BCE	Smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 - 6000 BCE	Slow population growth
Middle Archaic	Brewerton-like Points	6000 - 2500 BCE	Environment similar to present
Late Archaic	Narrow Points	2500 - 1800 BCE	Increasing site size
	Broad Points	1800 - 1500 BCE	Large chipped lithic tools
	Small Points	1500 - 1100 BCE	Introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 BCE	Emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 BCE	Introduction of pottery
Middle Woodland	Couture Corded Pottery	400 BCE - 500 CE	Increased sedentism



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Archaeological Period	Characteristics	Time Period	Comments
	Riviere au ∀ase Phase Pottery	500 - 800 CE	Seasonal hunting and gathering
Late Woodland	Younge Phase Pottery	800 - 1200 CE	Incipient agriculture
	Springwells Phase Pottery	1200 – 1400 CE	Agricultural villages
	Wolf Phase Pottery	1400 – 1550 CE	Earth worked villages, warfare

Between 9000 and 8000 BCE, Indigenous populations were sustained by hunting, fishing, and foraging and lived a relatively mobile existence across an extensive geographic territory. Despite these wide territories, social ties were maintained between groups. One method of maintaining social ties was through gift exchange, evident through exotic lithic material documented on many sites (Ellis 2013:35-40).

By approximately 8000 BCE, evidence exists and becomes more common for the production of ground-stone tools such as axes, chisels, and adzes. These tools are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increase in craft production and arguably craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in social organization which permitted individuals to devote time and effort to craft specialization. As described above, since approximately 8000 BCE, the Great Lakes basin experienced a low-water phase, with shorelines significantly below modern lake levels (Stewart 2013: Figure 1.1.C). It is presumed that the majority of human settlements would have been focused along these former shorelines. At approximately 6500 BCE the climate had warmed considerably since the recession of the glaciers and the environment had grown more similar to the present day. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper, i.e., naturally occurring pure copper metal (Ellis 2013:42). The recorded origin of this material along the north shore of Lake Superior indicates the existence of extensive exchange networks across the Great Lakes basin.

At approximately 3500 BCE, the isostatic rebound of the North American plate following the melt of the Laurentide glacier had reached a point which significantly affected the watershed of the Great Lakes basin. Prior to this, the Upper Great Lakes had drained down the Ottawa Valley via the French-Mattawa River valleys. Following this shift in the watershed, the drainage course of the Great Lakes basin had changed to its present course. This also prompted a significant increase in water-level to approximately modern levels (with a brief high-water period); this change in water levels is believed to have occurred catastrophically (Stewart 2013:28-30). This change in geography coincides with the earliest evidence for cemeteries (Ellis 2013:46). By 2900 to 2500 BCE, the earliest evidence exists for the construction of fishing weirs (Ellis et al. 1990: Figure 4.1; Stevens 2004). Construction of these weirs would have required a large amount of communal labour and are indicative of the continued development of social organization and communal identity. The large-scale procurement of food at a single location also has significant implications for permanence of settlement within the landscape. This period is also marked by further population increase and by 1500 BCE evidence exists for substantial permanent structures (Ellis 2013:45-46).



Stage 1 Archaeological Assessment: Little River Pollution Control Plant Municipal Class Environmental Assessment

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By approximately 950 BCE, the earliest evidence exists for populations using ceramics. Populations are understood to have continued to seasonally exploit natural resources. This advent of ceramic technology correlated, however, with the intensive exploitation of seed foods, such as goosefoot and knotweed, as well as mast, such as nuts (Williamson 2013:48). The use of ceramics implies changes in the social organization of food storage as well as in the cooking of food and changes in diet. Fish also continued to be an important facet of the economy at this time. Evidence continues to exist for the expansion of social organization (including hierarchy), group identity, ceremonialism (particularly in burial), interregional exchange throughout the Great Lakes basin and beyond, and craft production (Williamson 2013:48-54).

By the Late Woodland period there was a distinctive cultural occupation in southwestern Ontario, including Essex, Kent, and Lambton counties. The primary Late Woodland occupants of this area were populations described by archaeologists as Western Basin Tradition. Murphy and Ferris (1990:189) indicate that these people had ties with populations in southeastern Michigan and northwestern Ohio and represent an *in situ* cultural development from the earlier Middle Woodland groups. The Western Basin Tradition seems to have been centred in the territory comprising the eastern drainage basin of Lake Erie, Lake St. Clair, and the southern end of Lake Huron. The Western Basin Tradition is divided up into four phases based on differences in settlement and subsistence strategies and pottery attributes: Riviere au Vase, Younge, Springwells, and Wolf.

By approximately 550 CE, evidence emergences for the introduction of maize into southern Ontario. This crop would have initially only supplemented Indigenous people's diet and economy (Birch and Williamson 2013:13-14). Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing, and foraging. By approximately 1250 CE, evidence exists for the common cultivation of historical Indigenous cultigens, including maize, beans, squash, sunflower, and tobacco. The extant archaeological record demonstrates many cultural traits similar to historical Indigenous nations (Williamson 2013:55).

1.2.2 Post-Contact Indigenous Resources

At the turn of the 16th century, the study area is documented to have been occupied by the Western Basin Tradition archaeological culture. Following the turn of the 17th century, the region of the study area is understood to have been within the territory of the Fire Nation, an Algonkian group occupying the western end of Lake Erie. It is argued, however, that the *Atawandaron* (Neutral) expanded extensively westward, displacing the Fire Nation (Lennox and Fitzgerald 1990:418-419). It is debated whether the Fire Nation was descendent from the archaeologically described Western Basin Tradition, or if they migrated into the western part of Lake Erie, displacing a previous Indigenous culture (Murphy and Ferris 1990:193-194). Historians understand that the displaced Fire Nation moved across the St. Clair and Detroit Rivers into what is modern-day lower Michigan, and their populations are synonymous with the later Kickapoo, Miami, Potawatomi, Fox, and Sauk (Heidenreich 1990: Figure 15.1). Bkejwanong (Walpole Island) First Nation oral tradition states that the Three Fires (a political confederacy constituted of the Potawatomi, Ojibwa, and Ottawa) have occupied the delta of the St. Clair River and the surrounding region continually for thousands of years (Walpole Island First Nation [WIFN] no date [n.d.]). In 1649, the Seneca and the



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Mohawk led a campaign into southern Ontario and dispersed the resident populations, and the Seneca used the lower Great Lakes basin as a prolific hinterland for beaver hunting (Heidenreich 1978; Trigger 1978:345).

By 1690, Ojibwa-speaking people had begun to displace the Seneca from southern Ontario. The Indigenous economy, since the turn of the 18th century, focused on fishing and the fur trade, supplemented by agriculture and hunting (Konrad 1981; Rogers 1978). The study area falls within the traditional territory of the WIFN, the Aamjiwnaang (Sarnia) First Nation (Aamjiwnaang First Nation), the Wiiwkwedong and Aazhoodena (Kettle Point and Stony Point) First Nation (Lytwyn 2009), the Deshkaan Ziibing Anishinaabeg (Chippewas of the Thames First Nation), and Caldwell First Nation. Some populations of Wyandot (an Indigenous population of historically amalgamated Petun and Huron-Wendat individuals) also had moved to the region of Lake St. Clair at the turn of the 18th century and resided with the Three Fires (Tooker 1978:398).

In Essex County, and specifically in the Windsor region, a splinter group of Ottawa settled in the area (CRM Group Limited *et al.* 2005:2-14 to 2-15). The surviving populations of the Huron and Petun were also settling in the Windsor region as the Wyandot, exhibiting continuities with their 16th and 17th century predecessors from the Midland and Blue Mountain regions (Garrad 2014; Steckley 2014). Given the amalgamated nature of the Wyandot people (sometimes one of the contributing Indigenous peoples was recognized over another), the Wyandot were known as Huron in the Windsor region (Garrad 2014:16-54). Therefore, the Wyandot settlement in the Windsor region is commonly referred to as the "Huron Village" and related place names survive in Windsor today, such as Huron Church Road (but also note Wyandotte Street). A 1749 French map of the Detroit River region (Chaussegros de Léry 1752) depicts Ottawa and Huron villages on the waterfront of the Windsor region (Figure 3).

Despite the dispersal and movement of Indigenous groups throughout southern Ontario during the 17th and 18th centuries, archaeologically they can be characterized by continuity with their pre-contact Indigenous counterparts. These peoples still maintained a Late Woodland archaeological culture, albeit with some features of European material culture. While there was cultural and social change occurring due to contact with European colonial powers, there was equally a definite persistence of Indigenous socio-cultural practices since these groups were not so profoundly affected by European contact that they left their former lifeways behind (Ferris 2009).

In the middle of the 18th century, the Chippewa were located on the south shores of Lake Huron, the east shores of Georgian Bay, and on the west end of Lake Ontario. Indigenous peoples and their communities continued to play a large role in the occupation of the study area and its environs. Under British administration in the 19th century, the various Indigenous groups were divided into separate bands. The Anishinaabe included the western Algonquian peoples, among them the Chippewa and the Ottawa. Until the 18th century, the central Algonquian-speaking peoples, including the Potawatomi, were located in the Michigan Peninsula (Blackbird 1887).

Regardless of the differentiation among these groups in Euro-Canadian sources, there was a considerably different view by Indigenous groups concerning their self-identification during the first few centuries of European contact. These peoples relied upon kinship ties that cut across European notions of nation identity (Bohaker 2006:277-283). Many of the British-imposed nation names such as Chippewa,



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Ottawa, Potawatomi, or Mississauga artificially separated how self-identified Indigenous peoples' classified themselves; these groups were culturally and socially more alike than contemporary European documentation might indicate (Bohaker 2006:1-8).

Following the American Revolutionary War, Britain (the Crown) focused on the settlement of European immigrants into what became the province of Upper Canada in 1791. To enable widespread settlement, the Crown entered into a series of treaties with Indigenous peoples (Government of Canada n.d.). One of the earliest treaties involving lands located near the study areas was made on May 19, 1790 (Figure 4). Originally identified as the Detroit Treaty, the chiefs of the Ottawa, Chippewa, Potawatomi, and Huron nations and representatives of the Crown established a vast tract of land,

...beginning at the mouth of Catfish Creek, commonly called Rivière au Chaudière on the North Side of Lake Erie being the Western extremity of a Tract purchased by His said Majesty from the Messesagey Indians in the year One Thousand Seven Hundred and Eighty Four and from thence running Westward along the border of Lake Erie and up the Streight to the mouth of a river known by the name of Channail Ecarté to the first fork on the south side, then due east line until it intersects the Rivière à la Tranche, and up the said Rivière à la Tranche to the Thousand Seven Hundred and Eighty Four, then following the Western boundary of said tract being a due South direction until it strikes the mouth of said Catfish Creek or otherwise Rivière au Chaudière being the first offset;

Reserving a Tract beginning at the Indian Officers Land at a small run near the head of the Island of Bois Blanc and running upwards along the border of the Streight to the beginning of the French Settlement above the head of the Petite Isle au D'Inde; then a due East line seven miles and then South so many miles as will intersect another East line run from the mouth of said Run or Gully near the head of said Island of Bois Blanc:

And another Tract beginning at the mouth of Rivière au Jarvais commonly called Knagg's Creek, running up along the border of the Streight to the Huron Church and one hundred and twenty arpents in depth...

