New Tecumseth
Alliston · Beeton · Tottenham

10th Sideroad and 6th Line Intersection Improvements
Schedule 'B' Municipal Class Environmental Assessment

PUBLIC INFORMATION CENTRE

Date: Tuesday October 8th, 2019

Time: Drop in 5:30 p.m. to 7:30 p.m.

Location: Tottenham Community Centre
139 Queen Street N
Tottenham, ON

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

WELCOME

This public meeting will present information on the project background, the Municipal Class Environmental Assessment Process, alternative solutions under consideration and evaluation, and the next step in process.

PLEASE SIGN IN

- Please review the display material and feel free to discuss any concerns with members of the study team in attendance. All PIC material will be available on the Town's website at www.newtecumseth.ca as of October 9th, 2019.

- We invite you to provide any comments, in writing, on the Comment Sheet provided.

Your Input is Appreciated!

MUNICIPAL FREEDOM OF INFORMATION & PROTECTION OF PRIVACY ACT

All comments received will be maintained on file for use during the project and may be included in study documentation. Information collected will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

BACKGROUND INFORMATION

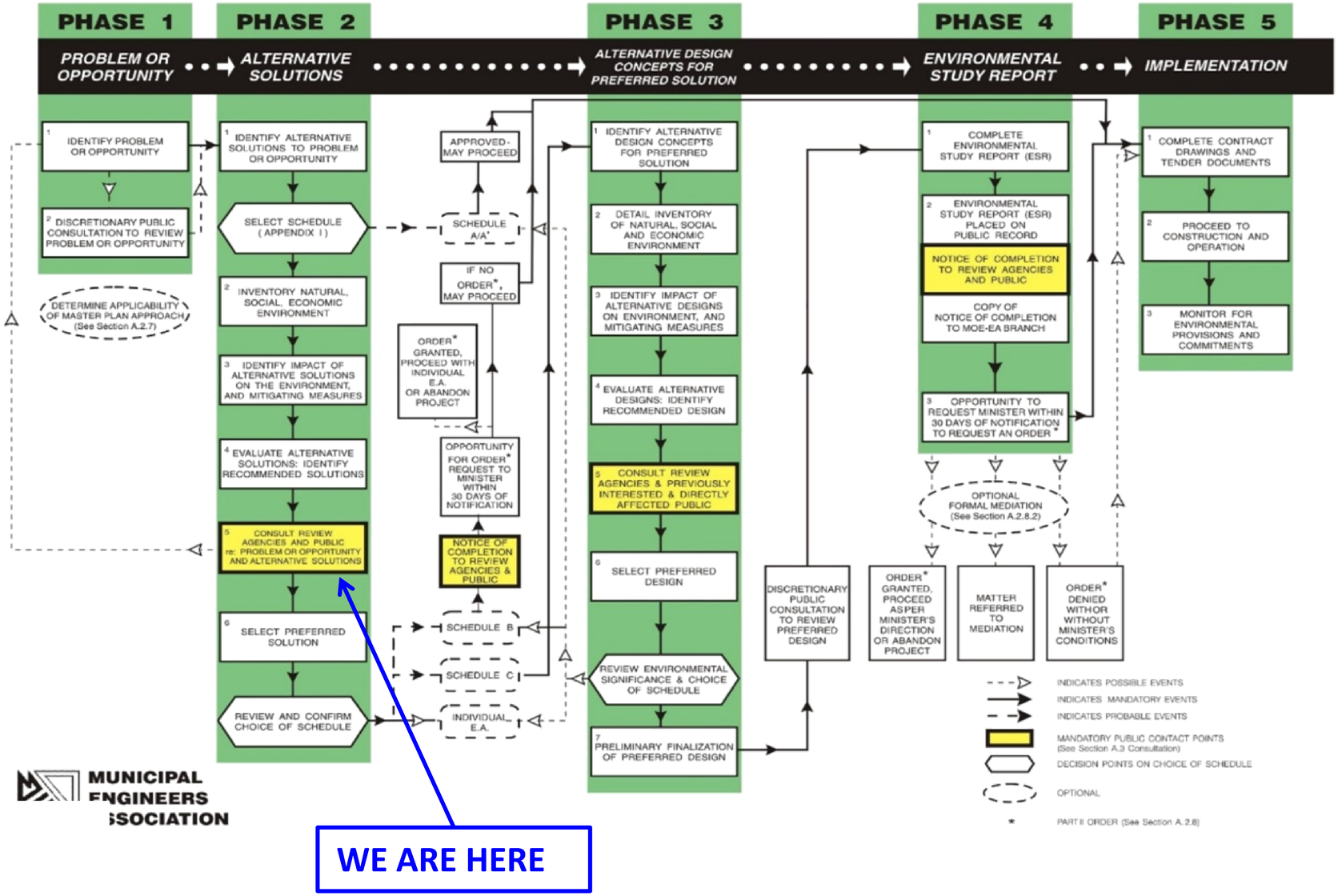
- In 2017 the Town of New Tecumseth retained Ainley Group to conduct a Municipal Class Environmental Assessment (Class EA) and Preliminary Design for intersection improvements at 10th Sideroad and 6th Line. This project will follow the Schedule ‘B’ planning process as outlined in the Municipal Class Environmental Assessment (amended 2015) and will entail a comprehensive review of potential alternative solutions.

