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REGIONAL MUNICIPALITY OF NIAGARA
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

Cultural Heritage Assessments

Cultural Heritage Screening Report –
Study Area



REPORT

**South Niagara Falls Wastewater Solutions Schedule C
Class Environmental Assessment for the New South
Niagara Falls Wastewater Treatment Plant and
Associated Collection and Conveyance Impacts,
Regional Municipality of Niagara, Ontario**
Cultural Heritage Screening Report

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Executive Summary

The Executive Summary summarizes only the key points of the report. For a complete account of the results and conclusions, as well as the limitations of this study, the reader should examine the report in full.

In January 2019, GM BluePlan Engineering (GM BluePlan) retained Golder Associates Ltd. (Golder) on behalf of the Regional Municipality of Niagara (Niagara Region) to undertake a cultural heritage screening report (CHSR) as part of the South Niagara Falls Wastewater Solutions Schedule C Class Environmental Assessment for the New South Niagara Falls Wastewater Treatment Plant (SNF WWTP) and Associated Collection and Conveyance Impacts (the Project).

A Regional Study Area was defined for the Project that includes approximately 125 km² (or 80% total land area) of the City of Niagara Falls, 24 km² (15.5% total land area) of the City of Thorold, and 7 km² (4.35% total land area) of the City of Welland. It extends to the existing Niagara Falls WWTP in the north, Carl Road West in the south, the Niagara River in the east, and the Welland Canal in the west. Ten 'Sites of Interest' for the SNF WWTP have been selected in the south part of the City of Niagara Falls, centred on the Welland River.

The objective of this CHSR is identify known or potential cultural heritage resources in the study area and determine if further cultural heritage studies will be required for the Project. Following the Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (2016) checklist, desktop analysis for this CHSR identified six (6) National Historic Sites of Canada, one (1) designated Heritage Railway Station, sixty (60) protected heritage properties designated under the *Ontario Heritage Act*, fifty-eight (58) commemorative or interpretive plaques from various government agencies, and twenty-four (24) cemeteries. The Regional Study Area also contains many properties with buildings or structures 40 or more years old, points of interest related to the Welland Canal, places related to the War of 1812, and public art and monuments. The Dell Cemetery (6811 Reixinger Road) is adjacent to Site of Interest 8, and Sites of Interest 2, 5 and 8 contain buildings or structures that are 40 or more years old.

Based on these results, Golder recommends to:

- Consider siting options that avoid all known and potential cultural heritage resources identified in this report

If multiple known or potential cultural heritage resources will be crossed or are adjacent to the preferred collection and conveyance corridors, Golder recommends to:

- Conduct a Cultural Heritage Assessment Report (CHAR) with field investigations to identify all known and potential cultural heritage resources potentially impacted by the Project and provide mitigation recommendations to avoid or reduce adverse impacts. The CHAR may recommend conducting subsequent site-specific Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs).

If a Site of Interest that includes a potential cultural heritage property is chosen for the SNF WWTP, Golder recommends to:

- Conduct a CHER to determine if the property meets the criteria for cultural heritage value or interest (CHVI) prescribed in *Ontario Regulation 9/06*. If the CHER finds the property has CHVI, conduct an HIA compliant with the City of Niagara Falls *Official Plan* policies to determine the appropriate mitigation measures for the preferred site.

Study Limitations

Golder Associates Ltd. has prepared this report in a manner consistent with guidance developed by the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, subject to the time limits and physical constraints applicable to this report. No other warranty expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder Associates Ltd. by GM BluePlan Engineering Limited. (the Client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder Associates Ltd.'s express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder Associates Ltd. may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder Associates Ltd. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder Associates Ltd. are considered its professional work product and shall remain the copyright property of Golder Associates Ltd., who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder Associates Ltd. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder Associates Ltd.'s report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project

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APPENDIX A

Screening Documentation MHSTCI Checklist

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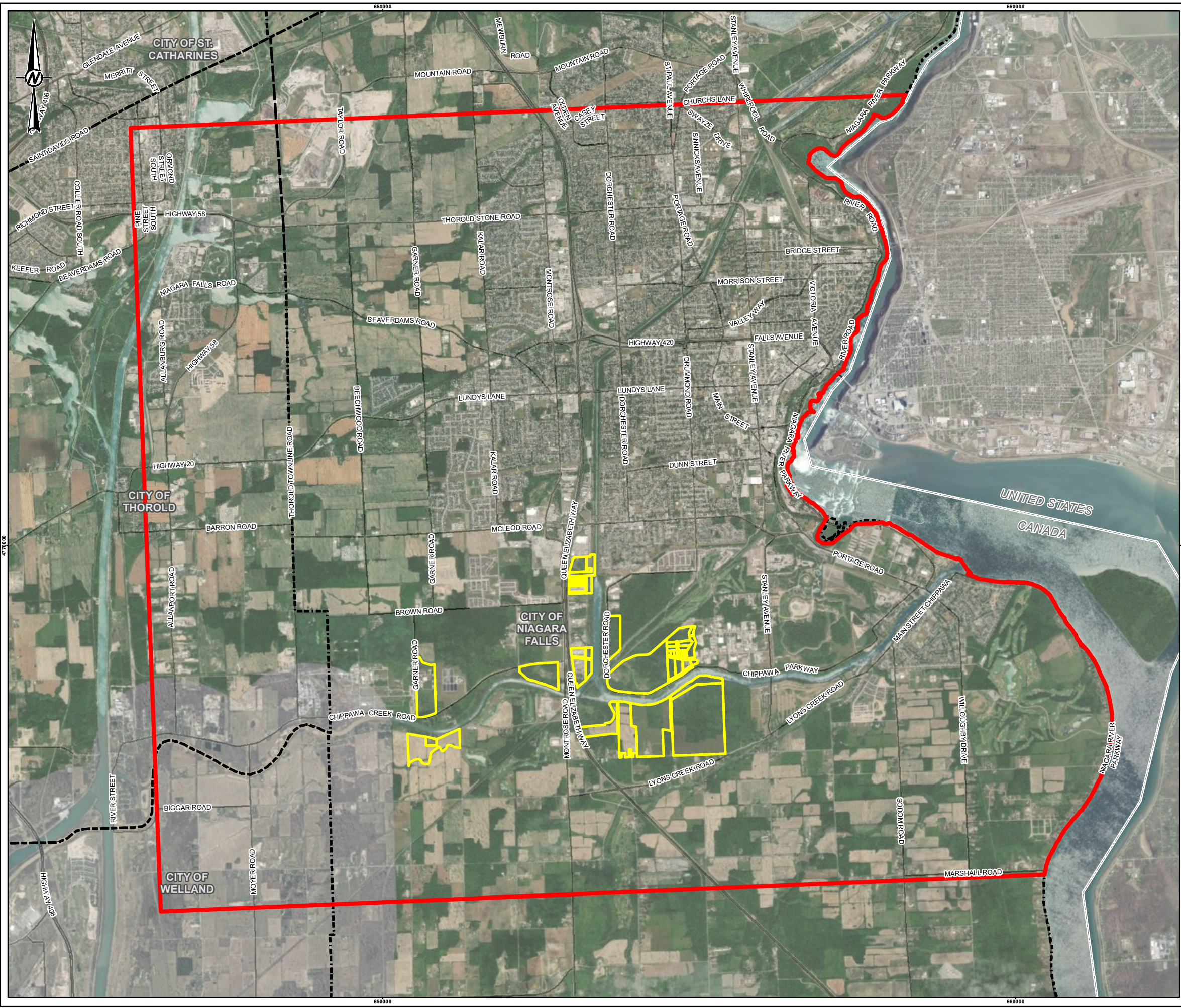
Screening Documentation Supplementary Information RSA and Sites of Interest

1.0 INTRODUCTION

In January 2019, GM BluePlan Engineering (GM BluePlan) retained Golder Associates Ltd. (Golder) on behalf of the Regional Municipality of Niagara (Niagara Region) to undertake a cultural heritage screening report (CHSR) as part of the South Niagara Falls Wastewater Solutions Schedule C Class Environmental Assessment for the New South Niagara Falls Wastewater Treatment Plant (SNF WWTP) and Associated Collection and Conveyance Impacts (the Project).

A Regional Study Area (RSA) was defined for the Project that includes approximately 125 km² (or 80% total land area) of the City of Niagara Falls, 24 km² (15.5% total land area) of the City of Thorold, and 7 km² (4.35% total land area) of the City of Welland. It extends to the existing Niagara Falls WWTP in the north, Carl Road West in the south (Figure 1), the Niagara River in the east, and the Welland Canal in the west. Ten 'Sites of Interest' for the SNF WWTP have been selected in the south part of the City of Niagara Falls, centred on the Welland River (Figure 2).

The purpose of this CHSR is to identify cultural heritage resources of value or interest within a large RSA in the City of Niagara Falls, City of Thorold and City of Welland and identify cultural heritage constraints within, or adjacent to, specific Sites of Interest for the SNF WWTP proposed in the City of Niagara Falls. The guidelines for a CHSR are provided in the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) *Ontario Heritage Tool Kit* series (2006) and *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (2016: MHSTCI Checklist).



LEGEND

- SITES OF INTEREST
- MUNICIPAL BOUNDARY
- REGIONAL STUDY AREA



REFERENCE(S)

1. BASE DATA - MNRF LIO, OBTAINED 2019
2. PRODUCED BY GOLDER ASSOCIATES LTD UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY, © QUEENS PRINTER 2019
3. IMAGERY: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY
- SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

CLIENT
REGIONAL MUNICIPALITY OF NIAGARA

PROJECT
**SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
 SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT**

TITLE
REGIONAL STUDY AREA LOCATION PLAN

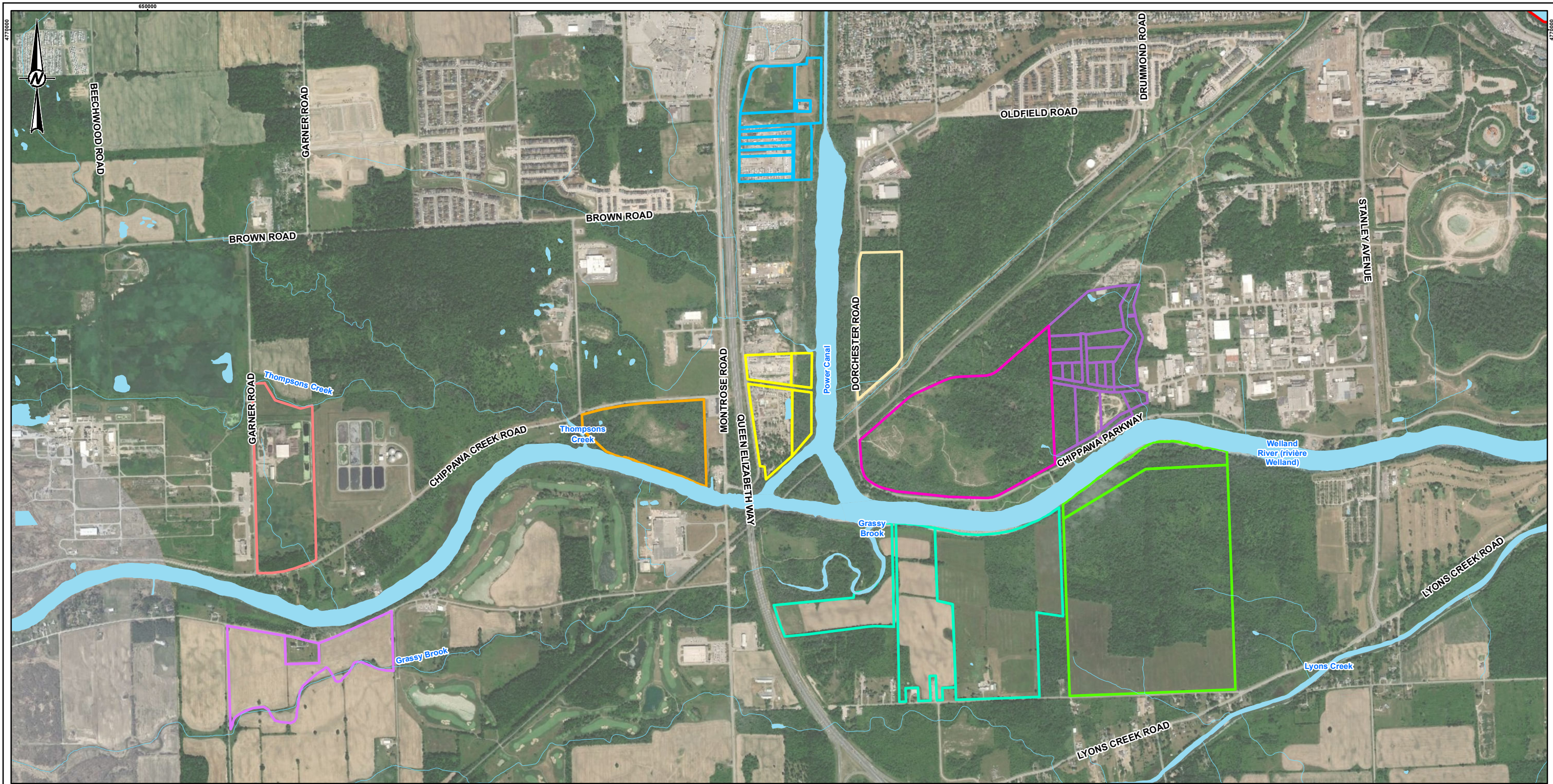
CONSULTANT	DATE	REVISION
YYYY-MM-DD	2020-04-22	
DESIGNED	PR	
PREPARED	PR	
REVIEWED	BH	
APPROVED	-	



PROJECT NO. 18104462 CONTROL 0003 REV. 0.0 FIGURE 1

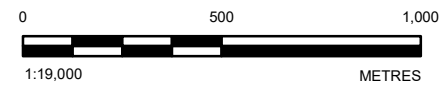
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LEGEND

WATERCOURSE	SITES OF INTEREST	SITE 6
WATERBODY	SITE 1	SITE 7
REGIONAL STUDY AREA	SITE 2	SITE 8
	SITE 3	SITE 9
	SITE 4	SITE 10
	SITE 5	



CLIENT
REGIONAL MUNICIPALITY OF NIAGARA

CONSULTANT	YYYY-MM-DD	2020-04-22
	DESIGNED	PR
	PREPARED	PR
	REVIEWED	BH
	APPROVED	-



REFERENCE(S)

1. BASE DATA - MNRF LIO, OBTAINED 2019
2. PRODUCED BY GOLDR ASSOCIATES LTD UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY, © QUEENS PRINTER 2019
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4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

TITLE
SITES OF INTEREST LOCATION PLAN

PROJECT NO.	CONTROL	REV.	FIGURE
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2.0 SCOPE AND METHOD

The scope of this CHSR was defined by the MHSTCI *Checklist* (2016). The purpose of this report is to identify existing cultural heritage constraints in the RSA and around the Sites of Interest and recommend future cultural heritage studies if required. The MHSTCI *Checklist* provides a screening tool to identify all known or recognized cultural heritage resources in the study areas, commemorative plaques, cemeteries, Canadian Heritage River watersheds, properties with buildings 40 or more years old, or potential cultural heritage landscapes.

To complete the checklist, Golder undertook the following tasks:

2.1 Task 1 - Background Research

- Reviewed federal, provincial, and municipal heritage registers, inventories, and databases to identify known cultural heritage resources in the study area. These sources include:
 - Canadian Register of Historic Places (www.historicplaces.ca);
 - Parks Canada Directory of Federal Heritage Designations (http://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx);
 - Ontario Heritage Trust Online Plaque Guide (<http://www.heritagetrust.on.ca/en/index.php/online-plaque-guide>) and Ontario Places of Worship Inventory (<http://www.heritagetrust.on.ca/Ontario-s-Places-of-Worship/Inventory>), and List of Easement Properties (<http://www.heritagetrust.on.ca/en/property-types/easement-properties>);
 - Ontarioplaques.com (data correlated with the Ontario Heritage Foundation Online Plaque Guide);
 - Canadian Heritage River System list of designated heritage river systems (<http://chrs.ca/>);
 - The Ontario Heritage Bridge List in the Ontario Heritage Bridge Guidelines for Provincially Owned Bridges (Interim) (Ministry of Transport 2008);
 - City of Niagara Falls Heritage Properties (<https://niagarafalls.ca/living/heritage/listing.aspx>);
 - Heritage Thorold Designated Properties (<http://www.heritagethorold.com/designatedproperties.html>);
 - City of Welland Designated Properties (<https://www.welland.ca/Heritage/designations.asp>); and,
 - Niagara Region's Niagara Open Data website (<https://niagaraopendata.ca/>).
- Consulted or attempted to consult with planning staff responsible for heritage with the City of Niagara Falls, City of Thorold, and City of Welland (see Table 1);
- Compared aerial photographs of the Sites of Interest from 1976 with contemporary satellite imagery to identify properties with buildings or structures over 40 or more years old; and,
- Mapped all identified cultural heritage resources and recommended further studies based on the MHSTCI *Checklist*.

2.2 Task 2 - Consult with Stakeholders

Table 1 summarizes the results of municipal consultation.

Table 1: Record of Consultation

Date	Contact	Query	Response
May 27, 2019	Margaret (Peggy) Boyle, Assistant Planner and staff liaison to the Municipal Heritage Committee. Planning and Development, City of Niagara Falls.	Golder submitted an email query asking if the City of Niagara Falls heritage dataset online is current and if the City maintains a list of designated and listed properties or only designated properties.	No response has been provided at the time of writing this report.
20 June, 2019	Grand Munday, Manager of Development Approvals, Planning Division, Infrastructure and Development Services, Corporation of the City of Welland.	Golder submitted an email query asking if the City of Welland's online list of designated properties is up to date, if the City's open data on the Region's GIS site is up to date and if the City has Listed heritage properties.	The City's designated properties list and open data are up to date and the City does not have Listed heritage properties on the heritage register.
June 24, 2019	Denise Landry, Manager of Planning, City of Thorold.	Golder submitted an email query asking if the list of designated properties is current.	The list of designated properties is accurate.

2.3 Task 3 - Conduct Screening

Base on information compiled during Tasks 1 and 2, Golder completed a screening based on the MHSTCI *Checklist* for the RSA (APPENDIX A, APPENDIX B, Figure 1) then screened the Sites of Interest (APPENDIX B, Figure 2).

3.0 KEY LEGISLATION AND POLICIES

3.1 Provincial Legislation and Plans

3.1.1 Environmental Assessment Act

The *Environmental Assessment Act (EAA)*, was legislated to ensure that Ontario's environment is protected, conserved, and wisely managed. Under the *EAA*, 'environment' includes not only natural elements such as air, land, water and plant and animal life, but also the 'social, economic and cultural conditions that influence the life of humans or a community', and 'any building, structure, machine or other device or thing made by humans'.

3.1.2 Ontario Planning Act and Provincial Policy Statement

The *Ontario Planning Act* (1990) and associated *Provincial Policy Statement 2014* (PPS 2014) provide the legislative imperative for heritage conservation in land use planning. The *Planning Act* identifies conservation of resources of significant architectural, cultural, historical, archaeological or scientific interest as a provincial interest, while PPS 2014 recognizes that protecting cultural heritage and archaeological resources has economic, environmental and social benefits, and contributes to the long-term prosperity, environmental health and social well-being of Ontarians. The *Planning Act* serves to integrate this interest with planning decisions at the provincial and municipal level, and states that all decisions affecting land use planning "shall be consistent with" PPS 2014.

The importance of identifying and evaluating built heritage and cultural heritage landscapes is recognized in two policies of PPS 2014:

- Section 2.6.1 – Significant built heritage resources and significant heritage landscapes shall be conserved; and,
- Section 2.6.3 – Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

Provincial Policy Statement 2014 defines significant as resources "determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people", and this determination can either be based on the provincial criteria prescribed in *O. Reg 9/06* and *Ontario Regulation 10/06* or by "municipal approaches that achieve or exceed the same objective". This definition also stresses that because not all resources may be "identified and inventoried by official sources", the significance of some resources "can only be determined after evaluation".

Conserved is defined in PPS 2014 as "the identification, protection, management and use of built heritage resources, cultural heritage landscapes, and archaeological resources in a manner that ensures their cultural heritage value of interest is retained under the *Ontario Heritage Act*." *Adjacent lands* are defined as "those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan". Built heritage resources, cultural heritage landscapes, heritage attributes, and protected heritage property are also defined in the PPS:

- **Built heritage resources:** a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Aboriginal [Indigenous] community. Built heritage resources are generally located on property that has been designated under Parts IV or V of the *Ontario Heritage Act*, or included on local, provincial and/or federal registers.

■ **Cultural heritage landscapes:** a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal [Indigenous] community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Examples may include, but are not limited to, heritage conservation districts designated under the *Ontario Heritage Act*; villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trail ways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by federal or international designation authorities (e.g., a National Historic Site or District designation, or a UNESCO World Heritage Site).

■ **Heritage attribute:** the principal features or elements that contribute to a *protected heritage property's* cultural heritage value or interest, and may include the property's built or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (including significant views or vistas to or from a *protected heritage property*).

■ **Protected heritage property:** property designated under Parts IV, V or VI of the *Ontario Heritage Act*; property subject to a heritage conservation easement under Parts II or IV of the *Ontario Heritage Act*; property identified by the Province and prescribed public bodies as provincial heritage property under the *Standards and Guidelines for Conservation of Provincial Heritage Properties*; property protected under federal legislation, and UNESCO World Heritage Sites.

Municipalities implement PPS 2014 through an official plan, which may outline further heritage policies

3.1.3 Ontario Heritage Act

The Province and municipalities are enabled to conserve significant individual properties and areas through the *Ontario Heritage Act (OHA)*. Under Part III of the *OHA*, compliance with the *Standards and Guidelines for the Conservation of Provincial Heritage Properties* is mandatory for provincially owned and administered heritage properties and holds the same authority for ministries and prescribed public bodies as a Management Board or Cabinet directive.

For municipalities, Part IV and Part V of the *OHA* enables councils to “designate” individual properties (Part IV), or properties within a Heritage Conservation District (HCD) (Part V) as being of “cultural heritage value or interest” (CHVI). Evaluation for CHVI under the *OHA* is guided by *Ontario Regulation 9/06*, which prescribes the “criteria for determining cultural heritage value or interest”. If a property meets one or more of these criteria, it may be eligible for designation under Part IV, Section 29 of the *OHA*. The designation is recognized through municipal by-law, and the property must be included on a “Register” maintained by the municipal clerk. A municipality may also “list” a property on the Register to indicate it as having potential CHVI. Importantly, designation or listing in most cases applies to the entire property, not only individual structures or features.

For provincial properties, evaluation of potential cultural heritage resources must apply *Ontario Regulation 10/06 (O. Reg 10/06): Criteria for Determining Cultural Heritage Value or Interest of Provincial Significance*. Should a property meet the criteria, consent from the Minister for Heritage, Sport, Tourism and Culture Industries may be required prior to demolition or disposal.

3.1.4 Niagara Escarpment Plan

A small area in the northwest corner of the RSA on the east side of the Welland Canal is within an area covered by the Niagara Escarpment Plan and the Greenbelt Plan. These lands are designated Escarpment Rural Area and Escarpment Protection Area. The cultural heritage objective in this section 2.10 of the plan is to “conserve the

Escarpment's cultural heritage resources, including significant built heritage resources, cultural heritage landscapes, and archaeological resources" (Government of Ontario 2017a:86). This plan requires a heritage impact assessment where proposed development is likely to impact cultural heritage resources.

3.1.5 A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The RSA is within the Greater Golden Horseshoe area. The long-term plan for this area, entitled *A Place to Grow: Growth Plan for the Greater Golden Horseshoe*, requires that cultural heritage resources be conserved to foster a sense of place and benefit communities. Municipalities in the Greater Golden Horseshoe are required to work with stakeholders including First Nations and Métis communities in developing and implementing official plan policies and strategies for the identification, wise use and management of cultural heritage resources (Government of Ontario 2019:47).

3.1.6 Greenbelt Plan

A small area in the northwest corner of the RSA east of the Welland Canal is within an area covered by the *Greenbelt Plan* and the *Niagara Escarpment Plan*. The *Greenbelt Plan* requires that cultural heritage resources be conserved to foster a sense of place and benefit communities. Like the *A Place to Grow* plan Municipalities crossed by the Greenbelt are required to work with stakeholders including First Nations and Métis communities in developing and implementing official plan policies and strategies for the identification, wise use and management of cultural heritage resources (Government of Ontario 2017b).

3.2 Municipal Plans

3.2.1 Regional Municipality of Niagara Official Plan

Chapter 10 of the Regional Official Plan is called "Creative Niagara" and is devoted to culture and heritage. Section 10.C.2.1 of the Regional *Official Plan* addresses built heritage resources, cultural heritage landscapes and archaeological resources. The Region requires significant built heritage resources and cultural heritage landscapes to be conserved using the provisions of the *Ontario Heritage Act*, *Planning Act*, *Environmental Assessment Act*, the *Funeral, Burials and Cremations Act* and the *Municipal Act*. Lower tier municipalities are encouraged to develop their own cultural heritage policies.

Section 10.C.2.1.4 commits that public works undertaken or reviewed by the Region to be designed in a sensitive manner and provide appropriate mitigation measures in design and location to conserve, enhance and complement existing built and cultural heritage resources.

Section 10.C.2.1.5 requires development, site alteration and public works projects on or adjacent to a significant built heritage resource or cultural heritage landscape to complete a heritage impact assessment.

The Region identifies the Welland Canal as a cultural heritage landscape in Section 10.F of the *Official Plan*.

3.2.2 City of Niagara Falls Official Plan

The *Official Plan for the City of Niagara Falls* was approved in 1993 and consolidated in 2017. Part 3 Section 4 of the *Official Plan* is dedicated to cultural heritage conservation. In section 4.19 the City requires development adjacent to and surrounding significant heritage properties to be designed as to not adversely impact on the character, quality or amenity associated with the heritage resource, and may require a heritage impact assessment.

Appendix VI of the *Official Plan* includes a list of future cultural heritage study areas based on the *Niagara Falls Heritage Master Plan*. Areas include:

- Stamford;
- Elgin;
- Clifton;
- Drummondville;
- Village of Chippawa;
- Lundy's Lane Battlefield (municipally owned sites plus related publicly owned properties);
- Lundy's Lane/Ferry Street (from Beechwood Road to Victoria Avenue);
- Portage Road (from Chippawa to the Hydro Reservoir);
- First Welland Canal/Welland River (both sides of the river within the current municipal boundary);
- Power Canal;
- Willoughby Marsh/Ussher's Creek; and,
- Niagara Parkway: Zimmerman Estate; Niagara Glen; Victoria Park/Oak Hall; Navy Island; Chippawa Battlefield.

3.2.3 City of Thorold Official Plan

Section A2.7 of the City of Thorold *Official Plan* is dedicated to cultural heritage with the goal to “continue to identify, conserve and enhance the City’s significant cultural heritage resources. Schedule E of the *Official Plan* maps cultural heritage sites designated under the *Ontario Heritage Act*.

Part D3 of the *Official Plan* addresses heritage and archaeological resources. Council may require an HIA to support development applications (Section D3.2.1). The *Official Plan* requires public authorities to have regard to the retention and protection of identified cultural heritage resources (Section D3.2.1.1).

3.2.4 City of Welland Official Plan

The City of Welland commits to encouraging the conservation, protection and enhancement of the City’s cultural heritage resources (Section 6.6.1.1). The City may require an HIA to support any proposal where the development or site alteration has potential to negatively impact cultural heritage resources (Section 7.11.16.1).

4.0 STUDY RESULTS AND RECOMMENDATIONS

Based on the information compiled from the sources listed above, a MHSTCI *Checklist* was completed for the Study Area (APPENDIX A). Supplementary screening documentation to accompany the MHSTCI *Checklist* is provided in (APPENDIX B).

4.1 Regional Study Area

Desktop analysis identified in the RSA:

- Sixty (60) properties designated under the *Ontario Heritage Act* including;
 - Thirty-three (33) properties in the City of Niagara Falls; and,
 - Twenty-seven (27) properties in the City of Thorold.
- Six (6) National Historic Sites of Canada;
- One (1) designated Heritage Railway Station;
- Seven (7) Federal and thirteen (13) Provincial commemorative or interpretive plaques and at least thirty-eight (38) plaques placed by other organizations including the Niagara Parks Commission and various municipal agencies; and,
- Twenty (20) cemeteries in the City of Niagara Falls and four (4) cemeteries in the City of Thorold.

Additionally, there are a number of other cultural heritage conditions in the RSA:

- The RSA includes the oldest settled parts of the City of Niagara Falls and City of Thorold as well as large rural areas and former villages in all three cities. Appendix VI of the City of Niagara Falls *Official Plan* identifies general areas for future cultural heritage study within the City including the Power Canal. Therefore, most of the RSA has the potential for properties with buildings or structures over 40 years old.
- The RSA also includes part of the Welland Canal and associated points of interest (Figure 3).
 - There have been four routes to the canal since the early 19th century, and these have been designated as a National Historic Event by the Historic Sites and Monuments Board of Canada (HSMBC). Although the HSMBC plaque for the canal is outside the RSA, seven (7) points of interest are in the RSA.
 - The Canal is also identified as a cultural heritage landscape by Niagara Region in Chapter 10 of the *Regional Policy Plan* (3.2.1). This notes that the canal's cultural heritage value lies in its combination of the operating canal with historic engineering works, buildings, open spaces, natural features and diverse landscapes, and that it is considered to be both a relict and a continuing landscape (Niagara Region 2014:10-13). This cultural landscape includes the Welland River from Port Robinson to the Niagara River at Chippawa, which was part of the first Welland Canal from 1829-1833.
- Significant sites and events from the War of 1812 took place in Niagara Region. Six (6) points of interest related to the War of 1812 are in the RSA (Figure 3).
- The Niagara Region open data system (www.niagaraopendata.ca) includes outdoor art and monuments with thirteen (13) sites in the City of Niagara Falls and four (4) sites in the City of Thorold (Figure 3). Outdoor

art and monuments may be structures over 40 years old and are structures or sites in the project area that define the local character of the area and are often associated with a community, person or historical event.

If multiple known or potential cultural heritage resources will be crossed or are adjacent to the preferred collection and conveyance corridors, Golder recommends to:

- Conduct a Cultural Heritage Assessment Report (CHAR) with field investigations to identify all known and potential cultural heritage resources potentially impacted by the Project and provide mitigation recommendations to avoid or reduce adverse impacts. The CHAR may recommend conducting subsequent site-specific Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs).

All known and potential cultural heritage resources in the RSA are mapped in Figure 3.

Known and potential cultural heritage resources in three sections of the City of Niagara Falls are listed in Section 4.1.1 and mapped in Figure 4 to Figure 6. Cultural heritage resources in the City of Thorold are listed in Section 4.1.2 and mapped in Figure 7. No known or potential cultural heritage resources were identified in the portion of the City of Welland within the RSA.

Property specific conservation measures have been identified for these sections in Table 2 and Table 3 to assist in project decision making. However, since the Project is in the conceptual design phase and the preferred routes for collection and conveyance infrastructure have not been selected it is understood that some of these properties may not be impacted by the Project. Therefore, not all of the property specific recommendations from Table 2 and Table 3 have been included in the summary statement and recommendations in Section 5.0.

4.1.1 City of Niagara Falls Known and Potential Cultural Heritage Resources

Table 2 lists the known or potential cultural heritage resources identified from desktop sources within the City of Niagara Falls and provides recommendations if these properties or sites will be potentially impacted by the Project.

Table 2: Cultural Heritage Resources Identified in the City of Niagara Falls Section of the Regional Study Area

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
4325 Bampfield Street, ■ First Bampfield House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a Heritage Impact Assessment (HIA) compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
4190 Bridge Street, ■ Old Imperial Bank	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
4267 Bridge Street, ■ Via Railway Station	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> Designated heritage railway station	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
3800 Bridgewater Street, ■ Laura Secord House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
6172 Buchner Place, ■ Buchner House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6166 Carman Street, ■ Stamford Green White Oak Tree	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6145 Corwin Avenue, ■ Egerton Morden House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6023 Culp Street, ■ Orchard/Cadham House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6151 Culp Street, ■ J. Ingles House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
8191 Cummington Square East, ■ Cummington Square	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
8196 Cummington Square West, ■ Chippawa Town Hall	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6590 Dunn Street, ■ Spencer-Weaver Homestead	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5810 Ferry Street, ■ Old Stamford Town Hall	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5781 Highland Avenue, ■ William Leeming House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
6110 Lundy's Lane, <ul style="list-style-type: none"> ■ Copper Beech Tree ■ Battle of Lundy's Lane ■ Drummond Hill Cemetery ■ War of 1812 Point of Interest ■ Battle of Lundy's Lane Plaque 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> National Historic Site of Canada	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6137 Lundy's Lane, <ul style="list-style-type: none"> ■ Fralick's Tavern 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
7565 Lundy's Lane, <ul style="list-style-type: none"> ■ Lundy's Lane School at Green's Corner 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
4177 Park Street, <ul style="list-style-type: none"> ■ Post Office/Customs House 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
5674 Peer Street, <ul style="list-style-type: none"> ■ Nathaniel Dett Chapel ■ R. Nathaniel Dett Chapel Plaque 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> National Historic Site of Canada	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6320 Pine Grove Avenue	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
3394-3428 Portage Road, <ul style="list-style-type: none"> ■ Old St. John’s Anglican Church ■ St. John’s Cemetery ■ St. John’s Church plaque 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
7820 Portage Road, <ul style="list-style-type: none"> ■ Holy Trinity Church ■ Church of the Holy Trinity Plaque ■ Holy Trinity Church Cemetery 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
4891 Portage Road, ■ John Thomson Jr. House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
4851 River Road, ■ Doran-Marshall Residence	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5680 Robinson Road, ■ All Saints Anglican Church ■ All Saints Anglican Church cemetery	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i> Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
3174 St. Patrick Avenue, ■ Russell Cottage	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
3360 St. Patrick Avenue, ■ Mitchell Cottage	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
3289 St. Paul Avenue, ■ Alexander-Robinson House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6212 Stamford Green Drive, ■ Stamford Green	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
4223 Terrace Avenue 4223, ■ Terrace Avenue	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5017 Victoria Avenue, ■ Carnegie Library	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5049 Victoria Avenue, ■ Niagara Falls Armoury	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
4761 Zimmerman Avenue, ■ Bampfield Hall	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
The Toronto Power Generating Station on the Niagara Parkway	National Historic Site of Canada	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
Battlefield Park on the west side of the Niagara Parkway ■ Battle of Chippawa ■ War of 1812 Point of Interest ■ Battle of Chippawa Plaques ■ Battle of Chippawa Park Cemetery	National Historic Site of Canada Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
The Queenston-Chippawa Hydro-Electric Development, from the junction of the Welland River and Niagara River to the outtake at the Sir Adam Beck No.1 Generating Station	National Historic Site of Canada	For any development proposed on or adjacent to the designated place for the National Historic Site of Canada (NHSC), consult the City of Niagara Falls to determine the scope for an HIA. The HIA should consider impacts to the heritage significance identified for the NHSC and recommend appropriate mitigations to avoid or reduce adverse impacts.

