



45 Spencer Street, Unit 101
Ottawa, ON K1Y 2P5
www.altaplanning.com

MEMORANDUM

To: File

From: Alta Planning + Design

Date: September 2020

Re: City of Guelph, Trans Canada Trail Route Investigation

Context

A gap currently exists in the Trans Canada Trail (TCT) route between the City of Guelph and Guelph-Eramosa Township. The northern extent of the TCT within the City of Guelph is the multi-use path (MUP) along Woodlawn Road that travels through Woodlawn Cemetery and connects down Marilyn Drive to the Speed River Trail. In Guelph Eramosa Township, the southern portion of the Trans Canada Trail is part of the Kissing Bridge Trail which intersects Wellington Road 39 (Silvercreek Parkway) and heads northwest, where it connects to a network of trails across the province of Ontario.

The gap is about 3 kilometres and has a complicated history of property ownership, environmental, technical and financial challenges. There is a desire to connect the gap through an off-road route using existing rail and hydro corridors instead of pursuing an on-road route. Connecting the existing segments will require a partnership between the City of Guelph, Guelph-Eramosa Township, Wellington County, GRCA, other approval agencies and various trail non-profit groups. A key map is included in Appendix A.

As part of the Guelph Trail Master Plan (GTMP) update, Alta Planning + Design has undertaken a route investigation to identify route options available to fill the gap in the Trans Canada Trail. The focus of this route investigation is the lands within the limits of the City of Guelph with some consideration/ description of lands outside of the City limit. The City and the Township have explored a number of different options in previous years to connect the TCT to the Kissing Bridge Trail. These options have not been included in this report as they were already determined to be not feasible and therefore not necessary to review or evaluate. This memo outlines study process, route options, decision making criteria, analysis and outlines the next steps in the process to develop the recommended trail route. The Guelph Trail Master Plan update will develop a prioritization plan for proposed new and upgraded trails. This investigation is not a commitment to prioritize the TCT route, and the route will be evaluated and prioritized with all other proposed trail projects.

Trans Canada Trail policies

The Trans Canada Trail is an organization that promotes and assists in the local development and use of trails that are branded under its Trans Canada Trail or The Great Trail brand. The organization is funded through charitable donations by individuals and government grants. Currently, the Trans Canada Trail has not established their own

specific set of required design standards for a trail to be branded as part of the Trans Canada Trail. The standards of the local municipality apply. In 2009, the Trans Canada Trail board reaffirmed the organization's commitment to its Greenway Vision¹ that prioritizes the creation of trails to be used by non-motorized vehicles during the summer season. When a trail is on a route that is shared with motorized vehicles, and users are subject to the Highway Traffic Act, the Trans Canada Trail has stated that the route will be recognized as a Road Cycling Route. These routes are not eligible to receive any funding, with exception of wayfinding and safety signage. Greenway routes are eligible for construction funding in addition to signage funding.

Background information

Study area

The study area of this project is located in the northwest part of Guelph. The key map in Appendix A illustrates the proposed route options by segment. The segments are designed to allow for flexible route alignments to identify a preferred route; a possible route could be segment B1 to A3 to A4, and the route options are not limited route A, B, or C.

More detailed maps are included as Appendix C.

Original approved TCT route

The Kissing Bridge Trail route registered as part of the Trans Canada Trail (TCT) in 1999. The City of Guelph previously approved a proposed route that travels along the hydro corridor to Woodlawn Road W on the north side of the road, crosses to the south side at Nicklin Road, then travels along the Guelph Junction Railway (referenced as the Canadian Pacific Railway) service road into Woodlawn Memorial Park. The County approved a route for the proposed Elora-To-Guelph Trail which also is routed along the hydro corridor to Woodlawn Road.

In 1999 and 2013, the City made applications to Infrastructure Ontario and Hydro One to complete the Elora-to-Guelph Trail. The applications were abandoned due to high legal risk and a number of other factors.

Regional planning

Wellington County identified the continuation of the Kissing Bridge Trail into the City of Guelph in their Active Transportation Plan in 2012. The connection was identified for a Multi-use trail with a medium term, 11-20 year implementation range.²

In 2013, the County of Wellington identified that the cost to complete the TCT identified in the Active Transportation Master Plan had a number of significant concerns citing cost and safety as major influences.³ Based on staff's recommendation, the Planning Committee

¹ [Trans Canada Trail, Greenways-Vision-and-Core-Principles](#)

² County of Wellington. Active Transportation Plan. 2012. Map 6.4

³ [County of Wellington. Planning Committee Report: Active Transportation – 5 Year Plan. Report No. PD2013-15. Thursday, May 9, 2013](#)

decided not to implement the Trans Canada Trail/Elora-to-Guelph Trail route identified as Option 1 in the report. The route used the existing Hydro One corridor to make the TCT connection into Guelph. Since this report in 2013, no funding has been budgeted by the County to complete this TCT connection. It should also be noted that trail planning and development are not within the scope of the County and this is provided by Municipal Towns or Townships.

Guelph Junction Railway

The Guelph Junction Railway (GJR) is a local active railway that connects with the Canadian National and Canadian Pacific Railways. The GJR terminates in the northwestern Guelph industrial park. The railway is owned by the City of Guelph and managed by a board of directors.⁴ Any trail next to the railway would require a three metre clear zone from the outside edge of the nearest rail to the trail.⁵

Hydro corridor

A hydro corridor owned by Infrastructure Ontario and operated by Hydro One stretches north/south, from Guelph to Elora. There is currently a dirt service road along the corridor. Hydro One previously stated that any trail would have to be built adjacent to the service road.⁶

Marden tract

The Marden Tract is a 44 acre parcel of forested land owned by the Grand River Conservation Authority (GRCA). Located across from the extent of the Kissing Bridge Trail, it extends from Wellington Road 39 in the west to the Hydro One corridor in the east. In 2002, the GRCA approved a report that passed responsibility to Wellington County for any maintenance or installation of infrastructure on the trail within the Marden Tract.⁷

Other developments

Included in the site plan approval for 63-65 Woodlawn Road W (currently the Home Depot) is a setback of three metres along the western edge of the property that would allow for the future construction of a trail adjacent to the GJR right-of-way.⁸

There is an approved development proposal for a flour mill (LVB Flour Mill) between the GJR and the hydro corridor, using the hydro corridor as a possible service road to access the site. An Environmental Impact Study (EIS) was completed in 2008 for the development which included an assessment of lands within one km of the proposed site, covering a significant amount of the railway and hydro corridor routes considered in this

⁴ <https://guelph.ca/business/economic-development-office/guelph-junction-railway/>

⁵ Verbal communication with Les Petroczi, Guelph Junction Railway. December 2017.

⁶ TCT Route Options Map. July 2017.

⁷ Grand River Conservation Authority, Report 2042. Trans Canada Trail - Elora to Guelph Trail. October 15, 2002.

⁸ Home Depot Holdings Inc. Site Plan Control Agreement. May 11, 2005

memo.⁹ A final site servicing and stormwater management design report was completed in October 2009.¹⁰

Flora and fauna

The 2008 EIS for the proposed flour mill found that there were no rare or endangered vegetative species within the vicinity of the site. They identified seven vegetation communities within and adjacent to the site. The EIS identified nine rare bird species known to the study area and vicinity. No rare mammals were observed in the EIS, but two provincially rare species have been recorded within Wellington County. Of the 20 amphibians and reptiles known to be within the vicinity of the area, two are considered rare in Ontario, but neither were recorded during the study.¹¹

Wetlands

Much of the land in the gap between the portions of the existing Trans Canada Trail is wetland. These wetland areas are protected by the GRCA, under provincial regulation 150/06 and have been identified as a Provincially Significant Wetland Complex, the Marden South Wetland Complex. According to GRCA policies, recreational trails are permitted uses in wetland zones,¹² but any development would have to be sensitive to the wetland, and seek approval from the GRCA, including completion of an EIS. The City of Guelph has also recognized the wetland complex as part of its Natural Heritage System within the Official Plan (OP). The OP limits development within Significant Wetlands and their established buffers to passive recreation, which is defined as bird-watching, hiking, snowshoeing.¹³ Past studies did not show that this specific wetland supports fish spawning or nursery habitat.¹⁴

Public feedback

During Fall 2017, community and stakeholder engagement sessions were held as part of the overall GTMP update process. Over the course of eight events, an online survey, and MindMixer (an online engagement platform), the public, community groups, committees and city staff were invited to comment and provide feedback on the GTMP, including the TCT Route Investigation. Feedback was positive regarding the TCT study, with most public comments excited that action was being taken on closing the existing gap and connecting the City to the Kissing Bridge Trail.

⁹ Natural Resource Solutions Inc. Guelph Eramosa LVB Flour Mill Environmental Impact Study. 2008.

¹⁰ Gamsby and Mannerow Limited. Final Site Servicing & Stormwater Management Design Report LVB Flour Mill. October 2009

¹¹ Natural Resource Solutions Inc. Guelph Eramosa LVB Flour Mill Environmental Impact Study. 2008.

