

WELCOME

Schedule 'B' Municipal Class Environmental Assessment Southeast Quadrant Sanitary and Water Servicing

Town of Amherstburg

Public Information Centre

Please Sign-in

August 21, 2018

4:30 PM to 7:00 PM

Libro Credit Union Centre

3295 Meloche Road, Amherstburg



Southeast Quadrant Sanitary and
Water Servicing – EA
Public Information Center

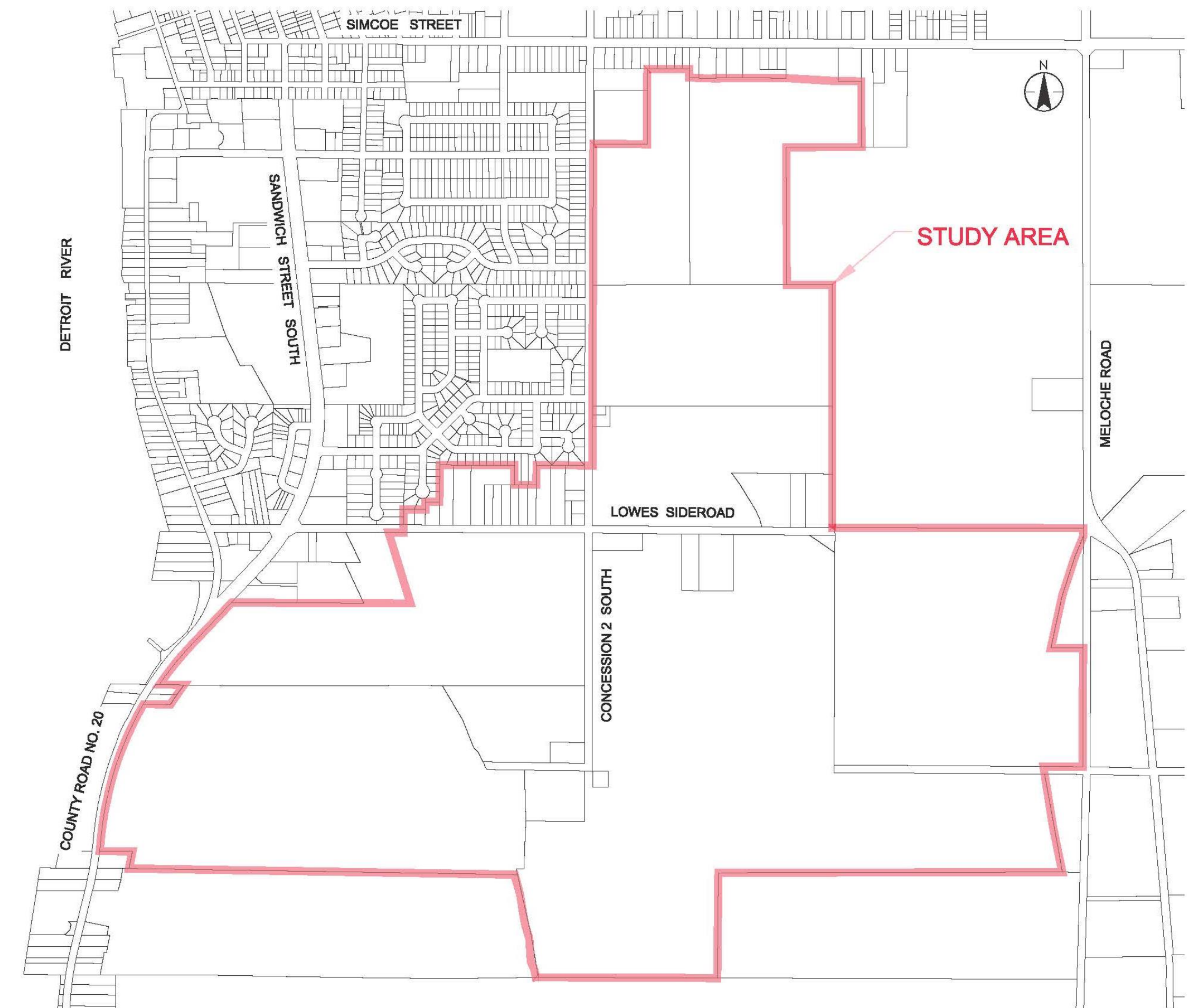


What is the purpose of the PIC?

The Town of Amherstburg is carrying out a Municipal Class Environmental Assessment (MCEA) Study to identify upgrades or new infrastructure required to provide sanitary and water servicing for existing and future development in the southeast quadrant of the Town.

The purpose of this Public Information Centre (PIC) is to present and discuss the work completed to date and collect public input on:

- The study process;
- Rationale for project;
- Background information, including the existing socio-economic, cultural and natural environments;
- Summary of the alternatives reviewed and the recommended strategy; and
- Next steps.