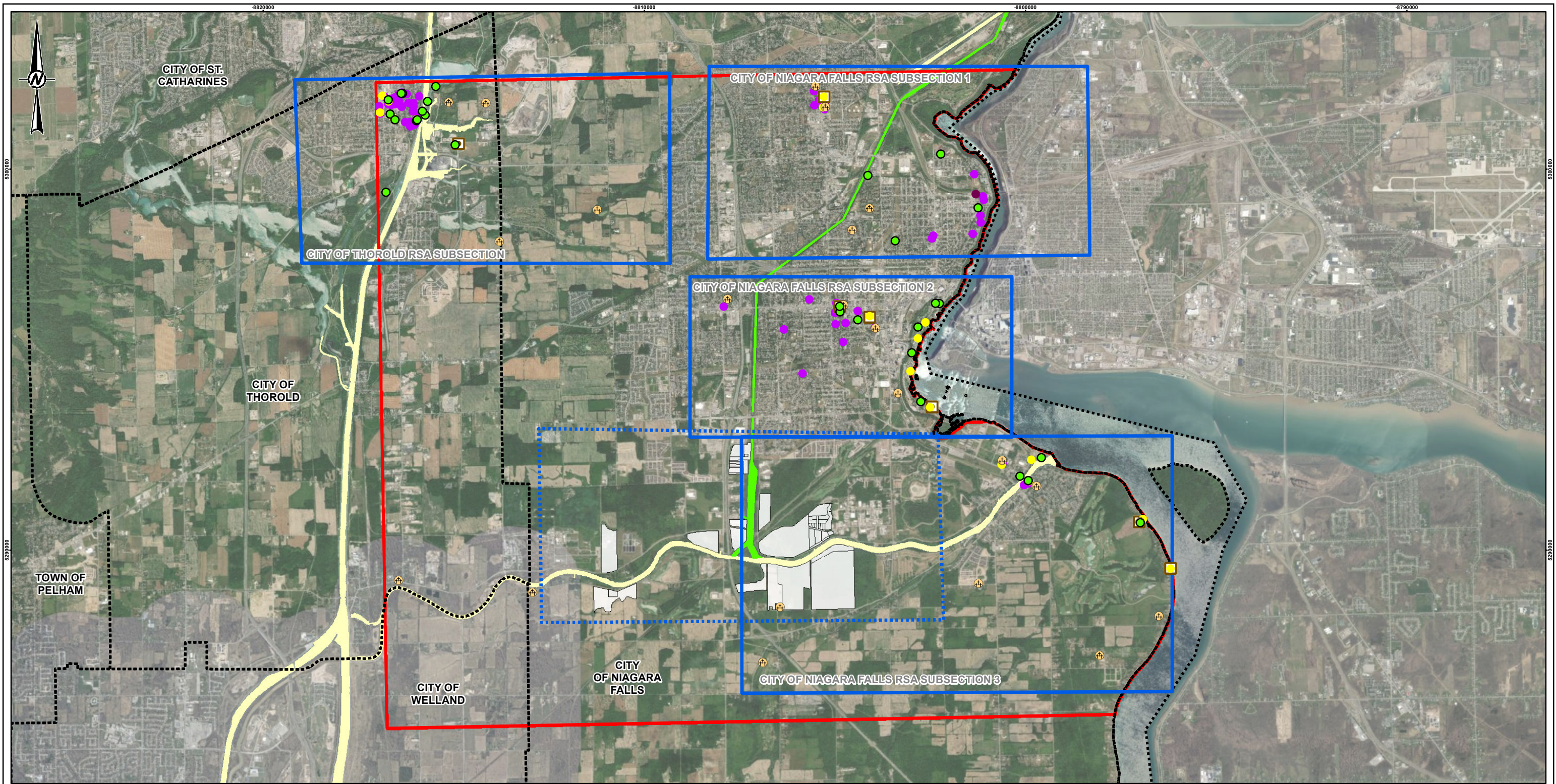
Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
6811 Reixinger Road ■ Dell Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a Cultural Heritage Evaluation Report (CHER) to determine the property meets the criteria for cultural heritage value or interest (CHVI) prescribed in <i>Ontario Regulation 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigations.
8280 Willoughby Drive ■ Chippawa Presbyterian Church Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Willick Road approximately 310m west of Sodom Road ■ Weaver Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
6085 Lundy's Lane ■ Lundy's Lane United Church Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
7489 Lundy's Lane ■ Lundy's Lane Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
4501 Stanley Avenue ■ Fairview Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
4764 Portage Road ■ Fairview Mausoleum	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
McCredie Road approximately 610 m south of Willowdell Road ■ McCredie Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Grassy Brook Road approximately 325 m west of McKenney Road ■ Young Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
4491 Garner Road ■ Lampman Family Burial Plot	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
3394-3428 Portage Road ■ Stamford Green Heritage Columbarium	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
9819 Niagara River Parkway ■ Miller 1 Family Burial Ground	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
2581 Miller Road ■ Lutes Farm Plot	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
6944-7021 Stanley Avenue ■ Our Lady of Peace Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
McMicking Street between St. Paul Avenue and St. Patrick Avenue ■ Stamford Presbyterian Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Navy Island plaque at N 43 02.645 W 79 01.053	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Destruction of the Caroline plaque at N 43 03.343 W 79 01.577	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Founding of Chippawa plaque at N 43 03.553 W 79 03.055	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation

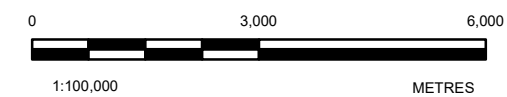
Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
Fort Chippawa plaque at N 43 03.775 W 79 03.021	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
The Niagara Parks Commission plaque at N 43 04.694 W 79 04.732	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Toronto Power Generating Station plaque at N 43 04.318 W 79 04.452	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Louis Henepin 1626-c.1705 plaque at N 43 05.034 W 79 04.626	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Sir Casimir S. Gzowski 1813-1898 plaque at N 43 05.200 W 79 04.519	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
Niagara Portage Road plaque at N 43 07.537 W 79 05.952	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation

Civic Address and Description	Cultural Heritage Status/Protection	Conservation Measures if Potentially Impacted
<p>The Ontario Paper Company Ltd. plaque at N 43 07.305 W 79 11.711</p>	<p>Property of Potential CHVI Plaque</p>	<p>Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i>. If the CHER confirms the property has CHVI, conduct an HIA consistent with the guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation</p>



- LEGEND**
- CEMETERIES
 - DESIGNATED HERITAGE RAILWAY STATION
 - FEDERAL AND PROVINCIAL COMMEMORATIVE PLAQUES
 - DESIGNATED HERITAGE PROPERTY
 - POTENTIAL CULTURAL HERITAGE PROPERTY
 - NATIONAL HISTORIC SITE
 - SITES OF INTEREST
 - REGIONAL STUDY AREA
 - POTENTIAL CULTURAL HERITAGE LANDSCAPE
 - WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
 - MUNICIPAL BOUNDARIES
 - RSA SUBSECTION
 - SITES OF INTEREST - GENERAL AREA

- WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
- MUNICIPAL BOUNDARIES
- RSA SUBSECTION
- SITES OF INTEREST - GENERAL AREA



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REGIONAL MUNICIPALITY OF NIAGARA

CONSULTANT

YYYY-MM-DD	2020-04-22
DESIGNED	PR
PREPARED	RRD
REVIEWED	BH
APPROVED	-



- REFERENCE(S)**
1. BASE DATA - MNRF LIO, OBTAINED 2019
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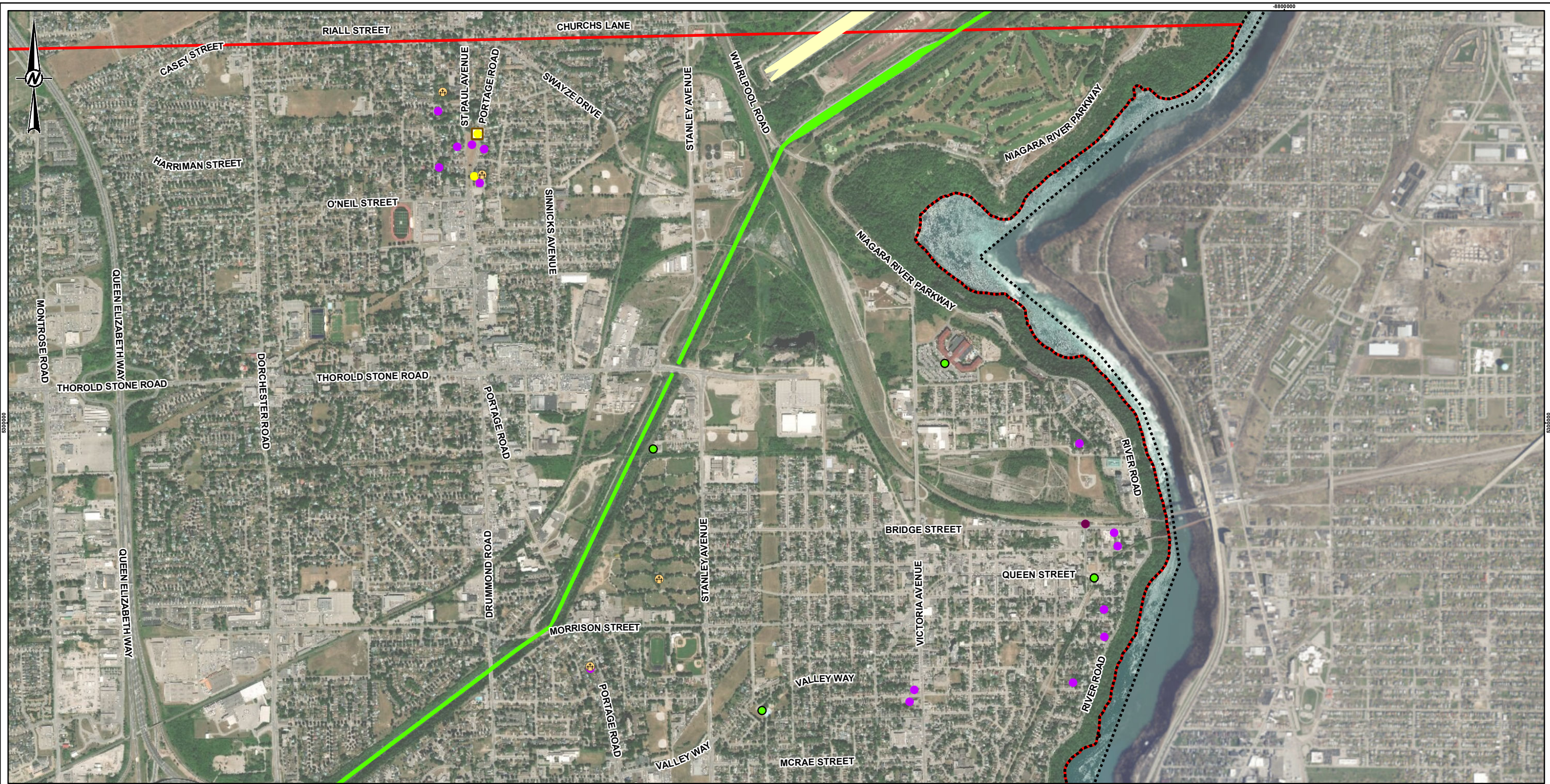
PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

TITLE
**KNOWN AND POTENTIAL CULTURAL HERITAGE RESOURCES
IN THE REGIONAL STUDY AREA**

PROJECT NO.	CONTROL	REV.	FIGURE
1810462	0003	0.0	3

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- LEGEND**
- CEMETERIES
 - DESIGNATED HERITAGE RAILWAY STATION
 - FEDERAL AND PROVINCIAL COMMEMORATIVE PLAQUES
 - DESIGNATED HERITAGE PROPERTY
 - POTENTIAL CULTURAL HERITAGE PROPERTY
 - NATIONAL HISTORIC SITE
 - REGIONAL STUDY AREA
 - POTENTIAL CULTURAL HERITAGE LANDSCAPE
 - WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
 - MUNICIPAL BOUNDARY

- REFERENCE(S)**
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 4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

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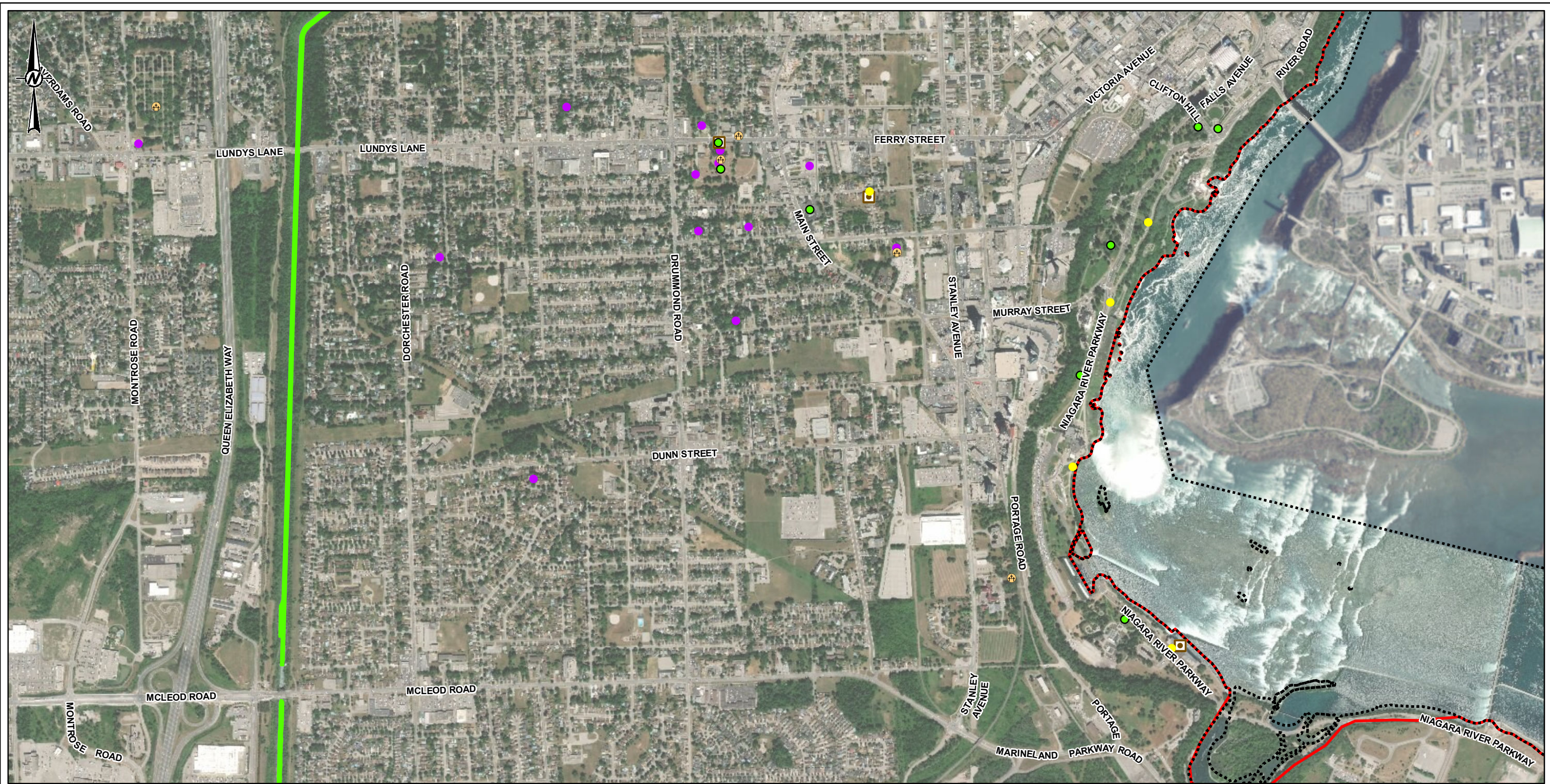
CONSULTANT	YYYY-MM-DD	2020-04-22
DESIGNED	PR	
PREPARED	RRD	
REVIEWED	MB	
APPROVED	-	












PROJECT			
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT			
TITLE			
KNOWN AND POTENTIAL CULTURAL HERITAGE RESOURCES IN THE CITY OF NIAGARA FALLS REGIONAL STUDY AREA SUBSECTION 1			
PROJECT NO.	CONTROL	REV.	FIGURE
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- LEGEND**
-  CEMETERIES
 -  FEDERAL AND PROVINCIAL COMMEMORATIVE PLAQUES
 -  DESIGNATED HERITAGE PROPERTY
 -  POTENTIAL CULTURAL HERITAGE PROPERTY
 -  NATIONAL HISTORIC SITE
 -  REGIONAL STUDY AREA
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 -  WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
 -  MUNICIPAL BOUNDARY

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 4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

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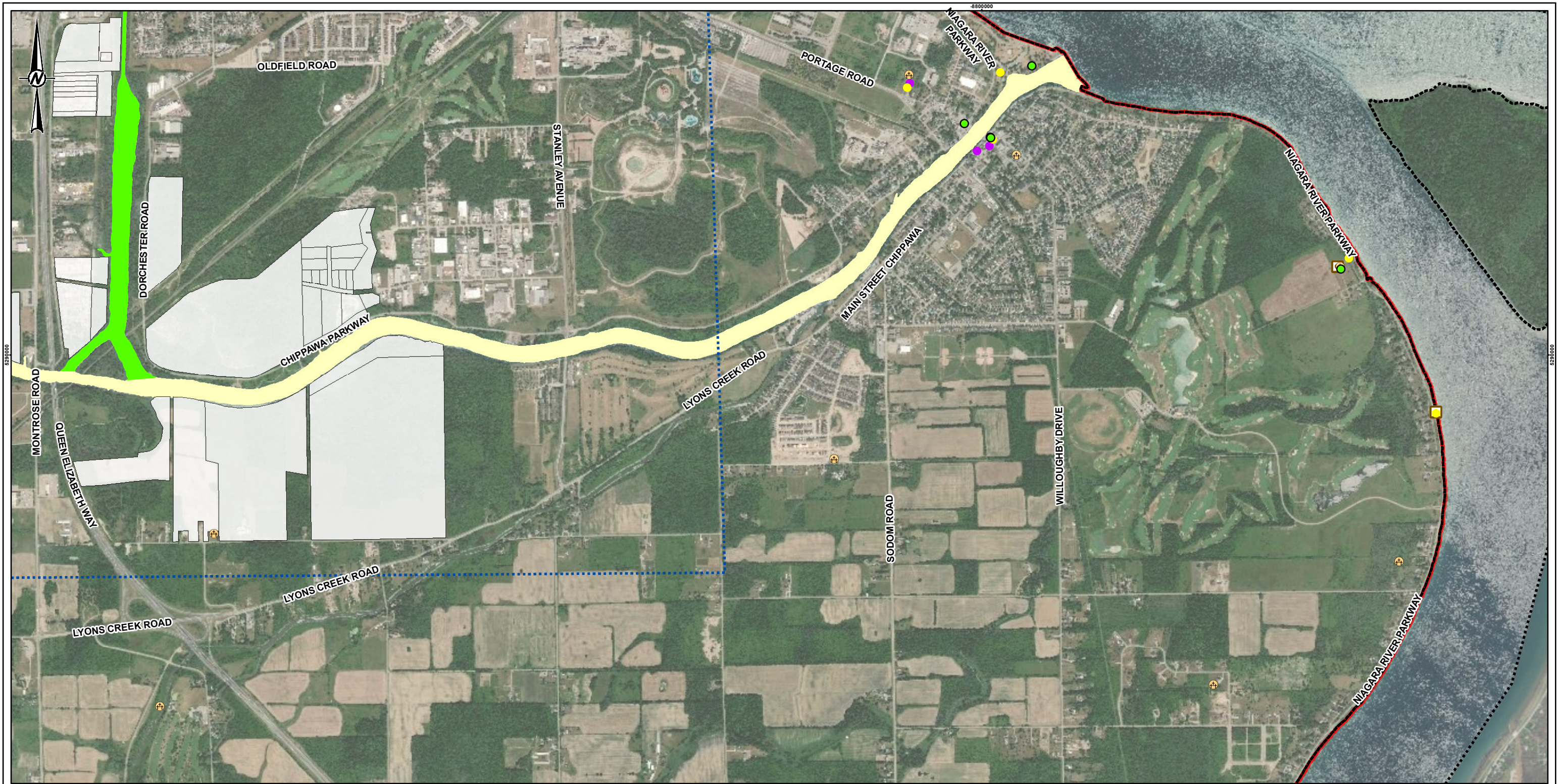
CONSULTANT	DATE	REVISION
	YYYY-MM-DD	2020-04-22
	DESIGNED	PR
	PREPARED	RRD
	REVIEWED	BH
	APPROVED	-

PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

TITLE	PROJECT NO.	CONTROL	REV.	FIGURE
KNOWN AND POTENTIAL CULTURAL HERITAGE RESOURCES IN THE CITY OF NIAGARA FALLS REGIONAL STUDY AREA SUBSECTION 2	18104462	0003	0.0	5

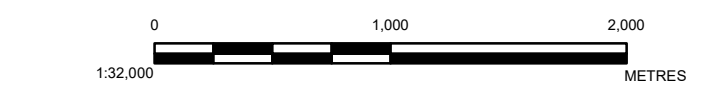
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- LEGEND**
- CEMETERIES
 - FEDERAL AND PROVINCIAL COMMEMORATIVE PLAQUES
 - DESIGNATED HERITAGE PROPERTY
 - POTENTIAL CULTURAL HERITAGE PROPERTY
 - NATIONAL HISTORIC SITE
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 - WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
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- REFERENCE(S)**
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	PREPARED	RRD
	REVIEWED	BH
	APPROVED	-

PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

TITLE
**KNOWN AND POTENTIAL CULTURAL HERITAGE RESOURCES
IN THE CITY OF NIAGARA FALLS REGIONAL STUDY AREA
SUBSECTION 3**

PROJECT NO.	CONTROL	REV.	FIGURE
18104462	0003	0.0	6

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4.1.2 City of Thorold RSA Subsection

Table 3 lists the known or potential cultural heritage resources identified from desktop sources within the City of Thorold and provides recommendations if these properties or sites will be potentially impacted by the Project.

Table 3: Cultural Heritage Resources Identified in the City of Thorold Section of the Regional Study Area

Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
12 Albert Street West, ■ Thorold’s Old Firehall	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a Heritage Impact Assessment (HIA) compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
13 Albert Street East, ■ Memorial Park/War Memorial Monument	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
14 Carleton Street North, ■ Tracy House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
8 Carleton Street South, ■ L.G. Loriman/Central School	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
49 Carleton Street South, ■ Calcott-Walker House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
40 Chapel Street South, ■ The Stewart House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
65 Chapel Street South, ■ Lynch House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
24 Clairmont Street, ■ St. Andrew's Presbyterian Church	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
44 Clairmont Street, ■ Moore-Lampman House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
18 Front Street North, ■ Dominion Government Building/Post Office Building	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
11 Front Street South, ■ The Stone Store	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
15 Front Street South, ■ Macartney Drug Store	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
28 Front Street South, ■ The Quebec Bank	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
31 – 33 Front Street South, ■ Carr-Millar-McMillan Block	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

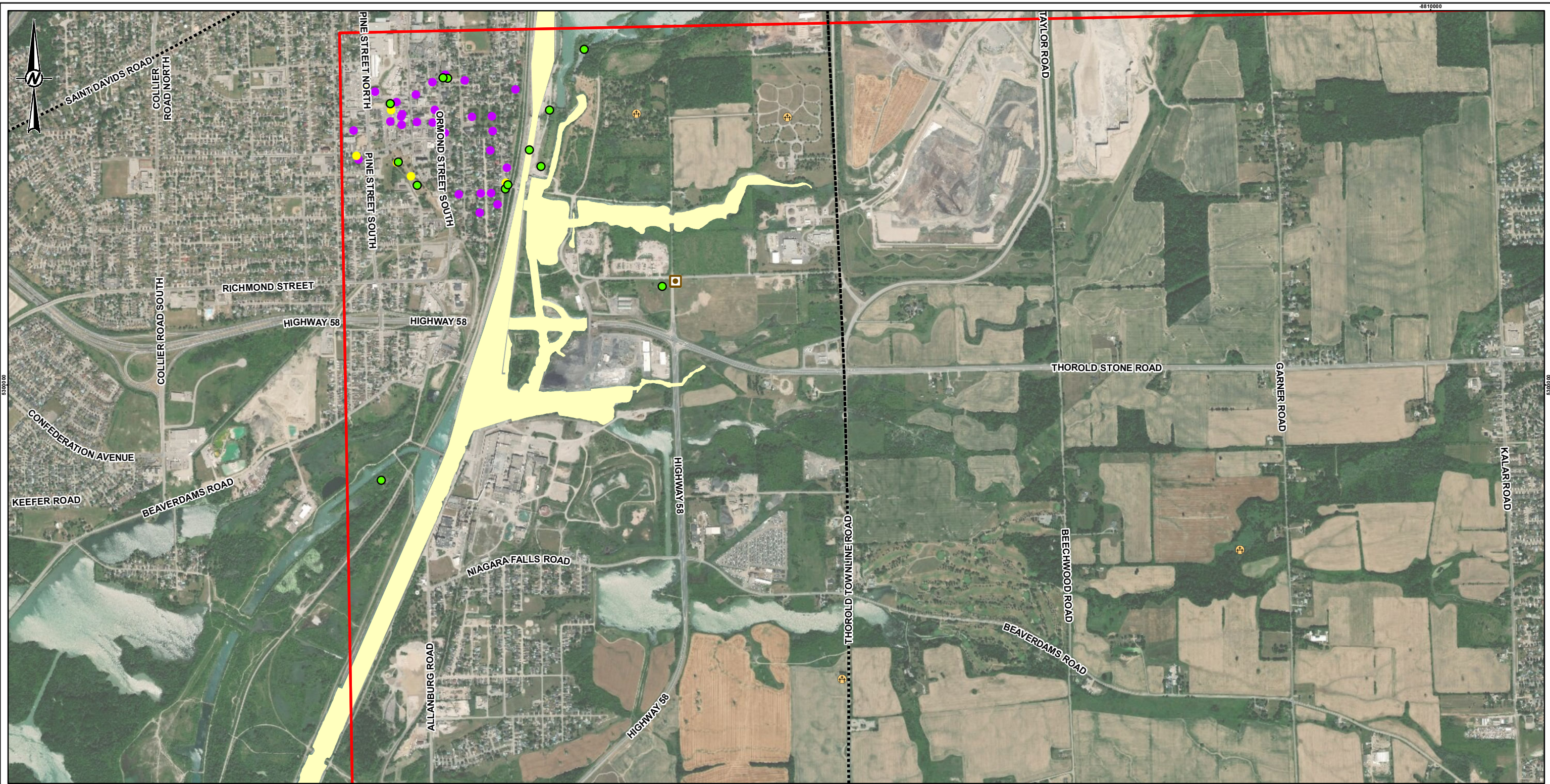
Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
14 Ormond Street North, ■ Chestnut Hall/East Side School Bell	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
17 Ormond Street North, ■ First Presbyterian Church	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
1 Ormond Street South, ■ Thorold's Carnegie Library	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5 Ormond Street South, ■ Munro House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
15 Pine Street, ■ Trinity United Church	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.









Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
20 Pine Street North, <ul style="list-style-type: none"> ■ The Millstone and Welland Mills ■ Welland Mills Plaque 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
22 Portland Street, <ul style="list-style-type: none"> ■ The Flannery House 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
13 Sullivan Avenue, <ul style="list-style-type: none"> ■ Sir Edward Beatty House ■ Sir Edward Wentworth Beatty plaque 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
16 Towpath Street, <ul style="list-style-type: none"> ■ Fire Bell 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
6 Welland Street South, <ul style="list-style-type: none"> ■ Kennedy/Ward House 	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
35 Welland Street South, ■ Carter-Holland House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
43 Welland Street South, ■ Millar House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
5 Wellington Street North, ■ Constable House	Protected heritage property designated under Part IV of the <i>Ontario Heritage Act</i>	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
The Battle of Beaver Dams Park	Battle of Beaver Dams National Historic Site of Canada Monument Laura Secord Plaque The Founding of Thorold Plaque Obelisk – Remains of 16 U.S. Soldiers War of 1812 Point of Interest	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.

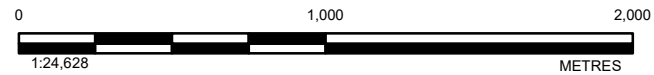
Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
Intersection of Old Thorold Stone Road and Davis Road	Battle of Beaver Dams National Historic Site of Canada War of 1812 Point of Interest	Conduct a HIA compliant with the MHSTCI <i>Ontario Heritage Tool Kit</i> prior to any proposed work on, or adjacent to, the protected heritage property. The HIA should determine the appropriate mitigation for direct and indirect impacts to the property and should also determine if monitoring the built heritage resources for vibration impact during construction is required.
Northwest corner of Canby Street and Alanport Road ■ Port Robinson Presbyterian Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a Cultural Heritage Evaluation Report (CHER) to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
3651 Thorold Townline Road ■ The Old Lakeview Municipal Cemetery (west section) ■ The New Lakeview Municipal Cemetery (east section)	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
West side of Thorold Townline Road approximately 375 m south of Beaverdams Road ■ The Upper Family 1 Cemetery	Subject to <i>Funeral, Burial and Cremation Services Act</i>	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI, conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation
South side of Albert Street West between Towpath Street and Ekins Lane	Property of Potential CHVI Plaque	Conduct a CHER to determine the property meets the criteria for CHVI prescribed in <i>O. Reg. 9/06</i> . If the CHER confirms the property has CHVI,

Civic Address and Description	Cultural Heritage Status	Conservation Measures if Potentially Impacted
<ul style="list-style-type: none"> ■ The First Cotton Factory Plaque 		conduct an HIA compliant with the consistent with guidance from the <i>Ontario Heritage Tool Kit</i> to determine the appropriate mitigation




- LEGEND**
-  CEMETERIES
 -  FEDERAL AND PROVINCIAL COMMEMORATIVE PLAQUES
 -  DESIGNATED HERITAGE PROPERTY
 -  POTENTIAL CULTURAL HERITAGE PROPERTY
 -  NATIONAL HISTORIC SITE
 -  REGIONAL STUDY AREA
 -  WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
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- REFERENCE(S)**
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 4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N



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	YYYY-MM-DD	2020-04-22
	DESIGNED	PR
	PREPARED	RRD
	REVIEWED	BH
	APPROVED	-

PROJECT			TITLE	
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT			KNOWN AND POTENTIAL CULTURAL HERITAGE RESOURCES IN THE CITY OF CITY OF THOROLD REGIONAL STUDY AREA SUBSECTION	
PROJECT NO.	CONTROL	REV.	FIGURE	
18104462	0003	0.0	7	

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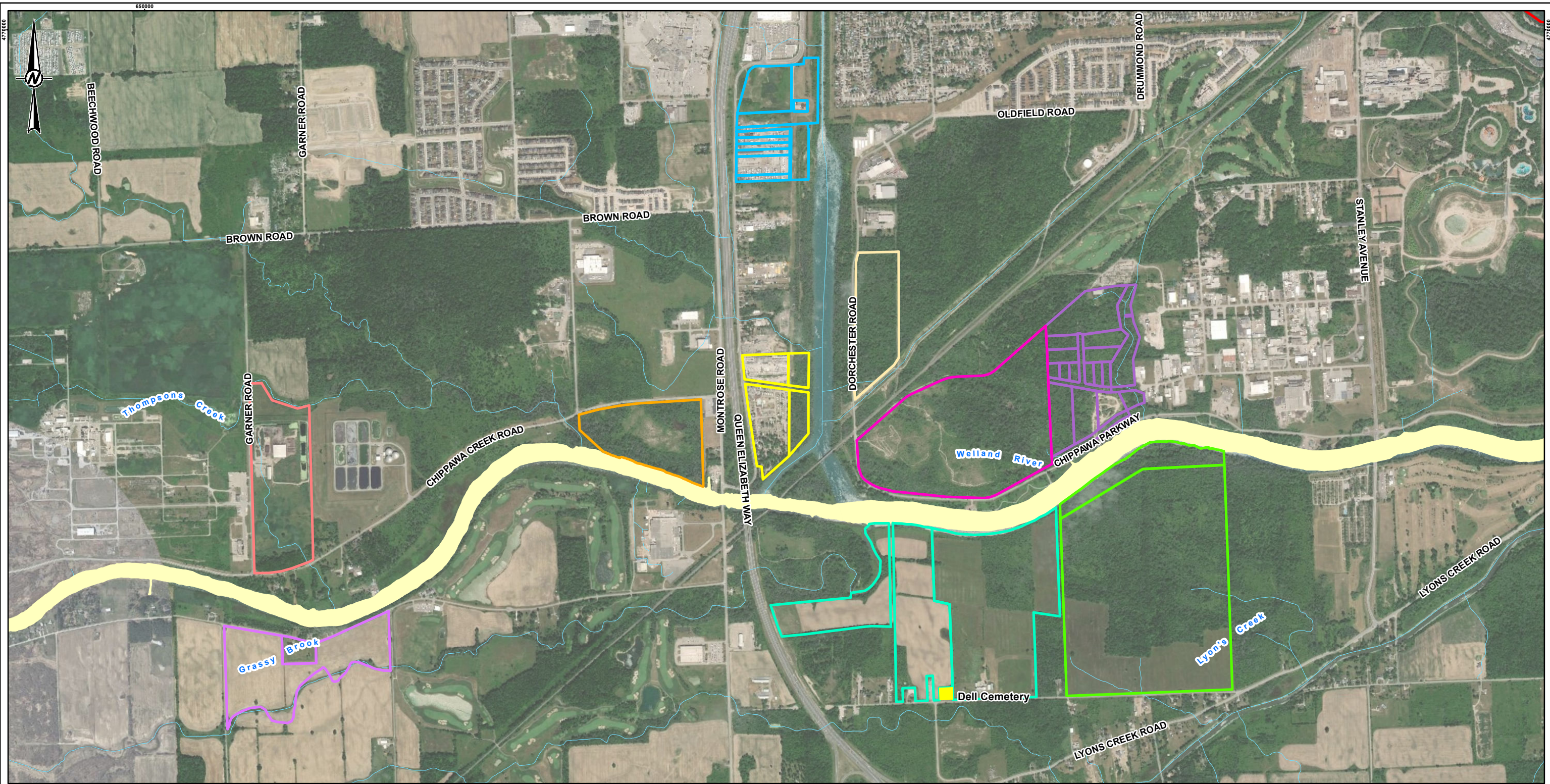
4.2 Sites of Interest

Desktop analysis for the Sites of Interest identified the following constraints, summarized in Table 4 and illustrated in Figure 8 and Figure 9.

Table 4: Potential Cultural Heritage Constraints at the Sites of Interest

Site of Interest	Potential Cultural Heritage Constraint	Recommendation if Selected
1	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
2	A house and two barns over 40 years old are on the Site of Interest.	Conduct a CHER to determine if the property meets the criteria for CHVI prescribed in <i>Ontario Regulation 9/06</i> . If the CHER finds the property has CHVI, conduct an HIA compliant with the City of Niagara Falls <i>Official Plan</i> policies to determine the appropriate mitigations.
3	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
4	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
5	The Site includes a property known as Jellystone Park Niagara Falls, a property that has been a trailer park/campground/resort since 1965. Some of the structures appear to be over 40 years old. The Site is adjacent to the Welland River section of the First Welland Canal and part of the Power Canal.	Conduct a CHER to determine if the property meets the criteria for CHVI prescribed in <i>Ontario Regulation 9/06</i> . If the CHER finds the property has CHVI, conduct an HIA compliant with the City of Niagara Falls <i>Official Plan</i> policies to determine the appropriate mitigations.
6	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
7	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
8	The Dell Cemetery at 6811 Reixinger Road is adjacent to Site of Interest 8. A house and farm complex with buildings over 40 years old is within the Site of Interest 8. The Site is adjacent to the Welland River section of the First Welland Canal and part of the Power Canal.	Conduct a CHER to determine if the property meets the criteria for CHVI prescribed in <i>Ontario Regulation 9/06</i> . If the CHER finds the property has CHVI, conduct an HIA compliant with the City of Niagara Falls <i>Official Plan</i> policies to determine the appropriate mitigations.

Site of Interest	Potential Cultural Heritage Constraint	Recommendation if Selected
9	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.
10	No known or potential cultural heritage resources identified from desktop analysis.	No further studies required.



- LEGEND**
- CEMETERIES
 - WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
 - REGIONAL STUDY AREA
- SITES OF INTEREST**
- SITE 1
 - SITE 2
 - SITE 3
 - SITE 4
 - SITE 5
 - SITE 6
 - SITE 7
 - SITE 8
 - SITE 9
 - SITE 10

REFERENCE(S)

1. BASE DATA - MNRF LIO, OBTAINED 2019
2. PRODUCED BY GOLDER ASSOCIATES LTD UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY, © QUEENS PRINTER 2019
3. IMAGERY: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY
4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

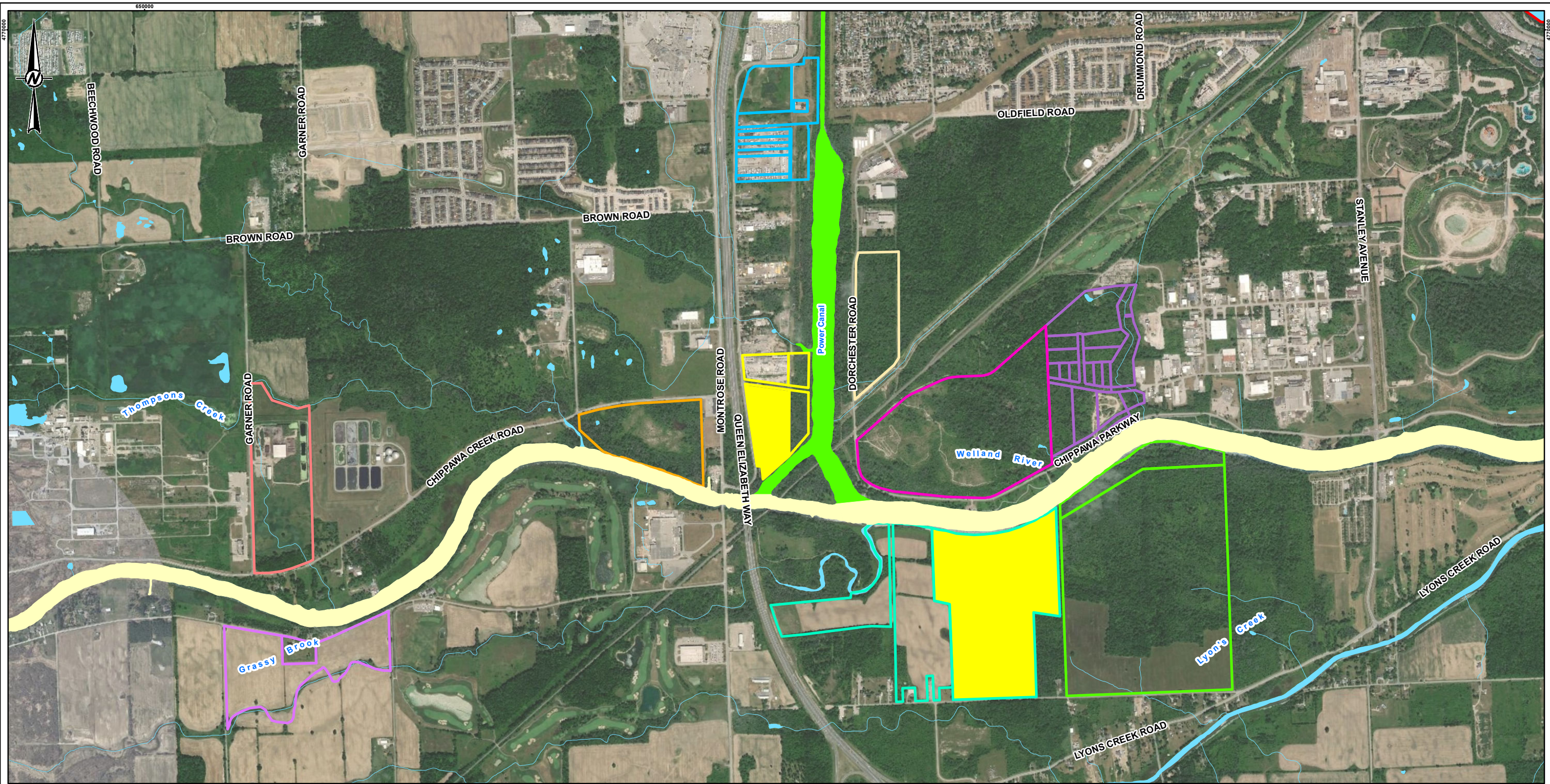
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PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

CONSULTANT	DATE	DESCRIPTION
	YYYY-MM-DD	2020-04-22
	DESIGNED	PR
	PREPARED	RRD
	REVIEWED	BH
	APPROVED	-

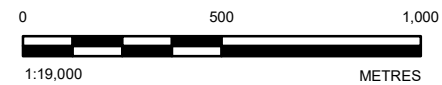
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KNOWN CULTURAL HERITAGE RESOURCES AROUND THE AREAS OF INTEREST	1810462	0003	0.0	8

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- LEGEND**
- POTENTIAL CULTURAL HERITAGE LANDSCAPE
 - PROPERTIES WITH BUILDINGS OR STRUCTURE OVER 40 YEARS OLD
 - WELLAND CANAL CULTURAL HERITAGE LANDSCAPE
 - REGIONAL STUDY AREA

- SITES OF INTEREST**
- SITE 1
 - SITE 2
 - SITE 3
 - SITE 4
 - SITE 5
 - SITE 6
 - SITE 7
 - SITE 8
 - SITE 9
 - SITE 10



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CONSULTANT	YYYY-MM-DD	2020-04-22
	DESIGNED	PR
	PREPARED	RRD
	REVIEWED	BH
	APPROVED	-

- REFERENCE(S)**
1. BASE DATA - MNRF LIO, OBTAINED 2019
 2. PRODUCED BY GOLDR ASSOCIATES LTD UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY, © QUEENS PRINTER 2019
 3. IMAGERY: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY
 4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

PROJECT
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
SCHEDULE C CLASS ENVIRONMENTAL ASSESSMENT

TITLE
POTENTIAL CULTURAL HERITAGE RESOURCES IN THE AREAS OF INTEREST

PROJECT NO.	CONTROL	REV.	FIGURE
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5.0 SUMMARY STATEMENT AND RECOMMENDATIONS

In January 2019, GM BluePlan Engineering (GM BluePlan) retained Golder Associates Ltd. (Golder) on behalf of the Regional Municipality of Niagara (Niagara Region) to undertake a cultural heritage screening report (CHSR) as part of the South Niagara Falls Wastewater Solutions Schedule C Class Environmental Assessment for the New South Niagara Falls Wastewater Treatment Plant (SNF WWTP) and Associated Collection and Conveyance Impacts (the Project).