¹² [Guelph Official Plan, 2018 Consolidation, Section 13 Natural Heritage Features](#)

¹³ [Guelph Official Plan, 2018 Consolidation, p.27](#)

¹⁴ Ecological Services Group. Environmental Impact Study: 63-65 Woodlawn Road West. 2001.

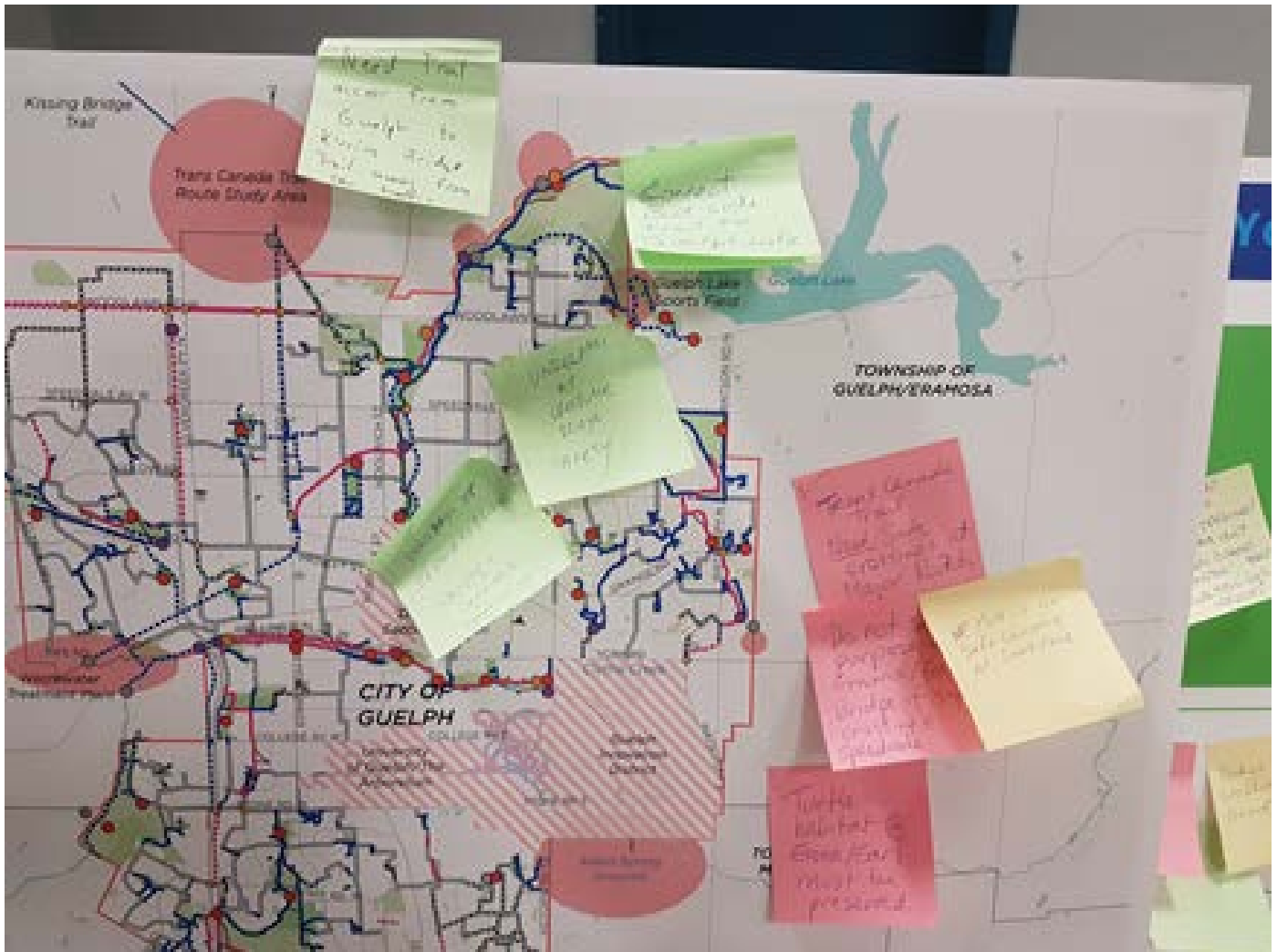


Figure 1 - Photo shows comments on post-it notes beside the Trans Canada Trail study area on a map at a public engagement event

Study process

The TCT Route Selection Study is a component study within the GTMP update project. Its purpose is to determine the conceptual route alignment for the remaining un-built section of Guelph’s TCT route. To do this, the following steps were followed:

1. Review previous City staff work and background material.
2. Analyze data, review previous routes investigated and identify possible routes.
3. Develop decision making criteria to be used throughout the study and to help guide future recommendations.
4. Eliminate possible routes that will not work based on preliminary background review and high level evaluation. Determine routes that need to be studied in more detail.
5. Collect additional information, data and discuss with agency partners.
6. Shortlist route options for engagement.

7. Engage the public, stakeholders, advisory committees and City staff on shortlisted TCT route(s) and decision making criteria.
8. Present information to Council.

Decision criteria

In order to evaluate the route options and variables, the following decision matrix was developed. This initial memorandum is intended to identify the various route options and provide a high-level analysis applying the criteria noted below at varying degrees. Follow-up study will continue to utilize the matrix below as a decision-making tool.

Table 1 - Trail Route Decision Making Matrix

Criteria	Variables		
	Most Suitable	Somewhat Suitable	Least Suitable
Ownership			
Ownership	City of Guelph	Township of Guelph-Eramosa	Third party-owned
Owner Willingness	Public owned & documented support	Owner Willing	Not Willing
Cost			
TCT Funding Eligible	Greenway Trail - Construction Costs	Road Cycling Route - Signage costs	Does not meet requirements
Route Length	Shortest/Most direct route	Second shortest/second most direct	Longest/Least direct
Cost to Build	Least Expensive		Most Expensive
Maintenance	Least Expensive		Most Expensive
Lifecycle Costs	Least Expensive		Most Expensive
Technical			
Slopes	No/minimal slopes (<2%)	Some slopes requiring minor technical engineering	Steep slopes requiring technical engineering
Required Crossings (Road, railway, driveway)	0 to 4	5 to 8	9+
Feasible within Right-of-way	No additional land required	Additional land available through easement	Needs additional land that is not available
Required Studies	Potential MCEA A or A+ and no other studies	Potential MCEA A or A+ and other studies OR MCEA B	Potential MCEA B and other studies OR MCEA C
Environmental			
Natural Heritage System	Trail permitted and no negative impact	Trail permitted and environmental impacts are able to be mitigated	Trail not permitted and environmental impacts unable to be mitigated

Contaminated Site	No known contamination	May be contamination	Significant contamination
Hydrogeology	Minimal known impact	Some known impact	Major known impact
Species-at-risk	Minimal known impact	Some known impact	Major known impact
Accessibility			
Accessibility	Trail can be constructed for the widest range of users and meet accessibility standards.	Trail can be constructed for most users and can meet most accessibility standards.	Trail can be constructed only for a small range of users and cannot meet accessibility standards.

Site visit

A site visit was conducted on June 12, 2018. Participants included representatives from the City of Guelph (Environmental Planning), the Grand River Conservation Authority and Guelph Junction Railway. A copy of the site visit notes is included in Appendix B.

Rudi Warne, P.Eng. with BT Engineering attended the site visit. Rudi is a Professional Engineer and Environmental Biologist with thirty plus years of experience in natural sciences, engineering and resource management. The photographic diary and site visit notes prepared by Rudi have also been included in Appendix B.

Route options

The following are description of the route options reviewed during the site visit:

Route “A” - Hydro Corridor (A1 + A2 + A3 + A4)

A1 – Starting on the existing pathway in Woodlawn Memorial Park (Woodlawn Cemetery), a user currently accesses Woodlawn Road via the existing roadway within the cemetery to an ad-hoc trail that exits the cemetery along the GJR.

A multi-use path exists on both sides of Woodlawn Road southwest of Nicklin Road. The Active Transportation Network Study (ATN), shows that the MUP will be extended from Nicklin on the south side of Woodlawn Road into the cemetery. At present, sidewalks exist on both sides of Woodlawn Road between Nicklin Road and the signalized intersection at the Home Depot entrance.

Should the A1 alignment be the preferred solution, the MUP on both sides that ends at Nicklin Road would need to be extended between intersections to create a continuous off-road facility. By extending the MUP on both sides of Woodlawn, connectivity to other land uses, such as Home Depot, could also be improved.

For the section between Nicklin Road and Edinburgh Road N, the driveway crossings should also be addressed to improve pedestrian and cyclist safety along the corridor. Intersection treatments could also be improved to facilitate bicycle travel.

A2 (alternative 1) - Heading north on a trail alongside the dirt service road for the hydro corridor for 800 m, where it crosses the active GJR railway. Options for a recommended facility type in this section include a MUP or a shared roadway should the motor vehicle volumes and speed remain low. This is the location of a future access to the proposed LVB Flour Mill.

A2 (alternative 2) - This alternative will build a new MUP connection on the Guelph Junction Railway (GJR) land within that ROW.

There are various combination of connecting either alternative of A2 to segments A3 and B2. These will need to be studied as part of a technical design exercise.