(Government of Canada 2025)

Today, this treaty is identified as Treaty Number 2 or the McKee Treaty. A plaque erected by the Historic Sites and Monuments Board of Canada further identifies this treaty as *McKee's Purchase*. A commemorative plaque located in Blenheim Memorial Park in Blenheim, Ontario reads:

In May 1790 Alexander McKee, Deputy Agent of the British Indian Department, and the principal chiefs of the Ottawa, Potawatomi, Chippewa and Wyandot negotiated a treaty whereby the British Crown acquired title to what is now southwestern Ontario. This treaty completed the process begun with Niagara treaties of 1781 and 1784, with the result that most of the Ontario peninsula was soon opened to British and Loyalist settlement.

(Government of Canada 2010)



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Caldwell First Nation were not part of the negotiations or signing of Treaty Number 2 (McKee's Purchase) and, therefore, were not able to secure rights and benefits from the treaty (Caldwell First Nation 2021). Without a treaty, Caldwell First Nation's traditional territory remained in possession of private and government interests until November 2020, when Caldwell First Nation received land designation from the Crown and established a Reserve for their community (Caldwell First Nation 2021).

In addition to the above, a map from the *History of the Windsor Border Region* (Lajeunesse 1960) depicts several Indigenous sites and trails documented in Essex County during the late 18th century (Figure 5). Based on Figure 5, the study area is near Trail G, an early path along the south shore of Lake St. Clair, connecting the Thames River to Sandwich (Lajeunesse 1960: xxxix). The accuracy to which the proximity of the study area can be associated to these trails is marginal; however, even a general association to these trails and sites speaks to the historical importance of the study area's location within Essex County.

The nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon their territory. However, despite this shift, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to...systems of ideology and thought" (Ferris 2009:114). As a result, Indigenous peoples have left behind archaeological resources throughout Ontario which show continuity with past peoples, even if they have not been recorded in Euro-Canadian documentation. Moreover, contemporary Indigenous nations have expressed that their traditional governance systems remain active and that treaty relationships with the Crown are regarded as ongoing and relevant today. For many Indigenous nations, treaties are understood as ongoing agreements that continue to inform governance, stewardship responsibilities, and contemporary relationships with the land.

1.2.3 Euro-Canadian Resources

In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament. At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new province, directing its settlement, and establishing a constitutional government modelled after that of Britain. In 1792, Simcoe divided Upper Canada into 19 counties consisting of previously settled lands, new lands opened for settlement and lands not yet acquired by the Crown. These new counties stretched from Essex in the west to Glengarry in the east.

The first French settlers arrived in the Detroit-Windsor area in 1701 when the Sieur De Lamothe Cadillac and roughly 100 military and civilian personnel established Fort Pontchartrain on the Detroit side of the Detroit River (Fuller 1972:6-8). The French settlement remained on the Detroit side until 1748 when the Jesuit mission to the Huron (or Wyandot) was established on the south shore near the foot of the present-day Huron Church Road and the Ambassador Bridge. Fort Pontchartrain surrendered to the British in 1760 and remained under British control until 1796, although it was officially a part of the United States from 1783 onwards. During this period, the settlement continued to grow but remained predominantly French. The area across the river (now in present-day Windsor) from Fort Pontchartrain (later to become



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Detroit) was called "Petite côte" and served the agricultural needs of the fort (Archives of Ontario 2025). The street pattern of the City of Windsor still reflects the French method of agricultural land division; for example, the long narrow parcels fronting the river where the "Petite côte" was located (Morrison 1954:3-4). In 1796, the original townsite of Sandwich was established to accommodate new immigrants of both French and British origin from the United States who wished to remain under British rule following American occupation of Detroit. This constituted the first urban settlement in what is now the City of Windsor and the first significant migration of English-speaking people into the Windsor area (Neal 1909:86-87).

Essex County was originally part of the District of Hesse, which in 1792 was renamed the Western District. On January 1, 1800, in the *Act for the Better Division of the Province*, the townships of Rochester, Mersea, Gosfield, Maidstone, Sandwich, and Malden were created as part of the County of Essex. The townships of Essex County were surveyed by Patrick McNiff, Abraham Iredell, and Thomas Smith (Clarke 2010).

As the area began to attract more Euro-Canadian interest, Patrick McNiff was assigned to survey and organize the area into a township, also to be named Sandwich. His survey of the township was completed in 1793. The form of the concessions noted as "Petite côte" was dictated by the land divisions already used by the French farmers in the "Petite côte" area, in what was to become Concession 1 Petite Côte. In fact, on his original township map where he measured the Concession 1 lots, Patrick McNiff notes that "on my measuring the farms in front from No. 1 to No. 154 found their division Lines to run in the very irregular manner they appear on the Plan" (McNiff 1956). The most accurate maps produced of the township at this time were completed by Abraham Iredell between 1797 and 1803, who resurveyed the area and renumbered the lots from Lot 82 onwards in Concessions 1 to 3 Petite Côte (Iredell 1803; Morris 1929). A portion of the 1803 survey plan (Iredell 1803) is illustrated on Figure 6. At it relates to the study area, the names Soulier is indicated on Lot 134, Parre is indicated on Lot 135, and Bourdeneau is indicated on Lot 136. Additionally, Little River is depicted on the 1803 survey plan (Iredell 1803) adjacent to the study area (Figure 6). As a result of the unusual surveying, historical plans and maps of Sandwich Township may be slightly askew when referencing to modern Lot and Concession lines.

By the mid-1850s, the community of Windsor became more established and grew large enough to compete with the adjacent community of Sandwich for important industrial development. For example, the Great Western Railway chose Windsor over Sandwich as its termination point in 1854. The arrival of the railway also allowed for the foundation of Walkerville, the third oldest settlement that is now part of the City of Windsor. In 1857, Hiram Walker established his distillery in the downtown area of Windsor where the Great Western Railway first met the waterfront (Morrison 1954:26).

In 1858, both Windsor and Sandwich were incorporated as towns (Morrison 1954:42). In 1861, the Township of Sandwich was subdivided into the townships of Sandwich West, Sandwich East, and Sandwich South (Neal 1909:12). However, many landowners are not listed within the more urban portions of the 1877 *Map of Essex County, Ontario* (Walling 1877) or the 1881 *Map of Sandwich Township* (Belden & Co. 1881). Figure 7 illustrates a portion of the 1877 map (Walling 1877), and Figure 8 illustrates a portion of the 1881 map (Belden & Co. 1881). Table 2 lists landowners depicted on the 19th century mapping as they relate to study area. The Essex County historical atlas of 1881 documents a



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total population of 36,258, with 25,303 settlers living in rural settings, and 10,955 living in urban settings (Belden & Co. 1881:8).

Table 2: Landowners Illustrated on Historical Mapping of Sandwich Township

Concession	Lot	1877 Map (Walling 1877) Landowner	1881 Map (Beldon & Co. 1881) Landowner
1 Petite Côte	134	Ben Soulier, Jos Soulier	None listed
	135	Jos Langlois	None listed
	136	P. Moreau	None listed

Little River is not depicted on the 1877 map (Walling 1877) but is illustrated on the 1881 map Beldon & Co. 1881). However, the course of the river differs from the 1803 survey plan (Iredell 1803). Moreover, the modern alignment of Little River has been altered due to constructed embankments and other municipal draining improvement projects. Aside from Little River, no structures or other notations are depicted on the 19th century mapping within or adjacent to the study area.

In discussing 19th century historical mapping, it must be remembered that many historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100), as is the case with the 1881 map (Belden & Co. 1881). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). Further, review of historical mapping, including treaty mapping, has inherent accuracy difficulties due to potential error in georeferencing. Georeferencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in "fixed" locations over time (e.g., road intersections, road alignments, shorelines, etc.), errors/difficulties of scale and the relative idealism of the historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

1.2.3.1 Heritage Properties

A query of the City of Windsor's Municipal Heritage Register found no heritage properties within 300 metres of the study area (City of Windsor 2024).

1.3 Archaeological Context

1.3.1 The Natural Environment

The study area is in the St. Clair Clay Plains physiographic region, as identified by Chapman and Putnam (1984). This region is described as:

Adjoining Lake St. Clair in Essex and Kent County Counties and the St. Clair River in Lambton County are extensive clay plains covering 2,270 square miles. The region is one of little relief, lying between 575 and 700 feet a.s.l. [175 to 213 metres above sea level],



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except for the moraine at Ridgetown and Blenheim which rises 50 to 500 feet higher [15 to 175 metres]... Glacial Lake Whittlesey, which deeply covered all of these lands, and Lake Warren which subsequently covered nearly the whole area, failed to leave deep stratified beds of sediment on the underlying clay till except around Chatham, between Blenheim and the Rondeau marshes, and in a few other smaller areas. Most of Lambton and Essex Counties, therefore, are essentially till plains smoothed by shallow deposits of lacustrine clay which settled in the depressions while the knolls were being lowered by wave action.

(Chapman and Putnam 1984:147)

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most used variables for predictive modeling of archaeological site location in Ontario. Little River forms the western boundary of the study area with a tributary, Old Little River, bisecting the study area. Though the course of Little River has changed overed time, it flows into the Detroit River approximately 650 metres north of the study area as it empties from the base of Lake St. Clair. Use of the Detroit River has evolved over time from being a transportation route used by early Indigenous inhabitants and Euro-Canadian explorers and settlers, to an industrial power source to support the early mills of the area, to a commercial shipping route, and finally to a water course used for recreational purposes throughout the 20th and 21st centuries.

Soils within the study area are Clyde Clay (Richards *et al.* 1949). Clyde clay is an almost level soil with poor natural drainage. It is dark black in colour and stone-free. Generally, the soil is satisfactory for general farming or corn, wheat and other grains, and is more often utilized as pasture (Richards *et al.* 1949).

1.3.2 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by uppercase letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces due to the earth's curvature as one moves north. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lowercase letters. Individual sites are assigned a unique, sequential number as they are registered (Borden 1952). The Ministry issues these sequential numbers and maintains the *Ontario Archaeological Sites Database*. The study area is located within Borden block AbHr.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction.