- <u>PROBLEM/OPPORTUNITY STATEMENT:</u> The purpose of the study is to identify appropriate roadway and intersection improvements, which will reduce the potential occurrence and severity of accidents and collisions, resulting from geometric and operational deficiencies within the study area. In addition, the study will consider upgrades to the configuration of the intersection to improve traffic operations, capacity, level of service and safety. These improvements and upgrades will have regard for the future traffic demands and growth in the area.

MUNICIPAL CLASS EA PROCESS

- A municipality is required to conduct a Municipal Class EA before this type of infrastructure improvement project can proceed to construction. A Municipal Class EA follows an approved planning process designed to protect the environment and to ensure compliance with the *Ontario Environmental Assessment Act.*

- The purpose of the *Ontario Environmental Assessment Act (EA Act)* is to provide for "…the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment." The term "environment" is broadly defined and includes the built, natural, socio-economic and cultural environments.

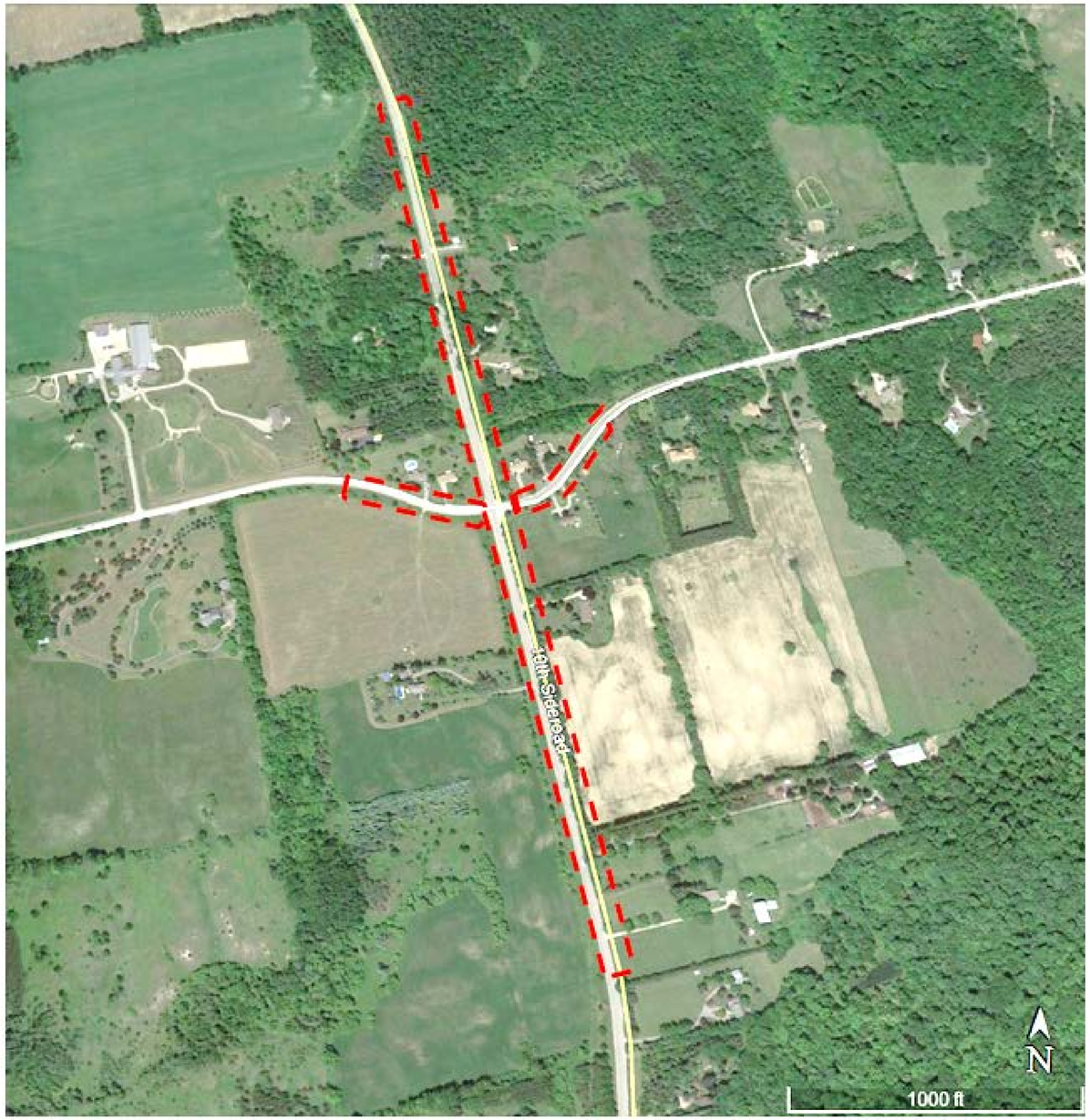


PROJECT STUDY AREA

- Located in the Town of New Tecumseth, the 10th Sideroad and 6th Line intersection is a four-way intersection with a two-way stop control on 6th Line, with 10th Sideroad being the through road.

- The road segments include approximately 1.2km of 10th Sideroad and approximately 300m of 6th Line.

- The surrounding terrain is rolling, with primarily agricultural uses and pockets of scattered residential enclaves.



ROADWAY DEFICIENCIES