A3 (outside city limits) - After the crossing, the trail continues alongside the service road on the hydro corridor for approx. 1533 m towards Wellington Road 30. Refer to the site visit notes for more information from GJR regarding railway crossing requirements.

A4 (outside city limits) - The trail heads west on a trail in the GRCA Marden Tract for 1082 m. While this trail currently exists, it may require upgrading for the increased traffic and accessibility. A marked crossing across Wellington County Road 39 would be needed to provide a safe crossing to the Kissing Bridge Trail.

Route "B" - Railway Corridor (B1 + B2)

B1 – Starting on the existing pathway in Woodlawn Memorial Park, a user currently accesses Woodlawn Road via the same route as A1; using the existing roadway within the cemetery to the GJR, a pathway along the GJR to Woodlawn, and using the signalized intersection at Nicklin, then along a MUP on Woodlawn back to the GJR railway corridor on the north side of Woodlawn. A new controlled crossing adjacent to the rail line across Woodlawn Road is considered not an option as it is approximately 50 m from an existing signalized intersection.

The B1 segment would not be permitted based on the Natural Heritage policies contained in the City's Official Plan. A trail developed to provide a significant community connection in a sensitive area would not be supported by city policies and could create a negative impact to the wetland¹⁵.

The B1 segment would proceed 930m northwest on the north side of the railway at which point it reaches a junction with the hydro corridor and rail line on the west side. During the site visit, the GJR representative indicated a preference for the north side due to greater right-of-way availability and less swamp (refer to the site visit notes in Appendix B including details specific to trail position and related handrail requirements). Positioning a trail on the north side of the rail line would also avoid the other existing rail line met at the junction of A2/B2/A3/B1 (i.e., rail line along the A2 alignment). Refer to Figure 2 for an aerial image of the junction.

B2 (outside of city limits) - The trail would continue along the railway for 1920 m until reaching Wellington County Road 39. During the site visit, the GJR representative indicated a preference for the trail to shift to the south side beyond the junction (refer to the site visit notes in Appendix B). This would allow for future planned railway operations for the LVB Flour Mill on the north side. Along the railway line, significant grading would

¹⁵ <https://guelph.ca/wp-content/uploads/Official-Plan-Consolidation-March-2018.pdf>, page 27

be required to accommodate the trail on the south side. Further to the west, the trail would also cross two farm access roads and a residential driveway. As the corridor west of the GJR property has been abandoned it may require selective tree and vegetation removals. If this route option was pursued, a marked crossing would be needed to connect the end of the trail to the Kissing Bridge Trail across Wellington County Road 39.

Past the GJR property is land that is owned by the Crown. The County of Wellington currently has a license to use this section of land for a trail as part of the license for the Kissing Bridge Trail.

Figure 2 - Image showing the existing conditions at the GJR/Hydro Corridor junction



Route "AB1" - Hybrid Route 1 (B1 + A3 + A4)

Refer to the discussion above for more details regarding B1, A3 and A4. The variation for this hybrid option is that it would not be necessary to cross the GJR line as the proposed trail would be situated on the northside of the rail line.

Route "AB2" - Hybrid Route 2 (A1 + A2 + B2)

Refer to the discussion above for more details regarding A1, A2 and B2. The variation for this hybrid option is that it would not be necessary to cross the GJR line twice at the junction of A2 and B2 (refer to the site visit notes in Appendix B).

Route "C" – Roadway (A1 + C1)

A1 – Refer to the discussion above specific to A1.

C1 - The route would continue on the existing MUP on either side of Woodlawn Road for 1030 m to Silvercreek Parkway N/Wellington County Road 39. From the hydro corridor to Silvercreek Parkway N/Wellington County Road 39, there is one road intersection with a signal control at Arrow Road, and four access driveways that intersect the existing MUP and should be addressed for pathway user priority and continuity. There are also three bus stops, where the paving changes to concrete from the asphalt path and has no paint

to indicate priority or configuration. These bus stops should receive configuration treatment to enhance safety and user experience for both trail and transit users.

The route would continue north on Wellington County Road 39 (Silvercreek Parkway), for 2480 m where it would reach the Kissing Bridge Trail. Based on facility selection criteria (volume, speed, classification), facility treatments could be either unidirectional bicycle facilities on both sides of the road adjacent to a sidewalk, or a bidirectional facility on one side, similar to the existing MUP on Woodlawn Road. For the purposes of this study, the feasibility of constructing such a facility has not been assessed (i.e., physical constraints). Currently Wellington County Road 39 has an approximately two metre wide shoulder that has paved and unpaved portions. On the east side there are 22 driveway accesses and one road, while the west side has 38 driveways accesses and one road. A marked crossing would be required for access from the east side of the road to connect the facility to the Kissing Bridge Trail.

Note the requirements in the Trans Canada Trail policies section regarding TCT funding eligibility (i.e., a road cycling route is not eligible for funding). This route is also the longest and least direct with a lower probably of a quality trail experience for the user (due to proximity to motor vehicles travelling at high speeds).

Alignments for stakeholder input and key considerations

The alignments for the City to engage stakeholders and undertake additional study include: **Route A (A1 + A2 + A3 + A4)** and **Route "AB2" - Hybrid Route 2 (A1 + A2 + B2)**. A map illustrating this is included in Appendix D.

The rationale is based on the following summary:

Route B (not feasible)

- Segment B1 is not feasible. Expanding the rail corridor or providing boardwalks in the wetland would be required beyond the Home Depot site. The City's Official Plan policies would not permit a trail in this location because of the Natural Heritage System constraints and impacts to the wetland.
- The alignment of B2 is feasible, but would require working with GJR to extend the trail outside the city limits. Key considerations for this segment include:
 - It would be shorter and more direct route as compared with A3-A4;
 - The trail would be located on the south side of the tracks as the proposed flour mill would need to access the railway on the north side of the tracks;
 - It would require significant grading or moving the railway line to accommodate a trail on the south side the tracks (this should be paired with the repair on the railway to help minimize impact and costs);
 - The route may require crossing the rail line two times in the area of the junction;
 - There are a few properties that span the railway and there would be more impacts to private landowners;

- The County's Kissing Bridge Trail license covers a section of B2 (the Crown property north of the GJR property).

Route A (feasible)

- Longest route (3.4 km) but likely easiest to construct (generally flat and potential to use the access road). It is complicated by property ownerships, technical considerations, environmental constraints and development applications.
- This segment is currently used as the informal off-road connection by the public and a trail should be pursued to improve public safety and access.
- Multi-use paths (MUPs) already exists along Woodlawn Road. The MUPs would need to be extended to connect into the cemetery. There is also a potential to connect into a future trail that would use the GJR railway to connect Woodlawn to Woolwich close to the Speedvale intersection.
- Segment A2 is feasible but technically complex to achieve. Key considerations for this segment include:
 - Infrastructure Ontario (IO) and Hydro One own and operate a portion of this land, a Park License would be required should the City pursue using the existing maintenance access (a license would need to be renewed every 5 years and City and Township may need separate licenses).
 - GJR owns and operates a section of land here. In order to build a trail on the GJR land, significant grading, and construction would be required to make it functional.
 - There is an approved Site Plan for the LVB flour mill site in this location and the easement rights complicate the ownership and ability to make this feasible.
 - Upgraded railway crossings would be needed.
 - City mapping shows a locally and provincially significant wetlands close to the city limit where the GJR tracks cross. Further investigation is needed to confirm any impacts to the wetland or required mitigation measures.
 - Potential for contaminated soils.
- A secondary benefit that a connection at A2 could connect the City two ways: 1) along Woodlawn Road and into the TCT within the City and 2) a future trail planned along Edinburgh Road.
- Segment A3 and A4 are outside of city limits. Marden Tract is an existing nature trail and GRCA would need to be consulted about how to meet accessibility requirements.

Hybrid Route 'AB2' (feasible)

- Shorter than Route A (2.8 km) but maybe more difficult and costly to construct due to more significant grading and construction along segment B2.
- Segment A2 is feasible but technically complex to achieve due to considerations noted above.

- The alignment of A1, A2 and B2 appears to have the highest probably of creating a more direct trail system, as the former railway leads directly to the Kissing Bridge Trail.

Route C

- This is the least enjoyable route to travel, but may be the easiest to construct. It would require improvement to the road shoulders. Key considerations include:
 - The route is completely within the right-of-way. An off-road connection is preferred by trail users.
 - With higher speed traffic and small shoulders this option is the least enjoyable to travel.
 - As part of the planned Highway 7 extension there is an on and off ramp planned to connect to Silvercreek Parkway from Curtis Drive. This may lead to increase traffic and more instances for cyclist/pedestrian conflicts.

Anticipated Required Approvals

Depending on the alignment of the route, different approvals will be required for the development of the trail. These can include:

Route outside the City of Guelph

An agreement with Guelph-Eramosa Township and/or the Wellington County will be necessary to ensure the mutual commitment to and feasibility of the project. The agreement should establish the required steps and reach an agreement on the construction costs as well as ongoing maintenance costs. In order to guarantee the success of the project, this will be key to moving the project forward and may take some time to complete.