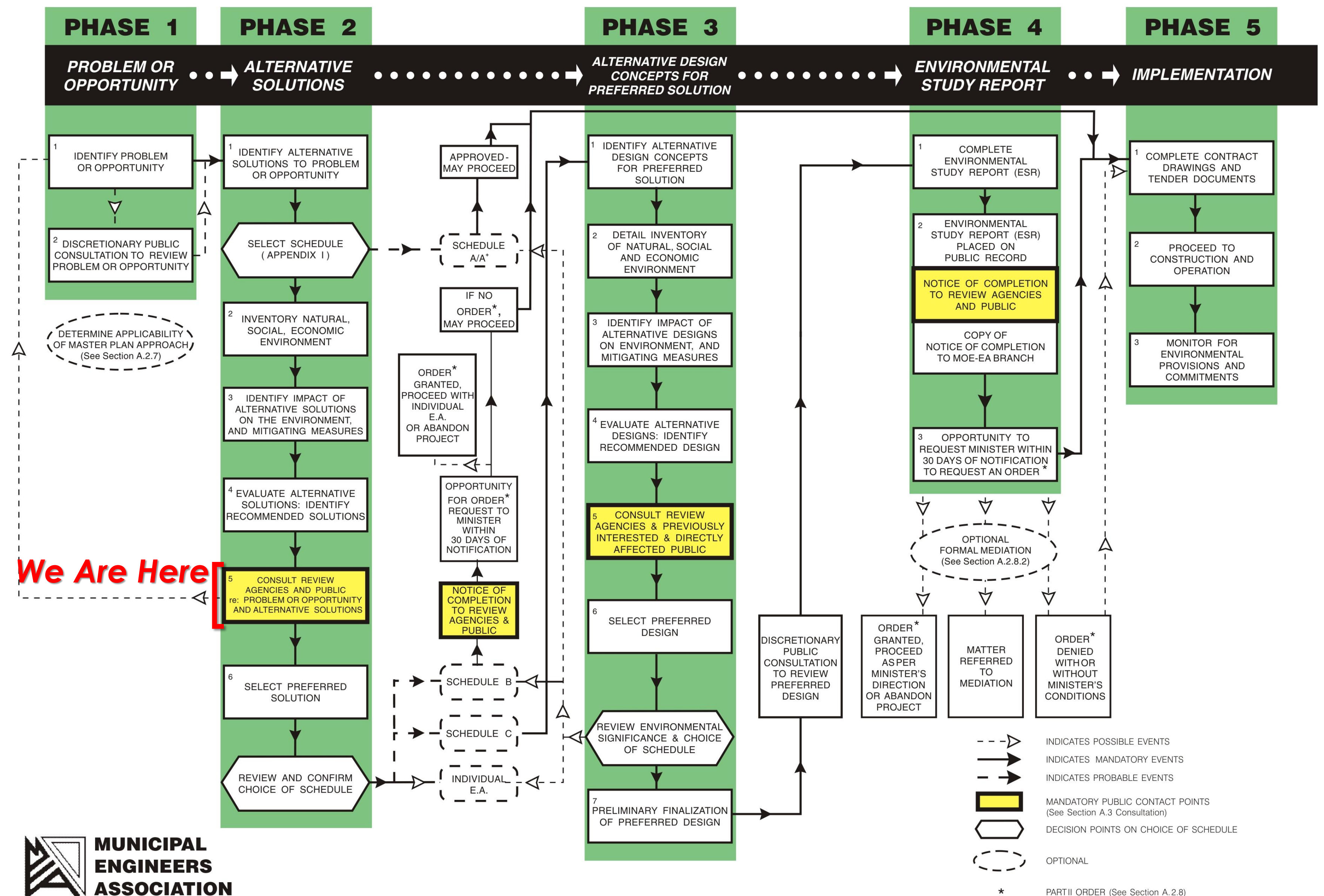


SE Quadrant of the
Town of Amherstburg

Study Process

The Municipal Class Environmental Assessment (MCEA) is an approved process for planning and designing municipal projects. The MCEA describes the process that the Town must follow in order to meet the requirements of the *Ontario Environmental Assessment Act*.

Based on the scope of this project, the Southeast Quadrant Servicing MCEA is being planned as a **Schedule 'B' Project**, which will complete Phases 1 to 2 outlined in the flow chart.



Problem/Opportunity

- The southeast quadrant of the Town is not serviced by an existing municipal wastewater collection system and the existing watermain system is not sized sufficiently to support future growth.
- Existing residential uses are generally serviced by private on-site sewage disposal systems, typically consisting of septic tanks and leaching beds, and small watermains.
- Several developers have requested the necessary sanitary and water servicing infrastructure be installed in the southeast quadrant of the Town to allow for the orderly development of the lands and to support future growth. The purpose of this MCEA Study is to identify upgrades or new infrastructure required to provide sanitary and water servicing for future development in the southeast quadrant of the Town.

Background Information

2008 – Southeast Quadrant Master Servicing Study was completed

2009 – sanitary sewers installed on Simcoe Street (375mm dia.) and Fryer Street (525mm dia.) to service future development via a proposed new forcemain and pumping station

2010 – removal and replacement of water tower

2012 – watermain upgrades (300 mm dia.) along Lowes Sideroad (Sandwich Street South to Fryer Street)

2014 – upgrades and expansion of the existing Amherstburg Wastewater Treatment Plant (AWWTP) and the main sewage pumping station to accommodate current and future wastewater flows

Inventory of the Environment

As part of the MCEA process, alternative solutions to address the problem or opportunity are identified by taking into consideration the existing environment. The following information boards provide a summary of the socio-economic, natural, and cultural environments, as well as the existing infrastructure. The following factors and criteria are considered during the development and assessment of alternative solutions.

Socio-Economic Environment



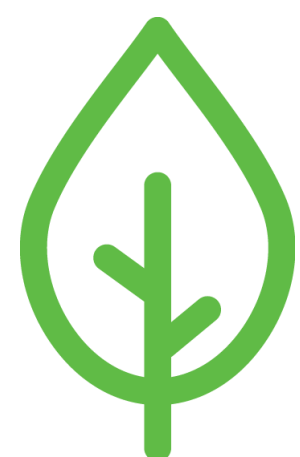
- Existing/future land uses
- Property impacts
- Noise/vibration
- Air quality

Engineering Considerations



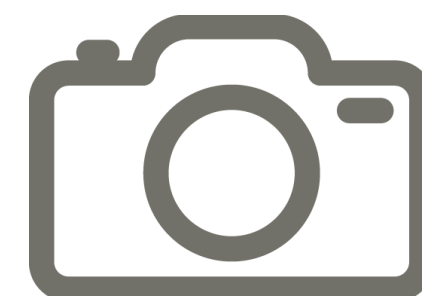
- Level of service/best use of existing infrastructure
- Impact on existing infrastructure/utilities
- Constructability
- Legislative criteria and regulations
- Construction/operation/maintenance costs

Natural Environment



- Terrestrial habitats and wildlife
- Species at risk
- Fish and fish habitats
- Drinking water source protection