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Confidentiality extends to media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The Ministry will provide information concerning site location to the party or an agent of the party holding title to a property or a licensed archaeologist with relevant cultural resource management interests.

An examination of the Ministry's *Ontario Archaeological Sites Database* (Government of Ontario 2025a) identified one registered archaeological site within one kilometre of the study area: Nicodemo-Dupuis (AbHr-19). The site is registered as a camp dating to the Woodland and Archaic archaeological periods. The site is not within 50 metres of the study area (Government of Ontario 2025a).

A query of the Ministry's *Ontario Public Register of Archaeological Reports* identified two previous archaeological assessments within 50 metres of the study area (Government of Ontario 2025b). In 2020, Fisher Archaeological Consulting (FAC) completed a Stage 1 archaeological assessment for various properties associated with the City of Windsor Sewer Master Plan (FAC 2020). The study area assessed by FAC (2020) for the Pontiac Pumping Station overlaps with a portion of the study area for the Project and was recommended for Stage 2 archaeological assessment (FAC 2020). Subsequently, in 2022, Stantec completed Stage 2 archaeological assessment for the Pontiac Pumping Station (Stantec 2022). No archaeological resources were identified during the Stage 2 archaeological assessment, and therefore no further work was recommended (Stantec 2022). The Stantec (2022) study area overlaps with the study area for the Project and is illustrated on Figure 9.

1.3.3 Archaeological Master Plan

The City of Windsor Archaeological Management Plan, 2024 Update (Archaeological Services Inc. [ASI] and FAC 2024) discusses the City's general archaeological context. As of 2005, outlined in the first iteration of the Archaeological Master Plan (AMP), archaeologists had registered 23 archaeological sites within the City's limits or within the immediate vicinity (CRM Group Limited et al. 2005). The number of registered archaeological sites has increased since the publishing of the 2005 AMP (CRM Group Limited et al. 2005), but the new statistic is not listed in the 2024 AMP (ASI and FAC 2024). The AMP recognizes that several poorly documented sites exist and there are many sites still to be documented, especially since the majority of the archaeological studies discussed in the AMP are concentrated along the Detroit River or in southwest Windsor (CRM Group Limited et al. 2005; ASI and FAC 2024). Based on mapping in the updated AMP (ASI and FAC 2024), the study area falls into an area designated as having archaeological potential, likely due to its proximity to Little River.

1.4 Existing Conditions

The study area for the Project comprises the existing LRPCP property, approximately 17.86 hectares, located on parts of Lots 134 to 136, Concession 1 Petite Côte, Geographic Township of Sandwich, former Essex County, now City of Windsor, Ontario. The study area comprises manicured lawn and greenspace, scrubland, and existing LRPCP and associated infrastructure including roads, buildings, lagoons, and parking lots.



2 Field Methods

Prior to the start of the Stage 1 archaeological assessment, the City provided Stantec with a map of the study area for the Class EA of the Project. The City's mapping serves as the Development Map for the Project. The mapping from the City was geo-referenced by Stantec's Geographical Information Systems (GIS) team and a digital file (i.e., a shape file) was created of the study area. The digital file of the study area was uploaded to ArcGIS Field Maps powered by ESRI, customized by Stantec for archaeological survey and assessment, for digital data recording in the field. Data was recorded in the field on a handheld mobile device paired with a Trimble R1 Global Navigation Satellite System (GNSS) receiver to an accuracy of less than one metre.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on May 7, 2025, by Andrew O'Shaughnessy, BA (R497) under Project Information Form number P256-0849-2025, issued to Parker Dickson, MA, by the Ministry. The property inspection involved spot-checking the entirety of the study area to identify the presence or absence of features of archaeological potential in accordance with Section 1.2 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

During the Stage 1 assessment the weather was warm and sunny, and the field, weather, and lighting conditions were suitable for the identification of features of archaeological potential. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential. The photography from the Stage 1 archaeological assessment is presented in Section 7.1 and confirms that the requirements for a Stage 1 archaeological assessment were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the Ministry's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Figure 9 illustrates photo locations from the Stage 1 archaeological assessment of the study area.

Approximately 59.4% of the study area was visually confirmed not to have been previously disturbed and, therefore, retains archaeological potential. Photographs illustrating typical examples of such areas are presented in Section 7.1.

Approximately 37.5% consists of lands previously disturbed by existing infrastructure associated with the LRPCP, including lagoons, roads, buildings, and areas of previous and extensive soil grading. Photographs illustrating typical examples of previous and extensive disturbance are presented in Section 7.1.

Lastly, approximately 3.1% of the study area was previously assessed by Stantec (2022) and no further archaeological work was recommended. This portion of the study area was not re-assessed or photographed as part of the Stage 1 property inspection.



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3 Analysis and Conclusions

Archaeological potential is established by determining the likelihood that archaeological resources may be present within a study area. Stantec applied archaeological potential criteria commonly used by the Ministry (Government of Ontario 2011) to determine areas of archaeological potential within the study area. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to modern water is one of the most used variables for predictive modeling of archaeological site locations. Distance to modern or ancient water sources is generally accepted as the most important determinant past human settlement patterns and considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site location and type to varying degrees. The Ministry categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, and creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes, and swamps.
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, and shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, and sandbars stretching into marsh.

Little River forms the western boundary of the study, and a tributary of Old Little River bisects the study area. Ancient and/or relic tributaries of other primary and secondary water sources may have existed but are not identifiable today and are not indicated on historical mapping.

Soil texture can also be an important determinant of past settlement, usually in combination of other factors such as topography. Soils within the study area would have been satisfactory for early agriculture.

A review of the Ministry's *Ontario Archaeological Sites Database* identified one registered archaeological site within one kilometre of the study area (Government of Ontario 2025a). Despite few registered archaeological sites in the Ministry's *Ontario Archaeological Sites Database* near the study area, the region was home to several Indigenous populations. Moreover, the paucity of archaeological sites is more



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likely a factor of few comprehensive archaeological surveys completed in the region than it is an indication of past Indigenous and early Euro-Canadian use.

Archaeological potential can also be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990c) or property that local histories or informants have identified with possible historical events, activities, or occupations. While no heritage properties or early settlements are within the study area or within 300 metres of the study area, historical mapping of the region of the study area depict landownership beginning in the early 19th century by Euro-Canadian immigrants. The 1877 map of Essex County illustrates a fully settled township with the beginnings of infrastructure such as the Canada Southern Railway (Walling 1877). By 1881, several villages had been established further inland from the Detroit River to support a continuous growing population (Belden & Co. 1881).

Based on mapping in the updated AMP (ASI and FAC 2024), the study area falls into an area designated as having archaeological potential, likely due to its proximity to Little River.

A portion of the study area has been previously assessed, and no further archaeological work was recommended (Stantec 2022). This portion of the study area retains low to no archaeological potential.

The Stage 1 property inspection determined that portions of the study area have been subject to deep and extensive land disturbance, i.e., lagoons, roads, buildings, and areas of previous and extensive soil grading. The Stage 1 property inspection determined the remaining portions of the study area comprise manicured lawn, scrubland, and woodlot that do not appear to have been extensively disturbed.

In summary, the Stage 1 archaeological assessment for the Project, involving background research and a property inspection, determined that approximately 40.6% of the study area retains low to no archaeological potential due to previous archaeological assessment (Stantec 2022), deep and extensive disturbances, and areas that are low-lying and permanently wet. The remainder of the study area, approximately 59.4%, retains archaeological potential. The results of the Stage 1 assessment are illustrated in Figure 9.



4 Recommendations

The Stage 1 archaeological assessment determined that approximately 40.6% of the study area retains low to no archaeological potential due to previous archaeological assessment (Stantec 2022) and deep and extensive disturbances. Thus, in accordance with Section 1.3.2 and Section 7.7.4 of the Ministry's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), Stage 2 archaeological assessment is not required for portions of the study area with low to no archaeological potential (Figure 9).

The Stage 1 archaeological assessment determined that the remainder of the study area, approximately 59.4%, retains archaeological potential. Thus, in accordance with Section 1.3.1 and Section 7.7.4 of the Ministry's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), Stage 2 archaeological assessment is required for areas of archaeological potential within the study area (Figure 9).

The objective of Stage 2 archaeological assessment is to document archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment. For areas that are actively or recently cultivated, the Stage 2 archaeological assessment must include the systematic walking of open ploughed fields at a five-metre interval as outlined in Section 2.1.1 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The Ministry's standards require that agricultural and accessible land, both active and inactive, be recently ploughed and sufficiently weathered to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing, and must provide at least 80% ground surface visibility.

For areas inaccessible for ploughing, the Stage 2 archaeological assessment must include a test pit survey at a five-metre interval as outlined in Section 2.1.2 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The Ministry's standards require that each test pit be at least 30 centimetres in diameter, excavated to at least five centimetres into subsoil, and have excavated soil screened through six-millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

If the archaeological field team determines any additional lands to be low-lying and permanently wet, steeply sloped, or disturbed during the Stage 2 fieldwork, those areas will not require survey but will be photographically documented in accordance with Section 2.1 of the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

The Ministry is asked to review the results presented and enter this report into the *Ontario Public Register* of Archaeological Reports.



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5 Advice on Compliance with Legislation

In accordance with Section 7.5.9 of the Ministry's 2011 <u>Standards and Guidelines for Consultant Archaeologists</u> (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the Ministry's 2011 <u>Standards and Guidelines for Consultant Archaeologists</u> (Government of Ontario 2011).

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990c). The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* (Government of Ontario 1990c) for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the *Ontario Public Register of Archaeological Reports* referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990c).

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990c). The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990c).

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 (Government of Ontario 2002), requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Public and Business Delivery Services and Procurement.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990c) and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.