Municipal Class Environmental Assessment (MCEA)

Construction of multi-use pathways within existing rights-of-way are pre-approved with no financial limits. Culvert repair and replacement are generally accepted as Class A or A+, not requiring further study, so long as there are no changes in the drain area or increased capacity. New water crossings for a pathway may require a Schedule B Class EA if the total construction cost of the crossing is less than \$2.7M. It is recommended that the City consult with the Ministry of Environment and GRCA to determine if a Schedule B Class EA is needed¹⁶

Wetlands and Natural Heritage System

If the trail is built within the GRCA regulation limits or the NHS feature or buffers, approval will be needed from the City and the GRCA. Because the Marden South Wetland Complex is considered Provincially Significant, an EIS would be required for any land

¹⁶ Wellington County. Active Transportation Plan. 2012. 4-13 and 4-14.

within 120 metres of the wetland, or on any adjacent lands.¹⁷ The goal of the EIS would be to demonstrate consistency with policy/legislation and determine that the proposed trail would have “no negative impacts.” To initiate a process seeking development within GRCA and NHS regulated area, a pre-consultation must be set up with the City and GRCA.¹⁸

Hydro corridor

In order to develop the route inside the Hydro One corridor, approval from Hydro One and Infrastructure Ontario will be required, which could include transfer of liability. Public bodies or private land owners can apply to use hydro corridor lands for a secondary use through the Provincial Secondary Land Use Program (PSLUP). Hydro One is responsible for completing a technical review of the proposal and, if Hydro One gives its technical clearance, IO is responsible for executing the appropriate agreement to facilitate the proposed secondary use (e.g., easement/licence). The municipalities will be responsible for 50% of the taxes of the corridor under a Park License.¹⁹

Railway corridor

If the route will be aligned alongside and within the GJR corridor, approval will need to be sought from the GJR board of directors and meet Transport Canada requirements, or seek approval if the setbacks cannot be met. A Design Needs Risk Assessment Report is required by Transport Canada.²⁰

Next steps

In order to proceed with **Route “AB2” - Hybrid Route 2 (A1 + A2 + B2) or Route A (A1 + A2 + A3 + A4)** the following are next steps that would be needed:

Segment A1

1. Formally connecting the TCT from Woodlawn Cemetery to Woodlawn Road. This would require:
 - a. Partnership/easement with the Woodlawn Cemetery Board – currently underway
 - b. Partnership/easement with GJR – currently underway
 - c. Design and construction of a formal path from the cemetery to Woodlawn Road.
2. Extending the MUP from on the south side of Woodlawn from Nicklin Road to the cemetery TCT connection.

¹⁷ [GRCA, Environmental Impact Study Guidelines and Submission Standards for Wetlands](#)

¹⁸ [GRCA, Environmental Impact Study Guidelines and Submission Standards for Wetlands](#)

¹⁹ E-mail correspondence, February 11, 2011.

²⁰ Verbal communication with Les Petroczi, Guelph Junction Railway. December 2017.

- a. The City is currently working on a design as identified in the ATN study. A construction budget is subject to Council Approval as part of the City's capital program of work.

Segment A2

1. Connecting the MUP on Woodlawn Road to the railway junction to the north. There are two options to make this connection. A feasibility study and preliminary design drawings should be prepared to determine the preferred option. The feasibility study will include:
 - a. Legal and topographic survey to confirm existing conditions, ownership and easements in this area.
 - b. Environmental Impact Study and/or Environmental Implementation Report.
 - c. Analysis of options based on Trail Route Decision Making Matrix included in this report.
 - d. A Design Needs Risk Assessment Report is required by Transport Canada if a railway crossing is needed;
 - e. Preliminary discussions with GRCA, Hydro One, LVB Flour Mill, Guelph Junction Railway.
2. The first option for a trail in this location would be utilize the existing Hydro One access road or the future LVB Flour Mill access road. This option would require less construction, but may be limited by Hydro One restrictions or requirements. In order to do this, it would require:
 - a. Partnership/easement with LVB Flour Mill owner and understanding if there are any future plans for development.
 - b. Application for the Provincial Secondary Land Use Program (PSLUP) to Hydro One and Infrastructure Ontario, which could include:
 - i. Development of detailed design drawings;
 - ii. Other technical studies including storm water management plans, Design Needs Risk Assessment Report, etc;
 - iii. Formal application to Hydro One;
 - iv. Legal agreements.
 - c. Preparation of detailed design and construction of trail.
3. A second option to connect the MUP on Woodlawn Road to the railway junction to the north is to build the trail on the GJR land 3.0m from the outside rail. In order to do this, it would require:
 - a. Partnership/easement or ownership of GJR land.
 - b. Design drawings that may include straightening a section of GJR track.
 - c. Hydro One approval for use of the land as a public trail, which could include:
 - i. Development of design drawings

- ii. Other technical studies including storm water management plans, Design Needs Risk Assessment Report, etc;
 - iii. Formal application to Hydro One to permit a trail within their easement;
 - iv. Legal agreements;
- d. Preparation of detailed design and construction of trail.

Segment B2 or A3 (outside city limits)

As this segment is outside city limits, either the Township or the County should take the lead to develop and connect this segment. The city should partner with these agencies to assist in developing the trail. In order to develop this segment, these steps will be required:

1. Establish lead (ie what is County versus city role in this work)
2. Partnership/easement or ownership of federally owned land.
3. Partnership/easement or ownership of GJR owned land.
4. Consultation with adjacent landowners.
5. Development of design drawings and required approvals/permits.

Appendix A






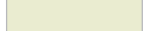
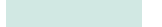
Key Map

TRANS CANADA TRAIL ROUTE SELECTION STUDY KEY MAP

Route Segments

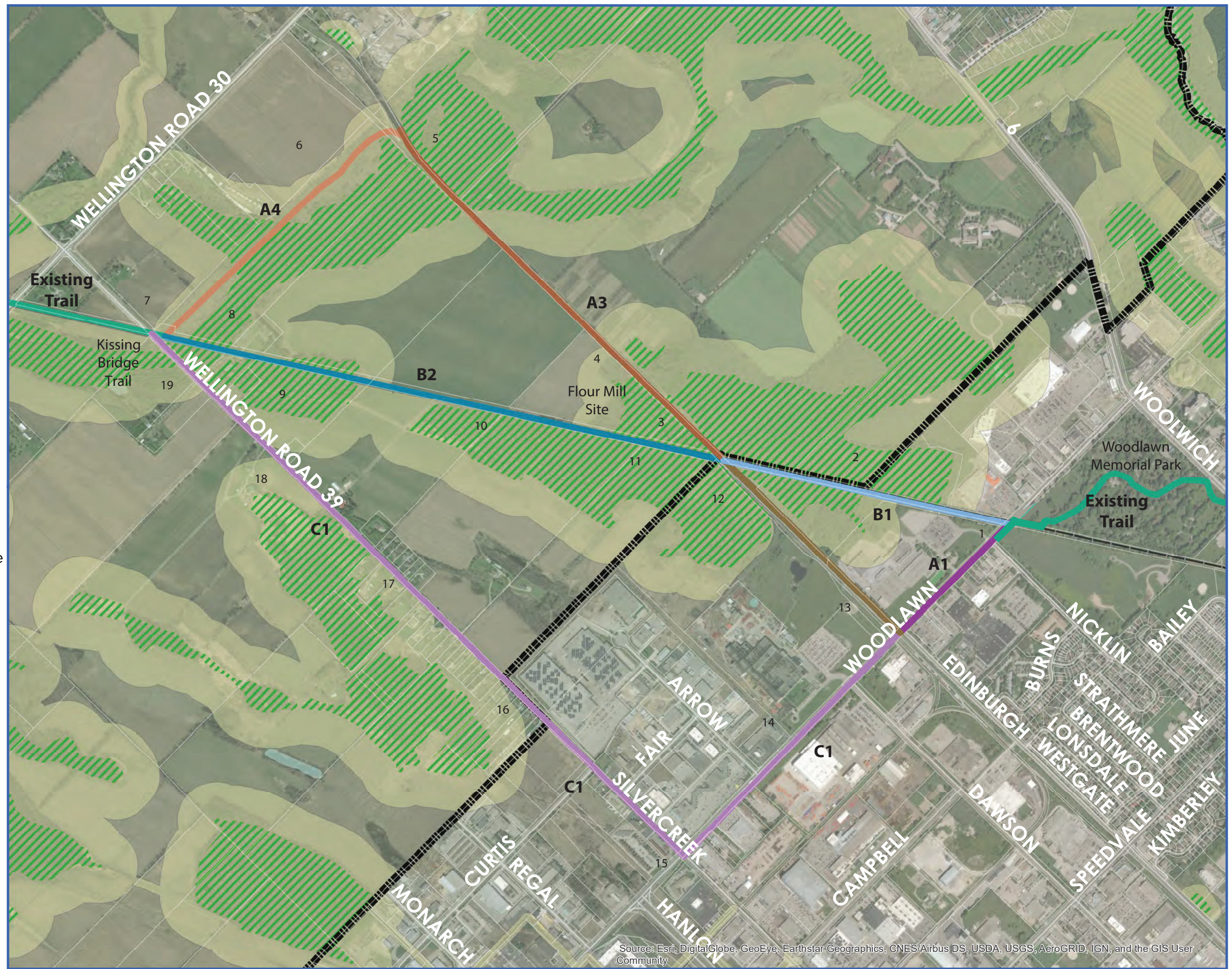
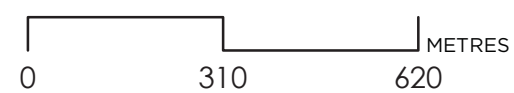
-  Existing / Planned
-  A1
-  A2
-  A3
-  A4
-  B1
-  B2
-  C1

Background

-  Close Up Map Reference
-  Railway
-  Property
-  Guelph Boundary
-  GRCA Wetlands
-  GRCA Regulation Limit
-  Water

November 2019

Route lines are illustrative, and do not represent exactly where a trail would be implemented within right-of-way.