Limited sight lines looking north from east leg of 6th Line due to vertical profile deficiencies.

Limited sight lines looking north from west leg of 6th Line due to vertical profile deficiencies and embankment.

Limited sight lines looking north along 10th Sideroad due to vertical profile deficiencies.

Limited sight lines looking south from west leg of 6th Line due to vertical profile deficiencies.

Limited sight lines looking south along 10th Sideroad due to vertical profile deficiencies.

Limited sight lines looking south from east leg of 6th Line due to vertical profile deficiencies.

EXISTING ENVIRONMENTAL CONDITIONS

NATURAL ENVIRONMENT

Surface Water/Fisheries/Aquatic:

- A drainage feature located approximately 0.5 km south of 10th Sideroad and 6th line intersection. The crossing is mapped as a headwater tributary of Beeton Creek, as per the County of Simcoe's Interactive Mapping. Based on site conditions, this crossing is not considered fish habitat.
- A second drainage feature is located approximately 0.5 km north of 10th Sideroad and 6th line intersection. This feature is *not* mapped on the County of Simcoe's Interactive Mapping. The culvert at the ditch in the road right of way (ROW) is likely not anticipated to function as fish habitat, however since a feature occurs, at some point northeast it is anticipated to transition to fish habitat within adjacent Environmental Protection (EP) 1 lands (beyond the ROW).

Wetlands: While there are no Provincially Significant Wetlands (PSW) in proximity to the areas of impact there are a number of unevaluated wetlands.

Vegetation (including SAR): Two Butternut Trees were noted to occur on the west side of the 10th Sideroad.