A Regional Study Area was defined for the Project that includes approximately 125 km² (or 80% total land area) of the City of Niagara Falls, 24 km² (15.5% total land area) of the City of Thorold, and 7 km² (4.35% total land area) of the City of Welland. It extends to the existing Niagara Falls WWTP in the north, Carl Road West in the south, the Niagara River in the east, and the Welland Canal in the west. Ten 'Sites of Interest' for the SNF WWTP have been selected in the south part of the City of Niagara Falls, centred on the Welland River.

The objective of this CHSR is identify known or potential cultural heritage resources in the study area and determine if further cultural heritage studies will be required for the Project. Following the Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (2016) checklist, desktop analysis for this CHSR identified six (6) National Historic Sites of Canada, one (1) designated Heritage Railway Station, sixty (60) protected heritage properties designated under the *Ontario Heritage Act*, fifty-eight (58) commemorative or interpretive plaques from various government agencies, and twenty-four (24) cemeteries. The Regional Study Area also contains many properties with buildings or structures 40 or more years old, points of interest related to the Welland Canal, places related to the War of 1812, and public art and monuments. The Dell Cemetery (6811 Reixinger Road) is adjacent to Site of Interest 8, and Sites of Interest 2, 5 and 8 contain buildings or structures that are 40 or more years old.

Based on these results, Golder recommends to:

- Consider siting options that avoid all known and potential cultural heritage resources identified in this report

If multiple known or potential cultural heritage resources will be crossed or are adjacent to the preferred collection and conveyance corridors, Golder recommends to:

- Conduct a Cultural Heritage Assessment Report (CHAR) with field investigations to identify all known and potential cultural heritage resources potentially impacted by the Project and provide mitigation recommendations to avoid or reduce adverse impacts. The CHAR may recommend conducting subsequent site-specific Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs).

If a Site of Interest that includes a potential cultural heritage property is chosen for the SNF WWTP, Golder recommends to:

- Conduct a CHER to determine if the property meets the criteria for cultural heritage value or interest (CHVI) prescribed in *Ontario Regulation 9/06*. If the CHER finds the property has CHVI, conduct an HIA compliant with the City of Niagara Falls *Official Plan* policies to determine the appropriate mitigation measures for the preferred site.

6.0 SOURCES

Canadian Heritage Rivers System

2019 *Heritage Rivers Database*. [online] Accessed at: http://chrs.ca/wp-content/uploads/2015/12/rivers2_e.gif

City of Niagara Falls

n.d. Heritage Properties. [online] Accessed at: <https://niagarafalls.ca/living/heritage/listing.aspx>

2019 Marineland. Niagara Falls Museums [online] Accessed at: <https://niagarafallsmuseums.ca/discover-our-history/history-notes/marineland>

City of Welland

n.d. Designations. [online] Accessed at: <https://www.welland.ca/Heritage/designations.asp>

Government of Ontario

1990a *Ontario Heritage Act*. Electronic document:

<https://www.ontario.ca/laws/statute/90o18?search=heritage+act>

1990b *Planning Act*. Electronic document: <https://www.ontario.ca/laws/statute/90p13?search=planning+act>

2006 *Ontario Regulation 9/06, Criteria for Determining Cultural Heritage Value or Interest*. Electronic document: <https://www.canlii.org/en/on/laws/regu/o-reg-9-06/latest/o-reg-9-06.html>

2017a *Niagara Escarpment Plan (2017)*. [online pdf] Accessed at: <https://escarpment.org/home>

2017b *Greenbelt Plan*. [online] Accessed at: <http://www.mah.gov.on.ca/Page13783.aspx>

2019 *A Place to Grow Growth Plan for the Greater Golden Horseshoe*. [online pdf] Accessed at: <https://www.ontario.ca/document/place-grow-growth-plan-greater-golden-horseshoe>

Heritage Thorold

n.d. Designated Properties. [online] Accessed at: <http://www.heritagethorold.com/designatedproperties.html>

Ministry of Tourism, Culture and Sport

2014a *Standards and Guidelines for the Conservation of Provincial Heritage Properties*. Ministry of Tourism, Culture and Sport, Toronto.

2014b *Standards and Guidelines for the Conservation of Provincial Heritage Properties Heritage Identification & Evaluation Process*. Ministry of Tourism, Culture and Sport, Toronto.

Ministry of Transportation

2008 *Ontario Heritage Bridge Guidelines for Provincially Owned Bridges (Interim Report)*. Ministry of Transportation, Toronto.

Ontario Heritage Trust

2019a *Plaque Database*. [online] Accessed at: <https://www.heritagetrust.on.ca/en/index.php/online-plaque-guide>

2019b *Places of Worship Inventory*. [online] Accessed at: <https://www.heritagetrust.on.ca/Ontario-s-Places-of-Worship/Inventory>

2019c *Easement Properties*. [online] Accessed at: <https://www.heritagetrust.on.ca/en/property-types/easement-properties>

Natural Resources Canada

1976 Air Photo A24317-191.1976-04-09. Scale 50,000.

Signature Page

Golder Associates Ltd.



Elizabeth Cushing, M.Pl., CAHP Intern
Cultural Heritage Specialist



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Senior Cultural Heritage Specialist/Archaeologist

EC/HC/ly

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[https://golderassociates.sharepoint.com/sites/29902g/technical work/02_environmental/02_cultural heritage/final/18104462-r-rev0_gmbp niagara falls wwtp classea 24apr2020.docx](https://golderassociates.sharepoint.com/sites/29902g/technical%20work/02_environmental/02_cultural%20heritage/final/18104462-r-rev0_gmbp_niagara_falls_wwtp_classea_24apr2020.docx)

APPENDIX A

**Screening Documentation MHSTCI
Checklist**

Project or Property Name

South Niagara Falls Wastewater Solutions Schedule C Class Environmental Assessment

Project or Property Location (upper and lower or single tier municipality)

Regional Municipality of Niagara Falls, City of Niagara Falls, City of Thorold and City of Welland

Proponent Name

Regional Municipality of Niagara Falls

Proponent Contact Information

Screening Questions

1. Is there a pre-approved screening checklist, methodology or process in place?

Yes No

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Yes No

If Yes, do not complete the rest of the checklist.

The proponent, 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 summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

3. Is the property (or project area):

Yes No

- | | | |
|---|-------------------------------------|-------------------------------------|
| a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. a National Historic Site (or part of)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. designated under the <i>Heritage Railway Stations Protection Act</i> ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. designated under the <i>Heritage Lighthouse Protection Act</i> ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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.

Part B: Screening 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Part C: Other Considerations

	Yes	No
5. Is there 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. has a special association with a community, person or historical event?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If **Yes** to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is 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** to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act, Planning Act* processes
- maintained by the property owner, proponent or approval authority

APPENDIX B

Screening Documentation
Supplementary Information RSA
and Sites of Interest

Appendix A – Screening Documentation Regional Study Area

Screening Criteria	Results
PART A	
Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	No
<i>Is the property (or project area):</i>	
■ identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value?	Yes; the Regional Study Area includes 33 properties in the City of Niagara Falls and 27 properties in the City of Thorold designated under Part IV of the <i>Ontario Heritage Act</i> .
■ a National Historic Site (or part of)?	Yes; the Regional Study Area includes 6 National Historic Sites of Canada.
■ designated under the Heritage Railways Stations Protection Act?	Yes; the Regional Study Area includes 1 designated Heritage Railway Station, the VIA/Canadian National Railway Station.
■ designated under the Heritage Lighthouse Protection Act?	No
■ identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	No
■ located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	No
PART B	
<i>Does the property (or project area) contain a parcel of land that:</i>	
■ is the subject of a municipal, provincial or federal	Yes; the Regional Study Area includes 7 Historic Sites and Monuments Board of Canada Plaques and 13 Ontario Heritage Trust Plaques. At least

Screening Criteria	Results
commemorative or interpretive plaque?	26 plaques have been placed by the Niagara Parks Commission and 12 have been placed by other organizations.
■ has or is adjacent to a known burial and/or cemetery?	Yes; the Regional Study Area includes 20 cemeteries in the City of Niagara Falls and 4 cemeteries in the City of Thorold.
■ is in a Canadian Heritage River watershed?	No
■ Contains buildings or structures that are 40 or more years old?	<p>Yes; the Regional Study Area includes many buildings and structures that are 40 or more years old. It covers approximately 156 km² and includes:</p> <ul style="list-style-type: none"> ■ 125 km² approximately 80% of the land area of the City of Niagara Falls; ■ 24 km² approximately 15% of the land area of the City of Thorold; and, ■ 7 km² approximately 4% of the land area of the City of Welland. <p>The Regional Study Area includes some of the most historic parts of the City of Niagara Falls and City of Thorold as well as large rural areas and former villages in all three cities.</p>
PART C	
Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):	
■ is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<p>Yes, the study area is crossed by part of the Welland Canal, which is designated a National Historic Event by the Historic Sites and Monuments Board of Canada. The existing and prior canal routes have cultural heritage value.</p> <p>Region of Niagara open GIS data includes datasets for historic Welland Canal points of interest, War of 1812 points of interest and outdoor public art and monuments.</p> <p>Welland Canals points of interest include 7 sites:</p> <ul style="list-style-type: none"> ■ the location of Lock 24 and 25 from the second canal; ■ the location of Locks 22, 23,24, and 25 from the third canal; and, ■ the location of Lock 7 of the fourth (current) canal. <p>War of 1812 points of interest include six sites, including:</p> <ul style="list-style-type: none"> ■ The Battle of Beaverdams Park; ■ The Battle of Beaverdams National Historic Site of Canada;

Screening Criteria	Results
	<ul style="list-style-type: none"> ■ The Battle of Lundy’s Lane National Historic Site of Canada/Drummond Cemetery; ■ Fort Chippawa location with a plaque in King’s Bridge Park; ■ Destruction of Chippawa Village, represented by the Founding of Chippawa Village plaque; and, ■ Battle of Chippawa National Historic Site of Canada. <p>The open GIS dataset for outdoor art and monuments includes 13 sites in the City of Niagara Falls and 4 sites in the City of Thorold. Public art and memorials in the City of Niagara Falls include:</p> <ul style="list-style-type: none"> ■ The Chippawa War Memorial in Cummington Square; ■ Eagle, tree stump art at 8089 Portage Road; ■ The Golden Fountain: Freedom, at 2565 Niagara Parkway; ■ Nikola Tesla Monument in Queen Victoria Park south of 6345 Niagara Parkway; ■ King George VI Statue at 7400 Portage Road; ■ The Cenotaph, Great War Memorial on Clifton Hill between Falls Avenue and River Road; ■ Fountain at Oakes Garden Theatre at Clifton Hill and River Road; ■ Morning Glory Fountain at Patterson Funeral Home 602 Main Street; ■ The Centennial Wall at 6136 Lundy’s Lane; ■ Swimming Mural at the F.H. Leslie Pool, 5250 Valley Way; ■ Water Molecule, at Queen Street Park, Queen Street and Erie Street; ■ Valleyway (War) Memorial at the Royal Canadian Legion branch 51, 5610 Fraser Street; and, ■ Totem Poles at Great Wolf Lodge, 3950 Victoria Avenue. <p>Public Art and memorials in the City of Thorold include:</p> <ul style="list-style-type: none"> ■ Rod Dowling Sainless Steel Sculpture 7, at 50 The Boardwalk; ■ Polar Bear (statue), at 50 Chapel Street South; ■ Seniors in Action (mural), at the Thorold Public Library, 14 Ormond Street North; and,

Screening Criteria	Results
	<ul style="list-style-type: none"> ■ Metal sculptures (3) Untitled, at the Thorold Public Library, 14 Ormond Street North.
<ul style="list-style-type: none"> ■ has a special association with a community, person or historical event? 	<p>Yes, the Regional Study Area has special associations with the War of 1812, the Welland Canal and shipping history in Ontario, and the history of power generation in Ontario. Most of the locations for these events or people are identified through designated historic places, plaques or monuments identified above.</p>
<ul style="list-style-type: none"> ■ contains or is part of a cultural heritage landscape? 	<p>The Welland Canal is identified as a cultural heritage landscape by Niagara Region in the <i>Regional Policy Plan</i> Chapter 10 <i>Creative Niagara</i>. The cultural heritage value lies in the combination of the operating canal with historic engineering works, buildings, open spaces, natural features and diverse landscapes. This landscape is considered a relict and a continuing landscape (Niagara Region 2014:10-13). It is unclear if the cultural landscape includes the Welland River from Port Robinson to the Niagara River at Chippawa, which was part of the first Welland Canal from 1829-1833.</p>

Appendix B – Screening Documentation Sites of Interest

Screening Criteria	Results
PART A	
Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	No
<i>Is the property (or project area):</i>	
■ identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value?	No
■ a National Historic Site (or part of)?	No
■ designated under the Heritage Railways Stations Protection Act?	No
■ designated under the Heritage Lighthouse Protection Act?	No
■ identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	No.
■ located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	No
PART B	
<i>Does the property (or project area) contain a parcel of land that:</i>	
■ is the subject of a municipal, provincial or federal	No

Screening Criteria	Results
commemorative or interpretive plaque?	
■ has or is adjacent to a known burial and/or cemetery?	Yes; Dell Cemetery at 6811 Rexinger Road is adjacent to Site of Interest 8.
■ is in a Canadian Heritage River watershed?	No
■ contains buildings or structures that are 40 or more years old?	<p>Yes; Sites of Interest 2, 5 and 8 contain buildings or structures that are 40 or more years old.</p> <ul style="list-style-type: none"> ■ Site of Interest 2, 8986 Grassy Brook Road contains a house and two barn that are over 40 years old. ■ Site of Interest 5, 8676 Oakwood Drive has been a trailer park/campground/resort since 1965. Some of the structures on the property appear to be over 40 years old. This property is currently Jellystone Park Niagara Falls. ■ Site of Interest 8 includes part of 6811 Rexinger Road, which includes a house and farm complex with buildings over 40 years old.
PART C	
Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):	
■ is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	Yes, as properties used for tourism-based businesses that have existed since the 1960s Sites of Interest 5, Jellystone Park Niagara Falls is a site that helps to define the character of the area.
■ has a special association with a community, person or historical event?	No
■ contains or is part of a cultural heritage landscape?	No



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A faint, purple-tinted map of a region with roads, rivers, and industrial sites, serving as a background for the top section of the cover.

V3.3.2

REGIONAL MUNICIPALITY OF NIAGARA
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

Cultural Heritage Assessments

Cultural Heritage Assessment Report –
Preferred WWTP Site

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Falls Wastewater Treatment Plant, Phase 2 Site, City of Niagara Falls, Ontario

Project #: OCUL2001

April 4, 2022

Prepared for:
Niagara Region
1815 Sir Isaac Brock Way, Thorold, Ontario, L2V 4T7

wood.

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Falls Wastewater Treatment Plant, Phase 2 Site, City of Niagara Falls, Ontario

Project # OCUL2001

PREPARED FOR:

Niagara Region Water & Wastewater Engineering
1815 Sir Isaac Brock Way, Thorold, Ontario, L2V 4T7

PREPARED BY:

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited
3450 Harvester Road
Burlington, ON, Canada

April 4, 2022

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wood.

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

Executive Summary

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A.

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed Phase 2 Wastewater Treatment Plant (SNFWWTP). The project footprint is comprised of multiple sections of fallow fields and surrounding woodlots south of Welland River and north of Reixinger Road in the City of Niagara Falls, Ontario. The Study Area includes the project footprint plus a 50m buffer.

Following the completion of background research, information gathering, and a field review, it was determined that there are four (4) potential heritage properties within and adjacent to, the Study Area. Of these three (3) (6811 Reixinger Road, Dell Cemetery, and Welland River) were previously identified as having potential cultural heritage value by Golder Associates Ltd (Golder 2019).

There may be impacts resulting from the planned Phase 2 SNFWWTP Site Plan that include potential indirect impacts to one (1) property, CHR 1 (Welland River), and potential direct impacts to one (1) property, CHR 3 (6811 Reixinger Road). The impact assessment for the Phase 2 was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) There is potential for indirect impacts to one (1) potential heritage properties CHR 1 (Welland River) as a result of potential land disturbance.
- 2) Work is planned within the Welland River however this work will take place below the waterline. No permanent impacts to the historical/associative and/or contextual value of the river are anticipated. However, should construction work disrupt the natural setting of the Welland River, then post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where possible. There is potential for direct impacts to one heritage property, CHL 3 (6811 Reixinger Road) as a result of property acquisition and demolition of the residence and associated buildings as part of the proposed construction of the SNFTWP facility. A Cultural Heritage Evaluation Report (CHER) should be prepared for this property to assess the presence, or absence, or cultural heritage value of interest (CHVI).
- 3) While no indirect or direct impacts are anticipated to the potential heritage

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

properties of CHR 2 or CHR 4, it is recommended that they be identified on design and construction mapping so that project personnel are aware of the presence of these potential heritage properties in the vicinity of the proposed work.

- 4) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix D. Should the proposed work be updated or changed, then the impact assessment should be revised to confirm impacts and recommended mitigation measures.

It should be noted that the above recommendations pertain only to Phase 2 of the project. Impacts related to the Phase 1 component of the project will be addressed under a separate cover prepared by Wood. The results and recommendations of the Phase 2 component should be coordinated with the results of the Phase 1 CHAR and the Stage 1-2 Archaeological Assessment prepared for this site.

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Acknowledgement

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Ministry of Heritage, Sport, Tourism and Culture Industries	Karla Barboza, Acting Team Lead, MHSTCI

Abbreviations

CHER	Cultural Heritage Evaluation Report
CHSR	Cultural Heritage Screening Report
CHVI	Cultural Heritage Value or Interest
HIA	Heritage Impact Assessment
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
OHA	Ontario Heritage Act
PHP	Provincial Heritage Property
PPS	Provincial Policy Statement
SCHV	Statement of Cultural Heritage Value

Glossary

Term	Definition
Built Heritage Resource:	Means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the <i>Ontario Heritage Act</i> , or that may be included on local, provincial, federal and/or international registers (Government of Ontario 2020).
Conserved:	Means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (Government of Ontario 2020).
Cultural Heritage Landscape:	Means a defined geographical area that may have been modified by human activity and is identified as having

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Term	Definition
Heritage Attributes:	<p>cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the <i>Ontario Heritage Act</i>, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms (Government of Ontario 2020).</p> <p>Means the principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g. significant views or vistas to or from a protected heritage property) (Government of Ontario 2020).</p>
Protected Heritage Property:	<p>Means property designated under Parts IV, V or VI of the <i>Ontario Heritage Act</i>; property subject to a heritage conservation easement under Parts II or IV of the <i>Ontario Heritage Act</i>; property identified by the Province and prescribed public bodies as provincial heritage property under the <i>Standards and Guidelines for Conservation of Provincial Heritage Properties</i>; property protected under federal legislation, and UNESCO World Heritage Sites (Government of Ontario 2020).</p>
Significant:	<p>In regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the <i>Ontario Heritage Act</i> (Government of Ontario 2020).</p>

1.0 Introduction

1.1 Project Context

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage are depicted in Appendix A and summarized in the table below.

Proposed Project Components	Work Completed by Wood
Phase 1 Sewer Alignment/Construction Shaft Locations	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022a)
Phase 2 Wastewater Treatment Plant	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Current Report) • Cultural Heritage Evaluation Report for 6811 Reixinger Road (Wood 2022b)
South Thorold Trunk and Blackhorse Sewage Pumping Station	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022c)

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed Phase 2 Wastewater Treatment Plant (SNFWWTP). The project footprint is comprised of multiple sections of fallow fields and surrounding woodlots south of Welland River and north of Reixinger Road in the City of Niagara Falls, Ontario. The Study Area includes the project footprint plus a 50m buffer.

The purpose of this CHAR is to establish the historical context of the Study Area, identify known and potential heritage properties through information gathering and fieldwork, and develop an inventory of built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area. A preliminary impact assessment and recommended mitigation measures were also prepared. The project footprint is comprised of multiple sections of fallow fields and surrounding woodlots south of Welland River and north of Reixinger Road in the City of Niagara, Ontario. The Study Area includes the project footprint plus a 50m buffer (Figure 1 and Figure 2).

1.2 Objectives

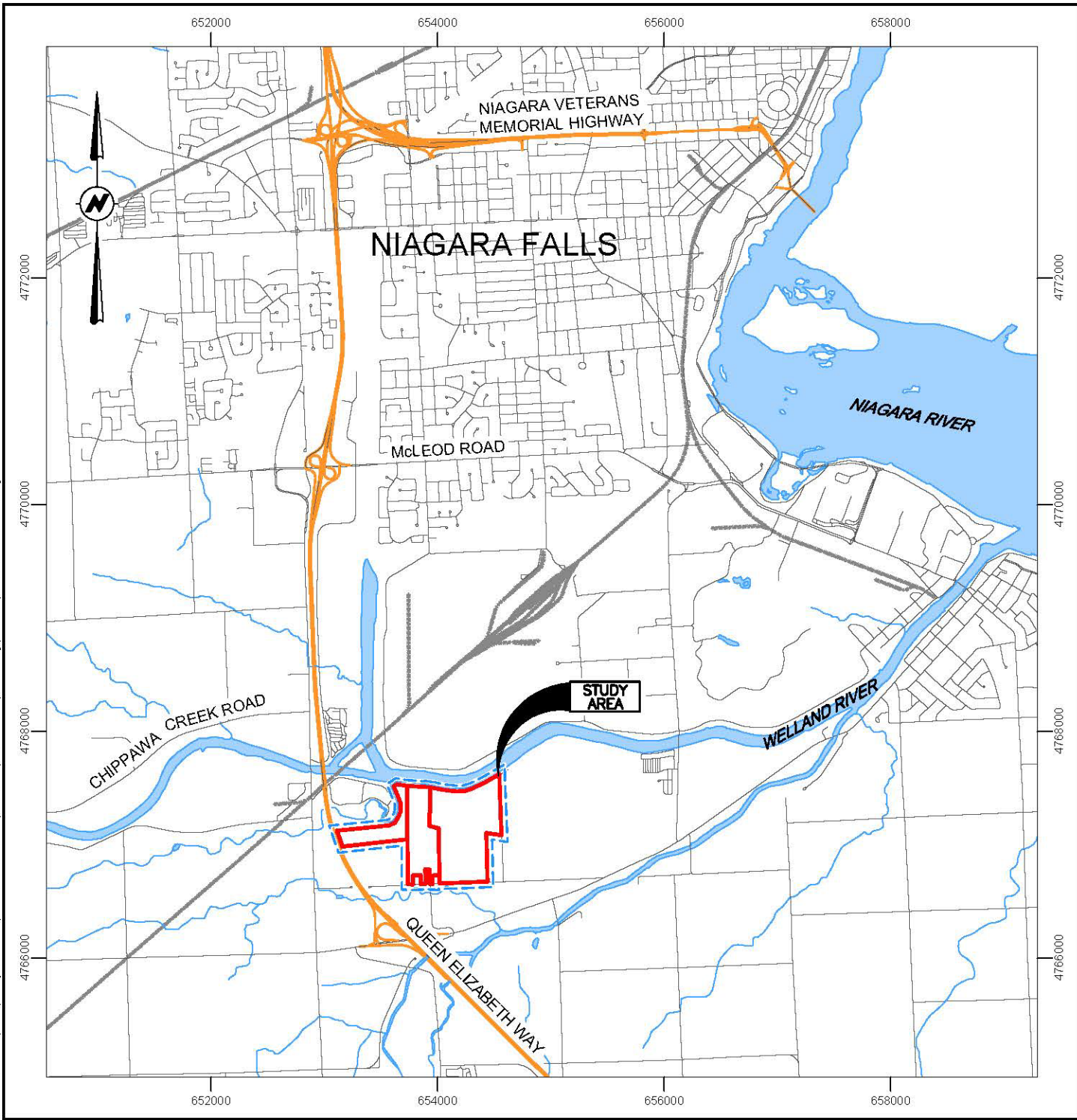
The tasks required for the preparation of this CHAR are:

- Background research, including consultation of primary and secondary sources

and review historical maps/aerial imagery to gain an understanding of the historical evolution of the Study Area;

- Online data collection and submission of agency information requests to the local municipality, Ontario Heritage Trust, and Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) to determine the presence of protected and potential built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area;
- Carry out a field investigation to establish the existing conditions of the Study Area, confirm the presence of protected heritage properties, and identify potential built heritage resources and/or cultural heritage landscapes;
- Create an inventory of built heritage resources and cultural heritage landscapes. Identify the statement of significance and list of heritage attributes for protected properties. Complete a high-level description of the property and preliminary list of heritage attributes for potential heritage properties; and,
- Complete an impact assessment to identify potential impacts to identified built heritage resources and cultural heritage landscapes that may result from the proposed work. Prepare mitigation measures where impacts are anticipated.

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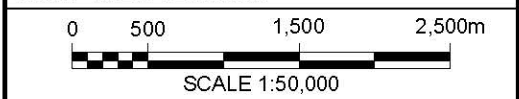


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
 LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 50 m BUFFER

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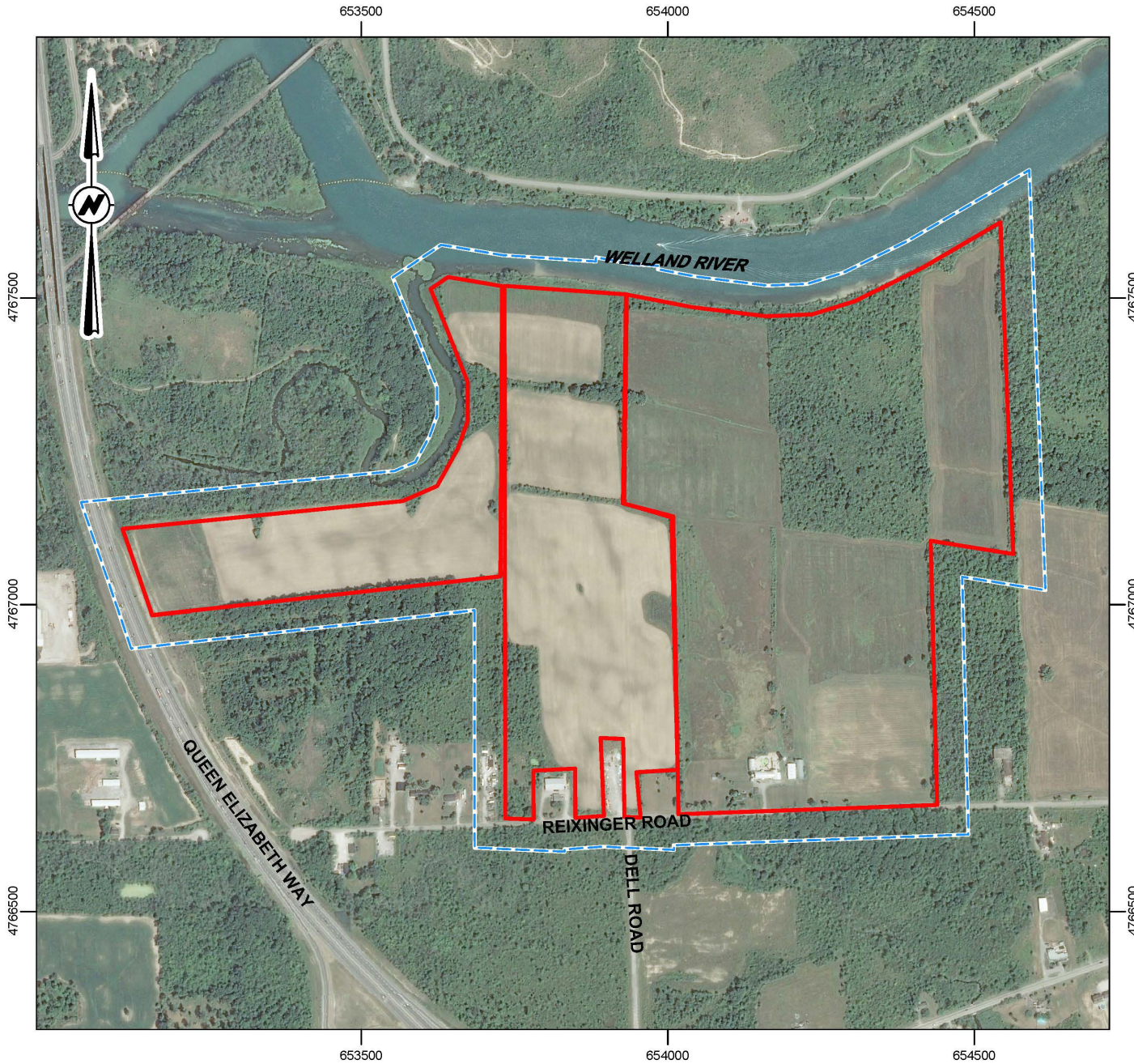
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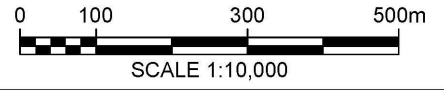


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
 AERIAL PHOTOGRAPH SHOWING THE
 LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 50m BUFFER

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2.0 Methodology

2.1 Regulatory Requirements

The requirements to consider cultural heritage under the Environmental Assessment process are found in the *Provincial Policy Statement (PPS)* (Government of Ontario 2020), *Environmental Assessment Act* (Government of Ontario 2020), and the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990).

2.1.1 Provincial Policy Statement

The PPS provides policy direction on matters of provincial interest related to land use planning and development (Government of Ontario 2020:1). The PPS is applicable to the entire Province of Ontario. Under the PPS, the conservation of cultural heritage is identified as a matter of provincial interest. Section 2.6 of the PPS gives direction on the consideration of cultural heritage and archaeology (Government of Ontario 2020:31). Specifically, the following direction is given regarding built heritage resources, cultural heritage landscapes, and protected heritage properties:

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved

2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

(Government of Ontario 2020)

2.1.2 Environmental Assessment Act

The *Environmental Assessment Act (EAA)* sets out planning and decision-making processes so that potential environmental effects are considered before a project begins (Government of Ontario 1990b). The *EAA* applies to provincial ministries and agencies, municipalities, and public bodies. Under the *EAA*, there are two types of assessments: Individual EAs and Streamlined EAs. Individual EAs are large-scale, complex projects with the potential for significant environmental effects. Streamlined EAs are routine projects that have predictable and manageable environmental effects. Streamlined EAs typically fall under the Municipal Class Environmental Assessment (MCEA) which are classified in terms of Schedules. The Schedule A, B and C Municipal Class EAs are defined within the MCEA Manual as follows:

Schedule A: These projects generally apply to normal, or emergency operational/maintenance procedures and the resulting effects are usually minimal and, therefore, these projects are pre-approved.

Schedule A+: These projects, similarly to the Schedule 'A', are pre-

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approved and typically involved minimal effects/impacts. Unlike the Schedule 'A' these projects require the public to be notified prior to the planned work.

Schedule B: These projects generally include improvements and minor expansions to existing facilities and there is a potential for some adverse environmental impacts.

Schedule C: These projects generally include the construction of new facilities and/or major expansions to existing facilities. As a result these projects have the potential for significant environmental effects.

(MCEA 2015)

The requirement to consider cultural heritage in Class EAs is discussed in the MCEA Manual (2015) where the cultural environment is identified as one of the key considerations in the MCEA process (MCEA 2015: B.1.1). Under Section B of the MCEA Manual, the cultural environment includes archaeological resources, areas of archaeological potential, built heritage resources, and cultural heritage landscapes (MCEA 2015: B.1.1[4]). Further, the MCEA Manual (2015: B.1.1[4]) gives the following direction regarding the cultural environment:

Significant cultural heritage and archaeological resources features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts, in accordance with provincial and municipal policies and procedures. Cultural heritage features should be identified early in the process in order to determine significant features and potential impacts.

In order to account for anticipated environmental effects to identified built heritage resources and cultural heritage landscapes Wood uses the following approach for each Schedule MCEA:

Schedule A: No additional buffer added to the Study Area for Schedule 'A' MCEA projects given the low potential for impacts to cultural heritage resources.

Schedule A+: No additional buffer added to the Study Area for Schedule 'A+' MCEA projects given the low potential impacts to cultural heritage resources.

Schedule B: Add a 25 m buffer to the Study Area for Schedule 'B' MCEA projects to capture potential adverse impacts to cultural heritage resources.

Schedule C: Add a 50 m buffer to the Study Area for Schedule 'C' MCEA projects to capture potential adverse impacts to cultural heritage resources.

This project falls under the Streamlined EA process as a Schedule 'C' Municipal Class

EA. Accordingly, Wood has added a 50m buffer to the Study Area in order to account for the risk of potential adverse impacts to cultural heritage resources.

2.1.3 Ontario Heritage Act

The *Ontario Heritage Act*, R.S.O. 1990, c.018, provides a framework for the protection of cultural heritage resources in the Province. It gives municipalities and the provincial government powers to protect heritage properties and archaeological sites. The *Ontario Heritage Act* includes two regulations for determining Cultural Heritage Value or Interest (CHVI): *Ontario Regulation* (O. Reg.) 9/06 and O. Reg. 10/06. O. Reg. 9/06 provides criteria to determine the CHVI of a property at a local level while O. Reg. 10/06 provides criteria to determine if a property has CHVI of provincial significance.

2.2 City of Niagara Falls Official Plan

The City of Niagara Falls outlines the long term objectives and policies of the City with respect to the growth and development of urban lands; the protection of agricultural lands and the conservation of natural heritage areas; and the provision of the necessary infrastructure (City of Niagara Falls, 2019). Policies relevant to cultural heritage are included below:

Section 4 of the Official Plan is entitled “Cultural Heritage Conservation” and outlines that the City of Niagara Falls has a rich historical background and promotes the following measures concerning development on significant heritage properties:

4.19 Development adjacent to and surrounding significant heritage properties shall be designed as to not adversely impact on the character, quality or amenity associated with the heritage resource.

4.21 City-owned heritage properties and buildings shall be conserved, maintained and, where possible, restored in accordance with the policies of this Plan.

2.3 Guidance Documents

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is responsible for the administration of the *Ontario Heritage Act* and has developed checklists, information bulletins, standards and guidelines, and policies to support the conservation of Ontario’s cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological sites.

The MHSTCI *Ontario Heritage Toolkit* gives guidance and information on the heritage conservation process in Ontario (Government of Ontario 2017). Specifically, the information sheets contained in the *Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* were used to guide the general preparation of this report (Government of Ontario 2006b). *InfoSheet#5: Heritage Impact Assessment and Conservation Plans* was used to guide the assessment of potential impacts resulting from the proposed

work.

2.4 Background Research

Background research was carried out during the preparation of this CHAR to gain a thorough understanding of the historical context of the Study Area. Primary sources, secondary sources, historical maps, and aerial photographs were consulted, as appropriate, to identify historical themes relevant to the Study Area. Specifically, research regarding the physiography, survey and settlement, 19th century land use, and 20th century land use of the Study Area was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historical maps from 1795, 1862, 1876, 1906, 1925, and 1942 were reviewed. In addition, recent and historic aerial photographs including Google Earth imagery were reviewed to identify changes within, and adjacent to, the Study Area.

The results of the background research are presented in Section 3.0 of this report.

2.5 Information Gathering

Information gathering was carried out to identify known and potential built heritage resources and cultural heritage landscapes in the Study Area. For this CHAR, the City of Niagara Falls, Ontario Heritage Trust, and the MHSTCI were contacted directly via email and/or phone to determine the presence of listed, designated, or protected heritage properties within, and adjacent to, the Study Area.

The results of information gathering activities are presented in Section 4.1 of this report.

2.6 Field Review

A field review of the Study Area was completed to identify properties containing protected and potential cultural heritage resources, including both built heritage resources and cultural heritage landscapes. During the field review, the 40-year 'rule of thumb' was used to identify properties with the potential to have CHVI. The 40-year rule is generally accepted by federal and provincial agencies as a preliminary screening measure for CHVI. It should be noted, however, that the 40-year threshold is a guide only and does not imply that all properties of 40 years of age have CHVI. Nor does it exclude properties that are less than 40 years of age and exhibit CHVI. The professional judgement of Wood's Cultural Heritage Specialist was used during the field review to apply the 40-year rule and identify properties with potential CHVI.

The results of the field review are presented in Section 4.2 of this report.

2.7 Inventory of Built Heritage Resources and Cultural Heritage Landscapes

Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area was created. The inventory is presented in Section 4.3

of this report.

2.8 Impact Assessment

An assessment was completed to determine impacts—direct or indirect—to identified built heritage resources and cultural heritage landscapes by the proposed work. The impact assessment for this CHAR was prepared using MHSTCI *InfoSheet #5: Heritage Impact Assessment and Conservation Plans* (InfoSheet #5) (2005). The following impacts to cultural heritage resources were considered:

- Destruction of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;
- Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces; and,
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect and archaeological resource.