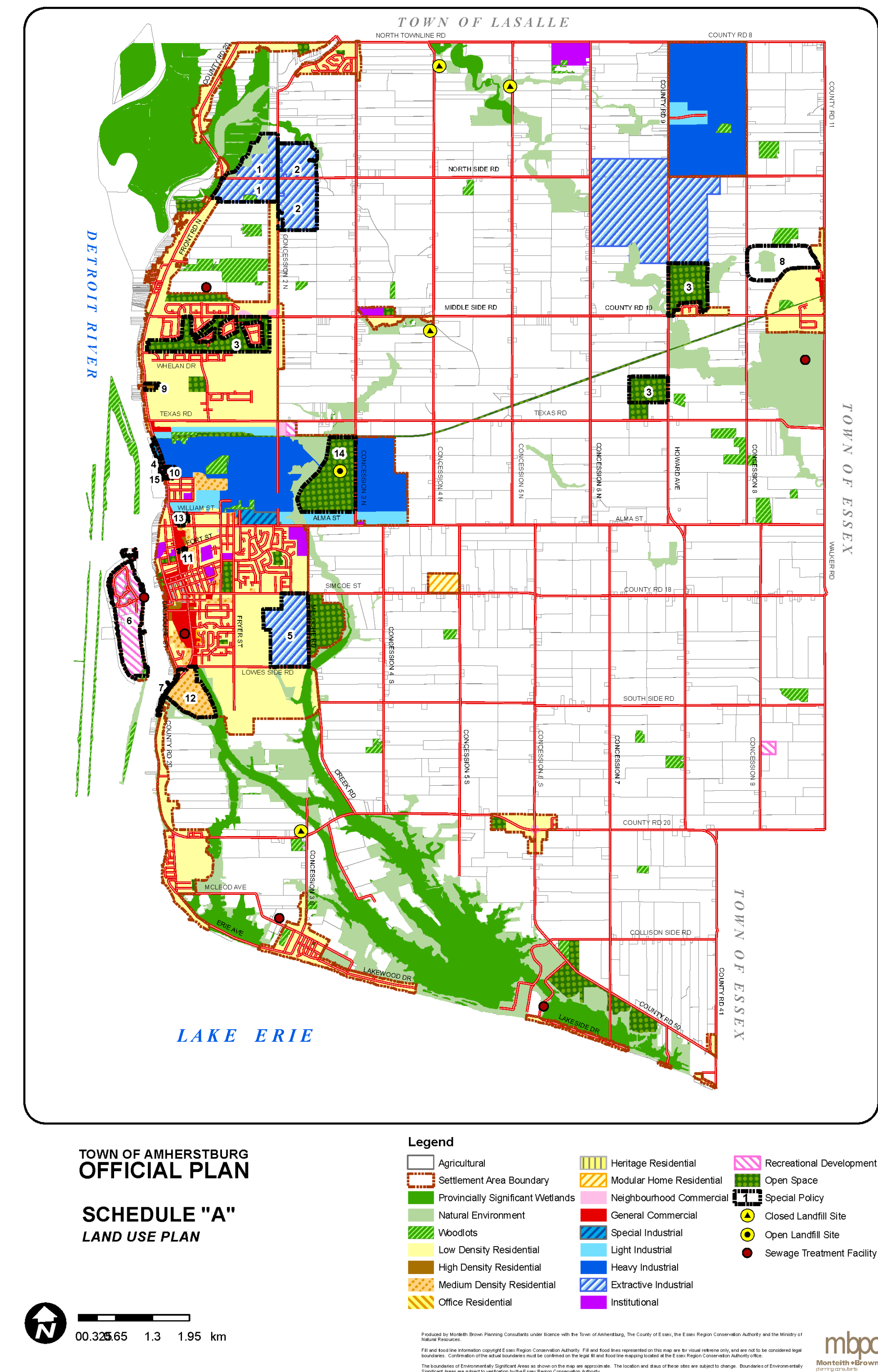
Cultural Environment



- Built heritage resources
- Cultural heritage landscapes
- Archaeological resources

Socio-Economic Environment

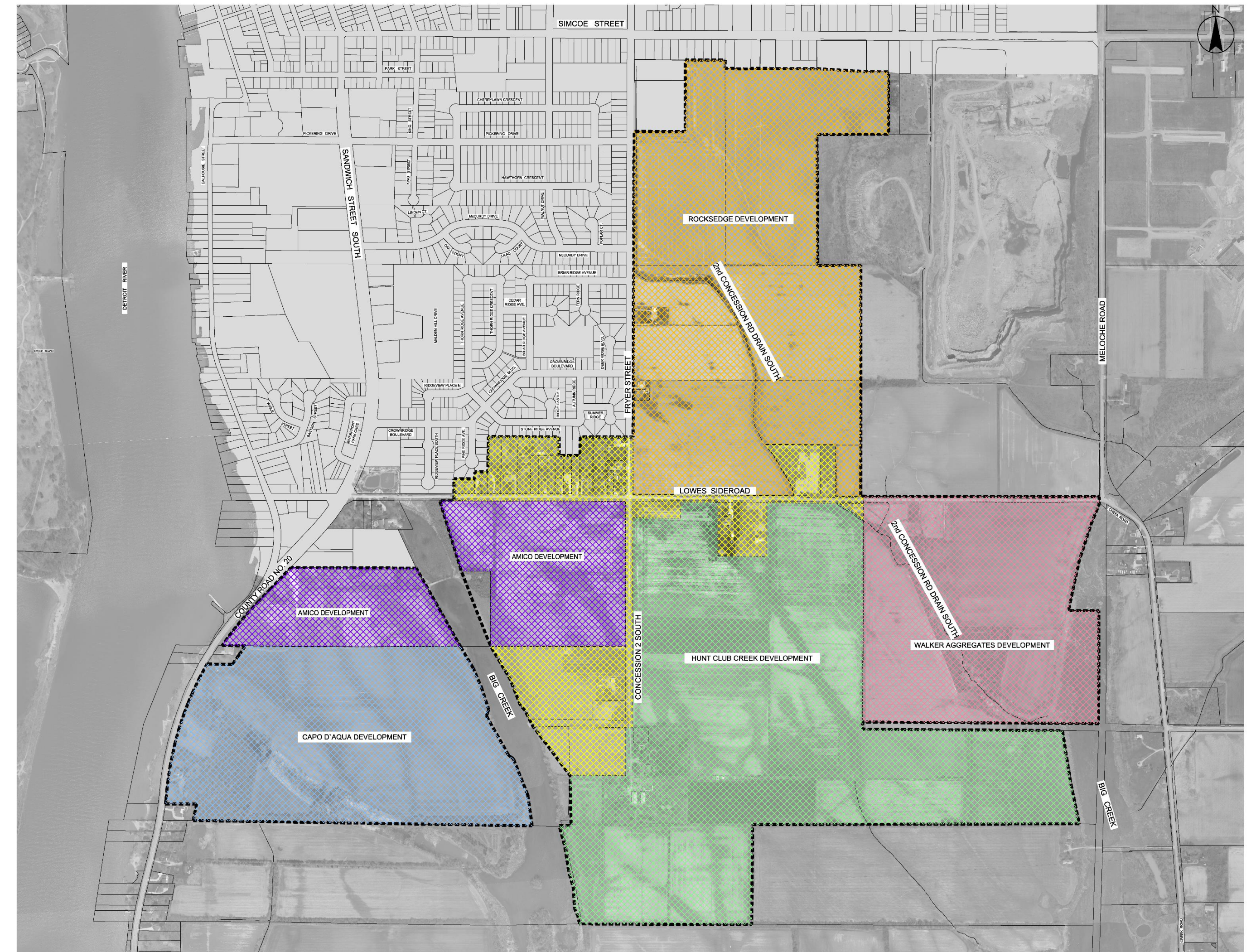
- The land within the study area is designated as “Low Density Residential” and “Medium Density Residential”.
- Big Creek is designated as “Provincially Significant Wetland” and “Natural Environment”.
- The future development area in the southeast quadrant of the Town of Amherstburg covers approximately 289 ha, consisting primarily of rural agricultural land with small pockets of residential land uses.
- Noise and vibration buffer zones are required for designated “Extraction Industrial” lands adjacent to the study area.