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Images 7

Photos 7.1

east

Photo 1: General view of the study area, facing Photo 2: General view of the study area, facing east





Photo 3: General view of the study area, facing Photo 4: General view of the study area, facing west

south







Photo 5: General view of the study area, facing Photo 6: General view of the study area, facing south





Photo 7: General view of the study area, facing west

Photo 8: General view of the study area, facing northeast











Photo 11: General view of the study area, facing northwest



Photo 12: General view of the study area, facing north







7 Images September 26, 2025

Photo 13: Previously disturbed gravel laneway and buildings, facing north

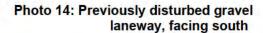




Photo 15: Previously disturbed gravel laneway, facing south



Photo 16: Previously disturbed gravel laneway, facing north







7 Images September 26, 2025

Photo 17: Previously disturbed gravel laneway, facing west



Photo 19: Previously disturbed plant infrastructure, facing west

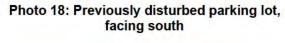




Photo 20: Previously disturbed plant infrastructure, facing northwest







7 Images September 26, 2025

Photo 21: Previously disturbed plant infrastructure, facing southeast

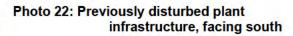




Photo 23: Previously disturbed plant infrastructure, facing southeast



Photo 24: Previously disturbed plant infrastructure, facing northeast







Photo 25: Previously disturbed plant infrastructure, facing south



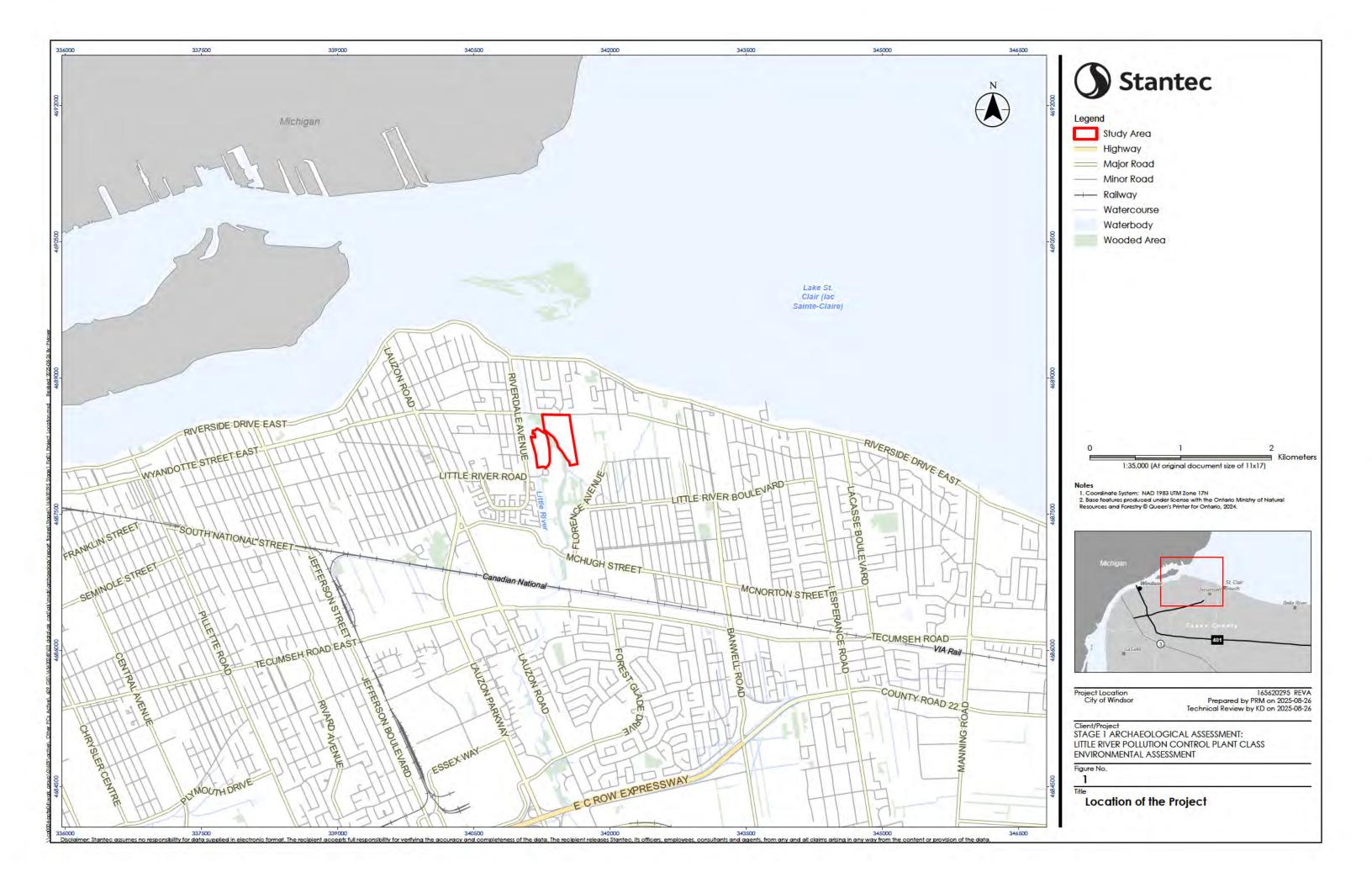


8 Maps September 26, 2025

8 Maps

General maps of the study area for the Stage 1 archaeological assessment follow on succeeding pages.









Legend

Study Area

Watercourse

Waterbody

100 Metres 1:3,000 (At original document size of 11x17)

- NOTES

 1. Coordinate System: NAD 1983 UTM Zone 17N

 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.

 3. Orthoimagery © First Base Solutions, 2025. Imagery Date, 2024.



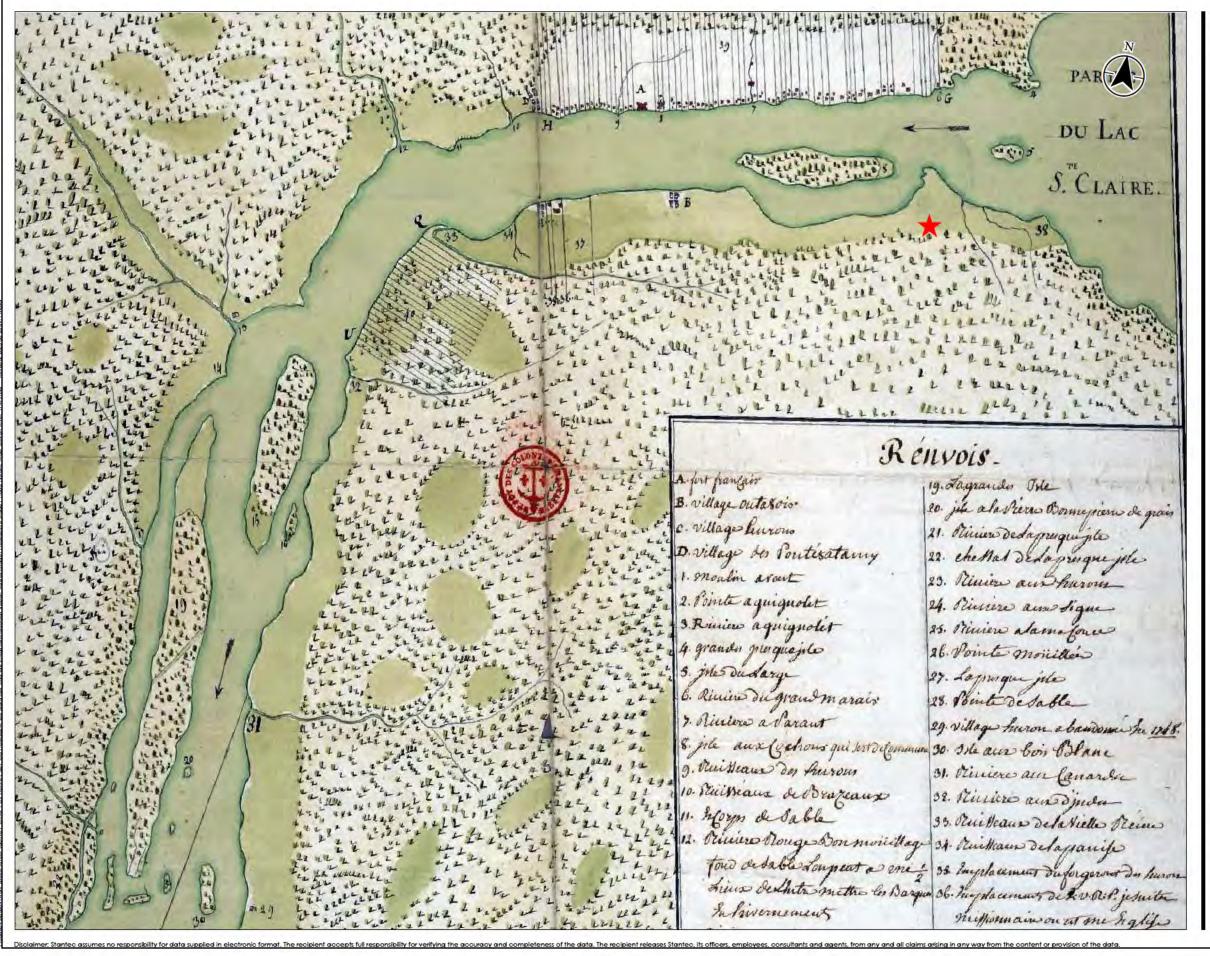
Project Location City of Windsor

165620295 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LITTLE RIVER POLLUTION CONTROL PLANT CLASS
ENVIRONMENTAL ASSESSMENT

Figure No.

Location of Study Area





Leger

Approximately Location of Study Area

Figure Not to Scale

Votes

 Reference: Chaussegros de Lery, Gaspar-Joseph. 1752. Carte de La Riviere du Detroit depuis de le Lac Frie jusques au Lac S. Claire. Department of Marine. Pari

Project Location City of Winds 165620295 REV/ Prepared by PRM on 2025-08-2 (echnical Review by KD on 2025-08-2

Client/Project

STAGE 1 ARCHAEOLOGICAL ASSESSMENT: LITTLE RIVER POLLUTION CONTROL PLANT CLASS ENVIRONMENTAL ASSESSMENT

Figure No.

3

Portion of the 1749 Map of the Detroit River





★ Approximate Location of Study Area

Figure Not to Scale

No. 13. Reference: Government of Canda. n.d.a. Map of Treaty Areas in Upper Canada Ottawa: Department of Indian Affairs. Survey Branch.