In addition, mitigation measures outlined in MHSTCI InfoSheet#5 were used to guide the preparation of considered alternatives, mitigation and conservation methods. These include methods of minimizing or avoiding a negative impact to cultural heritage resources, such as:

- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setbacks, settings, and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations; and,
- Buffer zones, site plan control, and other planning mechanisms.

The results of the impact assessment and recommended mitigation measures are contained in Section 5.0 of this report.

3.0 Historical Context

3.1 Introduction

In order to gain a thorough understanding of the history of the Study Area, a review of its physiography, survey and settlement, 19th century land use, and 20th century land use was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historically, the Study Area is located within Lots 7-10, Broken Front at Chippewa Creek, Township of Willoughby, Welland County.

3.2 Physiography

The Study Area is situated in the Haldimand Clay Plain physiographic region (Chapman and Putnam 1984). This area is made up of a series of parallel belts that were once submerged in Lake Warren. The highest ground adjoins the Niagara Escarpment. The main part of Welland County is characterized by level topography and poor drainage and several square miles are covered in peat bogs.

The Soil Survey of Welland County (Acton 1935) indicates that the dominant surface soil types within the Study Area is Niagara Clay and Welland Clay. Niagara Clay has fair to good surface drainage while Welland Clay experiences fair to poor natural drainage. The topography of the Study Area is generally smooth to undulating uplands with some low swales and pond holes.

The Welland River, a tributary of the Niagara River is located to the north of the Study Area.

3.3 Indigenous Land Use

The Study Area is located within the limits of the 1981 Niagara Purchase (Treaty Number 381) boundaries (Government of Ontario 2021). The Niagara Purchase was signed on May 9, 1781, by the British Government and certain Anishinaabe peoples. The purchase covers a four-mile (approximately 6.4 kilometre) strip on the west side of the Niagara River. On May 16, 1928, the Niagara land purchases were designated a National Historic Event. A commemorative plaque is located at 43 Castlereagh Street in Niagara-on-the-Lake, Ontario. (Government of Ontario 2021, The Canadian Encyclopaedia 2021). It is presently acknowledged that the land of the Study Area is situated on the traditional territory Haudenosaunee and Anishinaabe peoples (Brock University 2019). The following, read by Councillor Paul Grenier of the Niagara Regional Council from the June 06, 2019, council meeting includes the present land acknowledgement from the Niagara Region:

“We begin this meeting by acknowledging the land on which we gather is the traditional territory of the Haudenosaunee and Anishinaabe peoples, many of whom continue to live and work here today. This territory is covered by the Upper Canada Treaties and is within the land protected by the Dish

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

with One Spoon Wampum agreement. Today this gathering place is home to many First Nations, Metis, and Inuit peoples and acknowledging reminds us that our great standard of living is directly related to the resources and friendship of Indigenous people."

(Brock University 2019)

3.4 Township Survey and Settlement

Historically, the Study Area was located within the Township of Willoughby in the County of Welland. The County of Welland was formed in 1851 when land from the southern section of Lincoln County separated (Mika & Mika 1983). The county got its name after the Welland River, formally known as Chippawa Creek, which was named after a stream in Lincolnshire, England by John Graves Simcoe (Middleton & Landon 1927). The townships in this county were among the earliest settlements in Upper Canada, made up of United Empire Loyalists who came to the area after the American Revolutionary War (Carter 1984). The building of the first Welland Canal in the 1820s helped stimulate the growth of settlement in the area (Mika & Mika 1983). The earliest recorded European visitor to the county is Father Louis Hennepin, who explored the area as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page 1876).

Willoughby Township was first settled in 1784 and was surveyed in 1787 (Armstrong 1930). These first settlers were mainly United Empire Loyalists escaping the American Revolution. More groups of pacifist Pennsylvania Dutch families arrived in the 1790s. The 19th century saw increasing settlement, mainly by German-speaking farmers from Switzerland, and other German regions attracted by affordable land (Page 1876). Within Willoughby Township is the site of the Battle of Chippawa, fought between British and American forces on July 5, 1814 (Page 1876).

The closest historic community to the Study Area is the Village of Chippawa, which was established in 1792. The first permanent European settler in Chippawa was Thomas Cummings, who took up land on the south side of the Welland River in 1783. Chippawa housed a post office and was mainly utilized historically for shipbuilding and foundry work (Bond 1964; Jackson 1997).

Dell Cemetery is located at Reixinger Road at Dell Road, directly to the south of the Study Area (CanadaGenWeb Cemetery Project 2020). The cemetery was established in 1851 when Henry Dell Senior deeded one acre of land to the Methodist Episcopal Church. The church and cemetery established on the land became known as the Dell Chapel and Cemetery (Find a Grave 2020). The first known burial is associated with Mary Dell, wife of Robert Dell on November 14, 1849. The City of Niagara Falls acquired ownership of the cemetery in 1973. The cemetery is currently inactive (Bereavement Authority of Ontario 2017).

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

3.5 Review of Historical Mapping

3.5.1 18th and 19th Century Land Use

The Study Area is located within historically within Lots 7-10, Broken Front at Chippewa Creek, Township of Willoughby, Welland County. Historical records and mapping were examined to gain an understanding of 18th and 19th century land use in the Study Area. A summary of these historical records are presented below in Table 1.

Table 1: Review of 19th Century Historical Mapping

Year	Map Title	Historical Feature(s)
1795 (Figure 3)	1795 Augustus Jones Willoughby Township No. 1 Map (Jones 1795)	<ul style="list-style-type: none"> • Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> ○ Lot 7-10 Broken Front at Chippewa Creek • A tributary of Welland River is illustrated transecting the parcel • Property owners are listed but due to degradation of the document and file resolutions the names are primarily illegible, names that are legible are provided below: <ul style="list-style-type: none"> ○ Lot 7 - Jonas N/A ○ Lot 8 - John Thomas ○ Lot 9 – John N/A ○ Lot 10 – James N/A
1862 (Figure 4)	1862 Tremaine’s Map of the Counties of Lincoln and Welland (Tremaine 1862)	<ul style="list-style-type: none"> • Study Area is located within the following Lots and Concessions: • Lot 7-10 Broken Front at Chippewa Creek • Lot 7, Broken Front at Chippewa Creek <ul style="list-style-type: none"> ○ Estate of W. Miller ○ A tributary of Welland River is illustrated transecting the parcel • Lot 8, Broken Front at Chippewa Creek <ul style="list-style-type: none"> ○ Listed property owner H. Dell

3.5.2 20th Century Land Use

Land use at the beginning of the 20th century remained largely unchanged in the Township of Willoughby as agricultural land use was still predominant and the process of industrialization ongoing. The 20th century saw dramatic changes as the population of the township increased including city expansion, and residential developments. Aerial imagery from 1934-2020 demonstrates that the Study Area was predominately farmland and remained largely unchanged until 1965/1968. At this point additional roadways and residential houses can be seen (Appendix B: Plate B1-B5).

Historical records and mapping were examined to gain an understanding of 20th

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

century land use in the Study Area. While maps from 1906, 1907, 1908, 1915, 1920, 1925, 1928, 1930, 1938, 1939, and 1942 were examined, it was concluded that historic maps from the years 1906, 1925 and 1942 best illustrated the prominent changes of the Study Area within the early 20th century and its surrounding areas. A summary of these historical records are presented below in .

Table 2: Review of 20th Century Historical Mapping

Year	Map Title	Historical Feature (s)
1906 (Figure 6)	1906 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defense 1906)	<ul style="list-style-type: none"> • Three (3) wood residences depicted within the Study Area • One (1) Railway depicted 425 m to the northwest of the Study Area • Dell Cemetery is located directly to the south of the Study Area • Dell Chapel is located directly to the south of the Study Area • Welland River directly north of the Study Area • Reixinger Road directly south of the Study Area • QEW directly to the west of the Study Area
1925 (Figure 7)	1925 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defense 1925)	<ul style="list-style-type: none"> • Four (4) wood residences depicted within the Study Area • One (1) Railway depicted 425 m to the northwest of the Study Area • Dell Cemetery is located directly to the south of the Study Area • Dell Chapel is located directly to the south of the Study Area • Welland River depicted directly north of the Study Area • Reixinger Road directly south of the Study Area • QEW directly to the west of the Study Area
1942 (Figure 8)	1942 Department of National Defence Geographical Section, Canada Sheet 30 (Department of National Defense 1942)	<ul style="list-style-type: none"> • Four (4) wood residences depicted within the Study Area • One (1) Railway depicted 425 m to the northwest of the Study Area • Welland River transecting Study Area • Dell Cemetery is located directly to the south of the Study Area • Dell Chapel is located directly to the south of the Study Area • Reixinger Road directly south of the Study Area

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Year	Map Title	Historical Feature (s)
		<ul style="list-style-type: none"> • QEW directly to the west of the Study Area

A review of recent aerial photographs was completed to gain an understanding of 20th-21st century land use in the Study Area. A summary of the review is provided in **Table 3**. Aerial photographs are provided in Appendix B.

Table 3: Review of 20th-Century Historical Records

Year	Features
1934 (Appendix B: Plate B1)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River transects the Study Area • The Great Trunk Railway transects the Study Area
1954-55 Appendix B: Plate B2)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River is located north of the Study Area • The Great Trunk Railway is located north of the Study Area • The QEW is depicted east of the Study Area • Residences are located to north of Reixinger Road
1965 (Appendix B: Plate B3)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River is located north of the Study Area • The Great Trunk Railway is located north of the Study Area • The QEW is depicted east of the Study Area • Additional residences located to the north of Reixinger Road
1968 (Appendix B: Plate B4)	<ul style="list-style-type: none"> • The configuration of the Study Area is very stable and little change takes place.
1995 (Appendix B: Plate B5)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River transects the Study Area • The Great Trunk Railway transects the Study Area • The QEW is depicted transecting the Study Area • One of the residences to the west of the Study Area has been demolished • The configuration of Dell Road located south of the study area has been altered
Various (2000 to 2020 Online Google Earth Aerial Imagery)	<p>The configuration of the Study Area is very stable and little change takes place.</p>

The Ontario Heritage Trust plaque database was reviewed in order to determine if there are any commemorative markers documenting federal, provincial, or municipal historic landmarks sites or and properties that local histories or informants have identified with

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

possible CHVI. Presently there are no known historical plaques located within the Study Area or adjacent properties on the Ontario Heritage Trust provincial plaque database however field review identified one commemorative plaque at the Dell Cemetery (Ontario Heritage Trust 2021). Further details regarding the Dell Cemetery property can be found within the inventory of built heritage resources and cultural heritage landscapes presented in Section 4.3 of this report

3.6 Previous Investigations

3.6.1 Cultural Heritage Screening Report (Golder Associates Ltd. 2019)

In 2019, Golder Associates Ltd. was retained by GM BluePlan Engineering on behalf of the Regional Municipality of Niagara to complete a Cultural Heritage Screening Report, for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated collection and conveyance impacts (Golder 2019). The CHSR Study Area included approximately 125 km² of the city of Niagara Falls, 24 km² of the City of Thorold, and 7 km² of the City of Welland. The CHSR was a desktop study and used the MHSTCI Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes (the Checklist) to screen for the presence of known and potential heritage properties in the Study Area. The CHSR identified the following known and potential heritage properties:

- Six (6) National Historic Sites of Canada
- One (1) designated Heritage Railway
- 60 Protected Heritage Properties designated under Part IV of the Ontario Heritage Act
- 58 commemorative or interpretive plaques from various government agencies
- 24 cemeteries
- Numerous properties with buildings over 40 years old, points of interest related to the Welland Canal, placed related to the War of 1812, and public art and monuments

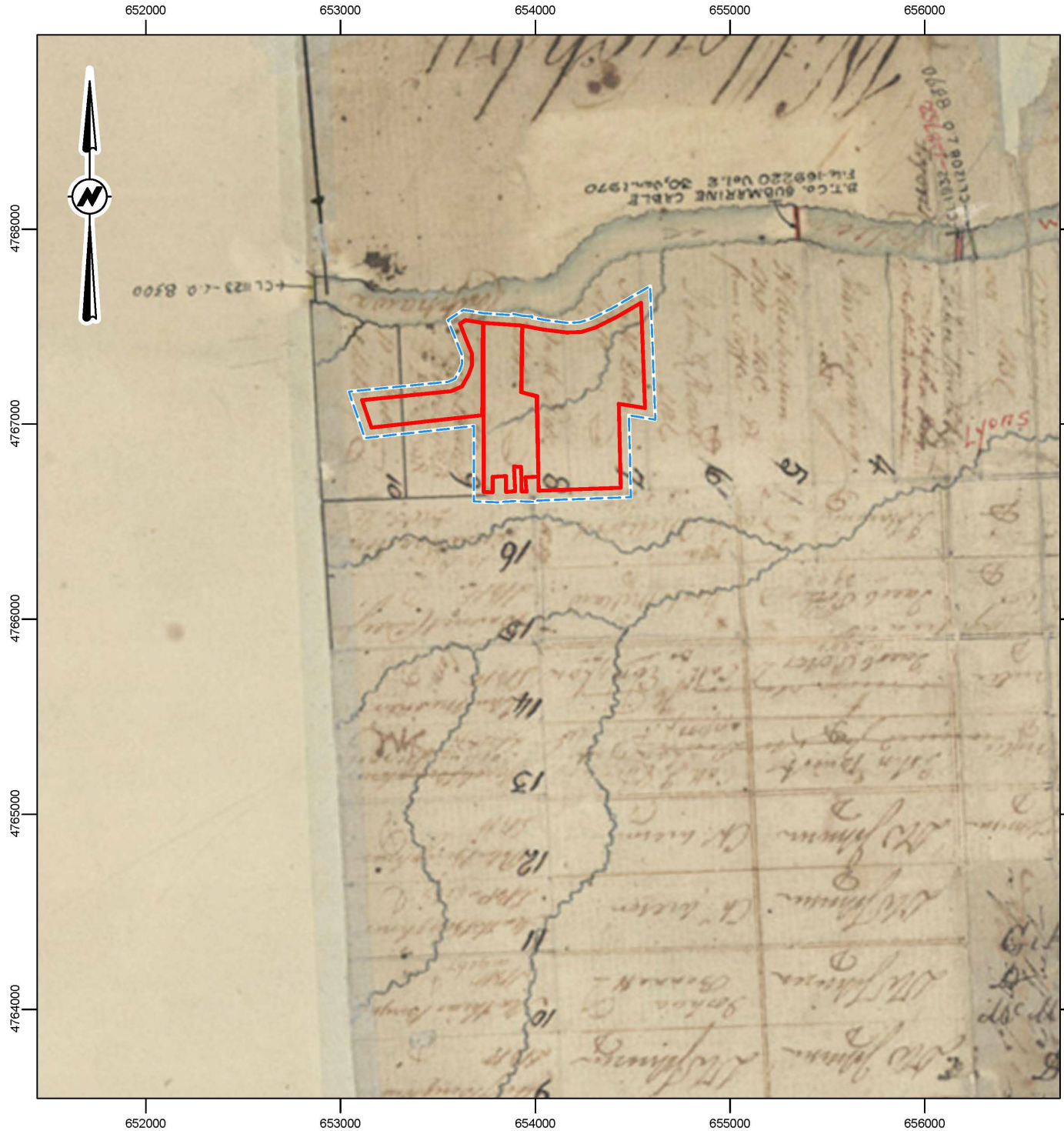
Golder recommended avoidance of the identified heritage properties (Golder 2019). Golder further recommended if avoidance of heritage properties was not feasible, then a Cultural Heritage Assessment Report (CHAR) with field investigations should be completed to identify all known and potential cultural heritage resources potentially impacted by the Project and provided mitigation recommendations to avoid or reduce adverse impacts. Golder noted that the CHAR may recommend subsequent site-specific studies, such as Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs)

Presently, the Study Area contains, and is adjacent to, three (3) potential heritage properties identified in the Golder CHSR. These are:

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR



- 6811 Reixinger Road - Residence
- Dell Cemetery
- Welland River

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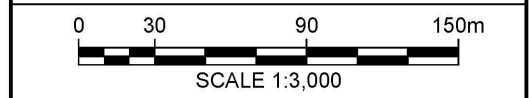


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
 1795 AUGUSTUS JONES WILLOUGHBY TOWNSHIP
 NO. 1 MAP

LEGEND:
 STUDY AREA
 50m BUFFER

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.300.
 ALL LOCATIONS ARE APPROXIMATE.
 REFERENCES:
 AUGUSTUS JONES 1795. WILLOUGHBY TOWNSHIP NO. 1 MAP.
 COPIED FROM AN ORIGINAL MAP SIGNED BY JOHN FREDERIK
 HOLLAND, SAMUEL HOLLAND AND D.W. SMITH. SOURCE:
 ONTARIO HERITAGE PROPERTY INDEX.



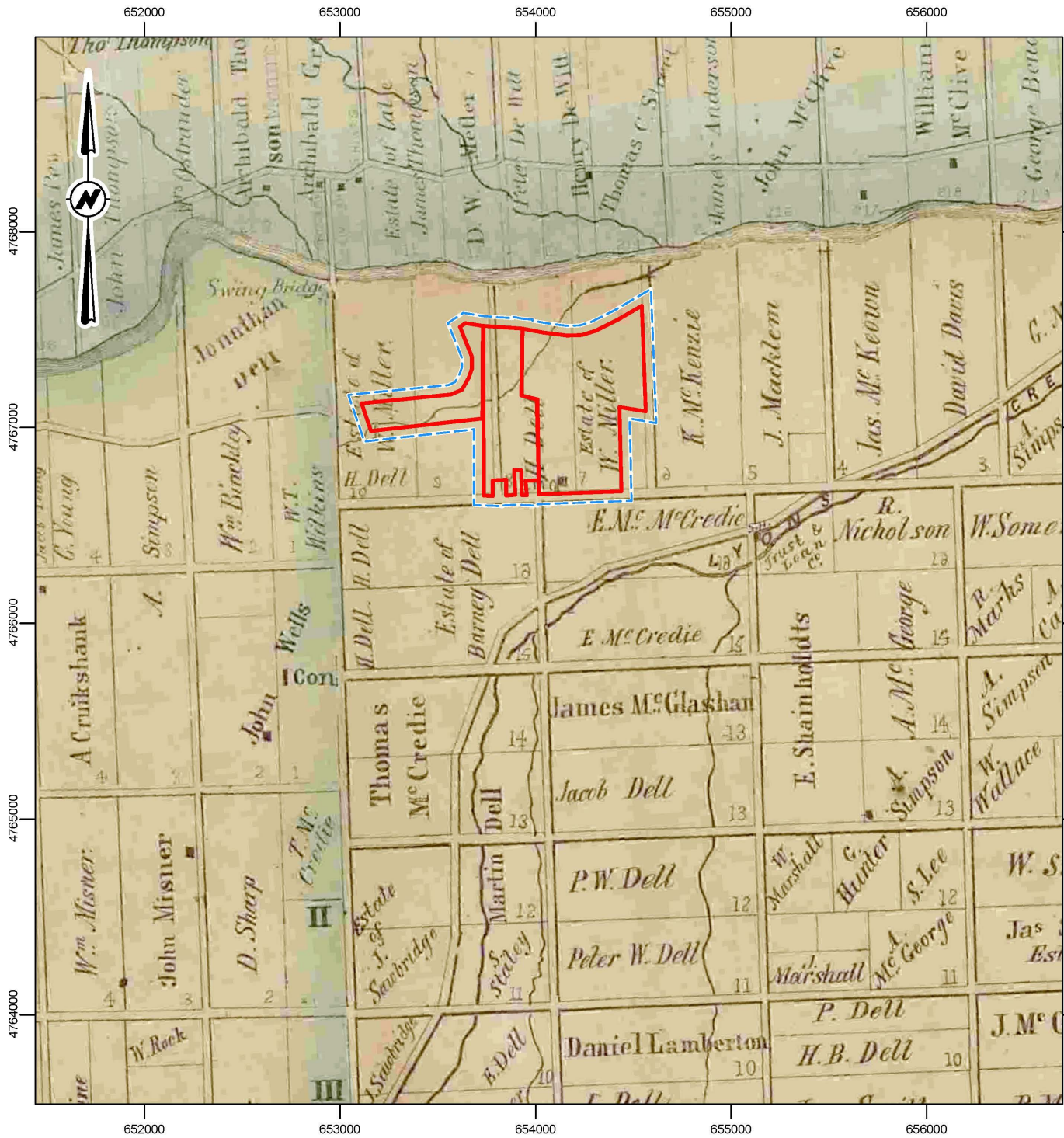
CLIENT:

Niagara Region
 NIAGARA REGION
 1815 Sir Isaac Brock Way
 Thorold, ON, L2V 4T7

wood.
 Wood Environment &
 Infrastructure Solutions
 201 KING STREET
 LONDON, ONTARIO
 N6A 1C3
 519-681-2400

DWN BY: LMK	CHK'D BY: CD	DATE: NOV. 10, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.300
REV No: 0		FIGURE No: 3

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PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
 1862 TREMAINE'S MAP OF THE COUNTIES OF
 LINCOLN AND WELLAND SHOWING THE LOCATION
 OF THE STUDY AREA

LEGEND:
 STUDY AREA
 50m BUFFER

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
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 REPORT No. OCUL2001.300.
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 REFERENCES:
 TREMAINE 1862.



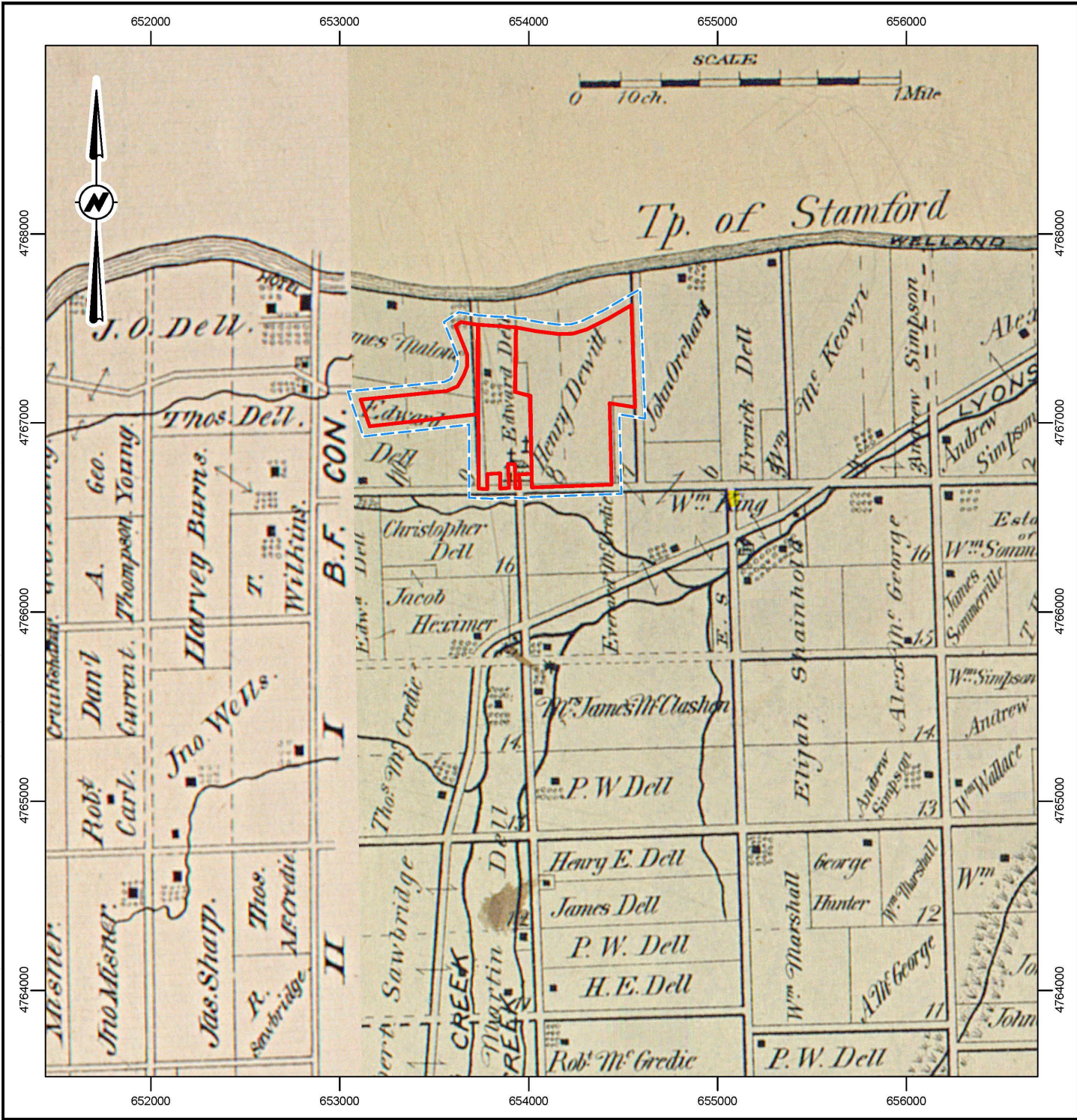
CLIENT:

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 NIAGARA REGION
 1815 Sir Isaac Brock Way
 Thorold, ON, L2V 4T7

wood.
 Wood Environment &
 Infrastructure Solutions
 201 KING STREET
 LONDON, ONTARIO
 N6A 1C3
 519-681-2400

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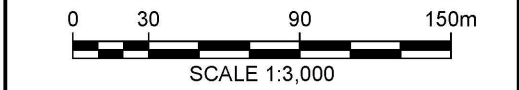


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
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 AND WELLAND COUNTIES SHOWING THE LOCATION
 OF THE STUDY AREA

LEGEND:
 STUDY AREA
 50m BUFFER

NOTES:
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 REPORT No. OCUL2001.300.
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 REFERENCES:
 PAGE, H. R. & CO. 1876.



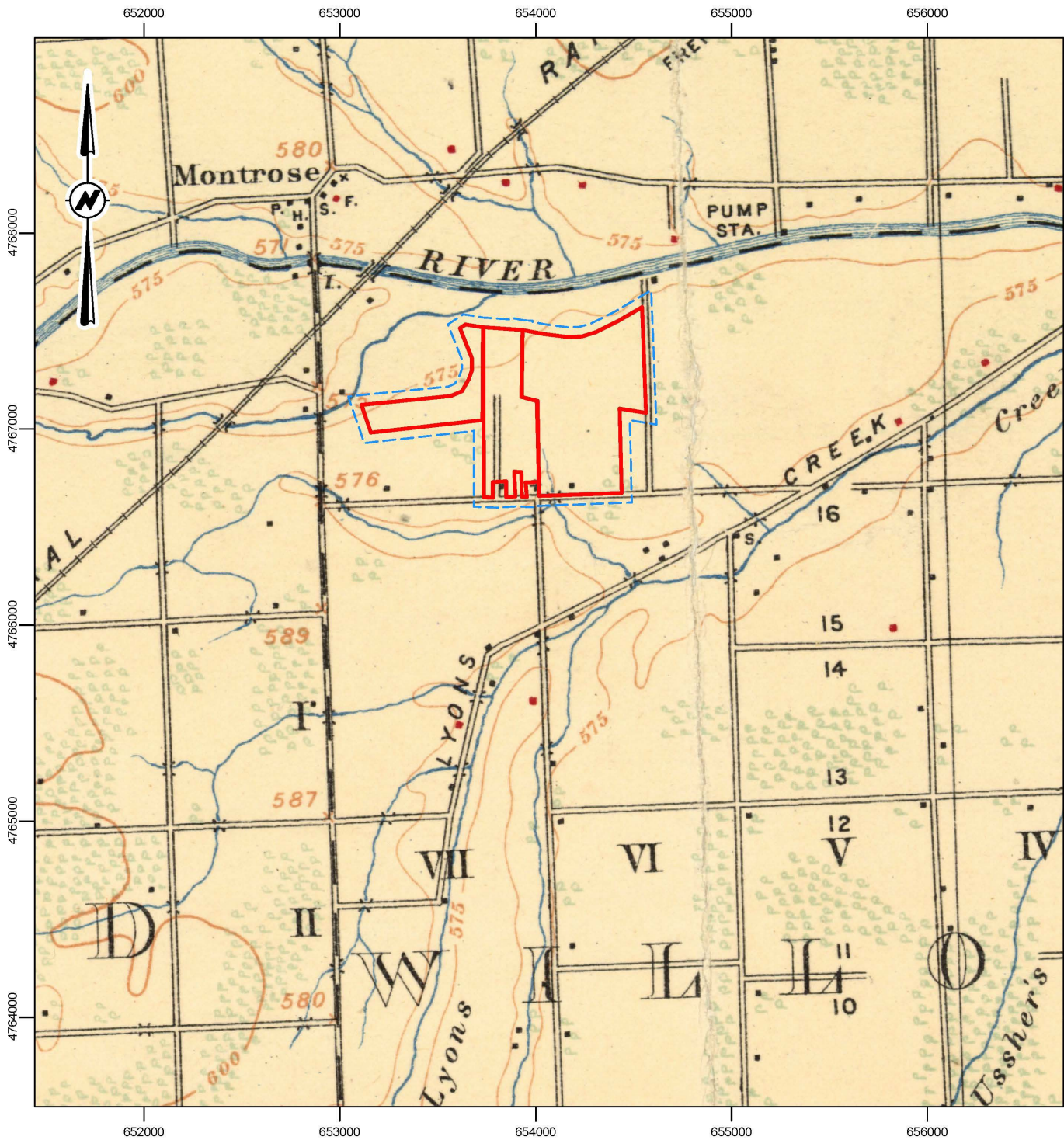
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wood.
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 Infrastructure Solutions
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 LONDON, ONTARIO
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PROJECT:
SOUTH NIAGARA FALLS WASTEWATER TREATMENT
PLAN CULTURAL HERITAGE ASSESSMENT REPORT
FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
1906 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA
SHEET

LEGEND:
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 50m BUFFER

NOTES:
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WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. OCUL2001.300.
ALL LOCATIONS ARE APPROXIMATE.
REFERENCES:
DEPARTMENT OF MILITIA AND DEFENSE 1906.



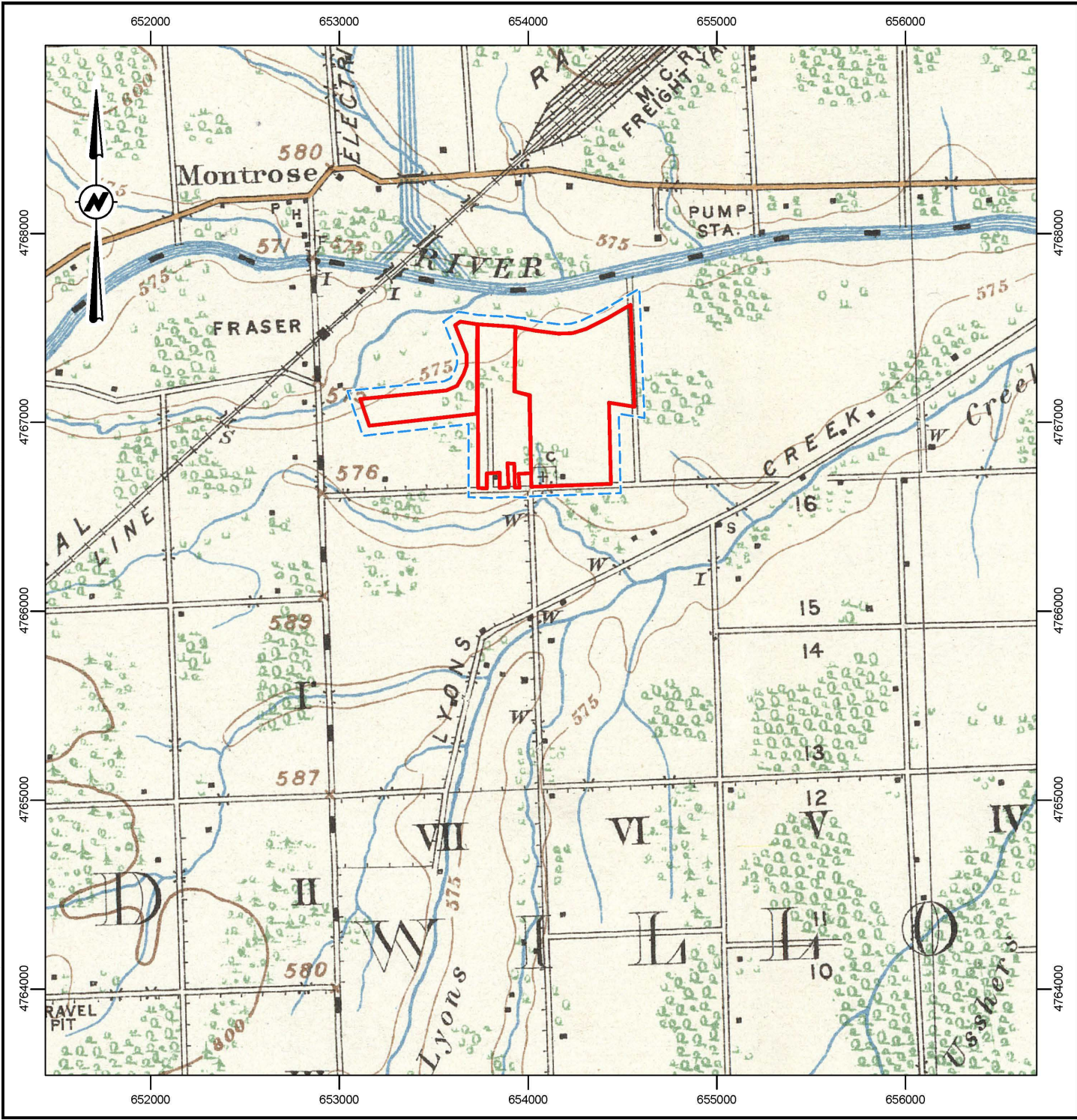
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wood.
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 Infrastructure Solutions
 201 KING STREET
 LONDON, ONTARIO
 N6A 1C3
 519-681-2400

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PROJECT:
SOUTH NIAGARA FALLS WASTEWATER TREATMENT
PLAN CULTURAL HERITAGE ASSESSMENT REPORT
FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
1925 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA
SHEET

LEGEND:

- STUDY AREA
- - - 50m BUFFER

NOTES:
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WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
REPORT No. OCUL2001.300.
ALL LOCATIONS ARE APPROXIMATE.

REFERENCES:
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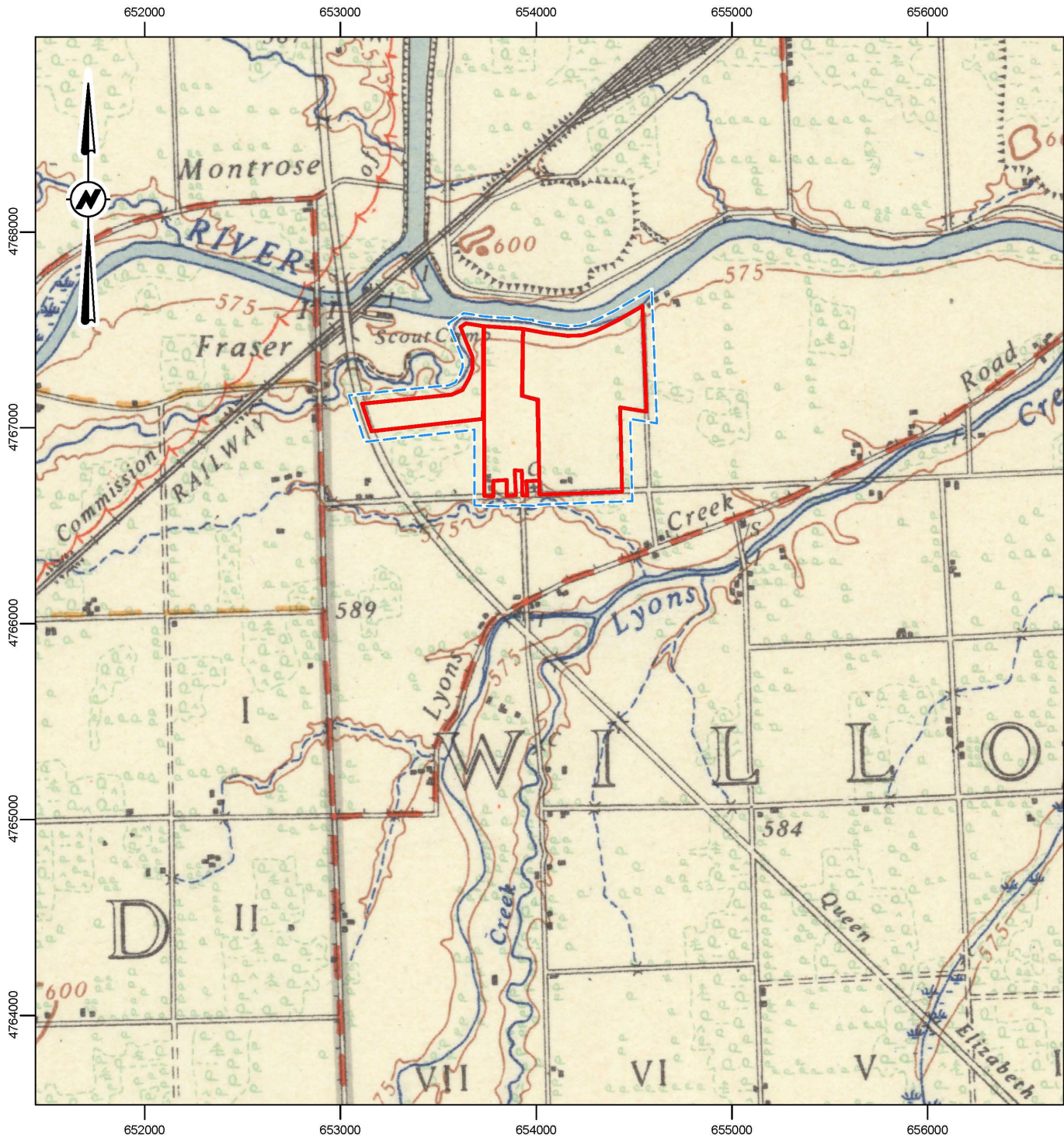
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 Wood Environment & Infrastructure Solutions 201 KING STREET LONDON, ONTARIO N6A 1C3 519-681-2400		
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South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

4.0 Results

4.1 Information Gathering Results

The City of Niagara Falls, Ontario Heritage Trust, and the MHSTCI were contacted to gather information on known heritage properties within, and adjacent to, the Study Area. Copies of the information gathering emails are provided in Appendix C.