Existing and Proposed Developments

Proposed new developments in the southeast quadrant of the Town include:

- Rocksedge Development – approximately 67.64 ha, estimated 500 residential lots
- Hunt Club Creek Development – approximately 86.42 ha, estimated 900 residential lots
- Amico Development – approximately 27.5 ha, estimated 182 residential lots and two apartment complexes
- Capo D'Aqua Development – approximately 30.36 ha (developable), estimated 110 residential lots
- Walker Aggregates Development – approximately 26.73 ha (developable), no current development plans however estimated 350 residential lots

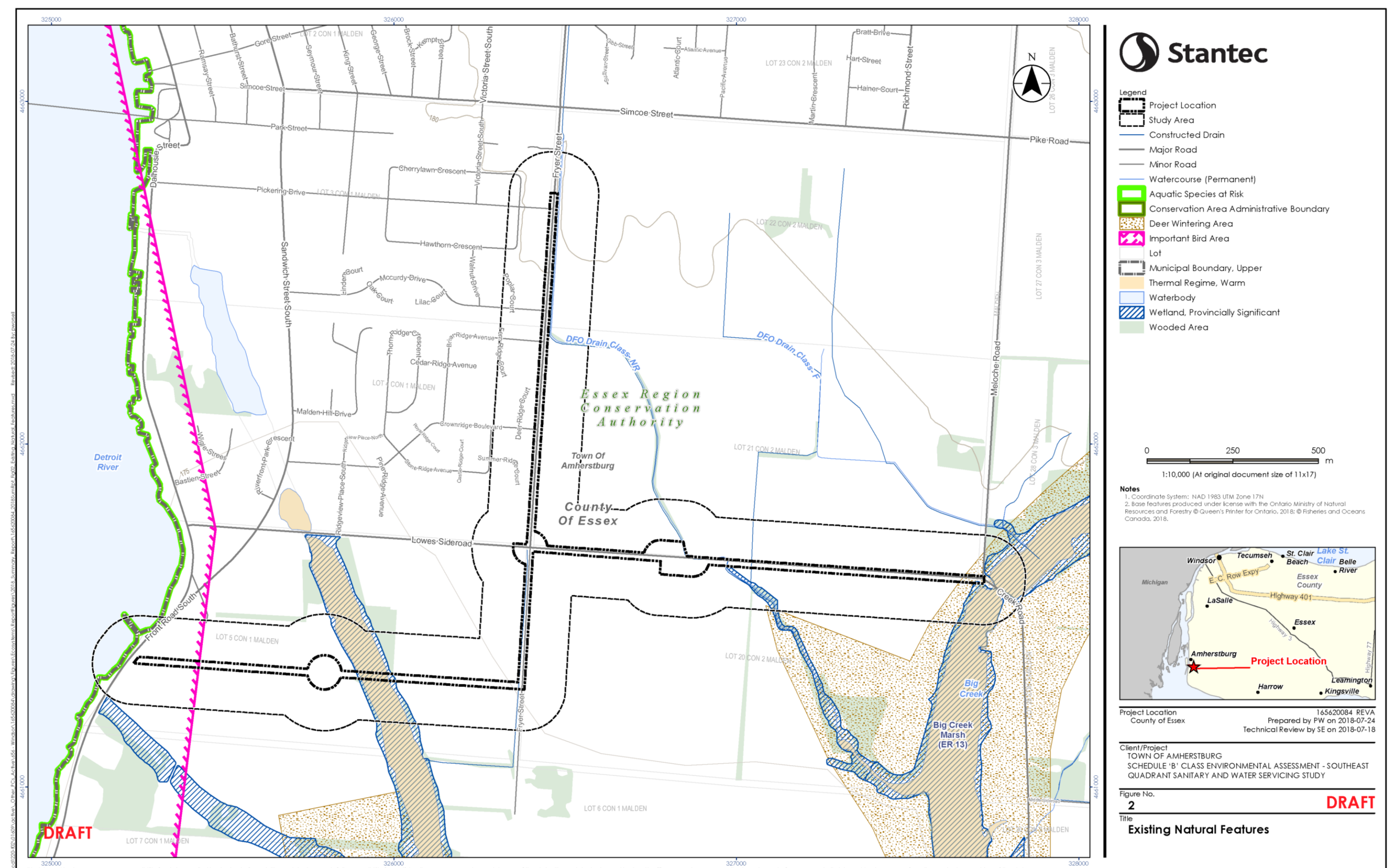


In addition, approximately 26 existing residential lots (24.88 ha) along Lowes Sideroad, Fryer Street and Concession Road 2 South requiring servicing.