Project Location City of Windsor

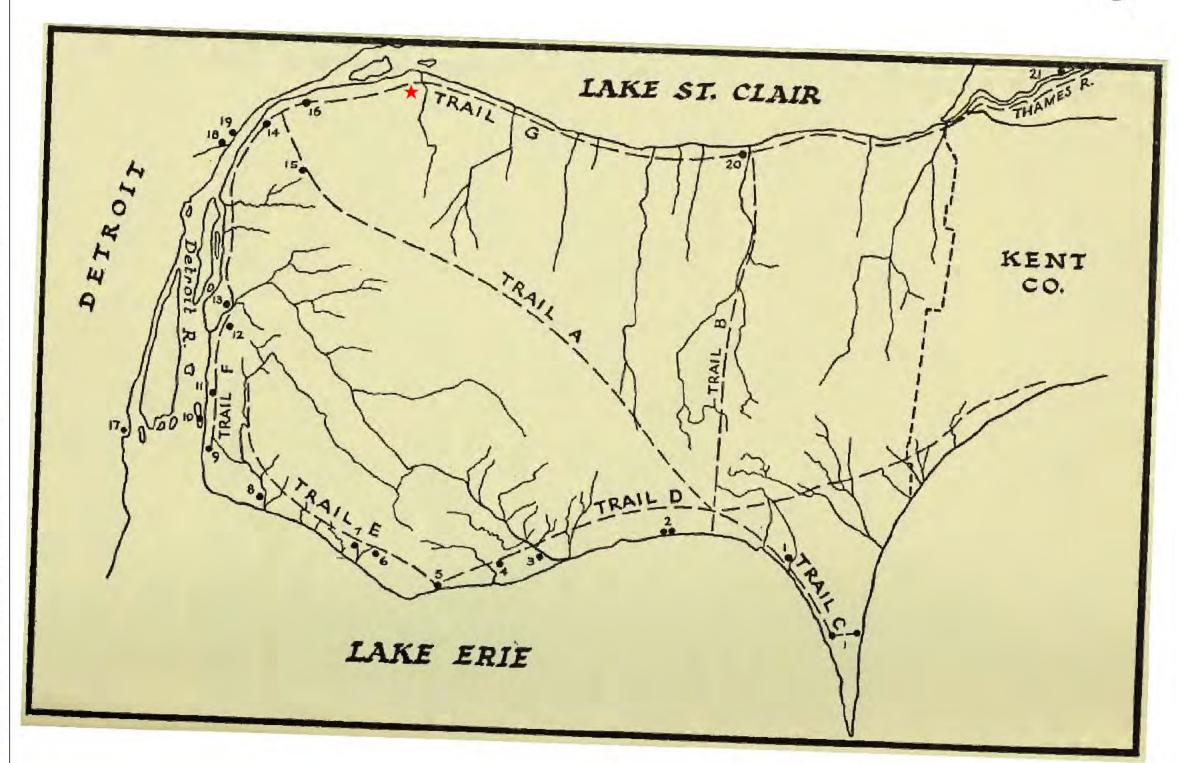
165620295 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

STAGE 1 ARCHAEOLOGICAL ASSESSMENT: LITTLE RIVER POLLUTION CONTROL PLANT CLASS ENVIRONMENTAL ASSESSMENT

Figure No.

Map of Treaty Areas of Upper Canada







★ Approximately Location of Study Area

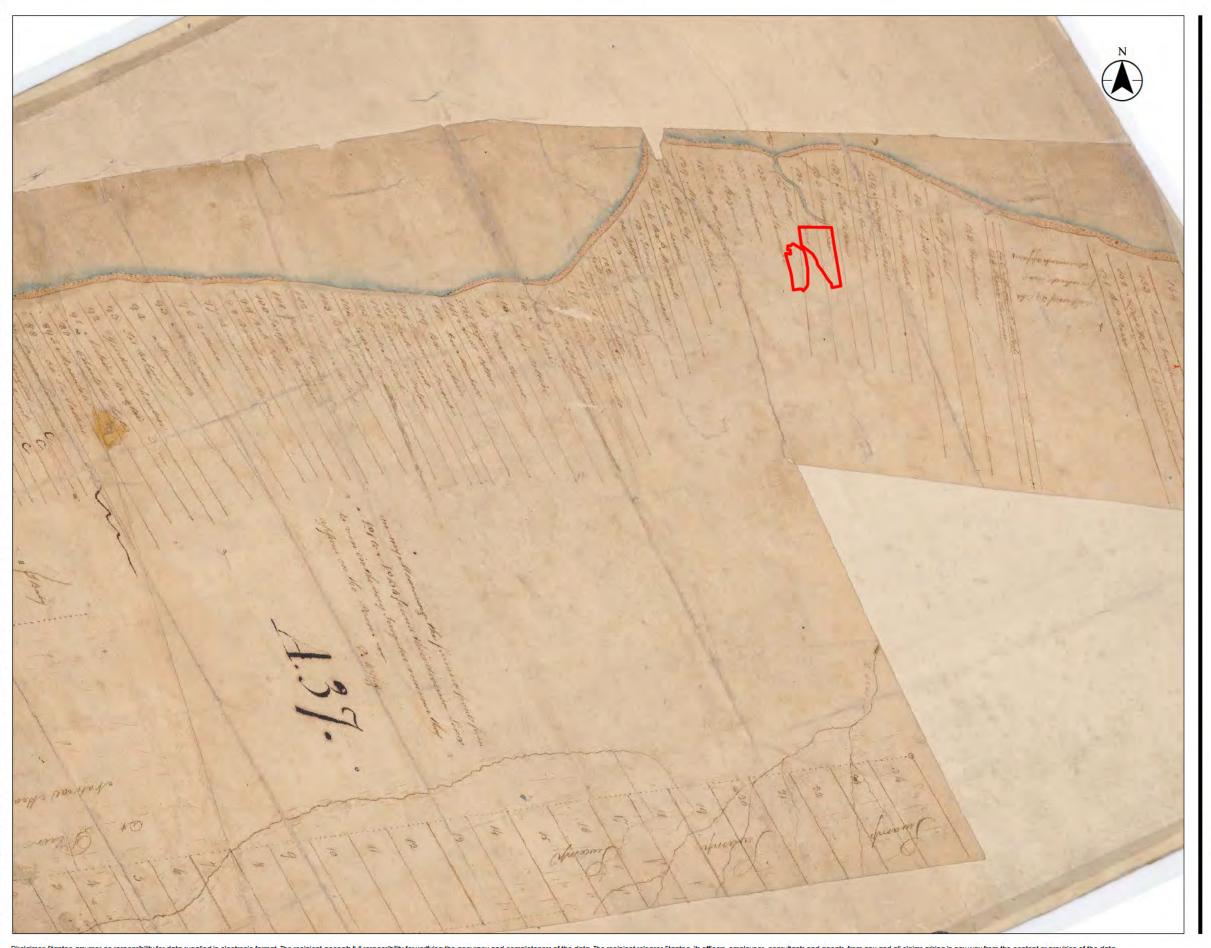
Figure Not to Scale

Notes 1. Reference: Lajeunesse, Ernest J. 1960. The Windsor Border Region: Canada's Southernmost Frontier. The Champlain Society. Toronto: University of Toronto Press.

165620295 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LITTLE RIVER POLLUTION CONTROL PLANT CLASS
ENVIRONMENTAL ASSESSMENT

Documented Indigenous Activity in Essex County (Lajeunesse 1960)





Approximately Location of Study Area

Figure Not to Scale

Notes
1. Reference: Iredell, Abraham. 1803. Sandwich. Map A35. Unpublished map, on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

Project Location City of Windsor

165620295 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LITTLE RIVER POLLUTION CONTROL PLANT CLASS
ENVIRONMENTAL ASSESSMENT

Portion of the 1803 Plan of a Portion of Sandwich Township





Approximately Location of Study Area

Figure Not to Scale

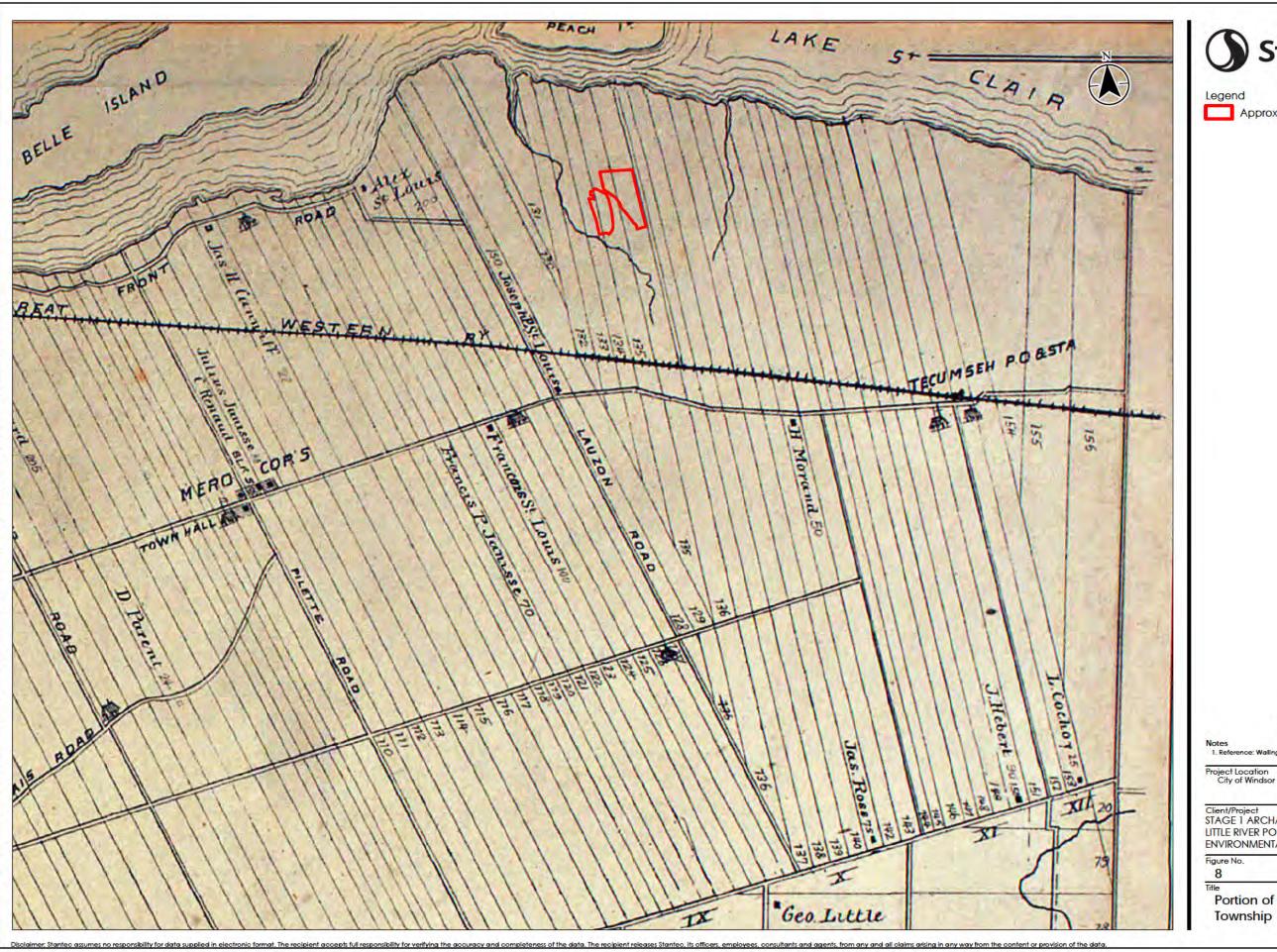
Notes
1. Reference: Walling, H.F. 1877. Map of Essex County, Ontario. R.M. Tackabury.