Peggy Boyle, City of Niagara Falls, reported that the Study Area does not include:

- Any properties designated under Part IV or Part V of the Ontario Heritage Act.
- Any properties that are the subject of an agreement, covenant or easement under Parts II or IV of the Ontario Heritage Act.
- Any properties that are currently listed on a municipal heritage register nor recommended for listing through the Heritage Register Project.
- Any properties subject to a Notice of Intention to Designate under the OHA.
- Any property on the MHSTCI's list of provincial heritage properties.

Kevin DeMille, Natural Heritage Coordinator at the Ontario Heritage Trust, reported that the Study Area does not contain any conservation easements or Ontario Heritage Trust-owned properties. Mr. DeMille also confirmed that there are no properties listed on the Ontario Heritage Trust's register within the Study Area.

Karla Barboza, Acting Team Lead at the MHSCTI, reported that there are no properties designated under the Ontario Heritage Act within, or adjacent to, the Study Area.

Records of information gathering activities are provided in Appendix C.

4.2 Field Review Results

The field review was completed by Chelsea Dickinson, Cultural Heritage Specialist at Wood, on Thursday, September 17, 2020. The field review confirmed that the Study Area is comprised of mostly agricultural lands and woodlots, with residential properties. The Study Area is bounded by Welland River to the north, agricultural fields/woodlots to the east Reixinger Road to the south, and the Queen Elizabeth Way (QEW) to the west. In addition, the Study Area includes three (3) historically surveyed roads intersecting the Study Area including: Reixinger Road, Dell Road, and Montrose Road (Regional Road 98). While these roads were laid out in the 19th century they have been significantly altered and do not retain the physical characteristics of a historical roadscape.

The QEW is a multilane intercity highway connecting Toronto with Niagara and the border at Buffalo. The QEW continues as the Gardiner Expressway into downtown Toronto (Hamilton Spectator 2020).

Reixinger Road, south of the Study Area is a narrow two-lane gravel roadway which is bordered by interspersed mature tree lines. Mostly bordered by agricultural land the roadway does contain some residential properties that primarily date to the mid-20th

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

century (Plate 1-Plate 7)

Previous investigations of the Study Area and surrounding lands by Golder in 2019 identified three (3) sites of potential cultural heritage interest including the Welland River, Dell Cemetery and the property at 6811 Reixinger Road.

The property at 6811 Reixinger Road contains farm complex that includes a one-and-a-half-storey residence with Ontario Gothic Revival style influences with additions to the original structure. Other structures on the property includes one (1) one and a half storey barn with a gambrel roof, two (2) Quonset huts, one (1) single-storey building with a clear-span roof construction, and two (2) silos (Plate 8-Plate 10).

Dell Cemetery is located on the north side of Reixinger Road at Dell Road. The cemetery is bounded by an agricultural field/residential property on the east (CHL2), agricultural lands to the north and south and Reixinger Road on the south. The cemetery is bounded by a black chain link fence and mature trees/tree lines and includes numerous grave plots with markers (Plate 11-Plate 12). A commemorative plaque (Plate 13) describing the history of the cemetery is located directly outside the fence line.

One (1) additional built heritage resource identified during field review is a bridge crossing the Welland River connecting Baden-Powell (Grassy Brook) Park to the surrounding woodlot directly north of the western portion of the Study Area (Plate 14-Plate 15).

The field review identified a one-and-a-half-storey new-traditional style residence at 7197 Reixinger Road. Further review of Niagara Region historical aerial photographs demonstrate that this residence was constructed by 1954-55 (Plate 16). While this residence is over 40-years old the residence appears to have been recently updated with new siding, and updates to the windows and roofing. As such it is not considered further in this study due to its relatively recent construction date and extensive alterations.

Additional photos of properties located outside the Study Area and adjacent lands are provided in Plate 17-Plate 20. These photos demonstrate that the Study Area is generally situated in a rural setting with a mix of industrial, commercial, and residential properties.

The Welland River, originally known as Chippawa Creek, is located directly north of the Study Area and is known as the largest river tributary to the Niagara River (Plate 21-Plate 24).

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR



Plate 1: West view of Reixinger Road



Plate 2: East view of Reixinger Road



Plate 3: West view of Reixinger Road



Plate 4: West view of Reixinger Road



Plate 5: South view of Dell Road running perpendicular to Reixinger Road



Plate 6: East view of Reixinger Road

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR



Plate 7: West view of Reixinger Road



Plate 8: North view of 6811 Reixinger Road (farm complex)



Plate 9: Northwest view of 6811 Reixinger Road (farm complex)



Plate 10: Northwest view of the residence at 6811 Reixinger Road



Plate 11: West view of Reixinger Road and Dell Road intersection, showing the Dell Cemetery on the north (right)



Plate 12: Dell Cemetery located north of Reixinger Road

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR



Plate 13: Dell Cemetery commemorative plaque



Plate 14: Metal Howe Truss bridge crossing the Welland River



Plate 15: Metal Howe Truss bridge crossing the Welland River



Plate 16: Northwest view of 7197 Reixinger Road



Plate 17: North view of scrapyard found north of Reixinger Road



Plate 18: Northeast view of 7001 Reixinger Road

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR



Plate 19: Southeast view Nexterra Substructures Inc. located at 7226 Reixinger Road



Plate 20: Northeast view of Commercial Pattered Concrete Yard located at 7089 Reixinger Road



Plate 21: Southwest view of Welland River from George Bukator Park (West public parking lot and boat ramp)



Plate 22: Northeast view of Welland River from George Bukator Park trails

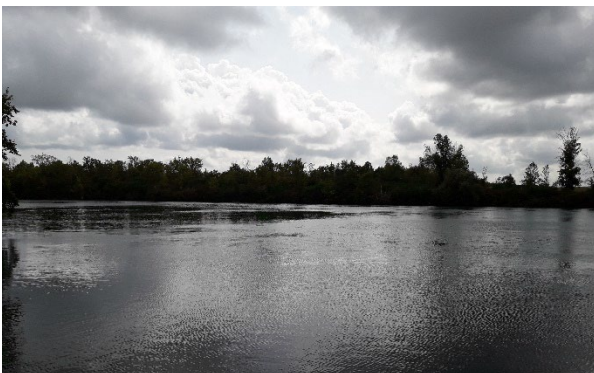


Plate 23: Southeast view of Welland River from George Bukator Park trails





Plate 24: Southwest view of Welland River from George Bukator Park trails

4.3 Inventory of Built Heritage Resources and Cultural Heritage Landscapes



Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area was compiled. The inventory is provided in . The locations of identified built heritage resources and cultural heritage landscapes in relation to the Study Area are depicted in Figure 9.

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

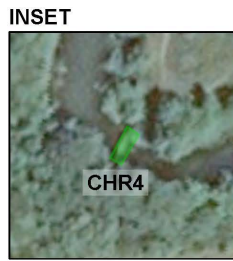
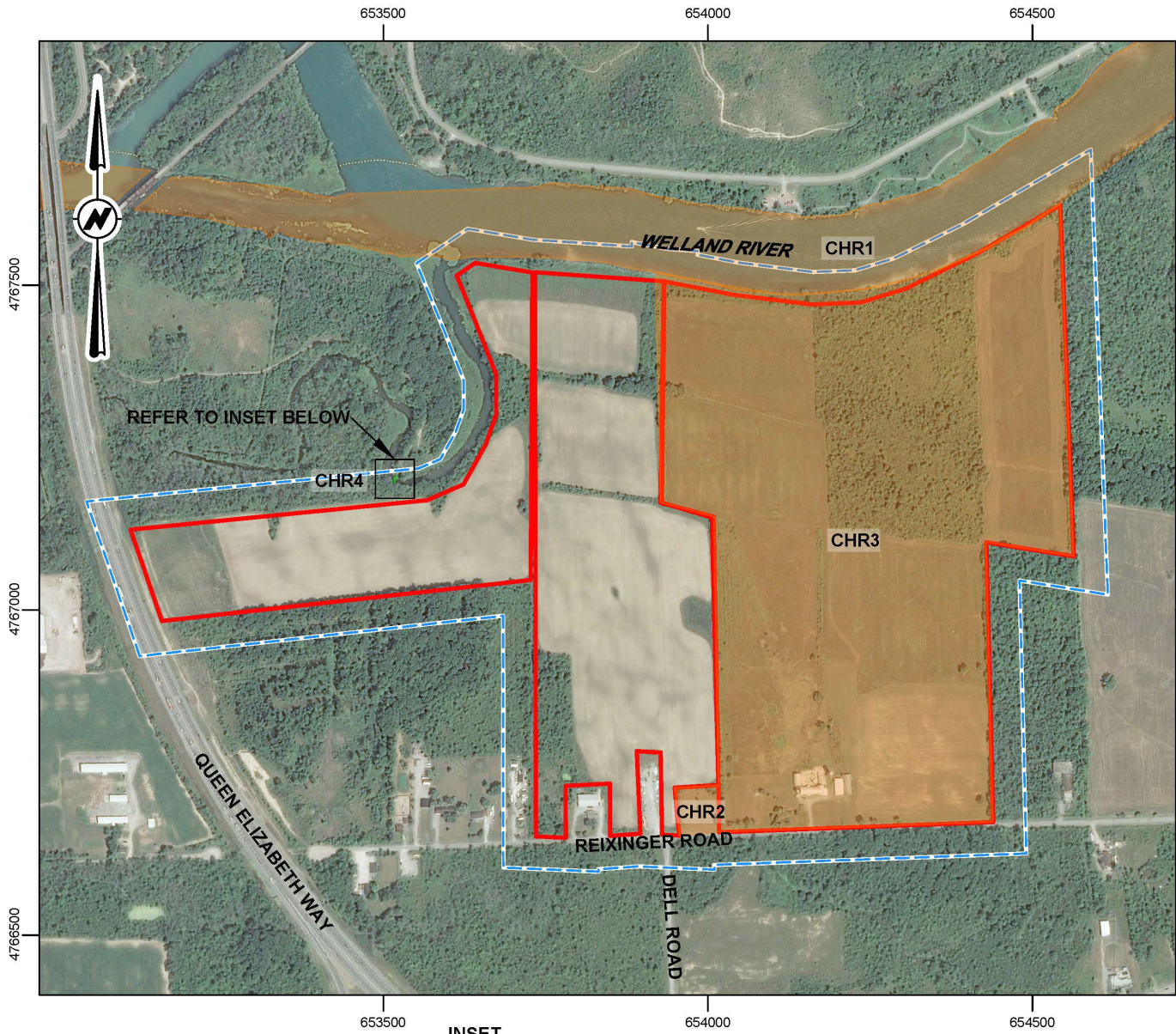
Table 4: Inventory of Cultural Heritage Resources

CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 1	CHL	Welland River	- Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>The Welland River intersects with the Phase 2 SNFWWTP Study Area. Originally known as Chippawa Creek, Welland River is known as the largest river tributary to the Niagara River (NPCA 2011). The river flows in an easterly and westerly direction toward the Queenston-Chippawa Power Canal (“Power Canal”; NPCA 2011). Due to the construction of the Welland Canal and the completion of the SAB1 Generating Station complex and associated Power Canal in 1920/1921, the river now partially flows into the Power Canal which has resulted in a flow reversal between the meeting of the Welland River, the Power Canal, and the mouth of the Welland River at the Niagara River (NPCA 2011). The river was renamed in 1792 by John Graves Simcoe Welland River is still commonly referred to as Chippawa Creek (Hogue 2014).</p> <p>The Welland River is directly linked to the Welland Canal which is identified as a cultural heritage landscape by Niagara Region in the Regional Policy Plan Chapter 10 Creative Niagara (Niagara Region 2014; Golder 2019). Golder also notes that the Welland River from Port Robinson to the Niagara River at Chippawa, was part of the first Welland Canal from 1829-1833.</p> <p>The Welland River may have historical/associative and/or contextual value.</p>	
CHR 2	CHL	Dell Cemetery (Reixinger Road at Dell Road)	- Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>Dell Cemetery is located at Reixinger Road at Dell Road in the vicinity of the Study Area (CanadaGenWeb Cemetery Project, 2020). The cemetery was established in 1851 when Henry Dell Sr. deeded one acre of land to the Methodist Episcopal Church which was known as the Dell Chapel and Cemetery (Find a Grave, 2020). The first known burial is associated with Mary Dell, wife of Robert Dell on November 14, 1849. The City of Niagara Falls acquired ownership in 1973, the cemetery is currently inactive (Bereavement Authority of Ontario 2017).</p> <p>The cemetery is bounded by an agricultural field/residential property on the east (CHL2), agricultural lands to the north and south and Reixinger Road on the south. The cemetery is bounded by a black chain link fence and mature trees/tree lines and includes numerous grave plots with markers. A commemorative plaque describing the history of the cemetery is located directly outside the fence line.</p> <p>The Dell Cemetery may have physical, historical/associative, and/or contextual value.</p>	

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 3	CHL	6811 Reixinger Road	- Previously identified by Golder Associates Ltd (2019)	<p>This property landscape contains a one-and-a-half-storey residence with Ontario Gothic Revival style influences with additions to the original structure located in the vicinity of the Study Area. Other buildings on the property include one (1) one and a half storey barn with a gambrel roof, two (2) Quonset huts, one (1) single-storey building with a clear-span roof construction, and two (2) silos (Plate 4).</p> <p>The residence is clad in clapboard siding with a cross gable roof with pronounced, projecting eaves. The front façade (north elevation) is asymmetrically arranged with the front entrance offset to the right (east). The windows are a mix of sash one-over-one (upper level), sash two-over-two (lower level) and a flat bay window (lower level). All windows and the front door appear to have wood trim and the front entrance is covered by a wood awning supported by wooden beams. The front entrance also includes mature trees. This residence appears on 1963 mapping but likely dates to the late 19th century or early 20th century based on architectural style and materials.</p> <p>As one of the few late 19th century/early 20th century residences in this section of Reixinger Road, this property may have design/physical, historical/associative, and/or contextual value.</p>	
CHR 4	BHR	Latitude: 43° 2'31.17"N Longitude: 79° 6'55.04"W	- Identified during field review	<p>An unnamed bridge identified during the field review over the Welland River connecting Baden-Powell (Grassy Brook) Park to the surrounding woodlot located directly north of the western portion of the Phase 2 SNFWWTP Study Area.</p> <p>The bridge is a single span metal truss bridge with vertical members and concrete abutments. A high-level review determined that this bridge may be a Howe Truss Bridge, a design developed by William Howe in 1840 and widely used in the mid to late 19th century (Historic Bridges, 2020). This bridge may have design/physical, historical/associative and/or contextual value.</p>	

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PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT
 PLAN CULTURAL HERITAGE ASSESSMENT REPORT
 FOR THE WASTEWATER TREATMENT PLANT SITE

TITLE:
 IDENTIFIED CULTURAL HERITAGE RESOURCES

- LEGEND:
- STUDY AREA
 - 50m BUFFER
 - PREVIOUSLY IDENTIFIED
 - IDENTIFIED DURING FIELD REVIEW

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.300.
 ALL LOCATIONS ARE APPROXIMATE.

REFERENCES:
 BING IMAGERY AS OF AUGUST 17, 2020 (IMAGE DATE
 UNKNOWN); BING IMAGERY USED FOR ILLUSTRATION
 PURPOSES ONLY AND NOT TO BE USED FOR MEASUREMENTS.



CLIENT:



NIAGARA REGION
 1815 Sir Isaac Brock Way
 Thorold, ON, L2V 4T7



Wood Environment & Infrastructure Solutions
 201 KING STREET
 LONDON, ONTARIO
 N6A 1C3
 519-681-2400

DWN BY:	LMK	CHKD BY:	CD	DATE:	NOV. 9, 2021
DATUM:	NAD83	PROJECTION:	UTM Zone 17	PROJECT No:	OCUL2001.300
REV No:	0			FIGURE No:	9

5.0 Impact Assessment

The MHSTCI InfoSheet #5 gives guidance on how to complete impact assessments for cultural heritage resources in the land use planning process. As discussed, the purpose of an impact assessment is to determine if identified cultural heritage resources will be impacted by the proposed work. This assessment considers two categories of impacts:

- **Direct Impact:** A permanent or irreversible negative affect on the CHVI of a property that results in the loss of a heritage attribute. Direct impacts include *destruction or alteration*.
- **Indirect Impact:** An impact that is the result of an activity on or near a cultural heritage resource that may adversely affect the CHVI and/or heritage attributes of a property. Indirect impacts include *shadows, isolation, direct or indirect obstruction of significant views or vistas, a change in land use, or land disturbances*.

It should be noted that land disturbances, as defined in MHSTCI InfoSheet #5, and described above, also apply to archaeological resources. An archaeological assessment is beyond the scope of this study since recommendations regarding archaeological resources must be made by a professional archaeologist licensed by the MHSCTI. An archaeological assessment for this project has been undertaken under separate cover by Wood.

5.1 Description of Proposed Work

The proposed work for Phase 2 of the SNFWWTP project involves property acquisition of 6811 Reixinger Road and demolition of residence and associated buildings as part of the development to the SNFTWP site plan and below grade pipeline from Welland River to chlorination/dechlorination contact tanks. Drawings of the proposed work are provided in Appendix D.

5.2 Assessment of Potential Impacts

An impact assessment to evaluate the potential impacts of the proposed work on built heritage resources and cultural heritage landscapes in the Study Area is contained in Table 5. The preliminary impact assessment determined that indirect impacts are anticipated to one (1) property, CHR 1 (Welland River), and direct impacts to one (1) property, CHR 3 (6811 Reixinger Road) resulting from the construction and installation of the site plan and below grade pipeline from Welland River to chlorination/dechlorination contact tanks. The impact assessment for the Phase 2 was prepared based on the proposed work depicted in Appendix D.

Table 5: Impact Assessment

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
CHR 1	CHL	Welland River	-Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>Anticipated Impact: Construction of a pipeline from the chlorination/dechlorination contact tank into the Welland River. The pipeline will exit the riverbank at about 4m below the surface of the river and rest on the bottom of the river approximately 4 m from the riverbank. In water work is anticipated within the Welland River to facilitate the installation and sinking of the pipeline.</p> <p>Type of Impact: <i>Indirect Adverse Impacts:</i> 1) Land disturbance</p>	<p>Preferred Option: <i>Avoidance:</i> The proposed work should be planned in a manner that avoids direct impacts to the riverbank of the Welland River. The river should be noted on project drawings as a “potential heritage property” to identify the potential heritage status of the property to project personnel.</p> <p>Alternative Option: <i>Post Construction Landscaping:</i> Work is planned within the Welland River however this work will take place below the waterline. No permanent impacts to historical/associative and/or contextual value of the river are anticipated. However, should construction work disrupt the natural setting of the Welland River, then post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where feasible.</p>
CHR 2	CHL	Dell Cemetery (Reixinger Road at Dell Road)	-Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	None	<p>This property should be noted on project drawings as a “potential heritage property” to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.</p> <p>Discussion: No impacts to the Dell Cemetery are anticipated from a cultural heritage perspective. However, recommendations for appropriate buffers contained in the Stage 1-2 Archaeological Assessment (P348-0106-2020 and P348-0107-2020) prepared for this project should be followed to avoid potential archaeological impacts to the Dell Cemetery.</p>
CHR 3	CHL	6811 Reixinger Road	-Previously identified by Golder Associates Ltd (2019)	<p>Anticipated Impact: Property acquisition and demolition of residence and associated buildings as part of the development to the SNFTWP site plan.</p> <p>Type of Impact: <i>Direct Adverse Impacts:</i> 1) Removal or demolition of all or part of any heritage attribute 2) Land disturbance 3) Introduction of new elements 4) Change in use for the property</p>	<p>Preferred Option: <i>Avoidance:</i> The proposed work should be planned in a manner that avoids the property. This property should be noted on project drawings as a “potential heritage property” to identify the heritage status of the property to project personnel.</p> <p>Alternative Option: <i>Additional Study:</i> Should direct impacts to this property be required and no other technically feasible options are available, then this property should be evaluated for CHVI in a Cultural Heritage Evaluation Report (CHER).</p>

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
					The above Mitigation Measures should be planned in co-ordination with the Phase 1 component of the project, completed by Wood under a separate cover.
CHR 4	BHR	Latitude: 43° 2'31.17"N Longitude: 79° 6'55.04"W	None	None	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

6.0 Recommendations

Wood Environment & Infrastructure Solutions (“Wood”) was retained by the Niagara Region to complete a Cultural Heritage Assessment Report (CHAR) in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Phase 2 SNFWWTP site (the Project).

Following the completion of background research, information gathering, and a field review, it was determined that there are four (4) potential heritage properties within the Study Area. Of these, three (3) (6811 Reixinger Road, Dell Cemetery, and Welland River) were previously identified as having potential cultural heritage value by Golder Associates Ltd (Golder 2019).

There may be impacts resulting from the planned Phase 2 SNFWWTP Site Plan that include potential indirect impacts to one (1) property, CHR 1 (Welland River), and potential direct impacts to one (1) property, CHR 3 (6811 Reixinger Road). The impact assessment for the Phase 2 was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) There is potential for indirect impacts to one (1) potential heritage properties CHR 1 (Welland River) as a result of potential land disturbance.
- 2) Work is planned within the Welland River however this work will take place below the waterline. No permanent impacts to the historical/associative and/or contextual value of the river are anticipated. However, should construction work disrupt the natural setting of the Welland River, then post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where possible. There is potential for direct impacts to one heritage property, CHL 3 (6811 Reixinger Road) as a result of property acquisition and demolition of the residence and associated buildings as part of the proposed construction of the SNFTWP facility. A Cultural Heritage Evaluation Report (CHER) should be prepared for this property to assess the presence, or absence, or cultural heritage value of interest (CHVI).
- 3) While no indirect or direct impacts are anticipated to the potential heritage properties of CHR 2 or CHR 4, it is recommended that they be identified on design and construction mapping so that project personnel are aware of the presence of these potential heritage properties in the vicinity of the proposed work.
- 4) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix D. Should the proposed work be updated or changed, then the impact assessment should be revised to confirm impacts and recommended mitigation

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

measures.

It should be noted that the above recommendations pertain only to Phase 2 of the project. Impacts related to the Phase 1 component of the project will be addressed under a separate cover prepared by Wood. The results and recommendations of the Phase 2 component should be coordinated with the results of the Phase 2 CHAR and the Stage 1-2 Archaeological Assessment prepared for this site.

7.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix E.

8.0 Closure

This report was prepared for the exclusive use of Niagara Region and is intended to provide a Cultural Heritage Assessment Report of the Study Area. The Study Area is bounded by Welland River to the north, agricultural fields/woodlots to the east, Reixinger Road to the south, and Queen Elizabeth Way to the west in the City of Niagara, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the cultural heritage assessment conducted by Wood. It is based solely a review of historical information, a property reconnaissance conducted in September 2020 and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the cultural heritage assessment. In evaluating the Study Area, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix F.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

**Wood Environment & Infrastructure,
a Division of Wood Canada Limited**

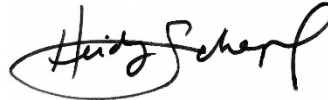
South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

Prepared by:

Reviewed by:



Chelsea Dickinson, B.A. (R1194)
Cultural Heritage Specialist



Heidy Schopf, MES, CAHP
Built Heritage and Cultural Landscape
Team Lead

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Wood

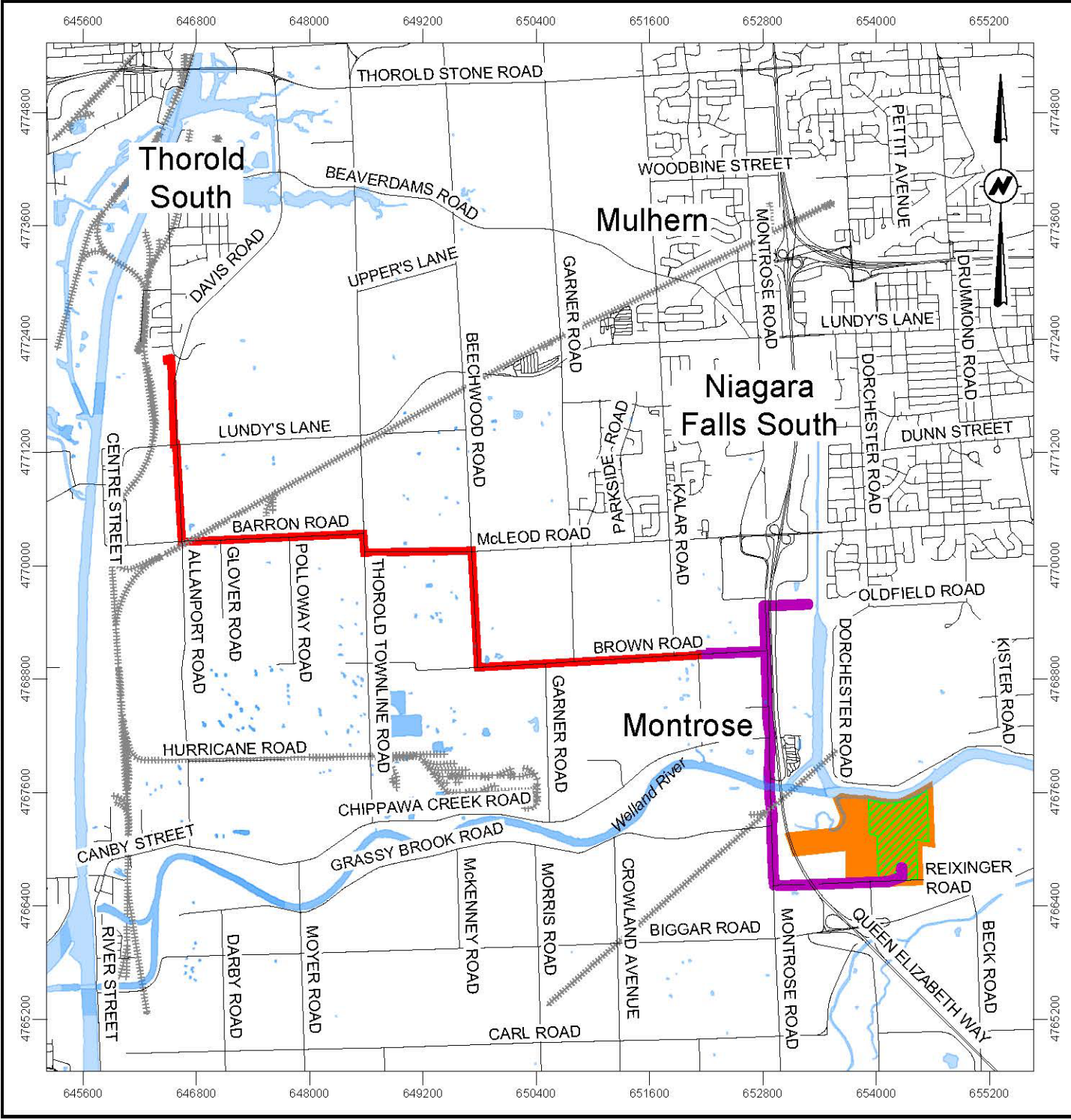
- 2022a *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Falls Wastewater Treatment Plant, Phase 1*

South Niagara Falls Wastewater Treatment Plant (Phase 2): CHAR

- Sewer Alignment/Construction Shaft Locations, City of Niagara Falls, Ontario*
Draft Report on File with Wood.
- 2022b *Cultural Heritage Evaluation Report for 6811 Reixinger Road, City of Niagara Falls, Ontario, South Niagara Falls Wastewater Treatment Plant Site (Phase 2), City of Niagara Falls, Regional Municipality of Niagara, Ontario* DRAFT Report on File with Wood.
- 2022c *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Wastewater Treatment Plant, South Thorold Trunk and Blackhorse Sewage Pumping Station (SPS), Cities of Niagara Falls and Thorold, Ontario* DRAFT Report on File with Wood.

Appendix A: Summary of Cultural Heritage Assessments

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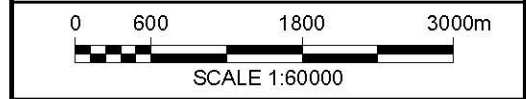
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 CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 FORMER COUNTY OF WELLDAN
 NOW IN THE CITY OF NIAGARA FALLS
 REGIONAL MUNICIPALITY OF NIAGARA, ONTARIO

TITLE:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SUMMARY OF ARCHAEOLOGICAL ASSESSMENTS

LEGEND:

- Phase 1 Cultural Heritage Assessment Report (CHAR) [Purple Box]
- Phase 2 Cultural Heritage Assessment Report (CHAR) [Orange Box]
- Cultural Heritage Evaluation Report (CHER) [Green Hatched Box]
- South Thorold Trunk and Blackhorse SPS Cultural Heritage Assessment Report (CHAR) [Red Line]

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. OCUL2001.
 ALL LOCATIONS ARE APPROXIMATE.
ORIGINAL PAPER SIZE: 31 x 11.
REFERENCES:
 CANMAP STREETFILES V2008.4.



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 647-689-4958

DWN BY:	CHK'D BY:	DATE:
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NAD83	UTM Zone 17	OCUL2001
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Appendix B: Aerial Photographs



Aerial Photograph
Dated: 1934
SNFWWTP: CHAR Site Location (Phase 2)
Plate: B1





LEGEND
— Alignment
— 50m Buffer



Aerial Photograph
Dated: 1954/55
SNFWWTP: CHAR Site Location (Phase 2)
Plate: B2





LEGEND

— Alignment

— 50m Buffer

Aerial Photograph

Dated: 1965

SNFWWTP: CHAR Site Location (Phase 2)

Plate: B3





LEGEND
— Alignment
— 50m Buffer

Aerial Photograph
Dated: 1968
SNFWWTP: CHAR Site Location (Phase 2)
Plate: B4





LEGEND
— Alignment
— 50m Buffer

Aerial Photograph
Dated: 1995
SNFWWTP: CHAR Site Location (Phase 2)
Plate: B5



Appendix C: Information Gathering

LIST OF INFORMATION GATHERING DOCUMENTATION

SECTION 1: CORRESPONDENCE WITH THE CITY OF NIAGARA FALLS

SECTION 2: CORRESPONDENCE WITH THE ONTARIO HERITAGE TRUST

SECTION 3: CORRESPONDENCE WITH THE MHSTCI

Section 1: Correspondence with the City of Niagara

Email correspondence with the City of Niagara (City) regarding the Study Area are provided on the following pages.

From: [Peggy Boyle](#)
To: [Dickinson, Chelsea](#); [Schopf, Heidi](#)
Subject: South Niagara Falls Wastewater Treatment Plan CHIA
Date: Thursday, November 12, 2020 2:00:11 PM

Hi Chelsea,

I am responding regarding the expanded study area for the above project. My reply is essentially like the other study area, based on the mapping provided, there are no designated properties in the study area, nor are any of the properties listed on the Municipal Register of Heritage properties.

None of the properties in that area are subject to any covenants or easements under the Ontario Heritage Act nor are any of the properties included on a list of Provincially significant properties.

Please let me know if you have any further questions,

Regards Peggy

[Peggy Boyle CAPH](#) | Assistant Planner | Planning, Building & Development | City of Niagara Falls | 4310 Queen Street | Niagara Falls, ON L2E 6X5 | (905) 356-7521 ext 4334 | Fax 905-356-2354 | pboyle@niagarafalls.ca

City of Niagara Falls Logo



niagarafalls.ca

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Section 3: Correspondence with the Ontario Heritage Trust

Email correspondence with the Ontario Heritage Trust (OHT) regarding the Study Area are provided on the following pages.

From: [Kevin DeMille](#)
To: [Dickinson, Chelsea](#)
Subject: Re: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plant Site
Date: Thursday, October 8, 2020 8:49:00 AM
Attachments: [image001.png](#)
[OCUL2001.300 South Niagara Falls WWTP Site CHIA Information Gathering 24September2020 DRAFT.pdf](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Good morning Chelsea,

Thank you for your information request related to a Cultural Heritage Impact Assessment (CHIA) for the proposed South Niagara Falls Wastewater Treatment Plant (WWTP) in Niagara Falls. Your request to identify protected and potential cultural heritage resources within or adjacent to the study area has been processed. I've reviewed the study area against our database of OHT easements and properties. We can confirm that the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the study area provided in your map.

Additionally, we checked the Register and can confirm there are no listed properties within or adjacent to the study area provided in your map. I recommend you contact the local municipality to verify no local heritage properties are present within the identified study area.

As described in Section 23 of the Ontario Heritage Act, the Trust holds and maintains the provincial Ontario Heritage Act Register of properties that have been designated by municipalities under sections 29 and 41 of the Act as well as properties designated under the Act by the Minister. We rely on municipalities to send us information and it is advisable to check with the clerk's office to verify information.

Under Section 27 of the Act (OHA) the clerk of a municipality is required to maintain a local register of all designated properties. Section 27 also states that municipalities may keep a register of property that has not been designated, but that the municipality has determined to be of cultural heritage value or interest. These are often referred to as "listed" properties. These non-designated heritage properties are not reflected in the OHA Register.

Kind regards,

Kevin De Mille

Kevin De Mille
Natural Heritage Coordinator

Telephone: 437-246-5854*NEW



From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: September 24, 2020 5:46 PM
To: registrar <registrar@heritagetrust.on.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>
Subject: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plant Site

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Good Evening,

Wood was retained by the Niagara Region to complete a Cultural Heritage Impact Assessment (CHIA) in support of the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (WWTP) site in the City of Niagara Falls, Ontario. To complete the CHIA, Wood is looking to identify protected and potential cultural heritage resources within, and adjacent to, the Study Area. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.
Research Archaeologist
Environment and Infrastructure Solutions
Work: (226) 821-2497
chelsea.dickinson@woodplc.com
www.woodplc.com

wood.

Section 3: Correspondence with the MHSTCI

Email correspondence with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) regarding the Study Area are provided on the following pages.

From: [Barboza, Karla \(MHSTCI\)](#) on behalf of [Registrar \(MHSTCI\)](#)
To: [Schopf, Heidi](#); [Registrar \(MHSTCI\)](#); [Dickinson, Chelsea](#)
Subject: RE: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations
Date: Friday, November 6, 2020 5:01:30 PM
Attachments: [image001.png](#)
[image002.png](#)

Hi Heidi,

It the Sir Adam Back I Generating Station **complex** (SAB1) which includes the main generating station, canal and associated features/elements. In my previous email, I attached a map depicting the property boundaries. It is adjacent to this recent inquiry.

Let me know if there are any other questions or if you would like to discuss over the phone.

Thanks and have a great weekend!
Karla

From: Schopf, Heidi <heidy.schopf@woodplc.com>
Sent: November-06-20 11:34 AM
To: Registrar (MHSTCI) <Registrar@ontario.ca>; Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Subject: RE: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

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Thanks Karla,

Can you confirm what part of the Sir Adam Beck Generating Station is adjacent to the Study Area? I am familiar with the Sir Adam Beck GS and I don't believe it is adjacent to the current SNFWTP study area (bottom left corner in the Google Earth image below). Let me know if this is incorrect.

Happy to discuss!
-Heidy



From: Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca> **On Behalf Of** Registrar (MHSTCI)
Sent: Thursday, November 5, 2020 12:26 PM
To: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Cc: Registrar (MHSTCI) <Registrar@ontario.ca>; Schopf, Heidy <heidy.schopf@woodplc.com>
Subject: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

File 0010857 – South Niagara Falls Wastewater Treatment Plant & Servicing

Hi Chelsea,

Hope this email finds you well.

As you may know, the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) developed screening checklists to assist property owners, developers, consultants and others to identify known and potential cultural heritage resources:

- [Criteria for Evaluating Archaeological Potential](#)
- [Criteria for Evaluating Marine Archaeological Potential](#)
- [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#)

I have used the document above (Built Heritage and Cultural Heritage Landscapes) in order to respond to your question:

- Question 3a. i. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value e.g. a property that is designated by order of the Minister of Heritage, Sport, Tourism and Culture Industries as being of cultural heritage value or interest of provincial significance [s.34.5]?

MHSTCI Response: To date, no properties have been designated by the Minister.

- Question 3a.v. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value included in the Ministry of Heritage, Sport, Tourism and Culture Industries' list of provincial heritage properties?

MHSTCI Response: The study area is adjacent to the Sir Adam Back I Generating Station complex (SAB1), a provincial heritage property of provincial significance – a map depicting the property boundaries is attached. MHSTCI recommends that you connect with Ontario Power Generation for further information about this property (Statement of Cultural Heritage Value and potential impacts to heritage attributes). You can contact Tali Laurenson, Real Estate Strategy Manager at 416-592-4154 or talitha.laurenson@opg.com.

Please note that if the subject lands or parts of the subject lands are owned or controlled by an Ontario Ministry or Prescribed Public Body (PPB) on behalf of the Crown (the list of PPBs is available as O. Reg. 157/10), a Ministry or PPB may have responsibilities under the [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

MHSTCI would appreciate if any technical cultural heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for MHSTCI review.

I hope this helps. Let me know if you have any questions.

Regards,
Karla

Karla Barboza MCIP, RPP, CAHP | (A) Team Lead, Heritage
Ministry of Heritage, Sport, Tourism and Culture Industries
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit T.
416.314.7120 | Email: karla.barboza@ontario.ca

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>

Sent: November-02-20 4:25 PM

To: Registrar (MHSTCI) <Registrar@ontario.ca>

Cc: Schopf, Heidi <heidy.schopf@woodplc.com>

Subject: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

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Good Afternoon,

Wood was retained by the Niagara Region to complete a Cultural Heritage Impact Assessment (CHIA) in support of the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations in the City of Niagara Falls, Ontario. To complete the CHIA, Wood is looking to identify protected and potential cultural heritage resources within, and adjacent to, the Study Area. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Research Archaeologist
Environment and Infrastructure Solutions
Work: (226) 821-2497
chelsea.dickinson@woodplc.com
www.woodplc.com

The logo for Wood, featuring the word "wood." in a bold, lowercase, sans-serif font. The period is a solid dot.