Natural Environment

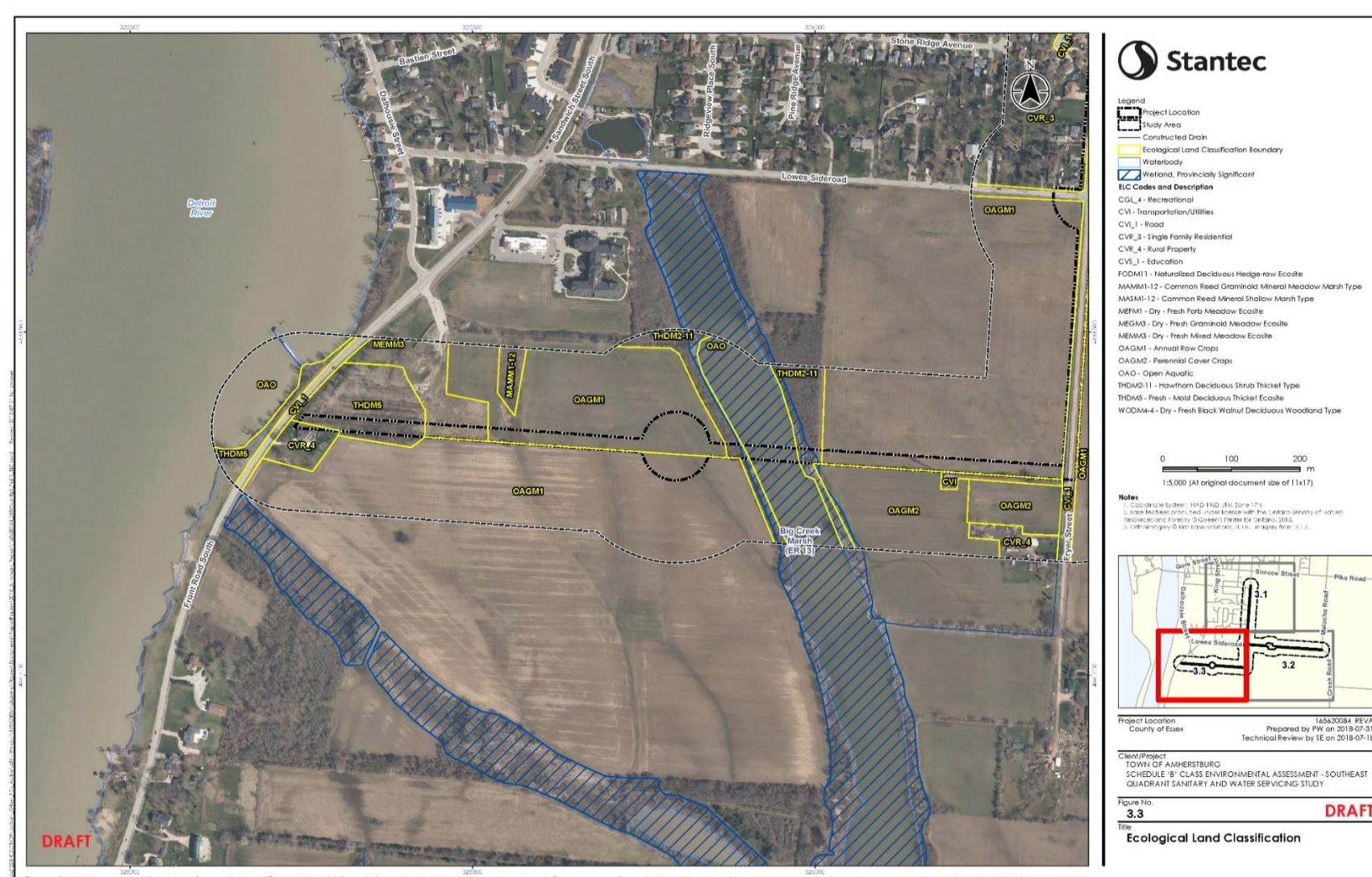
Wildlife habitat assessments were conducted in the study area to determine the presence of significant wildlife habitat features and species at risk habitat, including:

- Monarch butterfly habitat - Limited meadow habitat suitable in the study area.
- Turtle overwintering and nesting, specifically along Big Creek.
- Snake habitat - study area supports a variety of habitats suitable for snakes, including meadow, thicket, marsh, woodland, riparian and drainage swales.
- Breeding bird habitat - minimal habitat was identified; hay fields have the potential to support grassland breeding bird habitat.
- Bat roosting habitat - Trees suitable to support bat roosting were not identified in the project footprint, however bat use of trees in the study area is to be confirmed if tree removal is required.



Natural Environment, Cont'd

- The majority of the required servicing infrastructure footprint is primarily located in existing road allowances, where construction will primarily take place in existing gravel road shoulders and grassy roadsides that are regularly maintained. Several easements will also be required.
- Based on the Ecological Land Classification (ELC), botanical inventory and wildlife habitat assessments, 3 species of conservation concern (SOCC) and 7 species at risk (SAR) and their habitat may potentially be impacted by the project, including turtles, snakes and bats.
- Permitting under the *Endangered Species Act, 2007* may be required for some species (to be determined though further consultation with MNRF).



Cultural Environment

- A **Cultural Heritage Assessment Report** (CHAR) was completed to identify cultural heritage resources (built heritage, cultural heritage landscapes) within or adjacent to the study area.
- The criteria for determining Cultural Heritage Value or Interest (CHVI) is defined by *Ontario Regulation 9/06* of the *Ontario Heritage Act*.
- Each property over 40 years of age was evaluated to identify potential for CHVI and assessed for potential impacts and mitigate where appropriate.
- Three cultural heritage resources were identified:
 - 441 Lowes Side Road (BHR-1) - Two storey home, cross gable roof, wooden entrance porch, outbuildings, barn, and tree lined driveway
 - 2568 Concession Road 2 South (CHL-1) - 19th century farm dwelling, outbuildings, and surrounding agricultural fields
 - Streetscape along Concession Road 2 South (CHL-2) - representative rural streetscape including narrow gravel road, surrounding agricultural fields and farms
- A **Stage 1-2 Archaeological Assessment** is underway for the study area.