Wildlife (Including SAR):

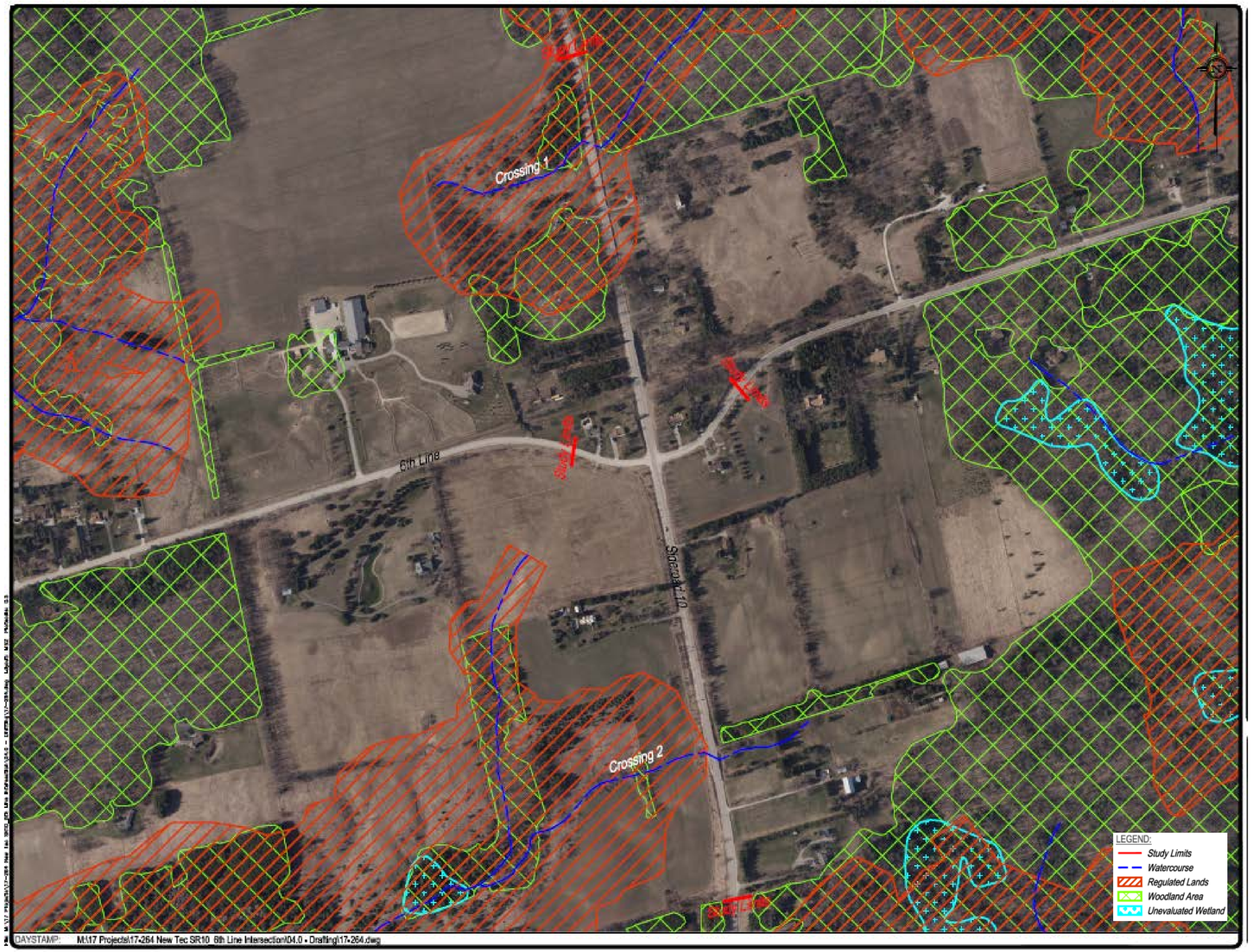
- Trees within the ROW have potential to be used as daylight roost habitat for Endangered Bat species.
- Lands adjacent to the ROW may be used as habitat for Species at Risk birds that include the Eastern Meadowlark, Bobolink, Barn Swallow and Bank Swallow.

Groundwater:

- No South Georgian Bay Lake Simcoe (SGBLS) Source Protection Plan policies apply.