Project Location City of Windsor

165620239 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LITTLE RIVER POLLUTION CONTROL PLANT CLASS
ENVIRONMENTAL ASSESSMENT

Title
Portion of the 1877 Map of Essex County





Approximately Location of Study Area

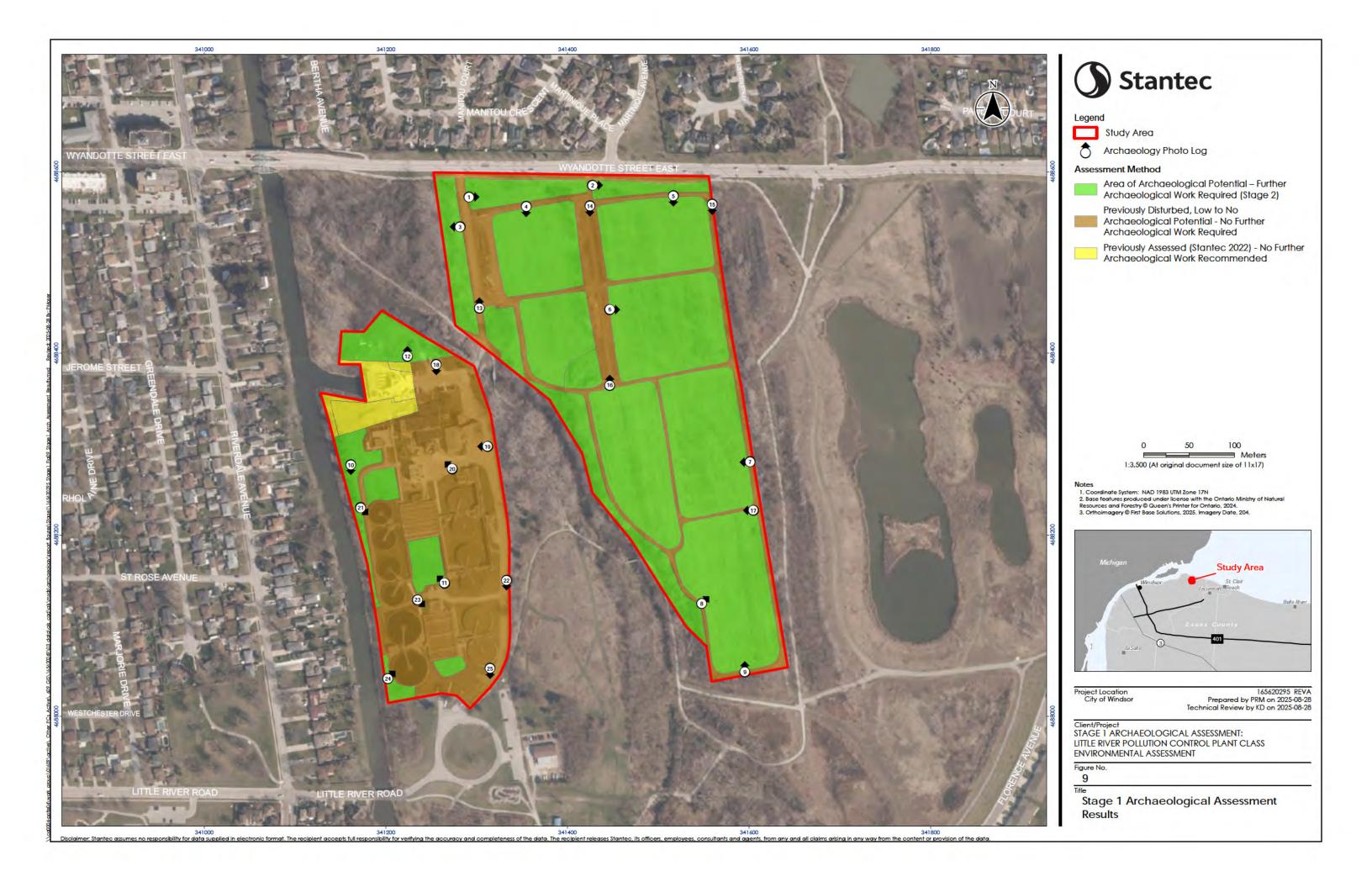
Figure Not to Scale

Notes
1. Reference: Walling, H.F. 1877. Map of Essex County, Ontario. R.M. Tackabury.

165620295 REVA Prepared by PRM on 2025-08-26 Technical Review by KD on 2025-08-26

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LITTLE RIVER POLLUTION CONTROL PLANT CLASS
ENVIRONMENTAL ASSESSMENT

Portion of the 1881 Map of Sandwich Township



9 Closure September 26, 2025

9 Closure

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.







Memo

To: Chandana Walgama From: Laura Walter and Tracie Carmichael

Windsor, ON Markham, ON

File: 165620295 Date: July 22, 2025

Reference: Heritage Overview - Little River Pollution Control Plant Expansion, Schedule 'C'

Municipal Class Environmental Assessment

INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by the City of Windsor (the City), to carry out a Municipal Class Environmental Assessment (EA) for Expansion of the Little River Pollution Control Plant (LRPCP) (the Project). The Project is classified as a Schedule C project under the Municipal Class EA process. Schedule C projects require the preparation and filing of an Environmental Study Report (ESR) for review by the public and relevant agencies. A Heritage Overview was completed in 2022 for the Pontiac Pumping Station Capacity Upgrades, which are located within the LRPCP property line. In March 2025, the project had progressed through Phase 1 and 2 of the Class EA Process and Phase 3 was being initiated for the Expansion of the LRPCP. To support Phase 3 of the EA process, Stantec completed an update to the 2022 Heritage Overview for the existing LRPCP property and potential expansion lands. This Heritage Overview has been completed to identify heritage resources, including built heritage and cultural heritage landscapes, present within, and adjacent to, the Study Area (Appendix A, Figure 1).

In 2018, the City undertook a comprehensive study to understand the causes of the widespread flooding in the City and surrounding municipalities, identify areas and locations in which severe flooding occurs, evaluate high-level alternative solutions to address the flooding, complete high-level designs and cost estimates, and provide an implementation strategy and timing for the proposed solutions. In July 2020, this study was adopted by the City as the Sewer & Coastal Flood Protection Master Plan (SMP). The SMP identified treatment capacity issues at the LRPCP and confirmed that during severe wet weather conditions the facility is unable to treat all wet weather flow. The Ministry of Environment, Conservation and Parks has indicated that any future expansion of the LRPCP should mitigate impacts from combined sewer overflow discharges such that the total loading from all by-pass events have a net reduction over the established conditions. The purpose of the ESR is to mitigate the impact of combined sewer overflows and accommodate development in the City within the Sandwich South neighbourhood.

This heritage overview consists of completion of the Ministry of Citizenship and Multiculturalism (MCM) Criteria for Evaluating Potential for built Heritage Resources and Cultural Heritage Landscapes Checklist (the Checklist). The Checklist identifies protected and potential properties within the Study Area and makes recommendations for further work, as appropriate. The Checklist includes consultation with the municipality, and relevant agencies as well as review of available online materials. Consultation with the City, the Ontario Heritage Trust (OHT), and MCM determined that no heritage properties are located within or adjacent to the Study Area.

The 2022 Checklist was prepared and edits to the 2025 Checklist were reviewed by a full member of the Canadian Association of Heritage Professionals (CAHP) who specializes in the identification of heritage resources and the evaluation of cultural heritage value or interest (CHVI).

Assessment

METHODOLOGY

REGULATORY REQUIREMENTS

The requirement to consider cultural heritage in the EA process is discussed in the Municipal Class EA Document (Municipal Engineers Association 2024). In this process, the cultural environment, including built heritage resources, cultural heritage landscapes, and archaeological resources, is considered as one in a series of environmental factors when undertaking a Municipal Class EA. The identification of cultural heritage resources is particularly important when describing existing and future conditions, assessing development alternatives, and determining of the preferred alternative. The Municipal Class EA process recognizes that cultural heritage resources that retain heritage attributes should be identified early in the EA process and avoided where possible. Where avoidance is not possible, potential effects to these attributes should be identified and minimized. Adverse impacts should be mitigated according to provincial and municipal guidelines. The requirement to consider cultural heritage is also discussed in the revised 2024 *Provincial Planning Statement* (PPS) (Government of Ontario 2024). Section 4.6 of the PPS addresses cultural heritage in the land use planning process and, as such, these types of resources were considered. The applicable provisions include:

- 4.6.1 Protected heritage property, which may contain built heritage resources or cultural heritage landscapes, shall be conserved
- 4.6.3 Planning authorities shall not permit development and site alteration on adjacent to protected heritage property unless the heritage attributes of the protected heritage property will be conserved

(Government of Ontario 2024: 28)

MUNICIPAL POLICY FRAMEWORK

The City's *Official Plan* under Section 9 *Heritage Conservation* includes the City's goal, objectives, and policies related to heritage conservation. This section of the plan was approved by the Ministry of Municipal Affairs and Housing on January 6, 2012 (City of Windsor 2013: 9-1). Applicable to this Heritage Overview is the following policies:

- 9.3.1.2 Built heritage resources include buildings, structures, monuments, installations or remains associated with architectural, social, political, economic or military history.
- 9.3.1.3 Cultural heritage landscapes are defined geographical areas of heritage significance, which have been modified by human activities such as archaeological sites, heritage conservation districts, parks/gardens, golf courses, neighbourhoods, cemeteries, trail ways, streets, street patterns and industrial complexes of cultural heritage value.
- 9.3.6.1 (c) Ensuring that the activities of all Municipal departments respect the character and significance of Windsor's heritage resources.
- 9.3.7.1 (b) Ensuring that secondary plan studies, community improvement plans and other planning studies identify heritage resources which may exist in the areas under study and propose means to protect and enhance those heritage resources.

July 22, 2025 Chandana Walgama Page 3 of 14

Reference: Heritage Overview - Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental

Assessment

(City of Windsor 2013)

MUNICIPAL AND AGENCY CONSULTATION

Agency consultation was conducted to determine the presence of previously identified protected properties within, or adjacent to, the Study Area. Forms of protection range from inclusion on a municipal register or list of potential heritage resources to designation under the *Ontario Heritage Act* (OHA) or a provincial easement made under the OHA. In order to determine the presence of any of these protected properties, consultation included correspondence with the following:

- MCM
- OHT
- City of Windsor

EXISTING CONDITIONS

MUNICIPAL AND AGENCY CONSULTATION

Consultation occurred via email and included mapping of the Study Area. At the provincial level, Karla Barboza, Team Lead, Heritage with MCM, responded that there are no properties designated by the Minister or provincial heritage properties within the Study Area. Kevin Baksh, Provincial Heritage Register with OHT, confirmed that the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the Study Area. At the City level, Kristina Tang, Heritage Planner reported that there is no apparent CHVI within the Study Area.