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Appendix D: Proposed Work



No.	Date	Description	By

STAMP:



SCALE BAR

ARCHITECT:
C²Architecture
 C2 Architecture Inc.
 415 Baseline Road West
 Bowmanville, ON L1C 5M2
 ☎ 905.697.4464

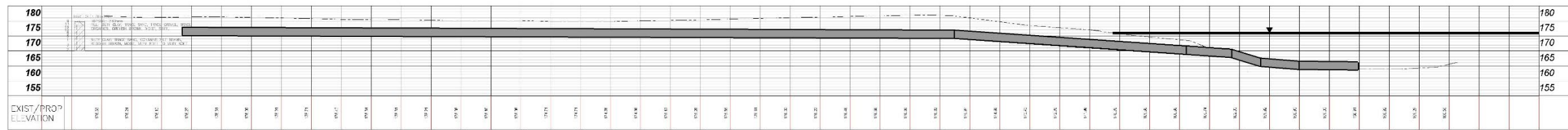
CLIENT:

PROJECT NAME:
**SOUTH NIAGARA FALLS WWTP
 CLASS EA AND CONCEPTUAL
 DESIGN**

SHEET TITLE:
PHASE 1 SITE PLAN

DISCIPLINE: **GENERAL**

DRAFTER: Author SCALE: AS NOTED



NO.	REVISION	DATE	INT.
0	CONCEPTUAL DESIGN ISSUED FOR REPORTS	2021-11-08	M

NOTES/LEGEND

1. THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWER AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THIS CONTRACT DRAWING AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL IN-DRY HIMSELF OF THE EXACT LOCATION OF ALL SLOD UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

2. PROPERTY LINES WERE PLOTTED USING REGISTERED PLANS AND BARS LOCATED IN THE FIELD. TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

DRAWING	JR
DESIGN	MI
CHECKED BY	--
APPROVED BY	--



SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
OUTFALL
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No. 71R009	REV.
DATE 2021-11-08	0
SCALE Hor : 1:500 m Ver : 1:27.5 m	
REF. No. #	
JWC. No.	
OUTFALL	

Appendix E: Assessor Qualifications

Assessor Qualifications

Heidy Schopf, MES, CAHP – Built Heritage and Cultural Landscape Team Lead -

Ms. Schopf is a Senior Cultural Heritage Specialist at Wood and has worked in the field of Cultural Resource Management since 2007. She is a Professional Member of CAHP. She has worked on a wide variety of projects throughout Ontario, including cultural heritage resources assessments, heritage impact assessments, heritage documentation reports (photographic and 3D/LiDAR), cultural heritage evaluations, strategic conservation plans, HCD studies and plans, heritage feasibility studies, and archaeological assessments. Ms. Schopf has extensive experience applying local, Provincial, and Federal heritage guidelines and regulations to evaluate protected and potential cultural heritage properties. She is skilled at carrying out impact assessments and developing mitigation measures to conserve the heritage attributes of properties where changes are proposed. Ms. Schopf has completed hundreds of cultural heritage projects under a variety of processes, including: Environmental Assessment Act, Planning Act, Ontario Heritage Act, Transit Project Assessment Process, Renewable Energy Approval, and Ontario Energy Board.

Chelsea Dickinson B.A., Cultural Heritage Specialist and Research Archaeologist

(R1194) - Ms. Dickinson has been working in consulting archaeology since 2015.

During this time, Ms. Dickinson has developed a variety of archaeological skills, from background research to Stage 4 excavations laboratory work, and environmental assessments (EA) conducted for the development of wind and solar farms, hydro line corridors and municipal roadway. Ms. Dickinson has had the privilege of working alongside a multitude of First Nation community members while conducting archaeological assessments in both Northern and Southern Ontario. Ms. Dickinson holds an honorary Degree in Near Eastern and Classical Archaeology from Wilfrid Laurier University, and a Post-Graduate Certificate in Geographical Information Systems from Fanshawe College. Ms. Dickinson holds an Applied Research Licence (R1194) from the Ontario MHSTCI.

Appendix F: Limitations

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:
 - a. The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - b. The Scope of Services;
 - c. Time and Budgetary limitations as described in our Contract; and,
 - d. The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in this report were based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.
4. The potential and protected built heritage resources and cultural heritage landscapes at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
5. Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' guidelines. It is possible that unforeseen and undiscovered cultural heritage resources may be present at the Study Area.
6. The utilization of Wood Environment & Infrastructure's services during the implementation of any further archaeological work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained in the report. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
7. This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information or conclusions in the report, is the sole responsibility of such third party. Wood Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.
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V3.3.3

REGIONAL MUNICIPALITY OF NIAGARA
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

Cultural Heritage Assessments

Cultural Heritage Evaluation Report
- Preferred WWTP Site

Cultural Heritage Evaluation Report for 6811 Reixinger Road, City of Niagara Falls, Ontario

South Niagara Falls Wastewater Treatment Plant Site (Phase 2), City of Niagara
Falls, Regional Municipality of Niagara, Ontario

Project: OCUL2001

April 4, 2022

Prepared for:
Niagara Region
1815 Sir Isaac Brock Way, Thorold, Ontario, L2V 4T7

wood.

Cultural Heritage Evaluation Report for 6811 Reixinger Road, City of Niagara Falls, Ontario

South Niagara Falls Wastewater Treatment Plant Site (Phase 2), City of Niagara Falls, Regional Municipality of Niagara, Ontario

PREPARED FOR:

Niagara Region
1815 Sir Isaac Brock Way, Thorold, ON, L2V 4T7

PREPARED BY:

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited
50 Vogell Road, Unit 3, Richmond Hill, ON, L4B 3K6
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April 4, 2022

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Executive Summary

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A.

This report contains the Cultural Heritage Evaluation Report (CHER) for 6811 Reixinger Road. The purpose of this CHER is to determine whether 6811 Reixinger Road has cultural heritage value or interest (CHVI) under Ontario Regulation (O. Reg.) 9/06 of the *Ontario Heritage Act*. The preparation of this CHER was guided by the MHSTCI’s *Heritage Property Evaluation: A Guide to Listing, Researching, and Evaluating Cultural Heritage Property in Ontario Communities* (2006) and the *Standards & Guidelines for Conservation of Provincial Heritage Properties: Heritage Identification and Evaluation Process* (MHSTCI 2014).

The Study Area consists of 6811 Reixinger Road, which is an irregular parcel approximately 108 acres in size located south of Welland River and North of Reixinger Road in the City of Niagara, Ontario. The property includes a farm complex that dates to the 19th century and contains an Ontario Vernacular farm house, two (2) barns, three (3) outbuildings, one Quonset and two (2) precast stave silos. Landscape elements on the property include agricultural fields, a woodlot, a swale, tree lines, pasture trees, fences, circulation routes, works areas, a slurry pit and two wells. Historically, the farm complex was owned by the Dell family in the late 18th century and throughout the 19th century and was actively farmed from the late 18th to early 21st centuries. The 19th century farm house and early 20th century barn on the property have undergone extensive renovations/updates.

The O. Reg. 9/06 evaluation determined that 6811 Reixinger Road has historical/associative value for reasons related solely to the archaeological potential of the property. Given that no other indicators of CHVI were identified, it is concluded that 6811 Reixinger Road is not a heritage property and does not warrant protection under the *Ontario Heritage Act* for reasons related to the buildings or landscape elements on the property. Rather, consultation with a licensed archaeologist is recommended and archaeological assessment per the technical standards defined in the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) is required for this property.

Based on the above, the following recommendations are made:

1. The property at 6811 Reixinger Road was evaluated against O. Reg. 9/06 of the Ontario Heritage Act and found to have CHVI for historical/associative solely related to its potential to yield archaeological resources related to the Dell family and/or Indigenous land use. A licensed archaeologist must be consulted prior to

Cultural Heritage Evaluation Report for 6811 Reixinger Road

any planned land disturbance on the property. Any associated archaeological work should be conducted in accordance with the technical standards defined in the MHSTCI 2011 Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011) and with the Ontario Heritage Act, R.S.O. 1990, c.O.18.

2. Given that the CHVI of 6811 Reixinger Road is solely related to the archaeological potential of the property, no further cultural heritage assessment is recommended for this property. Specifically, an HIA is not recommended since the existing buildings and landscape elements on the property were not found to retain CHVI.
3. This report should be circulated to the MHSTCI, Niagara Region, and Niagara Falls Municipal Heritage Committee (Municipal Heritage Committee) for review and comment.

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Project Personnel

Project Manager:	Heidy Schopf, MES, CAHP
Cultural Heritage Specialists:	Chelsea Dickinson, BA (R1194) Luke Fischer, MA, CAHP
Report Preparation:	Chelsea Dickinson, B.A. (R1194) Luke Fischer, MA, CAHP
Graphics:	Stephen LaBute
Report Reviewer:	Heidy Schopf, MES, CAHP

Acknowledgements

Karla Barboza	Acting Team Lead, Heritage, Ministry of Heritage, Sport, Tourism, and Culture Industries
Kevin DeMille	Heritage Planner, Ontario Heritage Trust
Peggy Boyle CAPH	Planner I, City of Niagara Falls

Abbreviations

CHRA	Cultural Heritage Resource Assessment
CHER	Cultural Heritage Evaluation Report
CHSR	Cultural Heritage Screening Report
CHVI	Cultural Heritage Value or Interest
HIA	Heritage Impact Assessment
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
OHA	Ontario Heritage Act
PHP	Provincial Heritage Property
PPS	Provincial Policy Statement
SCHV	Statement of Cultural Heritage Value

Glossary

Term	Definition
Adjacent lands	Those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan (Government of Ontario 2020).
Built Heritage Resource:	Means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the <i>Ontario Heritage Act</i> , or that may be included on local, provincial, federal and/or international registers (Government of Ontario 2020).
Conserved:	Means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision maker. Mitigative measures and/or alternative

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Term	Definition
Cultural Heritage Landscape:	<p>development approaches can be included in these plans and assessments (Government of Ontario 2020).</p> <p>Means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the <i>Ontario Heritage Act</i>, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms (Government of Ontario 2020).</p>
Heritage Attributes:	<p>Means the principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g. significant views or vistas to or from a protected heritage property) (Government of Ontario 2020).</p>
Protected Heritage Property:	<p>Means property designated under Parts IV, V or VI of the <i>Ontario Heritage Act</i>; property subject to a heritage conservation easement under Parts II or IV of the <i>Ontario Heritage Act</i>; property identified by the Province and prescribed public bodies as provincial heritage property under the <i>Standards and Guidelines for Conservation of Provincial Heritage Properties</i>; property protected under federal legislation, and UNESCO World Heritage Sites (Government of Ontario 2020).</p>
Significant:	<p>In regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the</p>

Term

Definition

Province under the authority of the *Ontario Heritage Act* (Government of Ontario 2020).

1.0 Introduction

1.1 Description and Location of Property

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A and summarized in the table below.

Proposed Project Components	Work Completed by Wood
Phase 1 Sewer Alignment/Construction Shaft Locations	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022a)
Phase 2 Wastewater Treatment Plant	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022b) • Cultural Heritage Evaluation Report for 6811 Reixinger Road (Current Report)
South Thorold Trunk and Blackhorse Sewage Pumping Station	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022c)

This report contains the Cultural Heritage Evaluation Report (CHER) for 6811 Reixinger Road. The purpose of this CHER is to determine whether 6811 Reixinger Road has cultural heritage value or interest (CHVI) under Ontario Regulation (O. Reg.) 9/06 of the *Ontario Heritage Act*. The preparation of this CHER was guided by the MHSTCI’s *Heritage Property Evaluation: A Guide to Listing, Researching, and Evaluating Cultural Heritage Property in Ontario Communities* (2006) and the *Standards & Guidelines for Conservation of Provincial Heritage Properties: Heritage Identification and Evaluation Process* (MHSTCI 2014).

The Study Area consists of 6811 Reixinger Road, which is an irregular parcel approximately 108 acres in size located south of Welland River and North of Reixinger Road in the City of Niagara, Ontario (Figure 1 and Figure 2). The property includes a farm complex that dates to the 19th century and contains an Ontario Vernacular farm house, two (2) barns, three (3) outbuildings, one Quonset and two (2) precast stave silos. Landscape elements on the property include agricultural fields, a woodlot, a swale, tree lines, pasture trees, fences, circulation routes, works areas, a slurry pit and two wells. Historically, the farm complex was owned by the Dell family in the late 18th century and throughout the 19th century and was actively farmed from the late 18th to early 21st centuries. The 19th century farm house and early 20th century barn on the

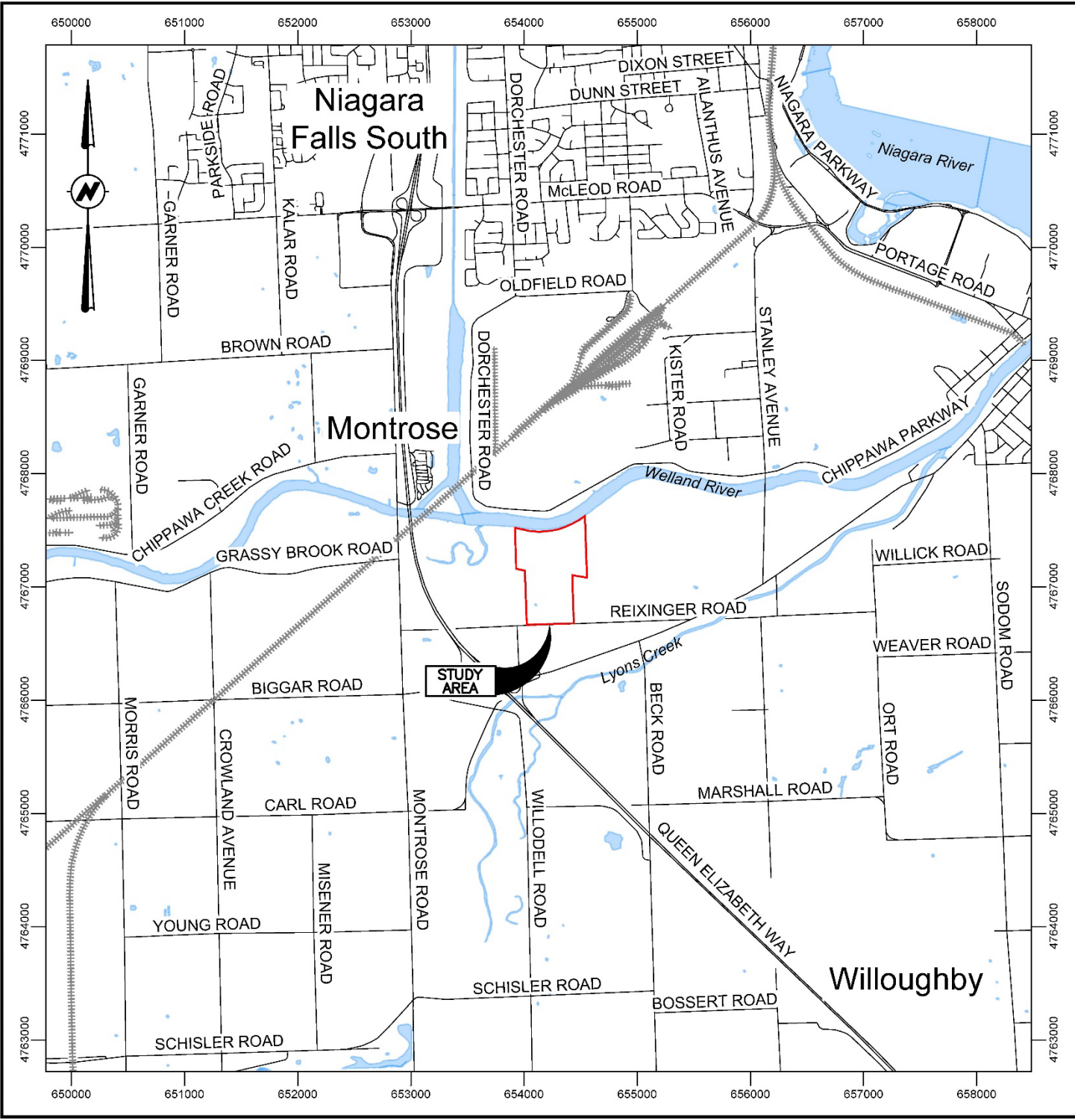
property have undergone extensive renovations/updates.

1.2 Objectives

The tasks completed for the preparation of this CHER include:


- Background research, including consultation of primary and secondary sources and review historical maps/aerial imagery to gain an understanding of the historical evolution of the Study Area;
- Online data collection and submission of agency information requests to the local municipality, Ontario Heritage Trust, and MHSTCI to determine the cultural heritage significance of the Study Area;
- Carry out a field investigation to establish the existing conditions of the Study Area, assess built heritage resources, cultural heritage landscape components, and identify heritage attributes (if warranted); and,
- Create a draft statement of Statement of Significance (if warranted).

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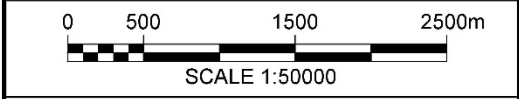


PROJECT:
 CULTURAL HERITAGE EVALUATION REPORT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 (PHASE II)
 6811 REIXINGER ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA


NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.600.
 ALL LOCATIONS ARE APPROXIMATE.
 ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 CANMAP STREETFILES V2008.4.



Niagara Region
 1815 SIR ISAAC BROCK WAY, P.O. BOX 1042
 THOROLD, ONTARIO, L2V 4T7

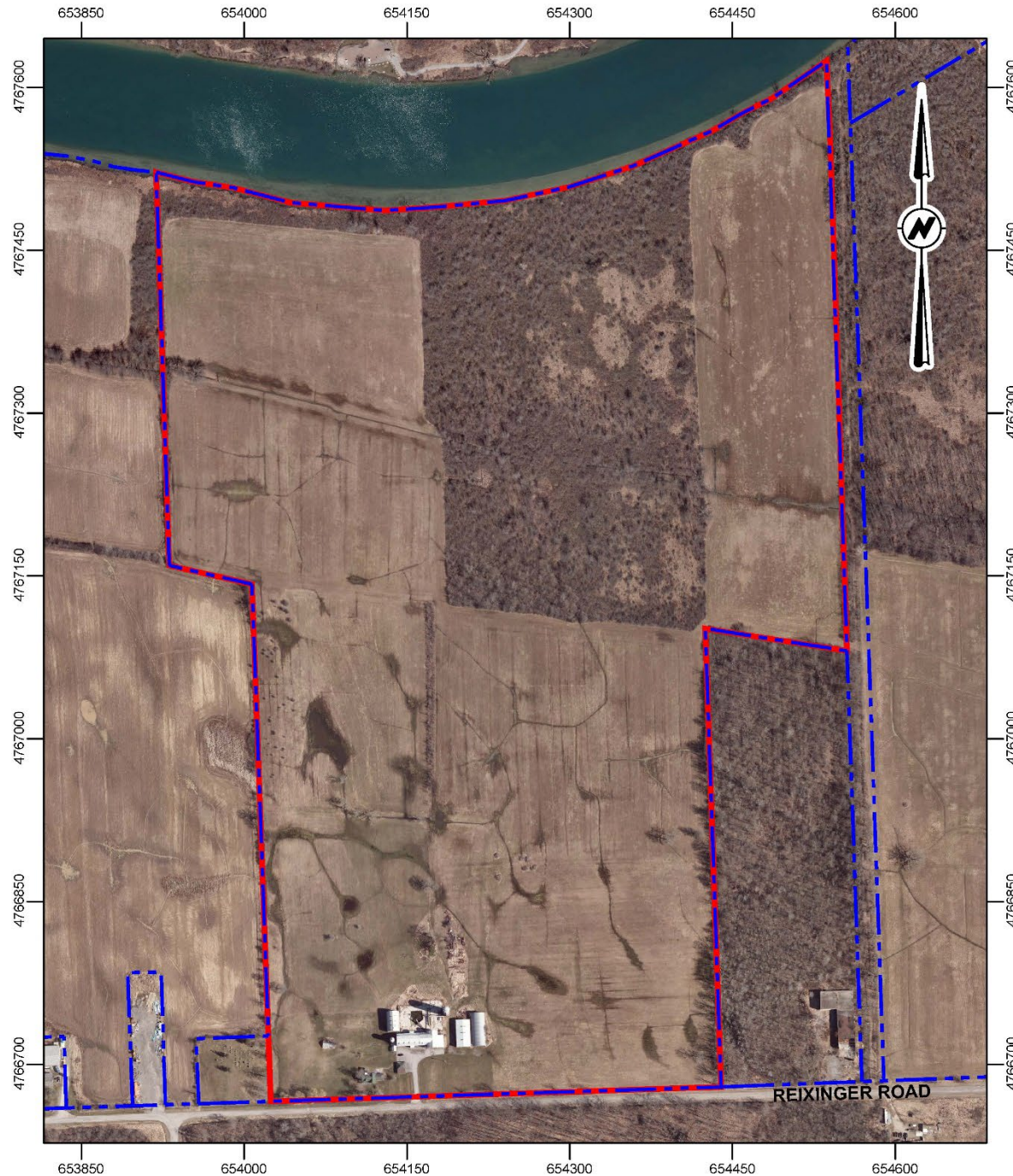


Wood
 Environment & Infrastructure Solutions
 50 VOGELL ROAD, UNIT 3
 RICHMOND HILL, ONTARIO, L4B 3K6
 647-689-4958





DWN BY: SJL	CHK'D BY: CD	DATE: AUG. 31, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.600
REV No: 1		FIGURE No: 1

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PROJECT:
 CULTURAL HERITAGE EVALUATION REPORT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 (PHASE II)
 6811 REIXINGER ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 AERIAL PHOTOGRAPH SHOWING
 THE LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 PROPERTY LINE

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.600.
 ALL LOCATIONS ARE APPROXIMATE.
ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 2018 AERIAL PHOTOGRAPHS BY THE REGION OF NIAGARA;
 CANMAP STREETFILES V2008.4.



Niagara Region
 1815 SIR ISAAC BROCK WAY, P.O. BOX 1042
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Wood
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 647-689-4958



DWN BY: SJL	CHKD BY: CD	DATE: AUG. 31, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.600
REV No: 1		FIGURE No: 2

2.0 Methodology

2.1 Regulatory Requirements

The requirements to consider cultural heritage under the Environmental Assessment process are found in the Provincial Policy Statement (PPS) (Government of Ontario 2020), Environmental Assessment Act (Government of Ontario 1990a), and the Ontario Heritage Act, R.S.O. 1990, c. O.18 (Government of Ontario 1990b).

2.1.1 Provincial Policy Statement

The PPS provides policy direction on matters of provincial interest related to land use planning and development (Government of Ontario 2020:1). The PPS is applicable to the entire Province of Ontario. Under the PPS, the conservation of cultural heritage is identified as a matter of provincial interest. Section 2.6 of the PPS gives direction on the consideration of cultural heritage and archaeology (Government of Ontario 2020:31). Specifically, the following direction is given regarding built heritage resources, cultural heritage landscapes, and protected heritage properties:

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

(Government of Ontario 2020)

2.1.2 Environmental Assessment Act

The Environmental Assessment Act (EA) Act sets out planning and decision-making processes so that potential environmental effects are considered before a project begins (Government of Ontario 2019). The EA Act applies to provincial ministries and agencies, municipalities, and public bodies. Under the EA Act, there are two types of assessments: Individual EAs and Streamlined EAs. Individual EAs are large-scale, complex projects with the potential for significant environmental effects. Streamlined EAs are routine projects that have predictable and manageable environmental effects. This project, the SNFWWTP EA, falls under the Streamlined EA process as a Schedule 'C' MCEA.

The requirement to consider cultural heritage in Class EAs is discussed in the MCEA Manual (2015) where the cultural environment is identified as one of the key considerations in the MCEA process (MEA 2015: B.1.1). Under Section B of the MCEA Manual, the cultural environment includes archaeological resources, areas of archaeological potential, built heritage resources, cultural heritage landscapes, and cultural heritage resources [MEA 2015: B.1.1(4)]. Further, the MCEA Manual [2015: B1.1(4)] gives the following direction regarding the cultural environment:

Significant cultural heritage and archaeological resources features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts, in accordance with provincial and municipal policies and procedures. Cultural heritage features should be identified early in the process in order to determine significant features and potential impacts.

2.1.3 Ontario Heritage Act

The *Ontario Heritage Act*, R.S.O. 1990, c. O.18, gives municipalities and the provincial government powers to protect heritage properties and archaeological sites (Government of Ontario 1990b). The *Ontario Heritage Act* includes two regulations for determining Cultural Heritage Value or Interest (CHVI): O. Reg. 9/06 and O. Reg. 10/06. O. Reg. 9/06 provides criteria to determine the CHVI of a property at a local level while O. Reg. 10/06 provides criteria to determine if a property has CHVI of provincial significance. For this study, O. Reg. 9/06 is used to determine the CHVI of 6811 Reixinger Road. The criteria for determining CHVI under O. Reg. 9/06 are:

1. The property has design value or physical value because it,
 - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,
 - ii. displays a high degree of craftsmanship or artistic merit, or
 - iii. demonstrates a high degree of technical or scientific achievement.
2. The property has historical value or associative value because it,
 - i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,
 - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or
 - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
3. The property has contextual value because it,
 - i. is important in defining, maintaining or supporting the character of an area,
 - ii. is physically, functionally, visually or historically linked to its surroundings, or
 - iii. is a landmark.
4. (Government of Ontario 2006)

2.2 City of Niagara Falls Official Plan

The City of Niagara Falls outlines the long-term objectives and policies of the City with respect to the growth and development of urban lands; the protection of agricultural lands and the conservation of natural heritage areas; and the provision of the necessary

infrastructure (City of Niagara Falls 2019). Policies relevant to cultural heritage are included below:

Section 4 of the Official Plan is entitled “Cultural Heritage Conservation” and outlines that the City of Niagara Falls has a rich historical background and promotes the following measures concerning development on significant heritage properties:

4.19 Development adjacent to and surrounding significant heritage properties shall be designed as to not adversely impact on the character, quality or amenity associated with the heritage resource.

4.21 City-owned heritage properties and buildings shall be conserved, maintained and, where possible, restored in accordance with the policies of this Plan.

2.3 Guidance Documents

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is responsible for the administration of the *Ontario Heritage Act* and has developed checklists, information bulletins, standards and guidelines, and policies to support the conservation of Ontario’s cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological sites.

The MHSTCI Heritage Property Evaluation: A Guide to Listing, Researching, and Evaluating Cultural Heritage Property in Ontario Communities gives guidance on researching and site analysis when completing a property specific heritage evaluation (MHSTCI 2006). In addition, the MHSTCI Heritage Identification & Evaluation Process guide gives detailed direction on the completion of O. Reg. 9/06 evaluations (MHSTCI 2014). Both documents were used to guide the preparation of this CHER.

2.4 Background Research

Background research was carried out during the preparation of this CHER to gain a thorough understanding of the historical context of the Study Area. Primary sources, secondary sources, historical maps, and aerial photographs were consulted, as appropriate, to identify historical themes relevant to the Study Area. Specifically, research regarding the physiography, survey and settlement, 19th century land use, and 20th century land use of the Study Area was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historical maps from 1795, 1862, 1876, 1906, 1925, and 1942 were reviewed. In addition, recent and historic aerial photographs including Google Earth imagery were reviewed to identify changes within, and adjacent to, the Study Area.

The results of the background research are presented in Section 3.0 of this report.

2.5 Information Gathering

Information gathering was carried out to identify known and potential built heritage

resources and cultural heritage landscapes in the Study Area. For this CHER, the City of Niagara Falls, Ontario Heritage Trust, MHSTCI, and Lundy's Lane Historical Society were contacted directly via email and/or phone to confirm the heritage status of the property and gather background information to inform the heritage evaluation.

The results of the information gathering activities are presented in Section 4.1 of this report.

2.6 Field Review

A field review of the Study Area was completed to identify built and landscape elements within 6811 Reixinger Road that may have cultural heritage value or interest (CHVI). During the field review, the 40-year 'rule of thumb' was used to identify property elements with the potential to have CHVI. The 40-year rule is generally accepted by federal and provincial agencies as a preliminary screening measure for CHVI. It should be noted, however, that the 40-year threshold is a guide only and does not imply that all buildings or landscapes of 40 years of age have CHVI. Nor does it exclude buildings or landscapes that are less than 40 years of age and exhibit CHVI. The professional judgement of Wood's Cultural Heritage Specialists were used during the field review to apply the 40-year rule and identify property components with potential CHVI.

The results of the field review are presented in Section 4.2 of this report.

2.7 Cultural Heritage Evaluation

The scope of work for this CHER includes the evaluation of one property: 6811 Reixinger Road. This property was previously identified as potential built heritage resource by Golder Associates Ltd (2019) and by Wood (Wood 2020). To determine the CHVI of the property, an evaluation against O. Reg. 9/06 of the *Ontario Heritage Act* was completed.

The results of the O. Reg. 9/06 evaluation are provided in Section 5.0 of this report.

3.0 Historical Context

In order to gain a thorough understanding of the history of the Study Area, a review of its physiography, survey and settlement, 19th century land use, and 20th century land use was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historically, the Study Area is located within Lots 7-8, Broken Front at Chippewa Creek, Township of Willoughby, Welland County.

3.1 Physiography

The Study Area is situated in the Haldimand Clay Plain physiographic region (Chapman and Putnam 1984). This area is made up of a series of parallel belts that were once submerged in Lake Warren. The highest ground adjoins the Niagara Escarpment. The main part of Welland County is characterized by level topography and poor drainage and several square miles are covered in peat bogs.

The soil survey of Welland County (Acton 1935) indicates that the dominant surface soil types within the Study Area is Niagara Clay and Welland Clay. Niagara Clay has fair to good surface drainage while Welland Clay experiences fair to poor natural drainage. The topography of the Study Area is generally smooth to undulating uplands with some low swales and pond holes (Figure 3).

The Welland River, a tributary of the Niagara River is located to the north of the Study Area.

3.2 Indigenous Land Use

The Study Area is located within the limits of the 1981 Niagara Purchase (Treaty Number 381) boundaries (Government of Ontario 2021). The Niagara Purchase was signed on May 9, 1781, by the British Government and certain Anishinaabe peoples. The purchase covers a four-mile (approximately 6.4 kilometre) strip on the west side of the Niagara River. On May 16, 1928, the Niagara land purchases were designated a National Historic Event. A commemorative plaque is located at 43 Castlereagh Street in Niagara-on-the-Lake, Ontario. (Government of Ontario 2021, The Canadian Encyclopaedia 2021). It is presently acknowledged that the land of the Study Area is situated on the traditional territory Haudenosaunee and Anishinaabe peoples (Brock University 2019). The following, read by Councillor Paul Grenier of the Niagara Regional Council from the June 06, 2019, council meeting includes the present land acknowledgement from the Niagara Region:

“We begin this meeting by acknowledging the land on which we gather is the traditional territory of the Haudenosaunee and Anishinaabe peoples, many of whom continue to live and work here today. This territory is covered by the Upper Canada Treaties and is within the land protected by the Dish with One Spoon Wampum agreement. Today this gathering place is home to many First Nations, Metis, and Inuit peoples and acknowledging reminds us that our great standard of living is directly related to the

resources and friendship of Indigenous people" (Brock University 2019).

3.3 Township Survey and Settlement

Historically, the Study Area was located within the Township of Willoughby in the County of Welland. The County of Welland was formed in 1851 when land from the southern section of Lincoln County separated (Mika & Mika 1983). The county got its name after the Welland River, formally known as Chippawa Creek, which was named after a stream in Lincolnshire, England by John Graves Simcoe (Middleton & Landon 1927). The townships in this county were among the earliest settlements in Upper Canada, made up of United Empire Loyalists who came to the area after the American Revolutionary War (Carter 1984b). The building of the first Welland Canal in the 1820s helped stimulate the growth of settlement in the area (Mika & Mika 1983). The earliest recorded European visitor to the county is Father Louis Hennepin, who explored the area as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page 1876).

Willoughby Township was first settled in 1784 and was surveyed in 1787 (Armstrong 1930). These first settlers were mainly United Empire Loyalists escaping the American Revolution. More groups of pacifist Pennsylvania Dutch families arrived in the 1790s. The 19th century saw increasing settlement, mainly by German-speaking farmers from Switzerland, and other German regions attracted by affordable land (Page 1876). Within Willoughby Township is the site of the Battle of Chippawa, fought between British and American forces on July 5, 1814 (Page 1876).

The closest historic community to the Study Area is the Village of Chippawa, which was established in 1792. The first permanent European settler in Chippawa was Thomas Cummings, who took up land on the south side of the Welland River in 1783. Chippawa housed a post office and was mainly utilized historically for shipbuilding and foundry work (Bond 1964; Jackson 1997).

Dell Cemetery is located at Reixinger Road at Dell Road, adjacent to the southwest corner of the Study Area (CanadaGenWeb Cemetery Project 2020). The cemetery was established in 1851 when Henry Dell Senior, son of Basnett Jr. and Ann (Defields) Dell, deeded one acre of land to the Methodist Episcopal Church. In 1851 Henry Dell deeded on acre of land to the Methodist Episcopal church, to be known as the Dell Chapel & Cemetery (Niagara Falls 2021). The church and cemetery established on the land became known as the Dell Chapel and Cemetery (Find a Grave 2020). The first known burial is associated with Mary Dell, wife of Robert Dell on November 14, 1849. The City of Niagara Falls acquired ownership of the cemetery in 1973 however the cemetery is currently inactive (Bereavement Authority of Ontario 2017).

3.4 Review of Historical Mapping

3.4.1 19th Century Land Use

The Study Area is located within historically within Lots 7-8, Broken Front at Chippawa

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Creek, Township of Willoughby, Welland County. Historical records and mapping were examined to gain an understanding of 18th and 19th century land use in the Study Area. It should be noted that the varied articulations and setback of the Welland River on the various historical maps are a result of realignment of the river and dredging activities that took place throughout the 19th and 20th centuries

A summary of these historical records is presented below in Table 1.

Table 1: Review of 18th and 19th century Historical Mapping

Year	Map Title	Historical Feature(s)
1795 (Figure 4)	1795 Augustus Jones Willoughby Township No. 1 Map (Jones 1795)	<ul style="list-style-type: none"> • Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> ○ Lot 7-8 Broken Front at Chippewa Creek ○ Property owner: Nathaniel. M. Dell • A tributary of Welland River is illustrated transecting the parcel
1862 (Figure 5)	1862 Tremaine's Map of the Counties of Lincoln and Welland (Tremaine 1862)	<ul style="list-style-type: none"> • Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> ○ Lot 7-8 Broken Front at Chippewa Creek • Lot 7, Broken Front at Chippewa Creek <ul style="list-style-type: none"> ○ Estate of W. Miller ○ A tributary of Welland River is illustrated transecting the parcel • Lot 8, Broken Front at Chippewa Creek <ul style="list-style-type: none"> ○ Listed property owner H. Dell ○ Dell Cemetery is located directly to the south of the Study Area ○ Dell Chapel is located directly to the south of the Study Area ○ A tributary of Welland River is illustrated transecting the parcel • A roadway is illustrated adjacent to the Study Area • No other features depicted
1876 (Figure 6)	1876 Illustrated Historical Atlas of Lincoln and Welland Counties (Page. 1876)	<ul style="list-style-type: none"> • Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> ○ Lot 7-8 Broken Front at Chippewa Creek ○ Listed property owners: <ul style="list-style-type: none"> ▪ Edward Dell (Lots 8-10) ▪ Henry DeWitt (Lots 7-8) ○ A roadway is illustrated adjacent to the Study Area ○ One (1) building depicted within Lot 8 ○ One (1) orchard depicted within Lot 8

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Year	Map Title	Historical Feature(s)
		<ul style="list-style-type: none"> ○ Dell Cemetery is located directly at the southwest corner of the Study Area within Lot 8, Broken Front at Chippewa Creek

3.4.2 20th Century Land Use

Land use at the beginning of the 20th century remained largely unchanged in the Township of Willoughby as agricultural land use was still predominant and the process of industrialization ongoing. The 20th century saw dramatic changes as the population of the township increased including city expansion, and residential developments. Aerial imagery from 1934-2020 demonstrates that the property at 6811 Reixinger Road was surrounded predominately by farmland. The surrounding lands remained largely unchanged until 1965/1968. At this point additional roadways and residential houses can be seen (Appendix B: Plate B1-B5).

Historical records and mapping were examined to gain an understanding of 20th century land use in the Study Area. While maps from 1906, 1907, 1908, 1915, 1920, 1925, 1928, 1930, 1938, 1939, and 1942 were examined, it was concluded that historic maps from the years 1906, 1925 and 1942 best illustrated the prominent changes of the Study Area within the early 20th century and its surrounding areas. It should be noted that the varied articulations and setback of the Welland River on the various historical maps are a result of the realignment of the river and dredging activities. A summary of these historical records are presented below in Table 2.

Table 2: Review of 20th Century Historical Mapping

Year	Map Title	Historical Feature(s)
1906 (Figure 7)	1906 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defense 1906)	<ul style="list-style-type: none"> • One (1) wood residence depicted within the Study Area • One (1) Railway depicted 425 m to the northwest of the Study Area • Dell Cemetery is located directly at the southwest corner of the Study Area • Dell Chapel is located directly to the west of the Study Area • Welland River directly north of the Study Area • Reixinger Road directly south of the Study Area • QEW directly to the west of the Study Area
1925 (Figure 8)	1925 Topographic Map of Ontario,	<ul style="list-style-type: none"> • One (1) wood residence depicted within the Study Area

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Year	Map Title	Historical Feature(s)
	Niagara Sheet (Department of Militia and Defense 1925)	<ul style="list-style-type: none"> • One (1) Railway depicted 425 m to the northwest of the Study Area • Dell Cemetery is depicted within the Study Area • Welland River depicted directly north of the Study Area • Reixinger Road directly south of the Study Area • QEW directly to the west of the Study Area
1942 (Figure 9)	1942 Department of National Defence Geographical Section, Canada Sheet 30 (Department of National Defense 1942)	<ul style="list-style-type: none"> • Two (2) wood residence depicted within the Study Area • One (1) Railway depicted 425 m to the northwest of the Study Area • Dell Cemetery is located directly at the southwest corner of the Study Area • Dell Chapel is located directly to the west of the Study Area • Welland River directly north of the Study Area • Reixinger Road directly south of the Study Area • QEW directly to the west of the Study Area

A review of recent aerial photographs was completed to gain an understanding of 20th and 21st century land use in the Study Area. A summary of the review is provided in Table 3. Aerial photographs are provided in (Appendix B).