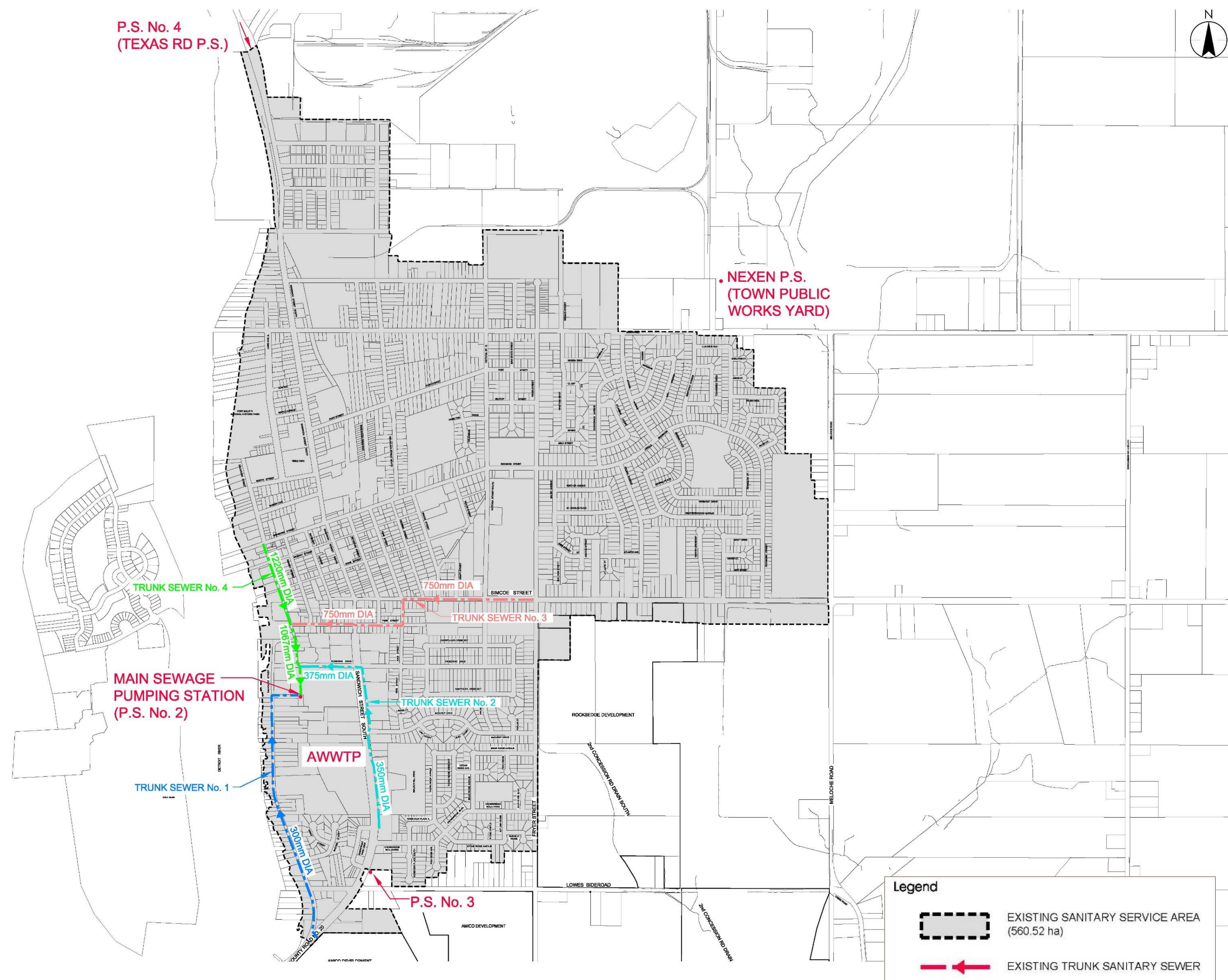


441 Lowes Side Road



2568 Concession Road 2 South

Existing Sanitary Servicing



The existing sewage collection system includes 4 sanitary trunk sewers in the vicinity of the study area. The sewers collect wastewater by gravity from the surrounding 560 ha urban area and conveys flows to the **Main Sewage Pumping Station No. 2** which discharges to the Amherstburg Wastewater Treatment Plant.

Trunk Sewer 1 (Dalhousie Street) has insufficient capacity to service study area.

Trunk Sewer 2 (Pickering Drive) has insufficient capacity to service study area.

Trunk Sewer 3 (Park Street/Simcoe Street) has excess capacity to service the study area.

Trunk Sewer 4 (Dalhousie Street) has excess capacity to service the study area.

Alternative Strategies for Sanitary Servicing

An analysis was carried out to identify needs for sanitary sewage upgrades to adequately service new developments in the southeast quadrant of the Town. Various development scenarios were examined to determine the sizing of the proposed new sanitary sewers, forcemains and pumping stations due to the probability that all proposed developments would not be developed at the same time; however, **installation of all necessary infrastructure to service the ultimate buildout was selected as the recommended strategy** for the following reasons:

- More cost effective for all proposed developments in the southeast quadrant to share the cost with the Town for installing the necessary infrastructure to service the ultimate buildout; and
- If the necessary infrastructure isn't installed to service the ultimate buildout, future upgrades would be required and would be more costly.

To accommodate ultimate buildout of future development, the following is required:

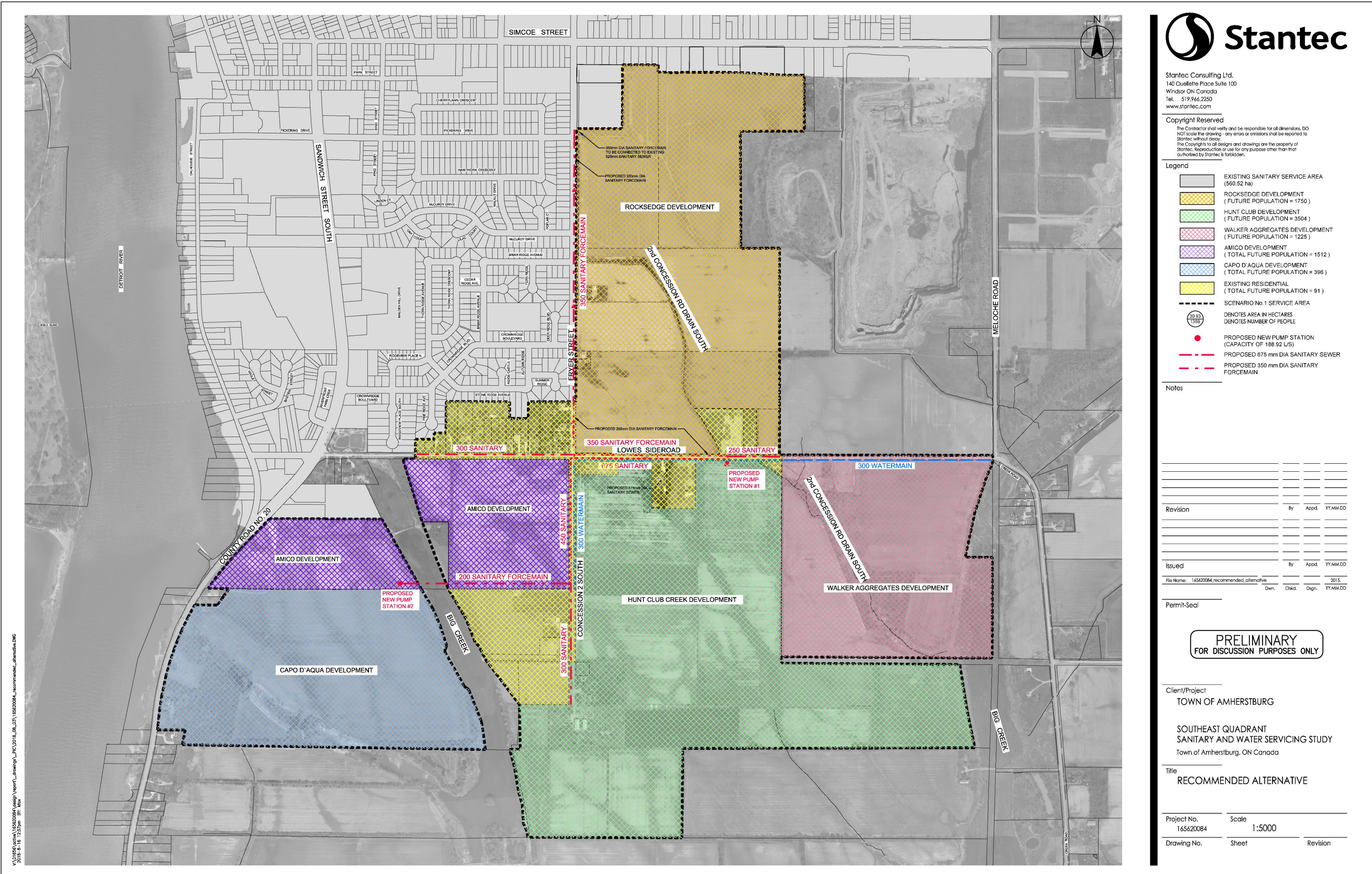
- New sanitary pumping station with a firm capacity of 188.92 L/s along Lowes Sideroad, near Concession Road 2 South with three phase power and a diesel generator for backup power
- 350 mm dia. forcemain heading north along Fryer Street and discharging to the existing 525 mm dia. sanitary sewer south of Simcoe Street;
- New 675 mm dia. sanitary trunk sewer installed on Lowes Sideroad, east of Fryer Street, which would discharge to a new pumping station; and
- New forcemain from west side of Big Creek to Concession Road 2, with new pumping station with three phase power and a diesel generator for backup power, located west of Big Creek.