REVIEW OF HISTORIC MAPPING

Late 19th century historic mapping of the Study Area was reviewed to identify the presence of structures, settlements, and other potential resources within the Study Area. The Study Area is situated on part Lot 134 to Lot 136, Concession 1 Petite Cote, in the former Township of Sandwich. The 1877 *Map of Essex County Ontario* prepared by H.F. Walling was reviewed (Appendix A, Figure 2). The map depicts on Lot 134: Ben Soulier on the north portion of the property with no structures, and Jos. Soulier on the south portion with two structures fronting Tecumseh Road, on Lot 135: Jos. Langlois on the south portion, and on Lot 136: P. and F. Moreau on the south portion. The map also shows the Great Western Railway line across the south portion of the three lots. No structures or settlements are depicted within or adjacent to the Study Area.

The 1881 map of the Township of Sandwich East from the Essex supplement in the *Illustrated Historical Atlas* of the Dominion of Canada, was also reviewed (Appendix A, Figure 3). This map depicts no structures or settlements in relation to the Study Area. The map depicts Little River west of the Study Area, and the Great Western Railway line to the south. Topographic mapping and aerial photography from the 20th century was also reviewed to confirm a date range for structures within and adjacent to the Study Area. Specifically, mapping material was reviewed from 1912, 1920, 1931, 1940, 1954, 1961, 1962, and 1975.

July 22, 2025 Chandana Walgama Page 4 of 14

Reference: Heritage Overview - Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental

Assessment

With the incorporation of the Town of Riverside in 1921, various sewer and drainage improvements were undertaken (Fullarton 2008). By 1931, Little River's course had been straightened and dredged along the western part of Lot 134, from the Detroit River to the Canadian National Railway line (former Great Western Railway line), along the western side of the Study Area (Fisher Archaeological Consulting 2020). By 1940, the first residences were constructed on the west side of the Little River, along Riverdale Avenue. The LRPCP was commissioned in 1966 and expanded in 1974 (City of Windsor 2022). The LRPCP is depicted on the 1975 topographic mapping.

SITE DESCRIPTION

Details and photographs for the site description were taken from the *Pollution Control Asset Condition Assessment for Little River Pollution Control Plant* prepared by Stantec in 2019 and the *Pollution Control Asset Condition Assessment for Large Pumping Stations* prepared by Stantec in 2020. The Study Area is located within an urban area on the east end of the City, known as East Riverside. To the west of the Study Area is the Little River and a residential neighbourhood that primarily dates to the mid to late 20th century. To the south and east is parkland associated with the Little River Corridor, and to the north is Wyandotte Street East.

The LRPCP is located on a 16.2 hectare (40 acre) site (Photo 1). The Plant treats sanitary and industrial wastewater from the portion of the City east of Pillette Road, and the nearby Town of Tecumseh. The LRPCP was originally constructed in 1965 and has undergone several expansions, most recent upgrades were completed in 1993. The original plant began its operation in 1966 as a primary treatment plant with a rated capacity of 18,000 cubic metres per day (m³/d). In 1974, it was upgraded and expanded to 36,000 m³/d. The plant was expanded again in the early 1990s to a rated capacity of 73,000 m³/d. The major unit operations at the LRPCP include fine bar screening, raw wastewater pumping station, grit removal, primary clarifiers, aeration tanks, final clarifiers, ultraviolet (UV) disinfection, and sludge dewatering by centrifuges. Adjacent to the Pontiac Pumping Station is the Operations Building built in 1966 (Photo 2 and Photo 3), the UV disinfection building No. 1 built in 1991 (Photo 4), and a storage building built in 1965 (Photo 5).

July 22, 2025 Chandana Walgama Page 5 of 14

Reference: Heritage Overview – Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental



Photo 1: Aerial Image of the LRPCP, Pontiac Pumping Station denoted by red arrow, and potential expansion lands denoted by yellow arrows



Photo 2: Operations Building, Plant Office, north elevation looking south



Photo 3: Operations Building, north elevation looking south

Assessment



Photo 4: Aerial view of UV Building No. 1



Photo 5: Pontiac Pumping Station (left) and Storage Building (right) looking west

The Pontiac Pumping Station is a one storey structure with a flat roof (Photo 6 to Photo 9). It is of masonry wall construction clad with red bricks and concrete blocks. The structure is supported by a reinforced concrete foundation. The exterior has aluminum frame windows, and a mixture of aluminum and metal doors. The Pontiac Pumping Station is primarily a stormwater pumping station that services the Pontiac drainage area and acts as an emergency bypass for the LRPCP in the case of a severe storm event. The stormwater from the drainage area flows by gravity to the stormwater inlet chamber and further to the Pontiac Pumping Station where it is lifted and discharged to the Little River. The existing infrastructure in the Pontiac drainage area consists of separate sanitary and stormwater collection systems as well as two stormwater management ponds. The Pontiac Pumping Station has a firm capacity of 4,812 litres per second (L/s) and a total capacity of 6,935 L/s. It is equipped with four screw pumps that are electronically driven.



Photo 6: Pontiac Pumping Station east elevation, looking northwest



Photo 7: Pontiac Pumping Station south elevation, looking north

July 22, 2025 Chandana Walgama Page 7 of 14

Reference: Heritage Overview – Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental

Assessment



Photo 8: Pontiac Pumping Station north elevation, looking southwest



Photo 9: Pontiac Pumping Station west elevation, looking northeast

The potential expansion lands include two areas within the LRPCP, and park lands on 9601 Wyandotte Street East. The two areas within the LRPCP are primarily open grass areas between buildings and internal driveways (Photo 10 to Photo 13). The potential expansion lands to the east of the Old Little River are roughly 22 acres in size. They are characterized by open park lands that are surrounded by vegetation (Photo 14 to Photo 18). Unpaved single lane roads are found throughout the area (Photo 19).



Photo 10: Lawn in northernmost portion of the potential expansion lands at LRPCP



Photo 11: Lawn in northernmost portion of the potential expansion lands at LRPCP



Photo 12: Lawn in southernmost area of the potential expansion lands at LRPCP



Photo 13: Lawn in southernmost area of the potential expansion lands at LRPCP



Photo 14: Park lands looking west from southeast corner of the potential expansion lands



Photo 15: Park lands looking north from the bottom southwest corner of the potential expansion lands



Photo 16: Park lands looking east from northwest portion of the potential expansion lands



Photo 17: Park lands looking south east from near the northwest corner of the potential expansion lands

Assessment





Photo 18: Park lands looking north near the northwest corner of the potential expansion lands

Photo 19: Unpaved roads within the potential expansion lands, looking east from northwest corner

MCM CHECKLIST

The Checklist was completed for the Study Area based on the results of the background research, municipal and agency consultation, and review of historic and topographic mapping. Overall, one indicator of cultural heritage value or interest were identified within the Study Area. This area contains a potential built heritage resource. Only the portion of the Study Area with the potential built heritage resource was evaluated according to *Ontario Regulation* (O. Reg.) 9/06. The results of the Checklist are summarized in Table 1 and the completed checklist is included in Appendix B.

Table 1: Indicators of CHVI According to the MCM Checklist -

Indicators of Cultural Heritage Value or Interest (CHVI)	Identified within the Study Area
Property identified, designated or otherwise protected under the OHA as being of cultural heritage value	Not Identified
A National Historic Site (or part of)	Not Identified
Designated under the Heritage Railway Stations Protections Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	Not Identified
Identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office	Not Identified
Located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site	Not Identified
Is the subject of a municipal, provincial or federal commemorative or interpretative plaque	Not Identified
Has or is adjacent to a known burial site and/or cemetery	Not Identified

Assessment

Indicators of Cultural Heritage Value or Interest (CHVI)	Identified within the Study Area	
Is in a Canadian Heritage River watershed	Not Identified	
Contains buildings or structures that are 40 or more years old	Identified	
Local or Aboriginal knowledge that the property is considered a landmark in the local community or contains structures or sites that are important in defining the character of the area	Not Identified	
Local or Aboriginal knowledge that the property has a special association with a community, person, or historical event	Not Identified	
Local or Aboriginal knowledge that the property contains or is part of a cultural heritage landscape	Not identified	

The MCM Checklist identified one indicator of CHVI, that of the Study Area containing structures that are 40 or more years old. This includes the Pontiac Pumping Station, Operations Building, and the Storage Building. These structures as part of the LRPCP property were evaluated for CHVI according to O. Reg. 9/06 in Table 2 (Government of Ontario 2023).

Table 2: Evaluation of LRPCP according to O. Reg. 9/06

Criteria of O. Reg. 9/06	Y/N	Comments	
Design or Physical Value			
Is a rare, unique, representative, or early example of a style, type, expression, material, or construction method	N	The structures on the LRPCP property were constructed between the 1960s and 1990s, as purpose-built utilitarian structures. The buildings within and adjacent to the Study Area are simple in design and lack architectural design details. The design and construction of the buildings was standard for municipal wastewater treatment plants in the province. The Pontiac Pumping Station was built in 1977, and is a later interpretation of a type, as stations existed in the province by the mid-19 th century. The City has 55 pumping stations and combined sewer overflows located throughout its boundaries (City of Windsor 2019). The LRPCP is one of two wastewater treatment plants in the City. The LRPCP serves the east half of the City and the Lou Romano Water Reclamation Plant (LRWRP) the west half. The LRWRP was built in 1969 and has since undergone several expansions between 1970 and 2011. Both plants are similar in their construction periods and designs. Thus, the LRPCP is not rare, unique, representative, or an early example of a style, type, expression, material, or construction method.	
Displays a high degree of craftsmanship or artistic merit	N	The structures on the LRPCP property do not display a high degree of craftmanship or artistic merit. Its structures were built according to industrial standards for the late 20 th century, with contemporary updates.	