Table 3: Review of 20th century Historical Records

Year	Features
1934 (Appendix B: Plate B1)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River is located north of the Study Area • The Great Trunk Railway is located north of the Study Area
1954-55 (Appendix B: Plate B2)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River is located north of the Study Area • The Great Trunk Railway is located north of the Study Area • The QEW is depicted east of the Study Area • Residences are located to north of Reixinger Road
1965 (Appendix B: Plate B3)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River is located north of the Study Area

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Year	Features
	<ul style="list-style-type: none"> • The Great Trunk Railway is located north of the Study Area • The QEW is depicted east of the Study Area • Additional residences located to the north of Reixinger Road
1968 (Appendix B: Plate B4)	<ul style="list-style-type: none"> • The configuration of the Study Area is very stable and little change takes place.
1995 (Appendix B: Plate B5)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River located directly north from the Study Area • The Great Trunk Railway transects the Study Area • The QEW is depicted transecting the Study Area • One of the residences to the west of the Study Area has been demolished • The configuration of Dell Road located south of the study area has been altered
Various (2000 to 2020 Online Google Earth Aerial Imagery)	<p>The configuration of the Study Area is very stable and little change takes place.</p>

3.5 Property History

The Study Area is situated is part of Lots 7 and 8, Broken Front at Chippewa Creek, in the former Township of Willoughby in the County of Welland. The 1795 Augustus Jones Willoughby Township No. 1 Map lists an N.M. Dell as the property owner however further review of the Township of Willoughby's first registry book lists a Nathaniel Dell as the patentee, dated October 24, 1795. There is no available census data for Ontario prior to 1825 (Library and Archives Canada 2021).

The *1862 Tremaine's Map of the Counties of Lincoln and Welland* lists the property owners of Lot 7 and 8 as the estate of W. Miller and H. Dell respectively. The 1851 census yielded a single result for a W. Miller within the Township of Willoughby. The search identified William Miller as a 13-year-old male listed alongside is mother (Susana Miller, 43 years of age), father (Jacob Miller, 47 years of age) and his nine siblings aging between 23 and 2 years of age.

Henry Dell Senior, son of Basnett Jr. and Ann (Defields) Dell, petitioned for land as a loyalist soldier in 1796. In 1851 Henry Dell deeded one acre of land to the Methodist Episcopal Church, to be known as the Dell Chapel and Cemetery. The cemetery would be later purchased by the City of Niagara Falls in 1973 (Niagara Falls 2021). The 1842 census yielded one result for Henry Dell Senior however due to the degradation of the upper portion of the document any additional notes pertaining to Henry and his family cannot be deciphered (Library and Archives Canada 1842).

The *1876 Illustrated Historical Atlas of Lincoln and Welland Counties* lists the property owners of Lot 7 and 8 as Henry DeWitt and Edward Dell (Figure 4-Figure 5). The 1861

Cultural Heritage Evaluation Report for 6811 Reixinger Road

and 1871 censuses were reviewed for additional information on Edward Dell and Henry DeWitt. Neither the 1861 nor the 1871 censuses yielded any results for Henry DeWitt. The property owner Edward Dell however was identified in both the 1861 and 1871 censuses. The 1871 census lists Edward Dell as a 47-year-old Episcopal Methodist farmer listed alongside his wife Hannah M. Dell (aged 42 years of age), their seven children whose ages range between 1 and 16 years of age as well as two additional individuals, a female named Charlotte Dell (44-years-old) and a male named Anarehy (84-years-old) (Library and Archives Canada 1861 and 1871).

To establish additional information on the land-use history of the property, the land registry data for Lots 7-8, Broken Front at Chippewa Creek, in the Willoughby, Welland County was reviewed. The current Study Area is located in portions of Lot 7-8, Broken Front at Chippewa Creek, and is comprised of approximately 108 acres.

As previously stated, the land registry data shows that the patent for Lots 7 and 8 at the Broken Front at Chippewa Creek was granted to Nathaniel Dell on October 24, 1795. In 1822, the property included all of Lots 7 and 8 and was discharged by Samuel Dell to Adam Crysler. By 1833, two land grants were issued the first between Adam Crysler to Samuel Dell (April 4, 1833) and the second between Henry Dell Sr. to Samuel Dell (May 18, 1833). Both land grants described the exchange of all of Lots 7 and 8 including, a total of 200 Acres. In 1851, Henry Dell Sr. granted 1 acre of land on Lot 8 to Johnathan Dell, Thomas Dell, Daniel Lambert, William Dell and Peter Dell (Trustees of Methodist Episcopal Church). This land was utilized to form the Dell Chapel and Cemetery. While the Chapel no longer exists the Dell Cemetery remains.

On 12 April 1834 Samuel Dell granted 110 acres of land between Lots 7 and 8 to Frederick Miller. This land would remain with the Miller family until September 17, 1873, when it was sold to Amos S. In 1874, Amos S. would sell the 110 acres of land between Lots 7 and 8 to Henry DeWitt. The land would remain with the DeWitt family until it was sold to Lorenzo Dell and Alice E. Dell in 1887. By 1902 the land would be sold by Lorenzo Dells wife to John Reixinger, Louis A. Reixinger and Frank. E. Reixinger. The land would remain within the Reixinger family until 1956 when it was granted to John D Crawford. In 1990 the land was transferred to his son Robert Crawford (present owner).

Table 4 and Table 5, below, provides a list of ownership for Lot 7-8, Broken Front at Chippewa Creek, Township of Willoughby from 1795 to 1944 and 1795 to 1954, respectively.

Table 4: Land Registry Data for Part of Lot 7, Broken Front at Chippewa Creek

Instrument	Date	Grantor	Grantee	Quantity of Land
1 st Registry Willoughby 1796	24 October 1795	-	Nathaniel Dell (Patentee*)	Lot 7 and 8, 200 Acres, on the Front concession on

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Instrument	Date	Grantor	Grantee	Quantity of Land
				the River Welland,
Patent	24 October 1798	Crown	Nathaniel Dell	All of Lot 7 and 8, 200 Acres
Buy & Discharge	18 May 1822	Samuel Dell	Adam Crysler	All of Lot 7 and 8, 200 Acres
Land Grant	20 March 1833	Adam Crysler	Samuel Dell	All of Lot 7 and 8, 200 Acres
Land Grant	2 April 1833	Henry Dell	Samuel Dell	All of Lot 7 and 8, 200 Acres
Buy & Sell	13 January 1834	Samuel Dell	Frederick Miller	110 Acres, Part of Lot 7 & 8
Will	16 April 1857	Frederick W. Miller	Anna Isabella Miller, his wife	All his estates
Buy & Sell	17 September 1873	Frederick Smith Miller	Amos S.	Inter Alia 110 acres, parts of Lot 7 & 8
Buy & Sell	16 June 1874	Amos S.	Henry DeWitt	Inter Alia 110 acres, parts of Lot 7 & 8 also 8 acres from part of Lot 7
Buy & Sell	18 August 1887	Henry DeWitt, wife	Alice. E. Dell, Lorenzo Dell	Inter Alia 110 acres, parts of Lot 7 & 8 also 8 acres from part of Lot 7
Buy & Sell	10 November 1902	Lorenzo Dell, wife	John Reixinger, Louis A. Reixinger and Frank. E. Reixinger	109 ½ Acres Inter Alia part of lot 7
Grant	7 March 1922	Louis A. Reixinger and	Louis A. Reixinger and	109 ½ Acres Inter Alia part

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Instrument	Date	Grantor	Grantee	Quantity of Land
		Frank. E. Reixinger as executors of John Reixinger	Frank. E. Reixinger	of lot 7 <i>((illegible note attached))</i>
Transfer	June 06, 1990	John D. Crawford Estate	Robert Crawford (Present Owner)	O.L. As in 187188

Table 5: Land Registry Data for Part of Lot 8, Broken Front at Chippewa Creek

Instrument	Date	Grantor	Grantee	Quantity of Land
1 st Registry Willoughby 1796	24 October 1795	n/a	Nathaniel Dell (Patentee*)	Lot 7 and 8, 200 Acres, on the Front concession on the River Welland,
Patent	24 October 1798	Crown	Nathaniel Dell	All of Lot 7 and 8, 200 Acres
Buy & Discharge	23 May 1822	Samuel Dell	Adam Chrysler	All of Lot 7 and 8, 200 Acres
Land Grant	4 April 1833	Adam Chrysler	Samuel Dell	All of Lot 7 and 8, 200 Acres
Land Grant	18 May 1833	Henry Dell Sr. (Eldest brother and heir to Nathaniel Dell)	Samuel Dell	All of Lot 7 and 8, 200 Acres
Buy & Sell	12 April 1834	Samuel Dell	Frederick W. Miller	110 Acres part of Lots 7 and 8
Buy & Sell	14 May 1851	Henry Dell Sr	Johnathan Dell, Thomas Dell, Daniel Lambert, William Dell	1 acre, known as part of W ½ commencing at SE corner of West ½ of Lot

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Instrument	Date	Grantor	Grantee	Quantity of Land
			and Peter Dell (Trustees of Methodist Episcopal Church known as Dells Chapel	
Will	16 April 1857	Frederick W. Miller	Anna Isabella Miller, his wife	All his estates
Will	25 June 1864	Henry Dell Sr	William Dell his son, Edward Dell his son and his wife <i>[illegible name]</i>	8 acres part of W ½, 42 acres part of w 12, ½ of all produce <i>[illegible note attached]</i> on his property for her use during her natural life and the use of his house, and furniture therin.
Buy & Sell	17 September 1873	Frederick S. Miller	Amos S.	Inter Alia part of Lots 7 & 8
Buy & Sell	16 July 1874	Amos S.	Henry DeWitt	Inter Alia part of Lots 7 & 8, 110 Acres
Buy & Sell	18 August 1887	Henry DeWitt	Alice E. Dell & Lorenzo Dell	Inter Alia 110 Acres, Part of Lots 7 & 8,
Mortgage	18 August 1887	Alice E. Dell Lorenzo Dell unmarried	Henry DeWitt	Same as 28
Land Grant	May 6 1891	Adam DeWitt	Richard Dell	Same as 28
Land Grant	25 April 1898	Richard Dell wife	Lorenzo Dell	Inter Alia <i>[illegible note attached]</i>

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Instrument	Date	Grantor	Grantee	Quantity of Land
Buy & Sell	10 November 1902	Lorenzo Dell, wife	John Reixinger, Louis A. Reixinger and Frank. E. Reixinger	109 ½ Acres Inter Alia part of Lot 8
Grant	7 March 1922	Louis A. Reixinger and Frank. E. Reixinger as executors of John Reixinger	Louis A. Reixinger and Frank. E. Reixinger	109 ½ Acres Inter Alia part of lot 8 (<i>illegible note attached</i>)
Probate	6 August 1956	Louis A. Reixinger	John D. Crawford	Inter Alia Part of Lot 8
Grant	1 December 1964	John D. Crawford Executor of Louis A. Reixinger	John D. Crawford	Inter Alia Part of Lot 8
Transfer	June 06, 1990	John D. Crawford Estate	Robert Crawford (Present Owner)	O.L. As in 187188

3.5.1 6811 Reixinger Road

Historically the property is associated with the Dell family, a highly respected name in Niagara, and is directly linked to the Dell Cemetery lands directly to the west of the property (Habermehl 2021; Niagara Falls Museum 2021). The lands that form the Dell Cemetery were donated to Johnathan Dell, Thomas Dell, Daniel Lambert, William Dell and Peter Dell the Trustees of Methodist Episcopal Church by Henry Dell Sr. on May 14, 1851. This land would later be used for the Dell Cemetery and Chapel (Plate 1 and Plate 2). While the Chapel no longer exists, the Cemetery is presently maintained by the City of Niagara Falls and is currently inactive (Bereavement Authority of Ontario 2017).

While there are no archival photographs of the current farm complex located at 6811 Reixinger Road, the Niagara Public Library Archives has several photos documenting the Dell family properties/businesses in the City of Niagara Falls (Plate 3 and Plate 4). While these photographs are not directly applicable to the property at 6811 Reixinger Road it does provide evidence as to the local influence of the Dell family with the City of

Niagara Falls.



Plate 1: Photo of Dell Cemetery on Rexinger Road (Niagara Falls Public Library Archives 1963)



Plate 2: Photograph of the Dell Chapel as seen on Dell Cemetery Information Plaque



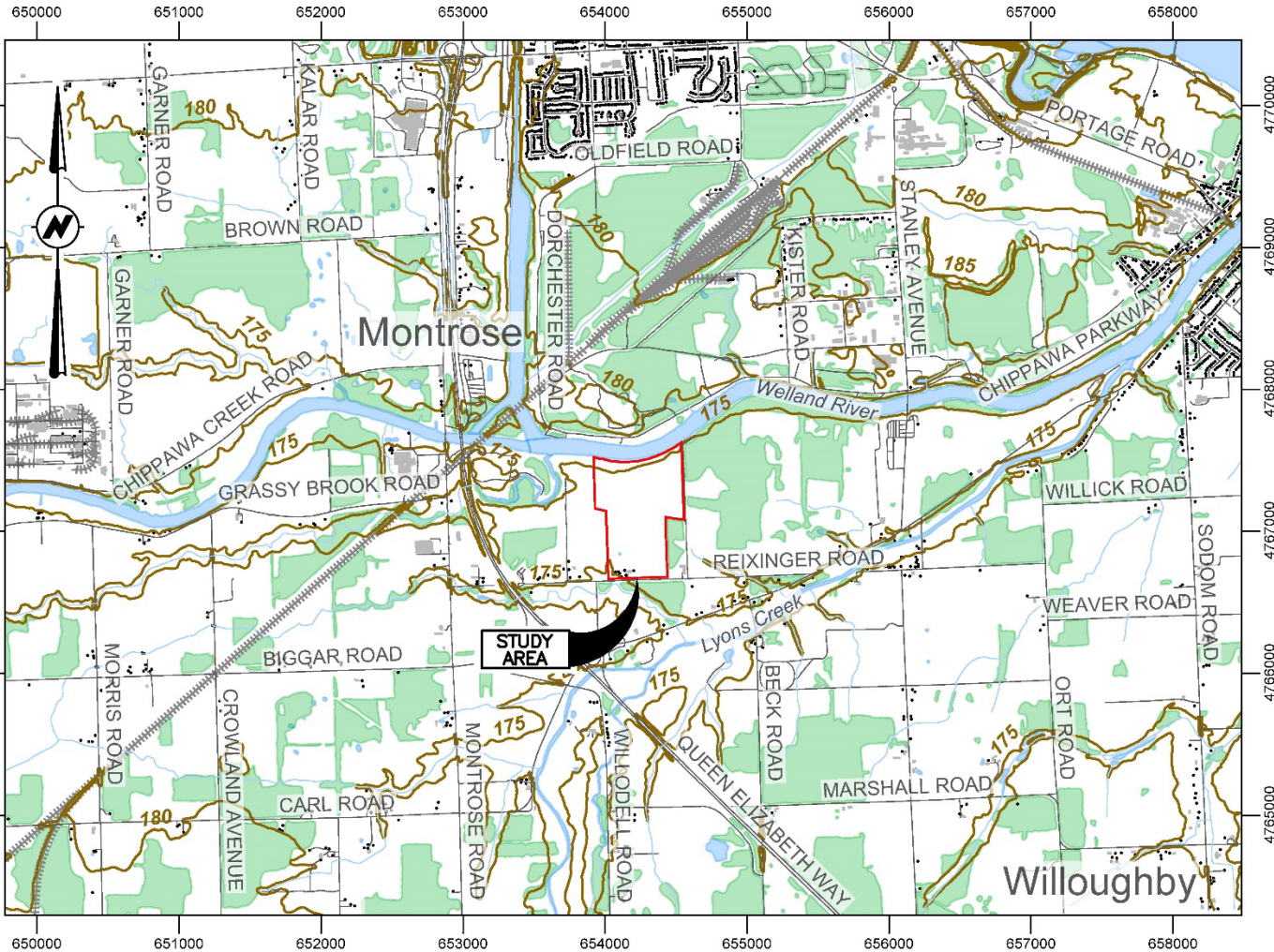
Plate 3: Photo of A E Dell General Merchant Store Main St Niagara Falls (Niagara Falls Public Library Archives 1900)



Plate 4: Photo of Hazel, Ted and Orin Dell in front of their home at Culp St Niagara Falls (Niagara Falls Public Library Archives 1900)

Mr. Robert Crawford, the present owner, was contacted on to gather information on the history of the property. Mr Crawford indicated that the main residence is well over 200 years old and has had three additions since its original construction the first approximately 150 years ago, the second in 1912 and the last addition in 1959. The property was previously utilized as a dairy farm and the barn located on the property was originally built in 1908 and a second barn was built in 1917. In 1959, the barns were remodeled which included the closing off of both structures, during this remodel the interior structure was gutted and altered.

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PROJECT:
 CULTURAL HERITAGE EVALUATION REPORT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 (PHASE II)
 6811 REIXINGER ROAD
 CITY OF NIAGARA, ONTARIO

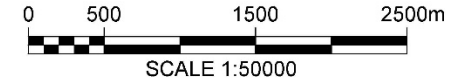
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 TOPOGRAPHIC MAP SHOWING
 THE LOCATION OF THE STUDY AREA

LEGEND:
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NOTES:
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 ORIGINAL PAPER SIZE: 8½ x 11.

REFERENCES:
 ESRI CANADA, "ONTARIO BASIC MAPPING (OBM)"; CANMAP
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Niagara Region
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 THOROLD, ONTARIO, L2V 4T7

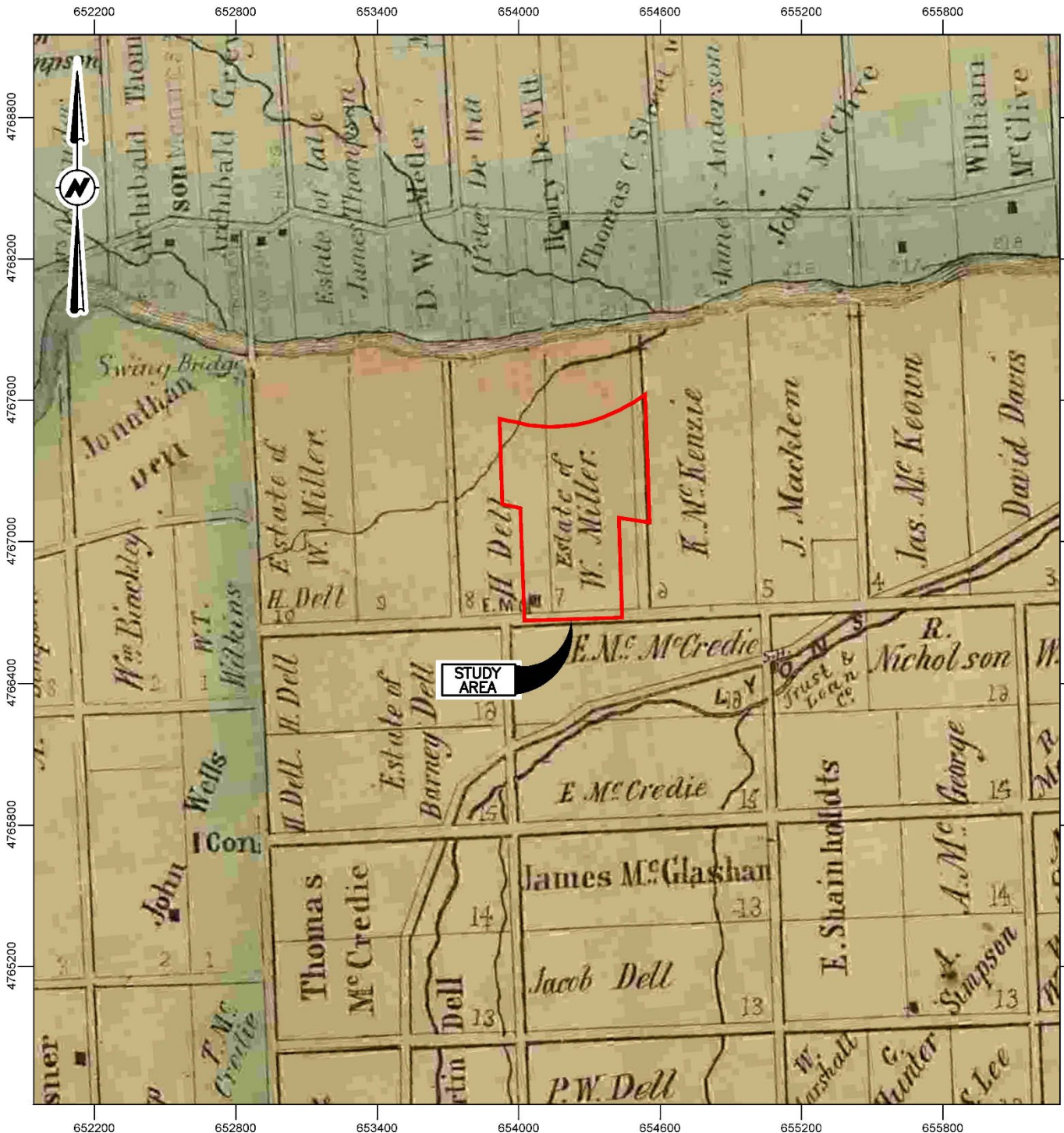


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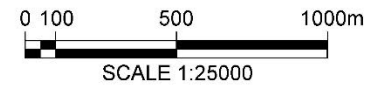
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 CULTURAL HERITAGE EVALUATION REPORT
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TITLE:
 1862 TREMAINE'S MAP OF THE COUNTIES
 OF LINCOLN AND WELLAND, CANADA WEST
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
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REFERENCES:
 G.R. & G.M. TREMAINE, 1862; CANMAP STREETFILES V2008.4.



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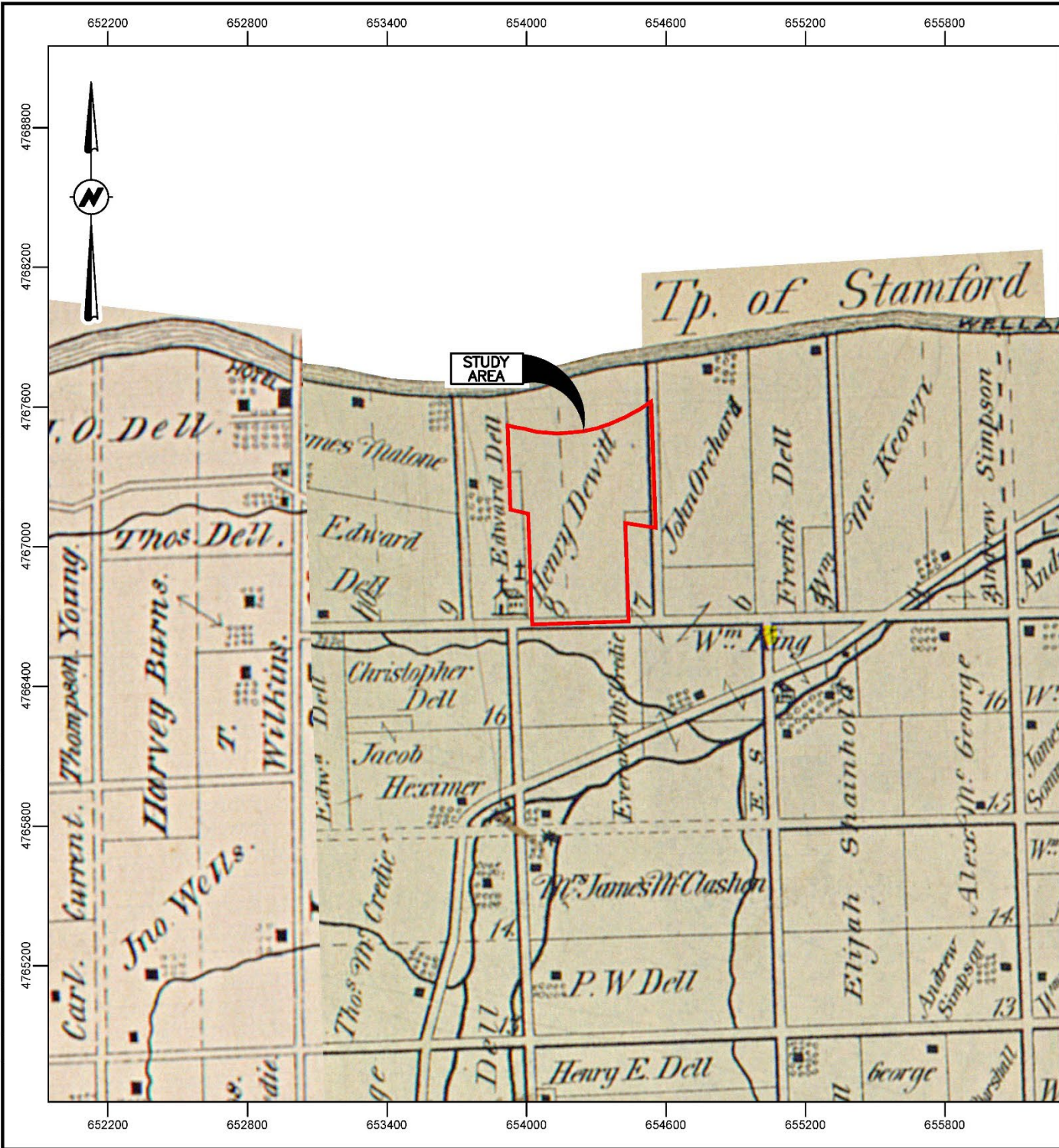


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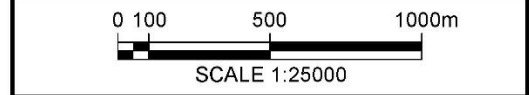


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 THE COUNTIES OF LINCOLN AND WELLAND, ONTARIO
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
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 REFERENCES:
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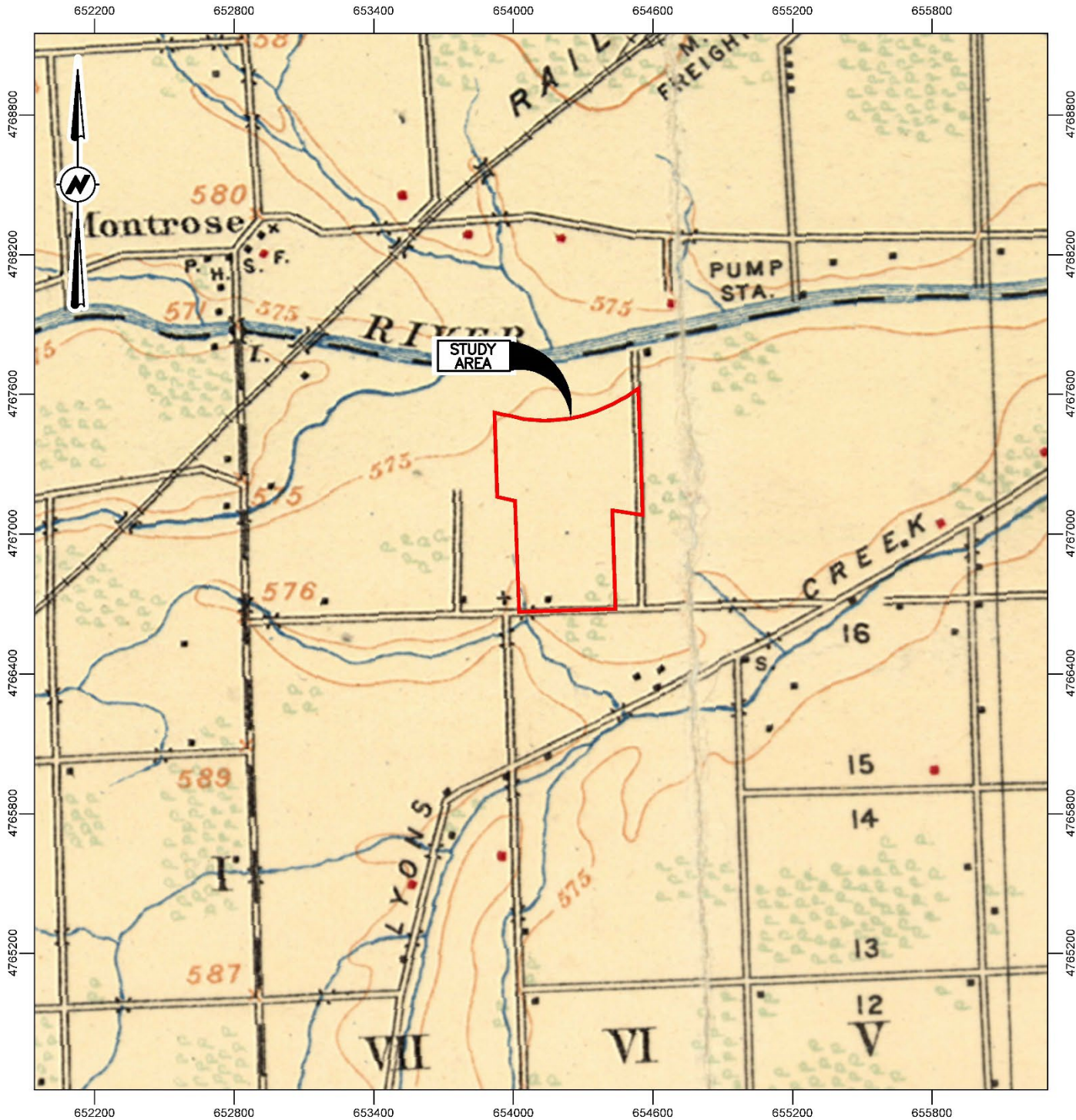


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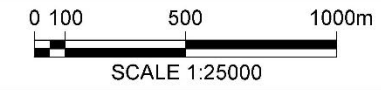


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TITLE:
 1906 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
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 REFERENCES:
 DEPARTMENT OF MILITIA AND DEFENSE, 1906; CANMAP
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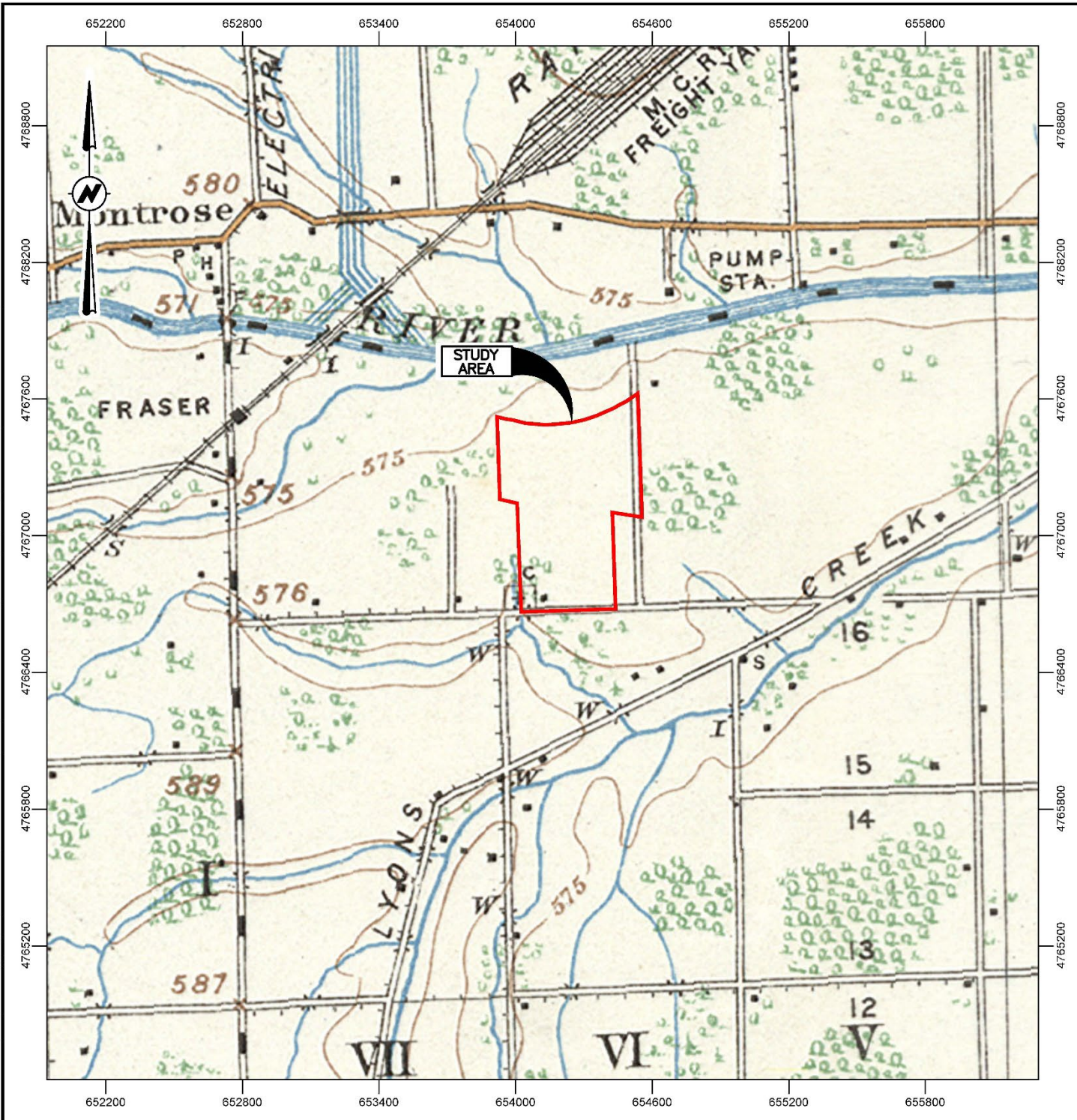


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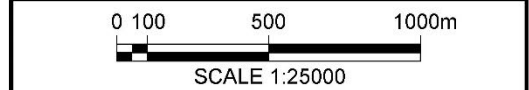


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TITLE:
 1925 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
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LEGEND:
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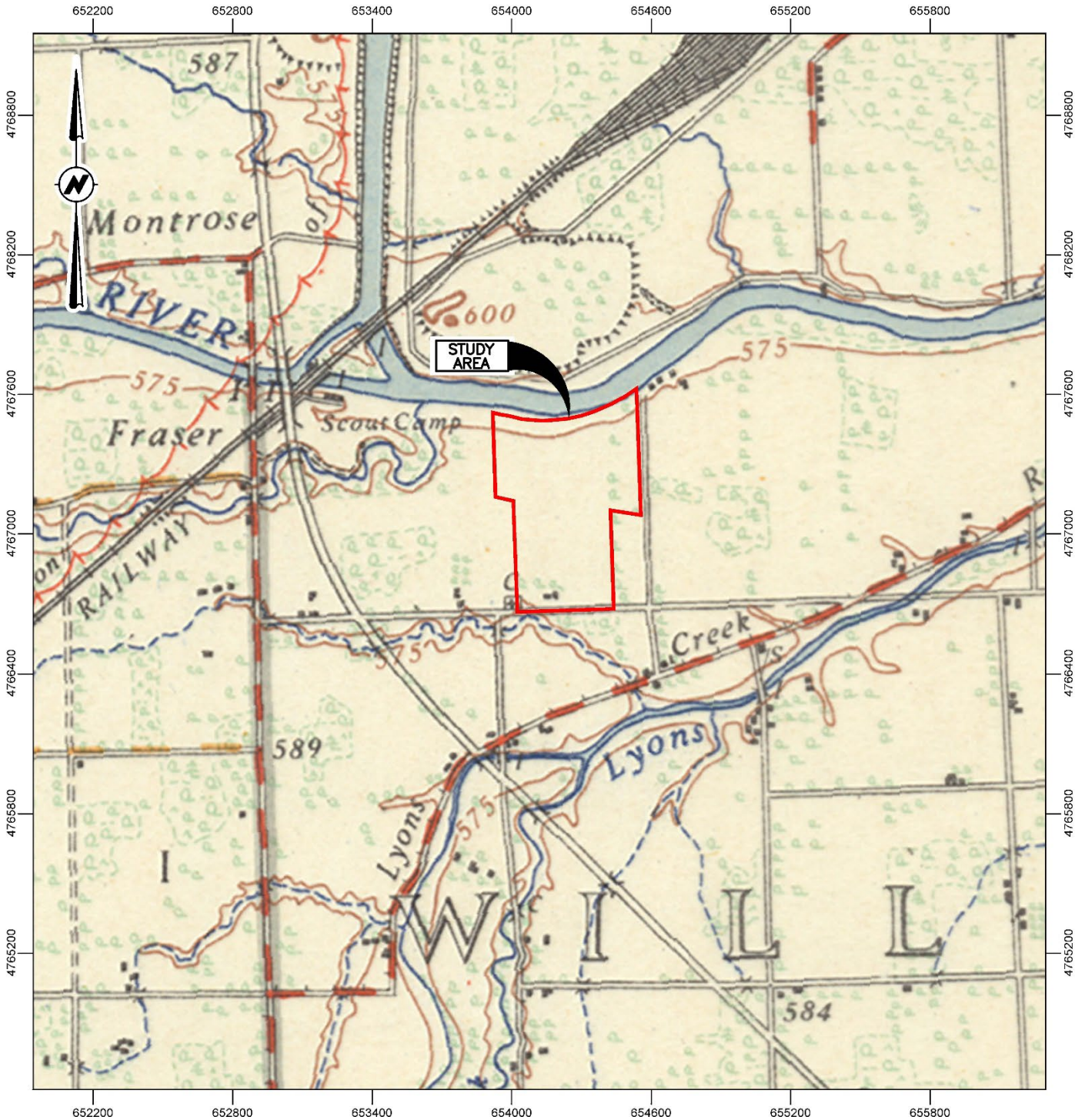


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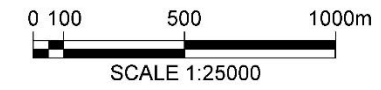


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 1942 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
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4.0 Existing Conditions

4.1 Information Gathering

The City of Niagara Falls, Ontario Heritage Trust, MHSTCI, Lundy's Lane Historical Society, and current property owner were consulted to gather information on the Study Area.