The exact location of the two new pumping stations will be determined during the detailed design phase.

Note: Additional sanitary sewers would be constructed on sections of Lowes Sideroad and Concession Road 2 South to service existing development.

Recommended Alternative

The exhibit below provides the recommended solution for servicing the southeast quadrant of the Town, including the location of proposed sanitary sewer infrastructure & pumping stations

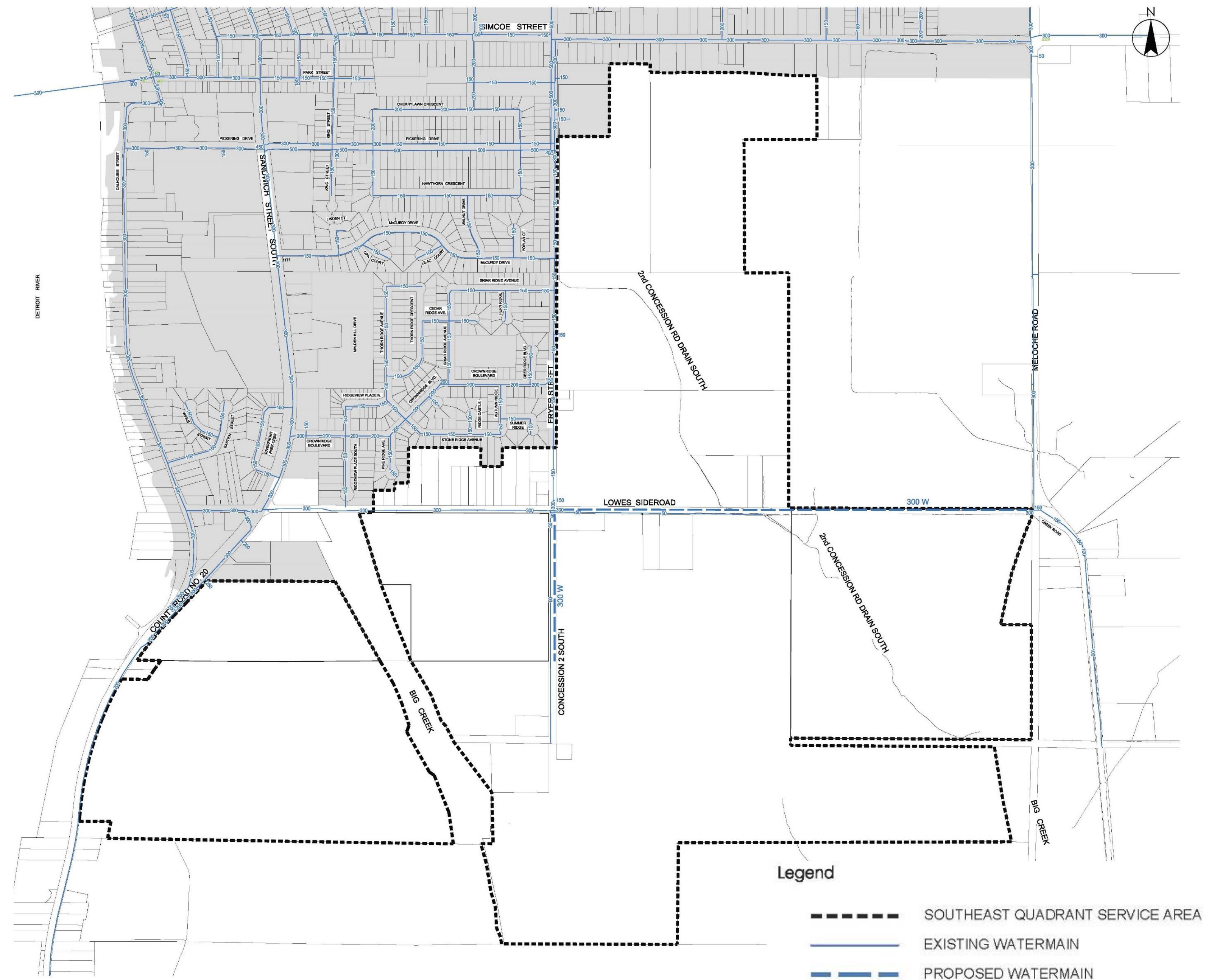


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Water Infrastructure

- A hydraulic analysis was carried out to identify needs for watermain upgrades to adequately service the proposed new developments.
- Upsizing the watermains along Lowes Sideroad (east of Fryer Street) and Concession Road 2 South (south of Lowes Sideroad) from 50 mm to 300 mm in dia. are recommended.
- It is also recommended to extend the watermains along Lowes Sideroad up to Meloche Road for improved looping and water distribution.
- Hydraulic modeling results show the existing water distribution system along with the proposed watermains can provide the domestic demands of the proposed developments.