Designated Areas:

- A small portion of the study area is located in an area regulated by the NVCA.
- There are no Areas of Natural and Scientific Interest (ANSI) within the study area.
- This project is not within the Greenbelt Area, the Oak Ridges Moraine Area or the Niagara Escarpment Plan Area.



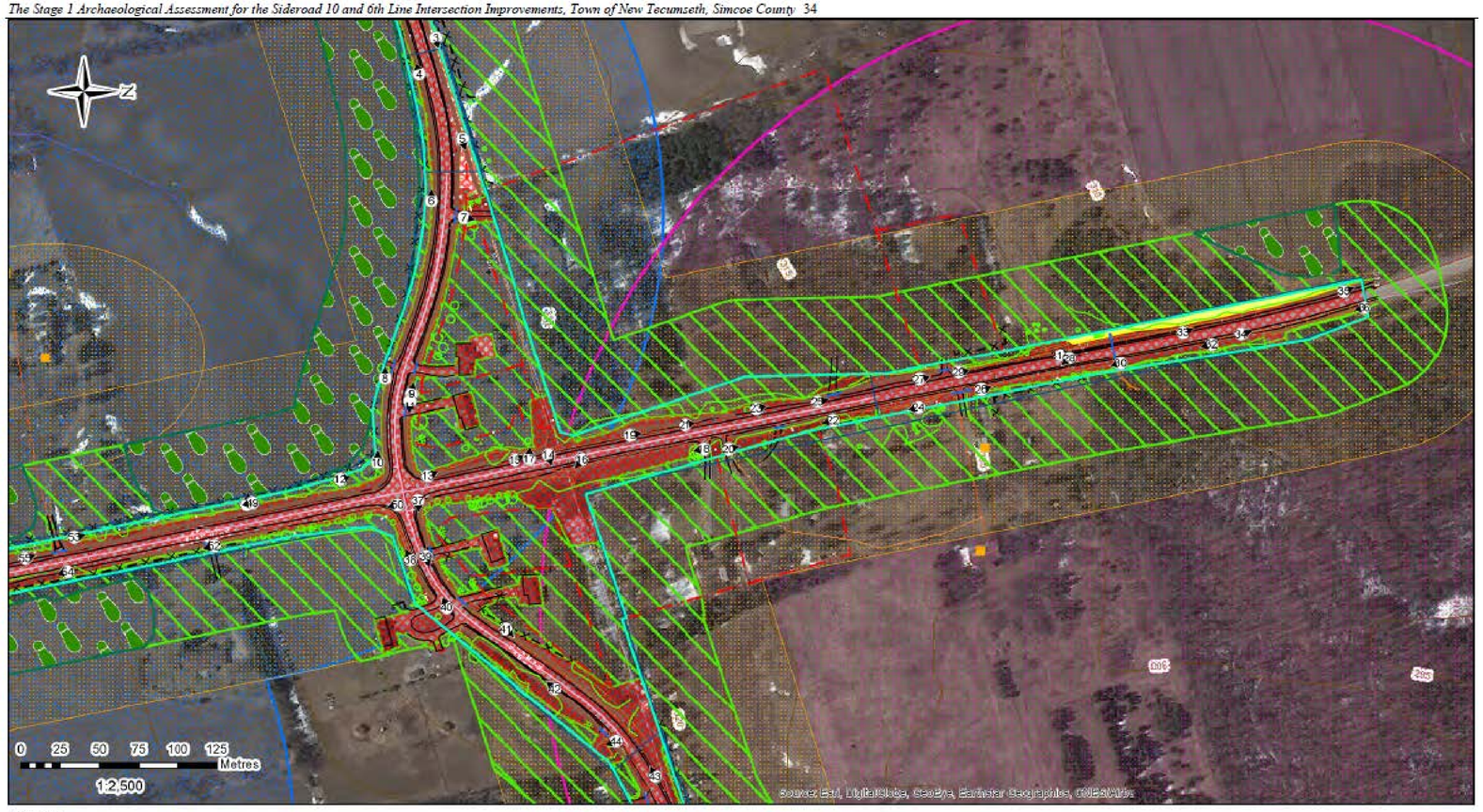
EXISTING ENVIRONMENTAL CONDITIONS (Continued)

CULTURAL ENVIRONMENT

Archaeological:

- The Stage 1 Report concluded that the existing roadway and ditches around the 10th Sideroad and 6th Line intersection have been extensively disturbed and no longer have archaeological potential.
- Most of the lands outside of the existing roadway and ditches around the 10th Sideroad and 6th Line intersection have archaeological potential. Any proposed impacts to these areas should be preceded by Stage 2 assessment.