Appendix B
Site Visit Notes and Photographic Diary

Unbuilt Section of TransCanada Trail, Guelph Ontario

Guelph Trail Master Plan Update

Notes from June 12, 2018 Site Visit

Leah Lefler – Environmental Planner, City of Guelph

Fred Natolochny - Grand River Conservation Authority (GRVA)

Les Petroczi – Guelph Junction Railway (GJR)

Rudi Warne – BTE Engineering (Biologist)

Helen White – City of Guelph (City Project PM)

Kate Whitfield – Alta Planning + Design (Consultant PM)

Documents

- Memo dated May 23, 2018: Trans Canada Trail Route Selection Study Draft
- Key Map
- Detailed Maps

General notes

- Route selection study
- The goal of this study is to review the initial route options created by the City and narrow them down to a preferred route
- The preferred route would be the subject of a future more detailed study
- A stewardship group will be required (i.e., Guelph hiking club)
- City: new OP language regarding formalizing ad hoc trails in wetlands (and not an informal trail conversion)

General construction notes

- GJR: 10 ft from edge of outside rail; plus handrail
 - Handrail to follow example of other track/trail configuration downtown
 - Hatch or AECOM report about railings and crossings
 - Confirmed that wider separation does not remove the requirement for a handrail (therefore keep close)
 - The rail location is also where drainage is addressed
- City: the trail would be the city standard width within the city limit (2.5-3 m trail); no county standard
 - TransCanada Trail standard is the local municipal standard
- If a boardwalk is constructed it would need rails on both sides, curb rail and toe rail

General GRVA notes

- Allow minor encroachment (occasional); have this policy for situations where setting up linear facility (through EA or equivalent); where comprehensive study for public good would consider marginal loss; need to show due diligence and good faith
- Need to know construction options
 - Fill
 - Elevated boardwalk with piers
 - Boardwalk with helical piers (?)
 - Elevated boardwalk with posts
 - Elevation boardwalk with poured concrete
- GRVA: Fred to review general information of where wetland complex “break” exists (MTO designation)
- Wetland characteristics therefore not necessarily all boardwalks; first think about what type of trail users
- Idea to draft three sections:
 - Tight base (where narrow base and water to the edge)
 - Medium base
 - Wider base (ballast bed wider)

B1

- GJR: preference for trail on northeast side; more ROW, less swamp
- Ponds on south side; plus ditch treatment associated with industrial property on Woodlawn (see file)
- Note culvert locations (cost to widen to accommodate trail)
- GRCA: changes between wetland and thicket but to be treated as a unit
- GJR: trail would cross track northwest of switch (and hydro line) and continue on south side
 - Plus 10 ft off switchstand
 - Cross on 40 degree angle therefore need approx. 40 ft (watch switch location)

B2

- Take into consideration plans for future rail line into property on the north side past the switch; has an impact on where trail crossing would be
 - Trail on northeast side better for environmental reasons in B2 but not GJR preference
- GJR: willing to move tracks 3 ft over; keep in ballast bed
- GJR: trains stored near where the track ends
- Note farm crossings; can full easements later if needed

A2

- Review flour mill proposal and associated; good example of a matrix; GRCA was involved; note that before OPA amendment
- If A2 then will need to cross tracks twice; do not cross on curve; good sightlines

A4

- GRVA owned trail; Marden Tract

A3

- Did not walk hydro corridor

Follow-up to the June 2018 site visit

A review of the natural heritage policies in the OP was conducted after the site visit and the following guidance was provided by the City:

“Development within Significant Wetlands and their established buffers (minimum 30 m width) is limited to the following permitted uses: Legally existing uses, buildings or structures; Passive recreational activities; Low impact scientific and educational activities; Fish and wildlife management; Forest management; Habitat conservation; Restoration activities.

In addition, the formalization of existing ad hoc trails through formal trails and walkways may be permitted within Significant Wetlands and their established buffers where: They are considered essential to the City’s trail system or integral to the scientific, educational or passive recreational use of the property; The environmental impacts of the proposed trails have been assessed and mitigated through design that minimize impacts to the natural heritage features and areas, and ecological functions; Where appropriate, they consist primarily of boardwalks and viewing platforms and are accompanied with educational signs.

Since an existing ad hoc trail does not exist, a trail alignment through the Significant Wetland is not supported by OP policies. Therefore, proposed route segments B1 and portions of B2 can not be supported.”

Additional notes:

Section B1 is within the City limits. For trails in the City, typically trails within wetland boundaries are not permitted unless they follow an existing route and are constructed to minimize impact (e.g. boardwalks). The trails in wetland buffers typically do not have such a restriction. In those instances, an EIS is undertaken to determine design and construction measures that mitigate impacts on the wetland. Wetland flagging is required in order to determine if the route is in a wetland.

The overall issue highlights the policy tension around new trails ‘naturally’ wanting to be in natural areas.

Photographic Diary – June 12, 2018



(B1) Proceeding west from Woodlawn Road along the Guelph Junction Railway ROW entering the 120 m buffer (above), and across the Marden South Provincially Significant Wetland (PSW) boundary (below)



To the south of the tracks and approaching the hydro corridor is a stormwater pond for an adjacent industry with a beaver-proof outlet structure

(B1)





(B1) A large area of cattail marsh (above) extends north and west approaching the hydro corridor. Forage fish were observed in a duckweed covered ponded area at a culvert crossing (below)



The PSW boundary abuts the railway embankments for much of their length to Wellington Road 39. Woody vegetation along the corridor is a mix of native (silver and red maple) and alien (buckthorn, Norway maple)

(B1)





(Junction
B1, B2,
A2, A3)

At the hydro corridor, a gravel access road and rail siding meet the proposed trail (above). The proposed trail location would be to the north of the tracks (beyond the tracks above and left, below)

The trail would cross the tracks from north to south (above) several metres to the west of the switch box. This will avoid a proposed new siding to the north (above) to a new industrial site

(B2)

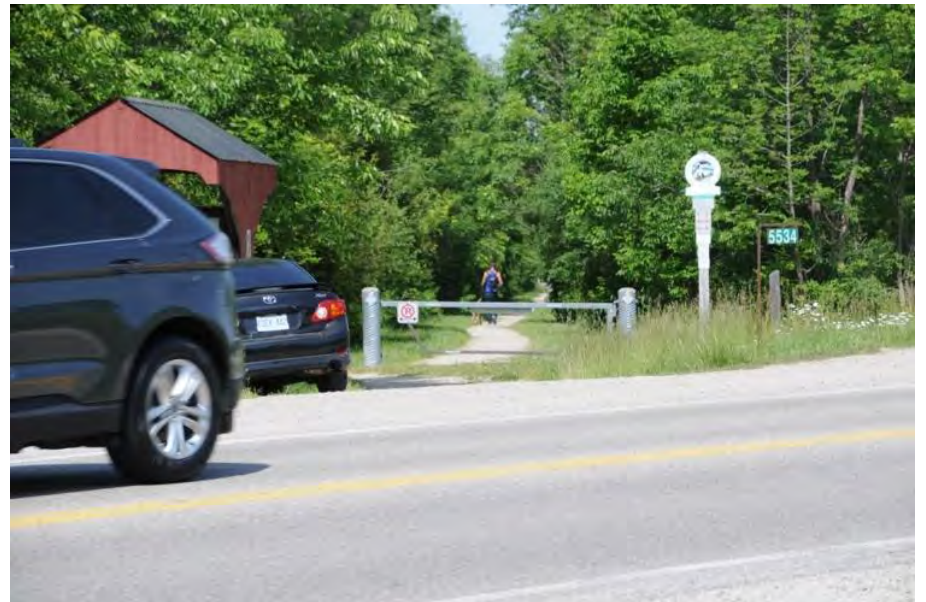




(B2) The rail ROW continues west through woodlands, meadows and across ponded areas until the tracks terminate



A well-used pathway continues west to Wellington Road 39 where it connects to the Trans Canada trail network (B2)





Information signage and a map are available to hikers and cyclists at the County Road 39 access point



Signage directs hikers to a trail to the north through the GRCA Marden Tract lands immediately adjacent to the Guelph Junction Railway terminus

(Junction A4, B2)





(A4) The Marden Tract trail skirts the PSW wetland-adjacent land boundary through a densely wooded forest (sugar/red maple, hemlock, basswood)