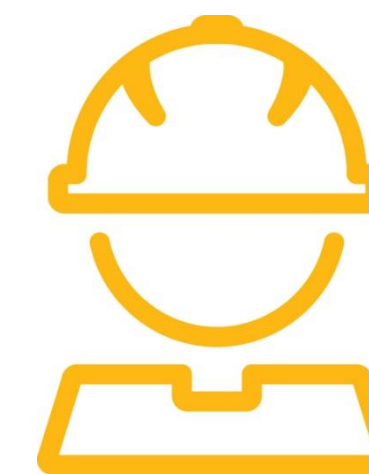
Proposed Construction Methods

Watermains, Sanitary Gravity Sewers, Sanitary Forcemain

- Open-cut trench excavation using excavators and trench boxes depending on depth, complete with backfill of trench with specified material compacted using vibrating construction equipment such as a hoe pack. Complete with restoration.
- Trenchless installation by Horizontal Directional Drilling across roadways and under drains/creeks. May require excavated/structurally supported drill pits. Complete with restoration.
- Possible installation with protective steel casing across roadways, drains/creeks by jacking and boring method. May require excavated/structurally supported bore pits. Complete with restoration.

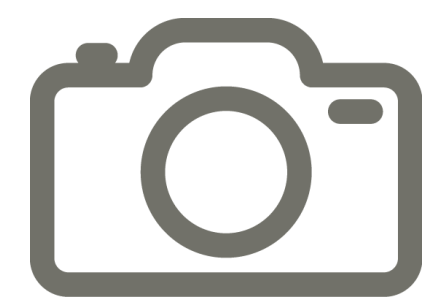
Pumping Stations

- Excavation for the pumping stations shall be carried out in an excavation protection system (i.e., cofferdam).
- Assessment of existing soil conditions and selection of proper piling driving equipment, if required, for a successful installation.
- Contractor to modify piling driving technique and equipment as required to maintain an acceptable level of ground vibration depending on the sensitivity of the surrounding area.
- Installation of structural steel wales, struts, bracings, and tie rods as required.
- Pouring concrete working mat on bottom of cofferdam excavation.
- Installation of dewatering facilities as required for cofferdams.



Summary of Proposed Mitigation

The following strategies are recommended to mitigate the potential impacts associated with the proposed improvements:



POTENTIAL IMPACT	PROPOSED MITIGATION
CULTURAL ENVIRONMENT	
Archaeological Resources	Some areas of archaeological potential exist in the study area. Stage 3 archaeological assessments will be completed as part of the property development plans.
Built Heritage Resources	The preferred alternatives have been developed to minimize impact to cultural heritage resources. Vibration impacts will be monitored during construction where required to minimize impact to built heritage features. Photographic documentation will be completed of the Concession Road 2 South streetscape prior to construction.
SOCIO-ECONOMIC ENVIRONMENT	
Property Impacts	Secure required right-of-way through development process within areas of active development. Continue to work with property owners during the detailed design phase to confirm mitigation measures.
Noise	During construction, the contractor will abide by the municipal noise control by-law. The Contractor will be required to keep idling of construction equipment to a minimum and to maintain equipment in good working order to reduce noise from construction activities.
Traffic	A traffic management plan will be developed during detailed design to define the details and measures to reduce the need for/duration of temporary closures. The Town will work with adjacent property owners to maintain access to all properties during construction, although some short term closures may be unavoidable. The closures will be scheduled to minimize impacts during business hours where feasible and practical.
NATURAL ENVIRONMENT	
Species at Risk	Permits from MNRF may be required due to the presence of species and habitat that are protected by the <i>Endangered Species Act, 2007</i> . Further consultation with MNRF and ERCA will be required to determine mitigation requirements.
Species at Risk Snake & Turtle Habitat	Exclusion fencing will be erected around the construction activity area and equipment storage area to exclude snakes and turtles from entering the construction zone during active periods. Location, fence height and fence erection timing will be determined and confirmed through MNRF consultation. No equipment or machinery will be permitted past the exclusionary fencing. Mitigation specific to Butler's Gartersnake, Eastern Foxsnake and Blanding's Turtle and their habitat will be considered through consultation with MNRF. Posting of speed limits in the construction area to mitigate road or vehicle related wildlife mortalities.
Breeding Birds	Tree and vegetation removal will occur outside the migratory bird nesting season (April 3 and August 11, as per Zone C1 of Environment Canada's Bird Nesting Zones [Environment Canada, 2016]) to mitigate disturbance or destruction of nesting birds protected under the MBCA.
Species at Risk Bats	A conservative approach will be taken to mitigate potential impacts to roosting bats that may be using the trees in the project location. Removal of trees will occur outside of the bat roosting period of May 1 to August 31.

Project Costs

- Cost sharing is to be fair and equitable to all participants and the capital costs for provision of infrastructure is to include all applicable construction, engineering, legal and financing costs.
- The total costs of providing the infrastructure will be reduced by any subsidies or grants received for the project.
- The capital cost sharing for the new sanitary sewers, forcemains and pumping stations is based on the proportion of each developers' land holdings within the southeast quadrant of the Town.
- The costs for shared infrastructure are to be recovered incrementally based on the cost sharing formula as well as the phasing of future developments within the southeast quadrant.
- Cost sharing for proposed improvements will be based on the final value of construction. The cost to connect existing homes cannot be determined until later in the process, based on the final value of construction.
- Compensation will be recovered during the development approval process and full compensation will be obtained upon full buildout of the sites.

Total Area including All Proposed Developments	264.13 ha
Proposed Developments Assessed	238.65 ha
Estimated Cost (2017\$)	\$9.011 M
Price per assessed hectare including all proposed developments	\$37.8 K

Next Steps



- Review, address and incorporate comments received on the Recommended Alternative.
- Meet with stakeholders and agencies as required.
- Confirm the Preferred Alternative.
- Prepare a Project File Report to document the Class EA process.
- Present Draft Project File Report to the Ministry of Environment Conservation and Parks (MECP) and Town Council.
- Finalize the Project File Report and make available for public review for a minimum of 30 days (Fall 2018).
- Completion of the detailed design drawings and specifications.
- Environmental Compliance Approval (ECA) (formerly known as a Certificate of Approval) to be obtained.
- Permit from the Essex Regional Conservation Authority to cross any municipal drain and for all works in ERCA regulated lands.

Contact Info/Get Involved

Your opinion matters!

Please complete a comment sheet to help shape decisions!

If concerns regarding this project cannot be resolved through discussions with the Town, a person or party may request that the Minister of the Environment, Conservation and Parks (MECP) order the project to comply with Part II of the EA Act (referred to as a Part II Order), which addresses Individual Environmental Assessments. A Part II Order Request form is to be completed and sent to the Minister, the MECP and the Town. Instructions will be provided within the Notice of Completion.

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