The Stage 1 Archaeological Assessment for the Sideroad 10 and 6th Line Intersection Improvements, Town of New Tecumseth, Simcoe County 34



SOCIO - ECONOMIC ENVIRONMENT

Land Use:

- The surrounding land of the study area is primarily rural and utilized for agricultural purposes with residences within proximity of the intersection.

Roadway Conditions:

- There have been a number of collisions at the intersection, attributable to the substandard sight lines at the crest of the vertical curve.

Utilities:

- Utilities in the area presently consist of Bell buried conduit and aerial hydro along both the 10th Sideroad and 6th Line.

ALTERNATIVE SOLUTIONS

During Phase 2 of the Class EA process, alternative solutions are developed to address the identified deficiencies.

- Alternative A – Do Nothing: considers retaining/maintaining the existing roadway ‘as is’ with no improvements and/or modifications to the existing cross-section. This alternative provides a benchmark to gauge the potential for impacts.

- Alternative B – Geometric Improvements: This alternative would attempt to address the geometric deficiencies by improving the vertical alignment in the vicinity of the intersection to facilitate an 80km/hr posted speed limit.

- Alternative C – Operational and Geometric Improvements: The vertical alignment improvements would be constrained by the ability to regrade adjacent driveways along 6th Line and sightlines. The resulting design speed would be a function of the constraints and the posted speed would be adjusted accordingly.

- Alternative D – Signalization: This alternative would seek to improve safety at the intersection through signalization. Upgrades to the existing roadway and lane configurations would be considered. The system would implement detection along 6th Line so that the signals may be actuated as demand occurs along the 6th Line corridor. 10th Sideroad would be shown green until actuated given its function as an arterial road.

EVALUATION MATRIX

	Evaluation Criteria	How Criteria Are Being Assessed	Alternative A Do Nothing		Alternative B 80 km/h Posted Speed Geometric Improvements		Alternative C Geometric & Operational Improvements		Alternative D Signalization	
	Safety Improvement	Improves sightlines, Improves roadway geometrics	○	No improvements to sightlines, geometrics and safety. Does not address problem statement.	●	Greatest improvements to sightlines and safety, no improvement to hazard awareness	●	Significant impact on sightlines, and safety, improves hazard awareness	●	Improved safety, improves hazard awareness and intersection operations
	Driveway Impacts	Impacts on driveway accessibility and operations	●	No impacts to existing driveways	○	Significant impacts on driveway grades, maximums likely to be exceeded.	●	Moderate impacts on Line 6, grades within standards. SR 10 driveways will need extension.	●	No impacts to existing driveways
	Utility Impacts	Extents of utility relocation required	●	No impacts to existing utilities.	○	Requires more significant relocations at intersection including OPI cabinet and further relocations at approaches.	○	Require relocation of utility poles and underground Bell cabling at intersection.	●	Requires installation of poles and traffic signals elements. No major utility relocations anticipated.
	Stormwater Management	Ability to accommodate drainage and storm flows compared to existing	□	No significant difference between alternatives	□	No significant difference between alternatives	□	No significant difference between alternatives	□	No significant difference between alternatives
	Constructability	Flexibility and ease of construction	●	No construction required	○	Greatest volume of excavation required for off-site handling and disposal.	●	Significant volume of earthworks required.	●	Minor localized grading at intersection
	Traffic Impacts	Through traffic mobility improvements, Traffic operations improvements, Increased capacity, reduced congestion	○	No Improvement to geometrics and does not allow unencumbered flow.	●	Improves geometrics to standard and allows unencumbered flow.	●	Promotes freer flow of traffic.	●	Promotes safer flow of traffic and advanced warning.
	Construction Cost	Project costs for construction	●	No Construction Cost	○	$3,500,000	●	$ 2,600,000	●	$400,000
	Property Impacts	Magnitude of property acquisitions required to implement	●	No property acquisitions required.	○	Moderate land acquisition required in the vicinity of the intersection.	○	Moderate land acquisition required primarily at approaches to accommodate fills.	●	No property acquisitions required.
	Mitigation of Impact	Severity of Impact, ability to mitigate with localized slope stabilizations, retaining walls, etc.	●	No impacts and no mitigation required	○	Significant impact at the intersection and approaches	○	Significant impact at the intersection and approaches	●	Primarily localized impacts at the intersection.
										RECOMMENDED SOLUTION