Criteria of O. Reg. 9/06	Y/N	Comments
Demonstrates a high degree of technical or scientific achievement	N	The structures on the LRPCP property do not demonstrate a high degree of technical or scientific achievement. They are standard for municipal wastewater treatment plants.
Historical	or Assoc	iative Value
Has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community	N	The LRPCP was constructed in 1966 to meet the growth of the City to provide for sanitary and industrial wastewater treatment. In 1951, about 80% of raw sewage from municipalities across Canada was discharged directly into lakes, rivers, and surrounding oceans without being treated. In the mid-20th century municipalities began establishing water treatment facilities (Goodings 2017). The need for wastewater treatment facilities was also influenced by the post-Second war boom and the growth of development outside of cities. LRPCP was one of many plants established throughout the province in the mid to late 20th century.
Yields, or has the potential to yield, information that contributes to an understanding of a community or culture	N	The property does not have the potential to yield information to contribute to an understanding of a community.
Demonstrates or reflects the work or ideas of an architect, artist, builder, designer, or theorist who is significant to a community	N	The property does not demonstrate or reflect the work or ideas of an architect, builder, designer, or theorist who is significant to the community.
Contextual Value		
Is important in defining, maintaining, or supporting the character of an area	N	The LRPCP is an industrial property within an urban landscape adjacent to residential subdivisions, the Little River, City roadways and parkland. The property does not define, maintain, or support the character of the area.
Is physically, functionally, visually, or historically linked to its surroundings	N	The Pontiac Pumping Station and the other structures on the LRPCP are functionally linked to their surroundings, similar to other pumping stations throughout the City. The function of the station is a inherent feature of all pumping stations and wastewater treatment plants. From a cultural heritage perspective, the property is not physically, visually, or historically linked to its surroundings.
Is a landmark	N	The LRPCP property is not a landmark. The property is not discernible in the public viewscape as the property is set away from the main public roadways and subdivisions, separated by the Little River and vegetation. The property is fenced off and not accessible to the public. Public trails run nearby the property; however, the trails are separated from structures by Little River Boulevard, metal fencing, and vegetation.

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Reference: Heritage Overview - Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental

Assessment

Based on a review of available information and O. Reg. 9/06, it was determined that there was no CHVI identified for the LRPCP property and the structures within and adjacent to the Study Area. The structures do not display any design or physical value as the style and construction of the buildings was standard for municipal wastewater treatment plants in the province. They were built with typical late 20th century construction materials and methods. From the review of historic and topographic mapping, and the completion of the MCM Checklist no historical or associative value was identified. The LRPCP was constructed in the mid-20th century to meet the growth of the City to provide for sanitary and industrial wastewater treatment, similar to other plants across the province. Lastly, the property has no contextual value given that it is an industry property within an urban area adjacent to residential subdivisions and parkland. The property is not discernible in the public viewscape.

RECOMMENDATIONS

Based on consultation with the appropriate regulatory bodies no protected heritage resources were identified within the Study Area. Review of historic mapping indicated no potential for 19th century structures in the Study Area. One indicator of CHVI was identified according to the MCM Checklist for the Study Area, however following further examination and discussion of the LRPCP property and the structures within the Study Area, there was no confirmed CHVI for the Study Area.

Given the findings of the Heritage Overview, no additional heritage studies are recommended, and this memo fulfills the Municipal Class EA and PPS requirements.

CLOSURE

This report has been prepared for the sole benefit of the City of Windsor and may not be used by any third party without the express written consent of Stantec Consulting Ltd., and the City of Windsor.

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Regards

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Attachment: Appendix A – Figures
Appendix B – MCM Checklist

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Assessment

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Heritage Overview – Little River Pollution Control Plant Expansion, Schedule 'C' Municipal Class Environmental Assessment Reference:

APPENDIX A - FIGURES





Study Area

--- Watercourse

Waterbody

1:3,000 (At original document size of 11x17)

- NOTES

 1. Coordinate System: NAD 1983 UTM Zone 17N

 2. Contains information licensed under the Open Government Licence Ontario, and the Open Government Licence Canada, accessed 2025

 3. Orthoimagery © First Base Solutions, 2025. Imagery Date, 2021



Project Location COUNTY OF ESSEX

165620295 REVA Prepared by IM on 2025-07-22 Technical Review by JW on 2025-04-10

CITY OF WINDSOR
HERITAGE OVERVIEW: LITTLE RIVER POLLUTION
CONTROL PLAN CLASS EA

Location of the Study Area



Study Area (approximate)

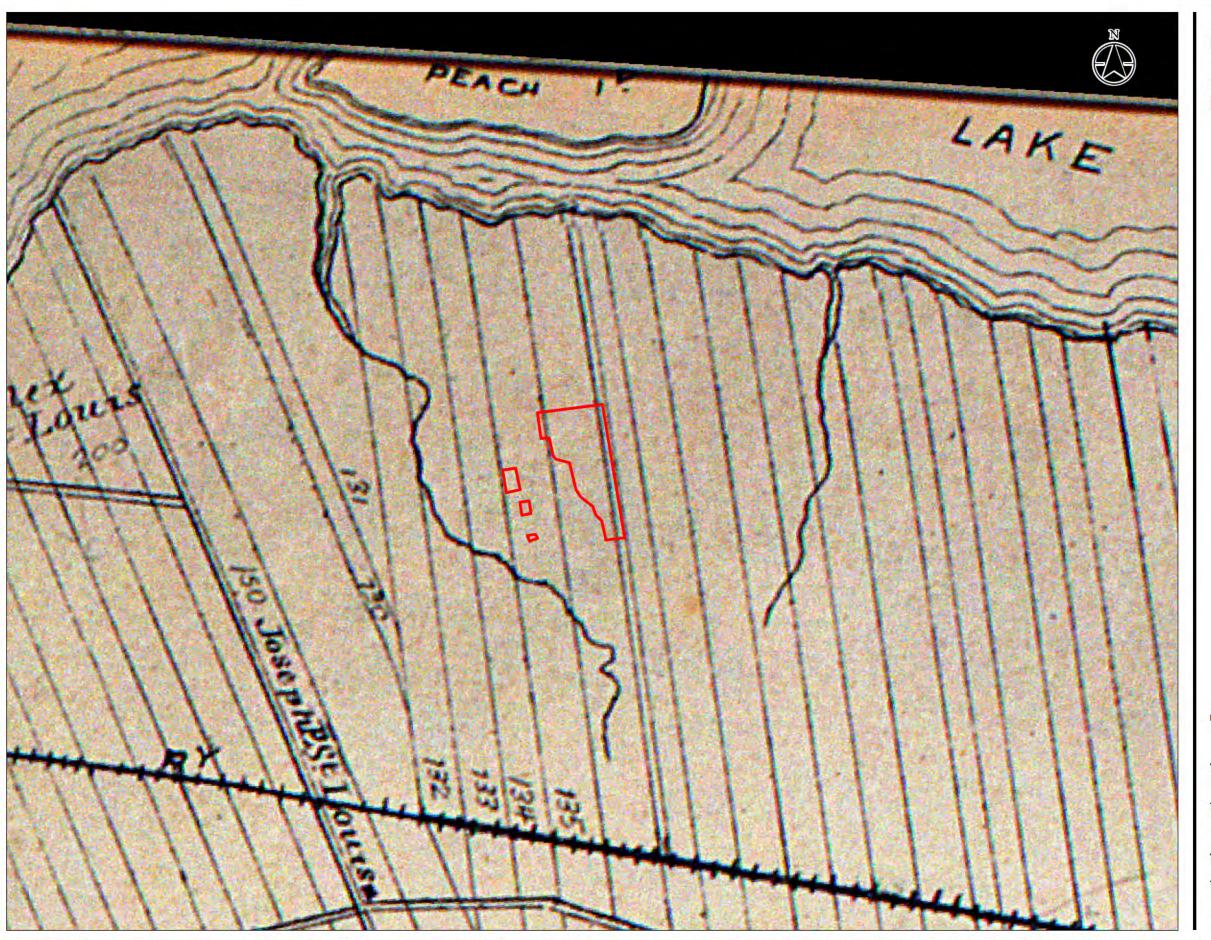
Figure Not to Scale

Project Location COUNTY OF ESSEX

165620295 REVA Prepared by IM on 2025-07-22 Technical Review by JW on 2025-04-10

CITY OF WINDSOR
HERITAGE OVERVIEW: LITTLE RIVER POLLUTION
CONTROL PLAN CLASS EA

Portion of the 1877 Historical Map of Essex County





Study Area (approximate)

Figure Not to Scale

Notes
1. Reference: Belden, H. and Co. 1881. Essex Supplement in Illustrated Historical Atlas of the Dominion of Canada. Toronto: Belden and Co.

Project Location COUNTY OF ESSEX

165620295 REVA Prepared by IM on 2025-07-22 Technical Review by JW on 2025-04-10

CITY OF WINDSOR
HERITAGE OVERVIEW: LITTLE RIVER POLLUTION
CONTROL PLAN CLASS EA

Portion of the 1881 Historical Map of Sandwich Township

Assessment

APPENDIX B - MCM CHECKLIST

	Proi	ect or f	Property Name		
	_		ver Pollution Control Plan Expansion, Municipal Class Environmental Assessment		
-			Property Location (upper and lower or single tier municipality) Ontario		
	_	onent y of V	Name Z <mark>indsor</mark>		
	_		Contact Information a Walgama, cwalgama@citywindsor.ca; (519) 253-7111		
	Scr	eenin	g Questions		
•				Yes	No
	1.	Is the	re a pre-approved screening checklist, methodology or process in place?		1
	If Y	es, ple	ase follow the pre-approved screening checklist, methodology or process.		
	If N	o, con	tinue to Question 2.		
ı	Pari	t A: S	creening for known (or recognized) Cultural Heritage Value		
	2	Lloc fl	on property (or project area) been evaluated before and found not to be of cultural horitage value?	Yes	No
			ne property (or project area) been evaluated before and found not to be of cultural heritage value?		
		-	not complete the rest of the checklist.		
	The	propo	nent, 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	sumn	nary and appropriate documentation may be:		
		•	submitted as part of a report requirement		
		•	maintained by the property owner, proponent or approval authority		
	If N	o, con	tinue to Question 3.		
				Yes	No
	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?		✓
		b.	a National Historic Site (or part of)?		1
		C.			1
		d.			1
		e.	identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?		1
		f.	located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?		✓

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.

Par	tB: So	creening 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?		1
	b.	has or is adjacent to a known burial site and/or cemetery?		1
	C.	is in a Canadian Heritage River watershed?		1
	d.	contains buildings or structures that are 40 or more years old?	✓	
Par	t C: 0	ther Considerations		
			Yes	No
5.	Is ther	re 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?		✓
	b.	has a special association with a community, person or historical event?		1
	C.	contains or is part of a cultural heritage landscape?		1
		one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the r within the project area.		
Υοι	need	to hire a qualified person(s) to undertake:		
		a Cultural Heritage Evaluation Report (CHER)		
		erty is determined to be of cultural heritage value and alterations or development is proposed, you need to lified person(s) to undertake:)	
		a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts		
	o to al perty.	of the above questions, there is low potential for built heritage or cultural heritage landscape on the		
The	propo	nent, property owner and/or approval authority will:		
		summarize the conclusion		
		add this checklist with the appropriate documentation to the project file		
The	sumn	nary and appropriate documentation may be:		
		submitted as part of a report requirement e.g. under the Environmental Assessment Act, Planning Act		

· maintained by the property owner, proponent or approval authority