A siding for the Guelph Junction Railway parallels the hydro corridor access road as it extends north from Woodlawn Road to the main line corridor



Although a trail is indicated extending northwest beyond the Guelph Junction Rail corridor, it soon becomes overgrown and impassable




Appendix C

Close Up Maps

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 1

Route Segments

 Existing / Planned

 A1

 B1

Background

 Railway

 Guelph Boundary

 Property

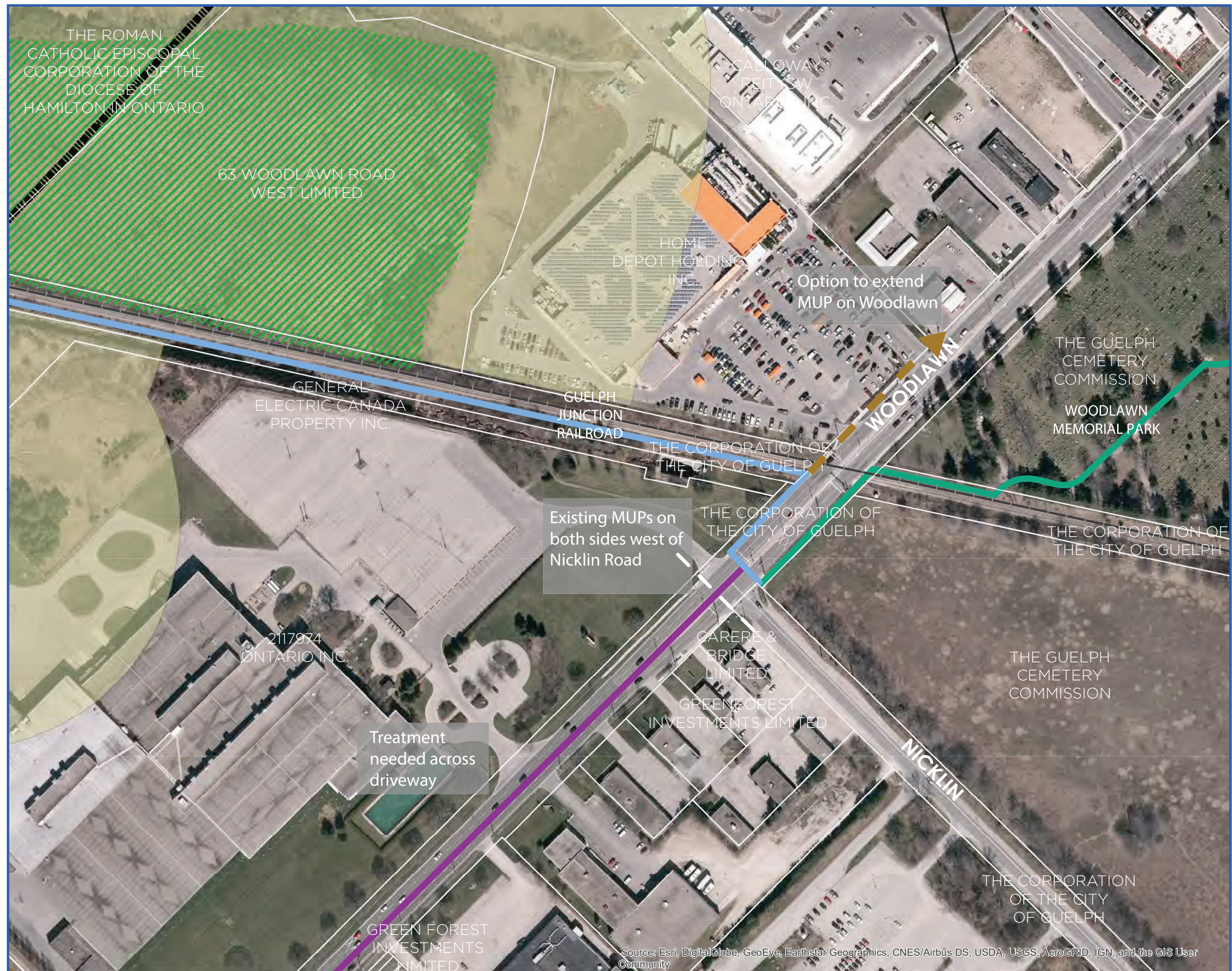
 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019

Route lines are illustrative, and do not represent exactly where a trail would be implemented within right-of-way.



TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 2


Route Segments

 B1

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019





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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 3

Route Segments

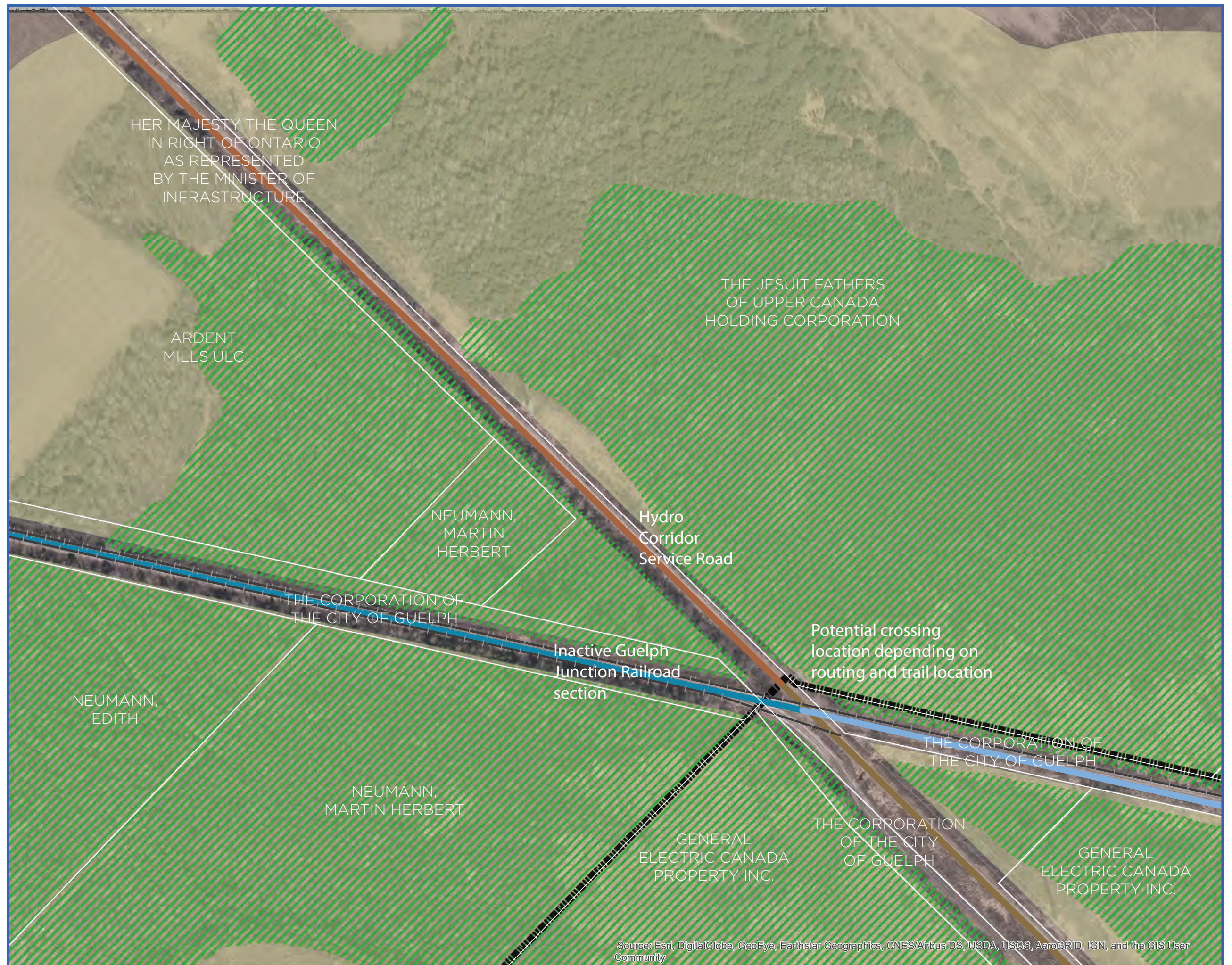
-  A2
-  A3
-  B1
-  B2

Background

-  Railway
-  Guelph Boundary
-  Property
-  GRCA Wetlands
-  GRCA Regulation Limit
-  Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 4

Route Segments

 A3

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water



November 2019

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 5

Route Segments

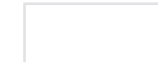
 A3

 A4

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

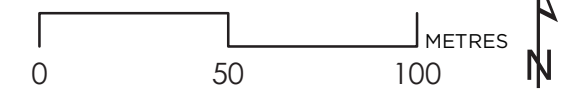
 GRCA Regulation Limit

 Water



November 2019

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 6

Route Segments

 A3

 A4

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water



November 2019




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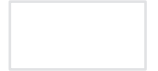