SUMMARY OF KEY ADVANTAGES AND DISADVANTAGES

ALTERNATIVE	ADVANTAGES	DISADVANTAGES
A - Do Nothing	▪ Lowest cost of alternatives under consideration. ▪ Proposes no construction so no potential to impact adjacent properties or natural heritage features. ▪ As this option proposes no improvements it is one of the less expensive alternatives to implement in the short term. ▪ Cost: $0	▪ Does not resolve any of the design standard shortfalls. ▪ No improvements to overall safety and functionality of the intersection.
B - Geometric Improvements	▪ Fully addresses the deficiencies associated with the existing intersection and roadway ▪ Allows for implementation of a posted 80km/hr speed limit.	▪ Significant lowering of existing road profile. ▪ Requires extensive property acquisition to accommodate the construction required to provide sight lines and roadway geometrics ▪ Potential impact to cultural heritage features. Additional studies required. ▪ Impact to natural heritage features. ▪ Cost: Most costly alternative to implement. – Est. $3.5M.
C - Geometric & Operational Improvements	▪ Improves the deficiencies associated with the existing intersection and roadway ▪ Speed limit to be determined based on geometrics that fit with in environmental constraints.	▪ Does not allow for implementation of a posted 80km/hr speed limit. ▪ Does not fully address geometry issues (i.e. profile). ▪ Does not resolve design speed deficiencies ▪ Potential impact to cultural heritage features. Additional studies required. ▪ Impact to natural heritage features. ▪ Cost: Second most costly alternative to implement – Est. $2.6M.
D - Signalization	▪ Provides improved safety through signalization of intersection. ▪ No impacts to natural heritage features. ▪ No direct impacts to cultural heritage features. ▪ Cost: Least costly alternative to implement – Est. $400,000.	▪ Does not allow for implementation of a posted 80km/hr speed limit. ▪ Does not fully address geometry issues (i.e. profile). ▪ Does not resolve design speed deficiencies

WHAT'S NEXT?

- The project team will review the comments received following the completion of this Public Information Centre and a Preferred Solution will be selected.

- A Project File Report (PFR) will be prepared to document the Class EA process and made available for a 30 day public review period.

- A Notice of Completion will be issued that will identify the final Preferred Solution, the start of the 30 day review period and the locations available to review the PFR document. The notice will also provide instructions for submitting a Part II Order request.

- Once the 30 day public review period ends and there are no further objections or requests for a Part II Order, the Class EA process is considered complete. The project can then move forward to Phase 5 involving the completion of detailed design and construction at a future date.

COMMENTS

- All PIC material is currently available on the Town's website at www.newtecumseth.ca.
- We invite you to provide any comments, in writing, on the Comment Sheet provided.
- All comments are to be submitted by **October 22, 2019** to either of the address below:

Town of New Tecumseth
P.O. Box 910
10 Wellington Street East
Alliston, ON, L9R 1A1
Tel: 705-435-3900
Fax: 705-435-0407
E-mail: engineering@newtecumseth.ca

Sean Sexsmith
Transportation Technologist
Ainley Group
280 Pretty River Parkway
Collingwood, Ontario L9Y 4J5
Tel: 705-445-3451
Fax: 705-445-0968
E-mail: sexsmith@ainleygroup.com

Thank you for your attendance at this meeting!
We appreciate your participation.

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