TRANS CANADA TRAIL ROUTE SELECTION STUDY

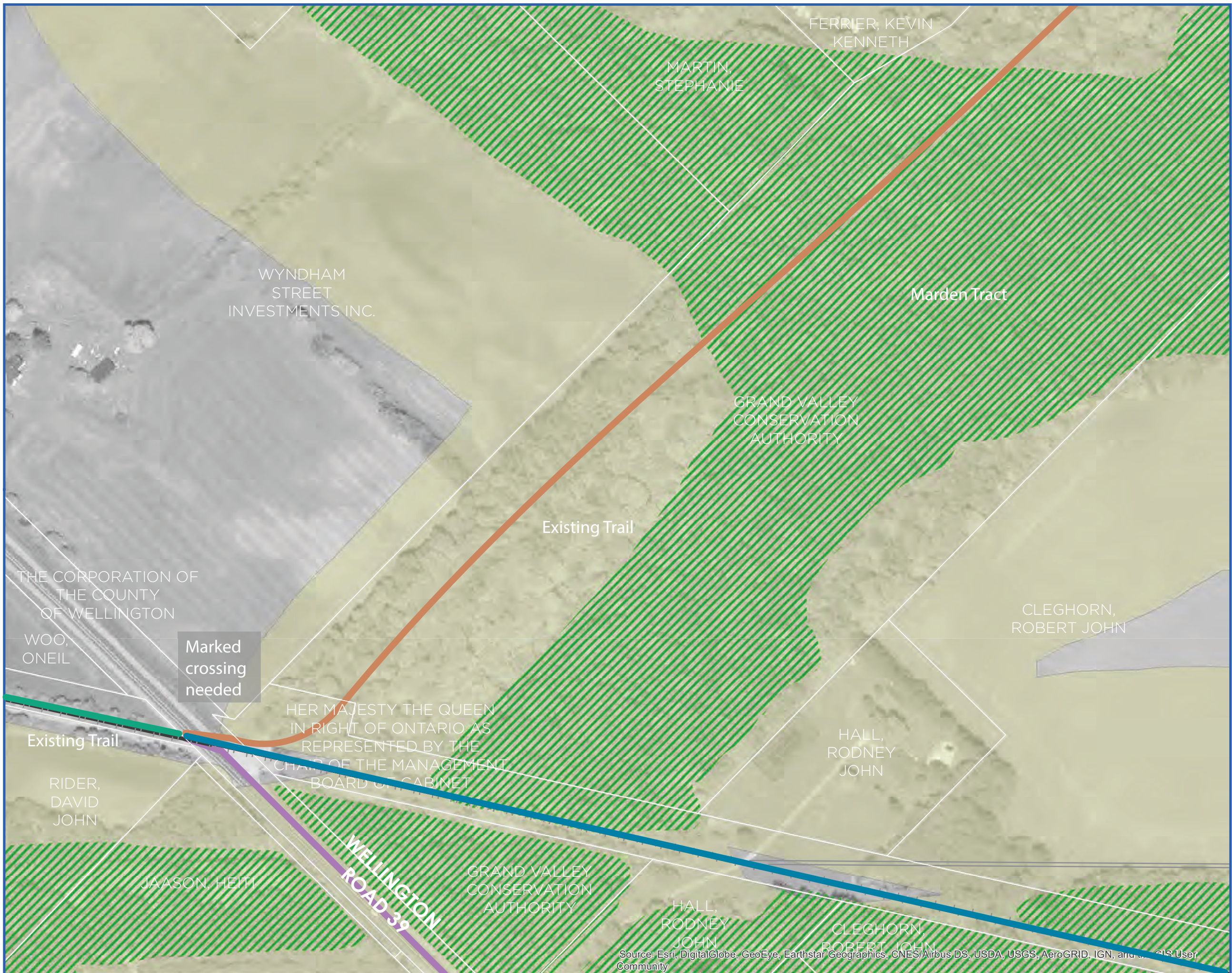
Map 7

Route Segments

-  A4
-  B2
-  C1

Background

-  Railway
-  Guelph Boundary
-  Property
-  GRCA Wetlands
-  GRCA Regulation Limit
-  Water



November 2019

Route lines are illustrative, and do not represent exactly where a trail would be implemented within right-of-way.



TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 8

Route Segments

- Existing
- A4
- B2
- C1

Background

- Railway
- Guelph Boundary
- Property
- GRCA Wetlands
- GRCA Regulation Limit
- Water

November 2019

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 9

Route Segments

 B2

 C1

Background

 Railway

 Guelph Boundary

 Property

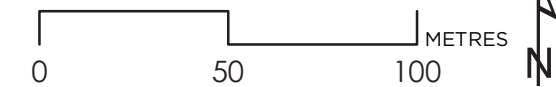
 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 10

Route Segments

 B2

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

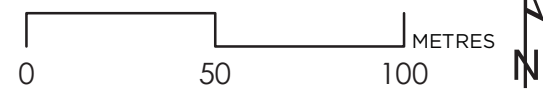
 GRCA Regulation Limit

 Water



November 2019

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 11

Route Segments

 B2

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water



November 2019

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 12

Route Segments

 B1

 B2

Background

 Railway

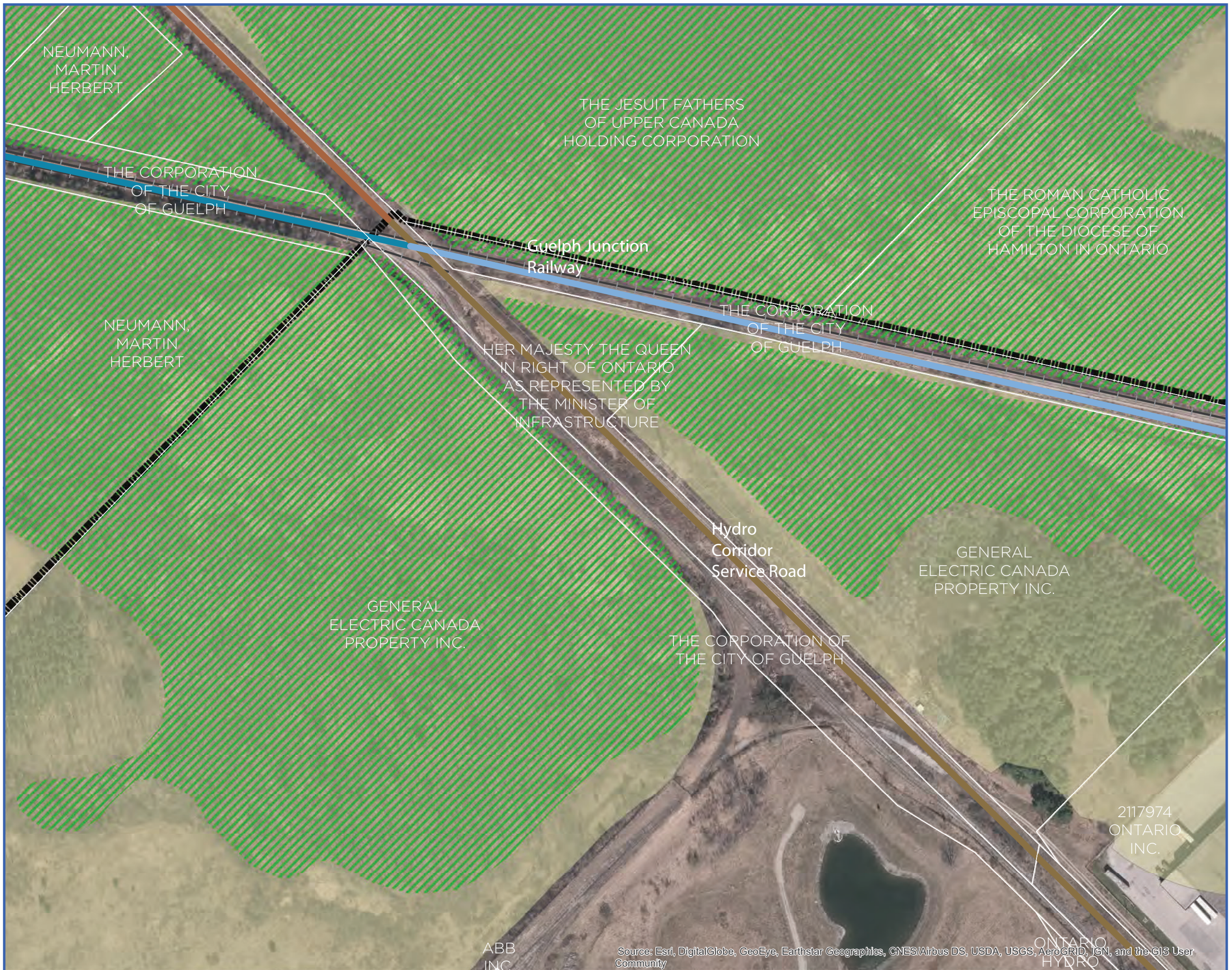
 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water



November 2019

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ABB INC.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ONTARIO HYDRO

TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 13

Route Segments

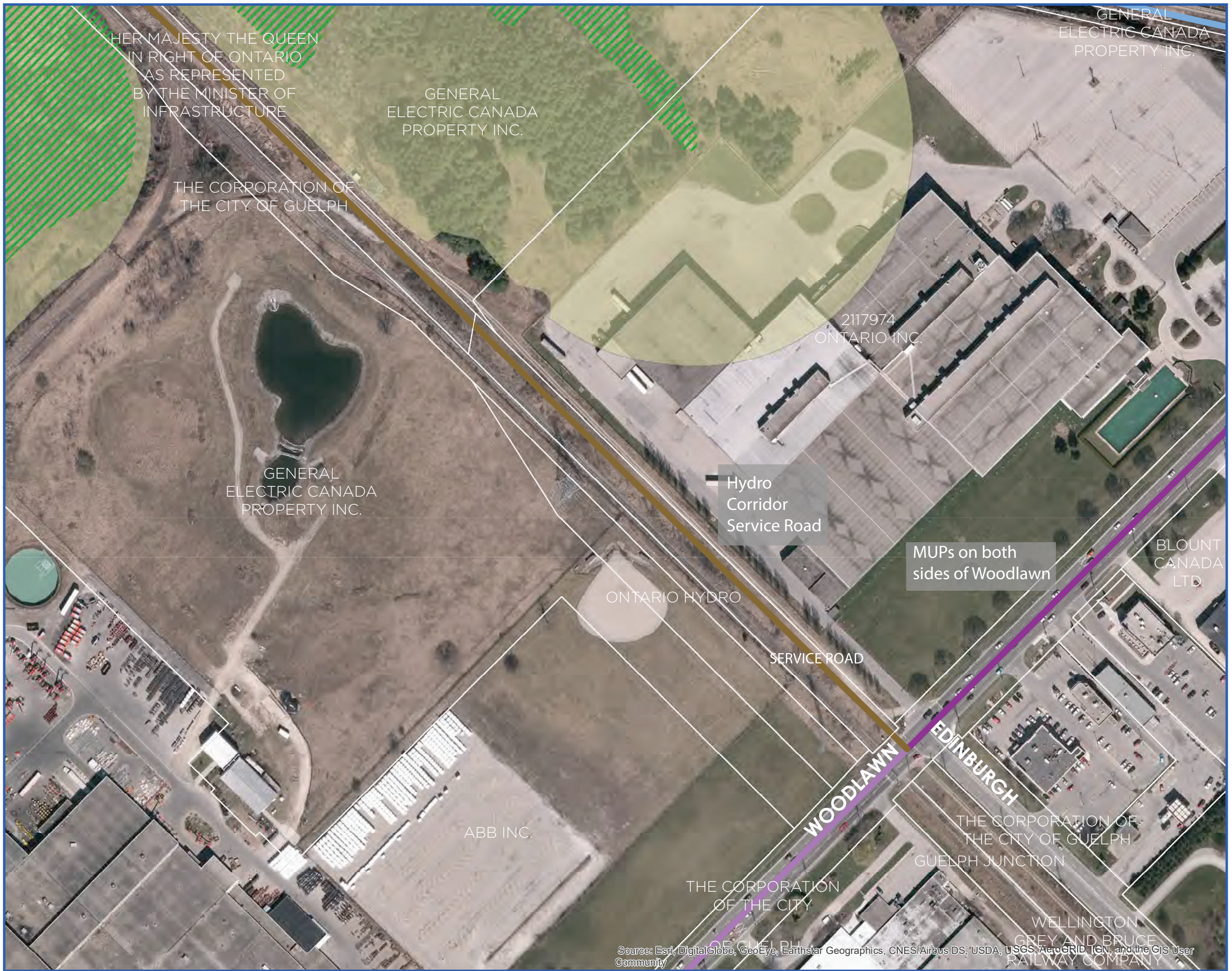
- A1
- A2
- C1

Background

- Railway
- Guelph Boundary
- Property
- GRCA Wetlands
- GRCA Regulation Limit
- Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 14

Route Segments

 C1

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 15

Route Segments

 C1

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 16

Route Segments

 C1

Background

 Railway

 Guelph Boundary

 Property

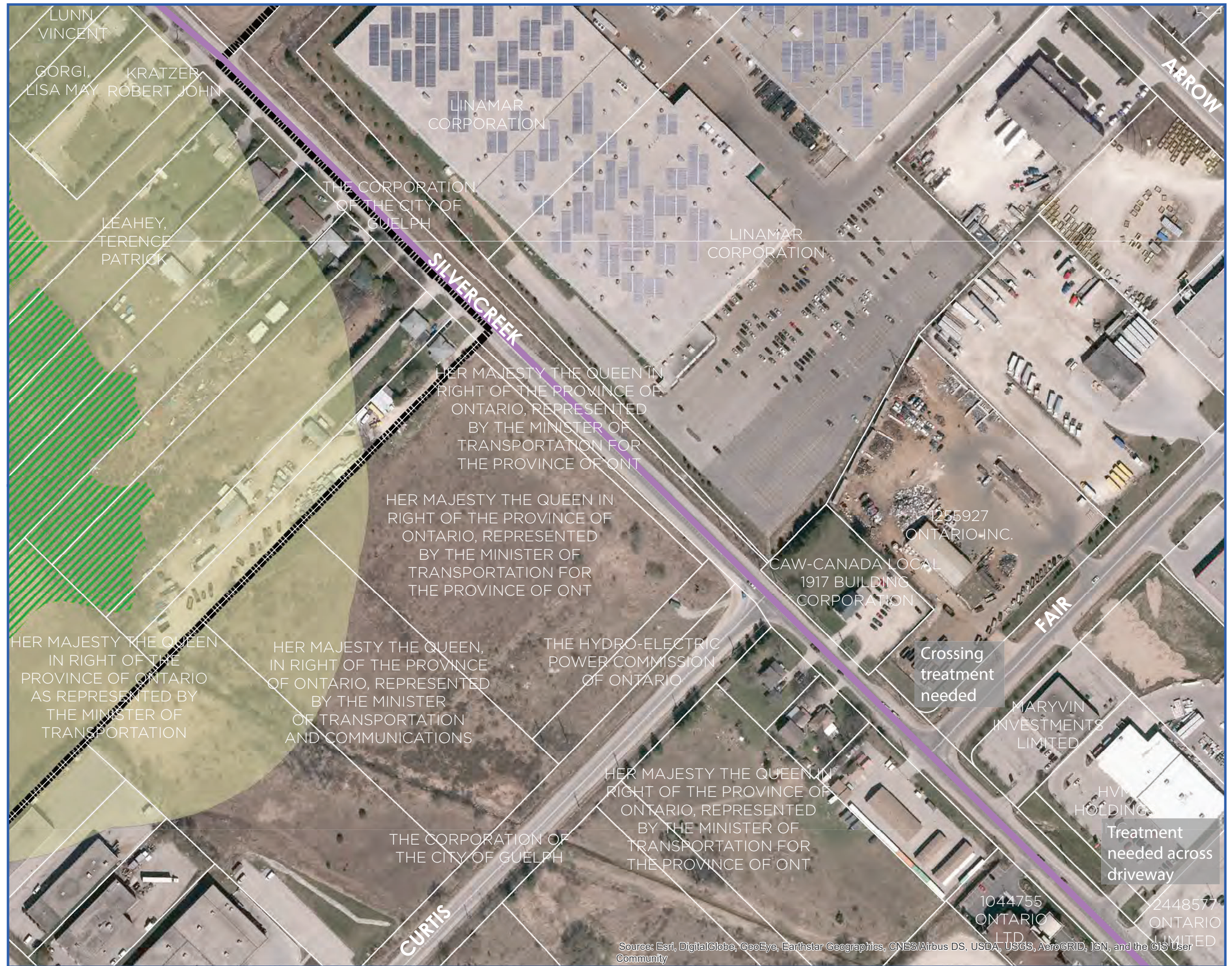
 GRCA Wetlands

 GRCA Regulation Limit

 Water

November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 17

Route Segments

 C1

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

 GRCA Regulation Limit

 Water



November 2019

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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 18

Route Segments

 C1

Background

 Railway

 Guelph Boundary

 Property

 GRCA Wetlands

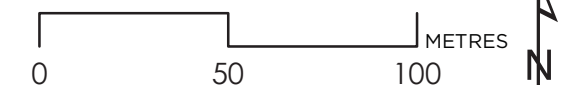
 GRCA Regulation Limit

 Water



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TRANS CANADA TRAIL ROUTE SELECTION STUDY

Map 19

Route Segments

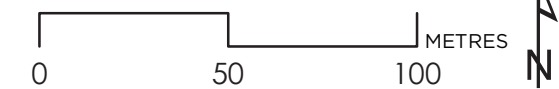
- Existing
- A4
- B2
- C1

Background

- Railway
- Guelph Boundary
- Property
- GRCA Wetlands
- GRCA Regulation Limit
- Water

November 2019

Route lines are illustrative, and do not represent exactly where a trail would be implemented within right-of-way.



Appendix D

Recommended Route Alignment

TRANS CANADA TRAIL ROUTE SELECTION STUDY KEY MAP

Route Segments

- Existing / Planned
- A1
- A2
- A3
- A4
- B1
- B2
- C1

Background

- Close Up Map Reference
- Railway
- Property
- Guelph Boundary
- GRCA Wetlands
- GRCA Regulation Limit
- Water

November 2019

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