Peggy Boyle, City of Niagara Falls, reported that the Study Area does not include and designated or listed heritage properties. Ms. Boyle did identify that the Study Area, according to the 2005 Heritage Master, has archaeological potential given its proximity to the Welland River.

Kevin DeMille, Natural Heritage Coordinator at the Ontario Heritage Trust, reported that the Study Area does not contain any Trust conservation easements or Ontario Heritage Trust-owned properties. Mr. DeMille also confirmed that there are no properties listed on the Ontario Heritage Trust's register within the Study Area.

Karla Barboza, Acting Team Lead at the MHSTCI, reported that there are no properties designated under the *Ontario Heritage Act* by the Minister within, or adjacent to, the Study Area. Karla Barboza has identified that the Sir Adam Beck 1 Generating Station Complex (SAB1), a Provincial Heritage Property, is located in close proximity to the property.

The Lundy's Lane Historical Society was contacted to gather local historical information on the property. No response was received at the time of writing.

Mr. Crawford, the current property owner, was consulted during the field review completed for this property. Mr. Crawford reported that the core of the main residence is over 200 years old and that three additions were added to the structure (one mid-19th century addition, a 1912 addition, and 1959 addition). Mr. Crawford identified that the property previously functioned as a dairy farm and that the original barns were constructed in 1908 and 1917. Both barns were significantly altered and remodeled in 1959.

4.2 Field Review Results

A field review of the Study Area was completed on July 6, 2021 by Chelsea Dickinson and Luke Fischer, both Cultural Heritage Specialists with Wood. The field review determined that the Study Area contains a farm complex with a one-and-a-half-storey Ontario Vernacular farmhouse and two barns. Both the residence and barns have undergone extensive alterations through the 20th century. The existing conditions of this property are presented below and an evaluation of this property against O. Reg. 9/06 is presented in Section 5.0.

4.2.1 Landscape Setting

The Study Area consists of an irregular parcel approximately 108 acres in size and is bounded by the Welland River to the north, Reixinger Road to the south, the farm

Cultural Heritage Evaluation Report for 6811 Reixinger Road

complex at 6533 Reixinger Road to the east and the farm complex 7001 Reixinger Road and the Dell Cemetery to the west.

The property is accessed by an asphalt driveway that connects Reixinger Road the core of the farm complex, which includes a residence, two barns, three outbuildings, two silos, and one Quonset. The driveway connects to circulation routes and work areas within the property. The main residence is located on the west side of the driveway and is the closest structure to Reixinger Road (Plate 5-Plate 7).

There are a number of landscape elements in the vicinity of the driveway and residence, including a stone pathway that connects the driveway to the side entrance and concrete pad on the southern elevation of the main residence. The main residence is generally surrounded by scattered mature trees and shrubbery on the west and east sides. Additional landscape features on the property include two wells located on the west and south side of the residence and fence lines/gates surrounding the concrete pad to the north of the barn. The property is bordered by a mix of agricultural fields, treelines and woodlots to the east, south and west of the property and Reixinger Road to the south. Other buildings on the property include a large barn with a cross gambrel roof, a barn with a gothic arch roof, one Quonset, three outbuildings, and two precast stave silos (Plate 8 -Plate 39).



Plate 5: View of the property at 6811 Reixinger Road facing northwest from Reixinger Road



Plate 6: View of the property at 6811 Reixinger Road facing northeast from Reixinger Road



Plate 7: View of the property/driveway at 6811 Reixinger Road facing north from Reixinger Road



Plate 8: View of the circulation routes surrounding Outbuilding 3 and the Quonset facing east



Plate 9: Concrete pathway to the main residence from the driveway facing southwest



Plate 11: Concrete located along the

Cultural Heritage Evaluation Report for 6811 Reixinger Road

Plate 10: Concrete well located at the south east side of the residence facing west side of the residence facing southeast



Plate 12: View of the circulation routes surrounding Outbuilding 3 and the Quonset, facing north



Plate 13: View of the circulation routes surrounding the Quonset facing west



Plate 14: View of the circulation route surrounding Outbuilding 3, facing southwest



Cultural Heritage Evaluation Report for 6811 Reixinger Road

Plate 15: View of the circulation routes surrounding Outbuilding 3 and the Quonset, facing east



Plate 16: View of the circulation routes surrounding the Quonset, facing south



Plate 17: View of Outbuilding 3 and the Quonset, facing south



Plate 18: View of Barn 2 with Gothic arch roof



Plate 19: Farm equipment's remnants located to the north of the barn on the concrete pad

Plate 20: View of Barn 1, facing northeast



Plate 21: View of rear concrete pad and farm equipment remnants north of Barn 1 (centre) and Barn 2 (right)



Plate 22: View of Outbuilding 3 and Silo 2 facing southwest



Plate 23: View of the farm complex from rear fields, facing southwest



Plate 24: View of the farm complex from rear fields, facing southeast



Plate 25: View of rear fields showing pasture trees, facing northeast

Cultural Heritage Evaluation Report for 6811 Reixinger Road



Plate 26: View of agricultural fields facing northeast from Reixinger Road



Plate 27: View of rear fields, facing north



Plate 28: View of western treeline, facing south



Plate 29: View of Silo 2 from the rear fields facing south



Plate 30: View of rear fields facing east



Plate 31: View of west treeline, facing south



Plate 32: View of property fields from the rear fields



Plate 33: View of Welland River from the rear fields, facing north



Plate 34: View of Welland River from the rear fields, facing northwest



Plate 35: View of west treeline, facing south



Plate 36: View of west treeline, facing northeast



Plate 37: View of west treeline and property line, facing south-southwest



Plate 38: View of linear swale in rear fields, facing northwest



Plate 39: View of linear swale in rear fields, facing southeast

4.2.2 Residence Exterior

The main residence is a one-and-a-half story Ontario Vernacular residence with an L-shaped plan. Based on the background research, there are three known additions on this residence, the first (Addition A, constructed in 1912) is aligned perpendicular to the original core of the residence and is situated in the centre of the building. The second addition (Addition B, constructed in 1959) is located off the east elevation of Addition A. The last addition (Addition C, constructed approximately 150 years ago) is located off the north elevation of the original core of the residence. For the ease of description, the terms 'original structure', 'Addition A', 'Addition B', or 'Addition C' will be used to describe the building. The residence is oriented in a north/south direction and is clad in a mix of wood clapboard siding and vinyl siding. The roof features a cross gable roof and pronounced, projecting eaves.

The front façade (south elevation) is asymmetrically arranged with the front entrance offset to the right (east) within the original structure. The front façade features: one (1) sash one-over one window on the upper level at the cross gable and two (2) sash two-over-two windows in the lower level of the original structure, two (2) sash-one over one windows on the upper level and one (1) flat bay window on the lower level of Addition A and one (1) sash one-over-one and one (1) sash two-over two windows on Addition B. All windows and doors feature a wood trim, and the front entrance is covered by a wood awning supported by four decoratively carved wooden beams. The majority of the front façade is clad in vinyl clapboard-style siding however the siding directly under the wood awning from the original structure is clad in the original wood clapboard siding (Plate 41-Plate 48).

The east elevation features Addition B and is clad in vinyl clapboard-style siding and features one (1) sash one over one window with wood trim (Plate 49-Plate 51).

The north elevation is likewise clad in vinyl clapboard siding and features Additions A, B and C. Moving left to right, the north elevation is arranged as Additions B, A and C. Addition B features one offset entrance (left) and one (1) cellar style window. Situated on either side of the entrance are two matching lights. Addition A features an offset (right) multi-light door and an exterior chimney clad in red brick laid out in a stretcher bond and one (1) square window on the lower level and two (2) sash one-over-one windows on the upper level. Finally, Addition C features one (1) box window with an offset (right) wooden lintel and a vertical board door with a single square upper panelled light. The north elevation also features a concrete pad in front of Addition B and one (1) well (Plate 52-Plate 55).

The west elevation is clad in vinyl siding and features Addition C and the original structure (moving left to right). The west elevation features one (1) sash two over two window (Addition C) and one (1) quad-light square window (original structure, upper level). Situated in front of the west elevation is one (1) well (Plate 56).



Plate 40: Front façade (south elevation) of 6811 Reixinger Road

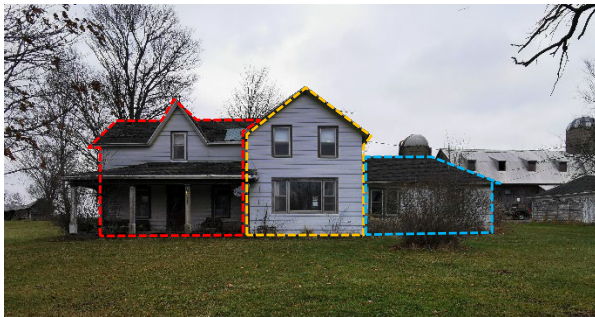


Plate 41: Front Façade (south elevation) of 6811 Reixinger Road. Original structure outlined in red hatching, 'Addition A' outlined in orange hatching; and 'Addition B' outlined in blue hatching.



Plate 42: Sash one-over-one window found in the centre gable of the original structure on the south elevation



Plate 43: Moulded wood cap on the wood pillar supporting the veranda roof (south elevation)



Plate 44: Example of wood footing on a pillar supporting the veranda roof on the south elevation.

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Plate 45: Underside of the covered veranda on the south elevation



Plate 46: Wood pillar with number 6811 located on the front facade



Plate 47: Covered veranda supported by wood pillars, facing southeast



Plate 48: View of Addition B facing northwest



Plate 49: East elevation of 6811 Reixinger Road with Addition B outlined in blue hatching



Plate 50: East elevation of 6811 Reixinger Road



Plate 51: Photo showing north and east elevations of 6811 Reixinger Road



Plate 52: North elevation of 6811 Reixinger Road showing Addition C outlined in green hatching



Plate 53: Concrete pad located on east side of the north elevation



Plate 54: Exterior chimney located on the north elevation of Addition A



Plate 55: North elevation of Addition C



Plate 56: West elevation of 6811 Reixinger Road

4.2.3 Historical Equipment and Fixtures

The Study Area contains pieces of farm equipment located on the north side of the Barn 1. Additional pieces of modern farm equipment are scattered throughout the property

near the circulation pathways (Plate 57-Plate 64).



Plate 57: Metal conveyors located on the north side of Barn 1



Plate 58: Metal conveyors located on the north side of Barn 1



Plate 59: Metal hopper and conveyor attached to Silo 2



Plate 60: Metal conveyor attached to the north elevation of Barn 1



Plate 61: Slurry lagoon and remnant farm equipment on the north side of Barn 1



Plate 62: Farm equipment located in the fields north of Barn 1

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Plate 63: Farm equipment located in the fields located north of Barn 1



Plate 64: Trailer located in the fields north of Barn 1

4.2.4 Other Buildings and Structures

The property contains several buildings in addition to the main residence including two barns, four outbuildings, one Quonset, and two silos.

Located northeast of the main residence is Barn 1, a large barn that was constructed in 1908/1917 and has an L-shaped plan and a cross gambrel roof made of aluminum panels. The building includes multiple entry points and windows on all elevations of the structure and a multitude of lightning rods. The barn is covered in wood vertical board siding on the upper level and a mix of rusticated concrete block/poured concrete foundations. There are five shed style dormers located on the south elevation with square windows. As previously stated, the original barn structure was built in 1908 and a second barn was built in 1917. These structures were later connected in 1959 and their interiors were gutted. A closer examination of the roofing structure indicates where these two structures were closed off (Plate 65-Plate 76).

Located to the southwest of the barn is Outbuilding 1 which has a rectangular plan, low gable roof and a shed style addition. This building is clad in shiplap wood siding and features four points of entry: two garage doors on the eastern elevation, one wood door on the west elevation with metal hinges and one sliding barn door on the south elevation. The south elevation also features one six light window with a wood frame. Outbuilding 2 is located northwest of the main residence and was previously a rectangular structure with a gable roof, this structure has since collapsed but the ruins of the building remain in situ. Outbuilding 3 is located to the east of Barn 1 and is a large rectangular, single-story outbuilding with a clear-span roof construction clad in aluminum siding. Outbuilding 3 is a recent structure (Plate 77-Plate 88).

The property also features a mid-20th century barn with an aluminum gothic arch roof (Barn 2). Barn 2 features a solid concrete foundation clad in concrete blocks and features an aluminum roof and multiple three light windows. The property also includes

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a Quonset, which is a recent structure with a semi-rounded open, canvas roof. The last two structures on the property include precast stave silos (Plate 89-Plate 100).



Plate 65: Front façade (south elevation) of Barn 1 at 6811 Reixinger Road



Plate 66: North elevation of Barn 1 at 6811 Reixinger Road. Silo 2 is located on the left (east), the slurry pit is located in the centre, and Barn 2 is located on the right (west)



Plate 67: South and east elevations of Barn 1 at 6811 Reixinger Road



Plate 68: Barn 1 with vertical board upper siding, rusticate concrete block foundations, and shed style dormers, facing north

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Plate 69: Barn 1 with vertical board siding, rusticated concrete block foundations, facing northeast



Plate 70: Example of wood frame, six light window located on lower level of Barn 1



Plate 71: Barn 1 with upper hayloft



Plate 72: Example of original hinges located on barn doors



Plate 73: Sliding barn doors on the north elevation of Barn 1

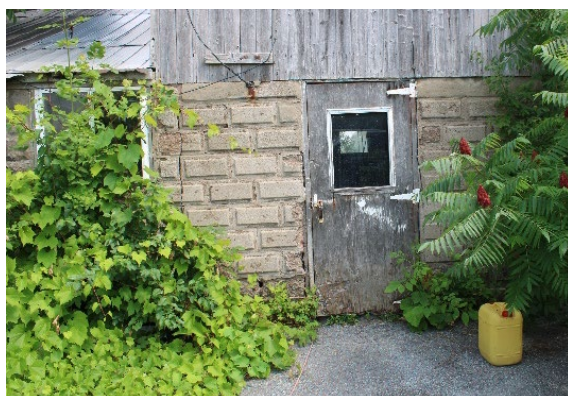


Plate 74: Example of wood door located on Barn 1

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Plate 75: View of rusticated concrete block foundation of Barn 1



Plate 76: Concrete block and rusticated concrete block lower-level walls of Barn 1



Plate 77: East elevation of Outbuilding 1 with shiplap wood siding and dual garage style doors



Plate 78: Southern elevation of Outbuilding 1 with shiplap wood siding



Plate 79: Western elevation of Outbuilding 1 with shiplap wood siding and wooden side door



Plate 80: Northern elevation of Outbuilding 1 with shiplap wood siding sliding barn door



Plate 81: Collapsed Outbuilding 2, south elevation



Plate 82: Collapsed Outbuilding 2, west elevation



Plate 83: Collapsed Outbuilding 2, north elevation



Plate 84: Collapsed Outbuilding 2, east elevation



Plate 85: Outbuilding 3 with aluminium siding, south elevation



Plate 86: Outbuilding 3 with aluminium siding, west elevation

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Plate 87: Interior of Outbuilding 3



Plate 88: Interior of Outbuilding 3



Plate 89: Barn 2 with concrete foundations/blocks and gothic arch aluminium roof, west elevation



Plate 90: Barn 2 with concrete foundations/blocks and gothic arch aluminium roof, east and north elevations



Plate 91: Barn 2 with concrete foundations/blocks and aluminium roofing, south and west elevations



Plate 92: Barn 2 with concrete foundations/blocks and aluminium roofing, north elevation

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Plate 93: Interior of Barn 2



Plate 94: Interior of Barn 2



Plate 95: Open canvas style Quonset shed, facing south



Plate 96: Open canvas style Quonset shed, facing north



Plate 97: Precast stave Silo 1, facing east



Plate 98: Precast stave Silo 1, facing southeast

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Plate 99: Precast stave Silo 2, facing north



Plate 100: Precast stave Silo 2, facing north-northwest

5.0 Evaluation of Cultural Heritage Value or Interest

5.1 Ontario Regulation 9/06

As described in Section 2.1.3, the criteria for determining CHVI of a property at a local level are set out in O. Reg. 9/06 of the *Ontario Heritage Act*. A property may be worthy of designation under the *Ontario Heritage Act* if it meets one or more of criteria of O. Reg. 9/06.

5.2 Evaluation of 6811 Reixinger Road

The property at 6811 Reixinger Road was evaluated against O. Reg. 9/06 to evaluate the property's potential CHVI. Table 6 provides a summary of the evaluation outcome for the property. A detailed evaluation of the property against the criteria of O. Reg. 9/06 is provided in Section 5.2.

Table 6: Evaluation of Cultural Heritage Value or Interest of 6811 Reixinger Road

Criteria		Evaluation Outcome
The property has design value or physical value because it:	Is a rare, unique, representative or early example of a style, type, expression, material or construction method	✗
	Displays a high degree of craftsmanship or artistic merit	✗
	Demonstrates a high degree of technical or scientific achievement.	✗
The property has historical value or associative value because it:	Has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community.	✗
	Yields or has the potential to yield, information that contributes to an understanding of a community or culture	✓
	Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	✗
The property has contextual value because it:	Is important in defining, maintaining or supporting the character of an area	✗
	Is physically, functionally, visually or historically linked to its surroundings	✗
	Is a landmark	✗

5.2.1 Design/Physical Value

The property at 6811 Reixinger Road contains an Ontario Vernacular farmhouse that was that dates to pre-1862. The residence is highly altered and has undergone three major renovations in the late 19th century, 1912, and in 1959 when additions were added to the house. The property also contains two barns (constructed in 1908/1917) that were remodelled in 1959. Other buildings on the property include three (3) outbuildings, one Quonset and two (2) precast stave silos. The outbuildings, Quonset, and silos all appear to be recently constructed. Landscape elements on the property include agricultural fields, a woodlot, a swale, tree lines, pasture trees, fences, circulation routes, works areas, a slurry pit and two wells.

The farmhouse has three additions and all but one section of the original wood siding has been replaced. In addition, the original core of the farmhouse is in deteriorated condition with few original architectural elements remaining. The 1908/1917 barn structures likewise are in deteriorated condition and underwent extensive remodeling in 1959 when they were closed off and the interiors were gutted. While the farmhouse and barn are over 40 years of age, both structures are highly altered and are not rare, unique, representative examples of a farmhouse or barn from the 19th century. The property has been in use as a functioning farm complex with utilitarian buildings, equipment, and landscape elements. No built or landscape elements on the property demonstrate a high degree of craftsmanship/artistic merit or technical/scientific achievement.

Based on the above discussion, it is concluded that the farm complex at 6811 Reixinger Road does not meet criterion 1 (i-iii) of O. Reg. 9/06 and does not have design/physical value.

5.2.2 Historical/Associated Value

The property at 6811 Reixinger Road was purchased by Nathaniel Dell in 1795 and is associated with the Dell family, a highly respected name in Niagara. Henry Dell Sr. donated part of the original extent of the property to the Trustees of Methodist Episcopal Church on May 14, 1851. Located adjacent to 6811 Reixinger Road to the west, this land would later be used for the Dell Cemetery and Chapel. The 6811 Reixinger Road property exchanged hands between a few other landowners before it was purchased by the Reixingers in 1902 and it remained with the Reixinger family until was granted to the John Crawford in 1956. John Crawford was the owner of the property until 1990 when the land was transferred to Robert Crawford, who is the present owner of the property.

Historically, the Dell family is notable as an influential family in Niagara during the early 19th century. However, archival research determined that the historical association with the Dell family is more directly linked to the Dell Cemetery, located immediately west of 6811 Reixinger Road. Historical maps depict a farmhouse on the 6811 Reixinger Road as of 1862. Presumably, this farmhouse is the original core of the main residence extant on the property today. While the core of original farmhouse remains, it is highly altered with few of the original architectural elements remaining. Accordingly, it is concluded

that the Dell Cemetery has a direct and significant historical relationship with the Dell family and Methodist Episcopal Church but the farm complex on 6811 Reixinger Road no longer represents a significant link to this family. Archival research further determined that the Dell family owned several properties in the City of Niagara Falls that may retain a more significant and direct link to this family.

Despite the historical ownership by the Dell family, it is concluded that the farmhouse and barn located at 6811 Reixinger Road have undergone continual renovations/upgrades that has ultimately obscured the historical association with the Dell family. In comparison, the Dell Cemetery, located to the west of the property at 6811 Reixinger Road, has a direct and significant historical association with the Dell family. In addition, the farm complex does not appear to demonstrate or reflect the work or ideas of an architect, artist, builder, designer, or theorist who is significant to the community.

The farm complex at 6811 Reixinger Road is located adjacent to the Welland River, a prominent watercourse in Niagara. In addition, archaeological sites and artifacts have been recovered from this property and the property located immediately to the west. Accordingly, 6811 Reixinger Road yields, and has the potential to yield, information that contributes to an understanding of a community or culture. Specifically, this property may yield early Indigenous archaeological material. The property also has potential to yield historical artifacts related to the farming of this property by the Dell family during the early 19th century.

Based on the above discussion it is concluded that the property at 6811 Reixinger Road does not meet criterion 2. i or 2.iii of O. Reg. 9/06 but does meet criterion 2.ii due to the fact that it has the potential to yield archaeological resources that could contribute to an understanding of Indigenous land use in Niagara and provide early evidence of the life of the Dell family.

Recommendations for conservation and/or future work pertaining to archaeological resources for the property at 6811 Reixinger Road are being addressed under separate Stage 1 Archaeological Assessment (P327-0013-2021) and Stage 1-2 Archaeological Assessments [PIF P348-0106-2021 (Stage 1) and P348-107-2021 (Stage 2)] being conducted concurrently Wood.

5.2.3 Contextual Value

The property at 6811 Reixinger Road is bounded by the Welland River to the north, Reixinger Road to the south, the farm complex at 6533 Reixinger Road to the east and the farm complex 7001 Reixinger Road and the Dell Cemetery to the west. The property surrounding 6811 Reixinger Road is largely populated with comparative properties and agricultural land. The 6811 Reixinger Road farm complex and surrounding lands are a typical mix of agricultural, residential, and rural/industrial land use in the City of Niagara. This area does not appear to have a unique or definable character and 6811 Reixinger Road does not define or maintain the rural/agricultural context of the area. No distinctive sense of historical identity was noted for the area through background research,

information gathering, or during the field review.

The farm complex at 6811 Reixinger Road is not known to have significant physical, functional, visual, or historical links to its surroundings. While the property has been a functioning farm complex since the 19th century, 6811 Reixinger Road does not appear to have significant relationships to the broader landscape since the properties located to the east, west, and south along Reixinger date to the mid-20th century. The exception is the Dell Cemetery, located immediately west of 6811 Reixinger Road. While the cemetery and the farm complex are historically linked through the Dell family, this historical link does not confer a strong sense of place or significant contextual relationship. Further, the farm complex at 6811 is not known to act as a landmark since it is typical of other farm complexes in the area.

Based on the above discussion, it is concluded that the property at 6811 Reixinger Road does not meet criteria 3 (i-iii) of O. Reg. 9/06 and does not have contextual value.

5.3 Statement of Cultural Heritage Value or Interest

The farm complex at 6811 Reixinger Road met one criteria of O. Reg. 9.06 of the *Ontario Heritage Act* for historical/associative reasons solely related to the archaeological potential of the property. Given that no other indicators of CHVI were identified, it is concluded that 6811 Reixinger Road is not a heritage property and does not warrant protection under the *Ontario Heritage Act* for reasons related to the buildings or landscape elements on the property. Accordingly, no statement of cultural heritage value or interest has been prepared. Rather, consultation with a licensed archaeologist is recommended and archaeological assessment prior to land disturbance is required. Archaeological assessment must be conducted in accordance with the technical standards defined in the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) and with the *Ontario Heritage Act*, R.S.O. 1990, c.O.18.

6.0 Recommendations

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A.

This report contains the Cultural Heritage Evaluation Report (CHER) for 6811 Reixinger Road. The purpose of this CHER is to determine whether 6811 Reixinger Road has cultural heritage value or interest (CHVI) under Ontario Regulation (O. Reg.) 9/06 of the *Ontario Heritage Act*. The preparation of this CHER was guided by the MHSTCI’s *Heritage Property Evaluation: A Guide to Listing, Researching, and Evaluating Cultural Heritage Property in Ontario Communities* (2006) and the *Standards & Guidelines for Conservation of Provincial Heritage Properties: Heritage Identification and Evaluation Process* (MHSTCI 2014).

The Study Area consists of 6811 Reixinger Road, which is an irregular parcel approximately 108 acres in size located south of Welland River and North of Reixinger Road in the City of Niagara, Ontario. The property includes a farm complex that dates to the 19th century and contains an Ontario Vernacular farmhouse, two (2) barns, three (3) outbuildings, one Quonset and two (2) precast stave silos. Landscape elements on the property include agricultural fields, a woodlot, a swale, tree lines, pasture trees, fences, circulation routes, works areas, a slurry pit and two wells. Historically, the farm complex was owned by the Dell family in the late 18th century and throughout the 19th century and was actively farmed from the late 18th to early 21st centuries. The 19th century farm house and early 20th century barn on the property have undergone extensive renovations/updates.

The O. Reg. 9/06 evaluation determined that 6811 Reixinger Road has historical/associative value for reasons related solely to the archaeological potential of the property. Given that no other indicators of CHVI were identified, it is concluded that 6811 Reixinger Road is not a heritage property and does not warrant protection under the *Ontario Heritage Act* for reasons related to the buildings or landscape elements on the property. Rather, consultation with a licensed archaeologist is recommended and archaeological assessment per the technical standards defined in the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) is required.

Based on the above, the following recommendations are made:

1. The property at 6811 Reixinger Road was evaluated against O. Reg. 9/06 of the *Ontario Heritage Act* and found to have CHVI for historical/associative solely related to its potential to yield archaeological resources related to the Dell family and/or Indigenous land use. A licensed archaeologist must be consulted prior to any planned land disturbance on the property at 6811 Reixinger Road. Any

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associated archaeological work should be conducted in accordance with the technical standards defined in the MHSTCI 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) and with the Ontario Heritage Act, R.S.O. 1990, c.O.18.

2. Given that the CHVI of 6811 Reixinger Road is solely related to the archaeological potential of the property, no further cultural heritage assessment is recommended for this property. Specifically, an HIA is not recommended since the existing buildings and landscape elements on the property were not found to retain CHVI.
3. This report should be circulated to the MHSTCI, Niagara Region, and Niagara Falls Municipal Heritage Committee (Municipal Heritage Committee) for review and comment.

7.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix D.

8.0 Closure

This report was prepared for the exclusive use of the Niagara Region and is intended to provide a Cultural Heritage Evaluation Report of the Study Area. The Study Area consists of an irregular parcel approximately 108 acres in size located south of Welland River and North of Reixinger Road in the City of Niagara, Ontario and encompasses the agricultural fields and property located at 6811 Reixinger Road.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the cultural heritage assessment conducted by Wood. It is based solely a review of historical information, a property reconnaissance conducted in July 2021 and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the cultural heritage assessment. In evaluating the Study Area, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

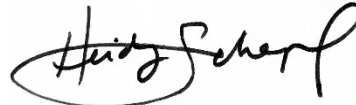
This report is also subject to the further Standard Limitations contained in Appendix E. We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

Wood Environment & Infrastructure,
a Division of Wood Canada Limited



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Wood

- 2022a *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Falls Wastewater Treatment Plant, Phase 1 Sewer Alignment/Construction Shaft Locations, City of Niagara Falls, Ontario*
Draft Report on File with Wood.
- 2022b *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Falls Wastewater Treatment Plant, Phase 2 Site, City of Niagara Falls, Ontario*
DRAFT Report on File with Wood.
- 2022c *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Wastewater Treatment Plant, South Thorold Trunk and Blackhorse Sewage Pumping Station (SPS), Cities of Niagara Falls and Thorold, Ontario*
DRAFT Report on File with Wood.

Appendix A: Summary of Cultural Heritage Assessments

Appendix B: Aerial Photographs



Aerial Photograph
Dated: 1934
Cultural Heritage Assessment Report SNFWWTP (Phase 2)
Plate: B1



LEGEND

 Study Area



Aerial Photograph
Dated: 1954/55
Cultural Heritage Assessment Report SNFWWTP (Phase 2)
Plate: B2

wood.



LEGEND

 Study Area



Aerial Photograph
Dated: 1965
Cultural Heritage Assessment Report SNFWWTP (Phase 2)
Plate: B3

wood.



LEGEND
Study Area

Aerial Photograph
Dated: 1968

Cultural Heritage Assessment Report SNFWWTP (Phase 2)
Plate: B4



wood.



LEGEND

 Study Area



Aerial Photograph
Dated: 1995
Cultural Heritage Assessment Report SNFWWTP (Phase 2)
Plate: B5

wood.

Appendix C: Information Gathering

SECTION 1: CORRESPONDENCE WITH THE CITY OF NIAGARA FALLS

Email correspondence with the City of Niagara Falls regarding the Study Area is provided on the following pages.

From: [Peggy Boyle](#)
To: [Dickinson, Chelsea](#)
Cc: [Schopf, Heidi](#); [Suzanne Anderson](#)
Subject: RE: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER
Date: Tuesday, August 31, 2021 2:43:48 PM
Attachments: [image001.png](#)
[image002.png](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hi Chelsea,
My apologies for not responding sooner.

I believe my comments will be similar to my comments of last November in that there are no designated or listed heritage properties within the study area.
One additional comment may be that the area has some archaeological potential as noted in the Heritage Master Plan done in 2005 for the City given its proximity to the Welland River.
These are my comments.

Regards,

Peggy

Peggy Boyle CAPH | Planner | Planning, Building & Development | City of Niagara Falls |
4310 Queen Street | Niagara Falls, ON L2E 6X5 | (905) 356-7521 ext 4334 | Fax (905) 356-2354 |
pboyle@niagarafalls.ca

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: Tuesday, August 31, 2021 2:16 PM
To: Peggy Boyle <pboyle@niagarafalls.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>
Subject: RE: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER

Good Afternoon,

I am following up on the below email regarding an information gathering request concerning the *Cultural Heritage Evaluation Report* for 6811 Reixinger Road in the City of Niagara Falls, Ontario.

Any update you could provide would be greatly appreciated.

Thanks,
Chelsea

From: Dickinson, Chelsea
Sent: Tuesday, May 18, 2021 2:35 PM
To: Peggy Boyle <pboyle@niagarafalls.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>

Subject: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER

Good Afternoon,

Wood was retained by the Niagara Region to complete a *Cultural Heritage Evolution Report* for 6811 Reixinger Road as part of the Schedule "C" MCEA Schedule for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) in the City of Niagara Falls, Ontario. To complete the CHER, Wood is looking to confirm the cultural heritage value and status of the property and its adjacent lands. Wood is also seeking any information or background documents regarding this site. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.
Cultural Heritage Technician | Research Archaeologist
Environment and Infrastructure Solutions
Work: (226) 821-2497
chelsea.dickinson@woodplc.com
www.woodplc.com

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SECTION 2: CORRESPONDENCE WITH THE ONTARIO HERITAGE TRUST

Email correspondence with the Ontario Heritage Trust (OHT) regarding the Study Area is provided on the following pages.

From: [Kevin DeMille](#)
To: [Dickinson, Chelsea](#)
Cc: [Schopf, Heidi](#)
Subject: Re: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER
Date: Friday, May 21, 2021 8:40:00 AM
Attachments: [image001.png](#)
[image002.png](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Good morning Chelsea,

Thank you for your information request related to a Cultural Heritage Evaluation Report for 6811 Reixinger Road as part of the Schedule "C" MCEA Schedule for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) in the City of Niagara Falls, Ontario. Your request to verify the presence of OHT heritage properties or easements within or adjacent to the study area has been processed. I've reviewed the study area against our database of OHT easements and properties. We can confirm that the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the study area provided in your map. Additionally, we have reviewed the study area against the Ontario Heritage Act Register. We can confirm that study area and the surrounding lands are not designated or listed under the OHA.

If you have not already done so, I recommend you check the Trust's Plaque Database (an online PDF is available here) <https://www.heritagetrust.on.ca/en/index.php/pages/tools/data-inventories>

to verify the presence of plaques. Additionally, I recommend you contact the local municipality to verify no local heritage properties are present within the identified study area.

As described in Section 23 of the Ontario Heritage Act, the Trust holds and maintains the provincial Ontario Heritage Act Register of properties that have been designated by municipalities under sections 29 and 41 of the Act as well as properties designated under the Act by the Minister. We rely on municipalities to send us information and it is advisable to check with the clerk's office to verify information.

Under Section 27 of the Act (OHA) the clerk of a municipality is required to maintain a local register of all designated properties. Section 27 also states that municipalities may keep a register of property that has not been designated, but that the municipality has determined to be of cultural heritage value or interest. These are often referred to as "listed" properties. These non-designated heritage properties are not reflected in the OHA Register.

Kind regards,

Kevin De Mille

Kevin De Mille

Natural Heritage Coordinator

Telephone: 437-246-5854*NEW

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From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>

Sent: May 18, 2021 2:36 PM

To: registrar <registrar@heritagetrust.on.ca>

Cc: Schopf, Heidi <heidy.schopf@woodplc.com>

Subject: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER

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Good Afternoon,

Wood was retained by the Niagara Region to complete a *Cultural Heritage Evaluation Report* for 6811 Reixinger Road as part of the Schedule "C" MCEA Schedule for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) in the City of Niagara Falls, Ontario. To complete the CHER, Wood is looking to confirm the cultural heritage value and status of the property and its adjacent lands. Wood is also seeking any information or background documents regarding this site. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Cultural Heritage Technician | Research Archaeologist
Environment and Infrastructure Solutions

Work: (226) 821-2497

chelsea.dickinson@woodplc.com

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SECTION 3: CORRESPONDENCE WITH THE MHSTCI

Email correspondence with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) regarding the Study Area is provided on the following pages.

From: [Barboza, Karla \(MHSTCI\)](#) on behalf of [Registrar \(MHSTCI\)](#)
To: [Dickinson, Chelsea](#)
Cc: [Schopf, Heidy](#); [Registrar \(MHSTCI\)](#)
Subject: MHSTCI Response: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER
Date: Thursday, May 20, 2021 9:10:32 AM
Attachments: [image001.png](#)
[image002.png](#)
[SNFWTP_CHER_6811_Reixinger_Information_Gathering_18May2021_DRAFT.pdf](#)
[MHSTCI Response Information Request - South Niagara Falls Wastewater Treatment Plan CHIA for the Wastewater Treatment Plan \(WWTP\) associated sewer alignmentsconstruction shaft locations .msg](#)

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Good morning Chelsea (and Heidy),

I hope this email finds you well.

We are not aware of any provincial heritage properties adjacent to this property. However, the Sir Adam Beck 1 Generating Station **Complex** (SAB1) is in close proximity – see our email from May 2020 attached.

Please note that if the subject lands or parts of the subject lands are owned or controlled by an Ontario Ministry or Prescribed Public Body (PPB) on behalf of the Crown (the list of PPBs is available as O. Reg. 157/10), a Ministry or PPB may have responsibilities under the [Standards and Guidelines for Conservation of Provincial Heritage Properties](#). Let me know if you need any contacts at the Ontario Power Generation and/or The Niagara Parks Commission.

I hope this helps. Let me know if you have any questions.

Regards,
Karla

Karla Barboza MCIP, RPP, CAHP | (A) Team Lead, Heritage
Ministry of Heritage, Sport, Tourism and Culture Industries
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit
T. 416.314.7120 | Email: karla.barboza@ontario.ca

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: May-18-21 2:35 PM
To: Registrar (MHSTCI) <Registrar@ontario.ca>
Cc: Schopf, Heidy <heidy.schopf@woodplc.com>
Subject: Information Request: 6811 Reixinger Road Niagara Falls, Municipal Class EA - CHER

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Good Afternoon,

Wood was retained by the Niagara Region to complete a *Cultural Heritage Evaluation Report* for 6811 Reixinger Road as part of the Schedule "C" MCEA Schedule for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) in the City of Niagara Falls, Ontario. To complete the CHER, Wood is looking to confirm the cultural heritage value and status of the property and its adjacent lands. Wood is also seeking any information or background documents regarding this site. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.
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Appendix D: Assessor Qualifications

Assessor Qualifications

Heidy Schopf, MES, CAHP – Built Heritage and Cultural Landscape Team Lead -

Ms. Schopf is a Senior Cultural Heritage Specialist at Wood and has worked in the field of Cultural Resource Management since 2007. She is a Professional Member of CAHP. She has worked on a wide variety of projects throughout Ontario, including cultural heritage resources assessments, heritage impact assessments, heritage documentation reports (photographic and 3D/LiDAR), cultural heritage evaluations, strategic conservation plans, HCD studies and plans, heritage feasibility studies, and archaeological assessments. Ms. Schopf has extensive experience applying local, Provincial, and Federal heritage guidelines and regulations to evaluate protected and potential cultural heritage properties. She is skilled at carrying out impact assessments and developing mitigation measures to conserve the heritage attributes of properties where changes are proposed. Ms. Schopf has completed hundreds of cultural heritage projects under a variety of processes, including: Environmental Assessment Act, Planning Act, Ontario Heritage Act, Transit Project Assessment Process, Renewable Energy Approval, and Ontario Energy Board.

Henry Cary, Ph.D., CAHP, RPA – Senior Staff Archaeologist –Dr. Henry Cary has over 20 years of public and private-sector experience directing archaeological and cultural heritage projects in urban, rural, Arctic and Sub-Arctic environments in Canada as well as the Republic of South Africa, Italy, and France. His career has included positions as project archaeologist and cultural resource management specialist for Parks Canada's Fort Henry National Historic Site Conservation Program and Western Arctic Field Unit, Heritage Manager for the Town of Lunenburg UNESCO World Heritage Site, and senior-level archaeologist and cultural heritage specialist for CH2M and Golder Associates. He currently holds a Professional Archaeology Licence (P327) issued by the Ontario MHSTCI, is MTO RAQs certified in Archaeology/Heritage and is a member of the Canadian Association of Heritage Professionals (CAHP) and Register of Professional Archaeologists (RPA). His education includes a B.A. in Prehistoric Archaeology and Anthropology from Wilfrid Laurier University, a MA in Historical Archaeology from Memorial University, and a Ph.D. in War Studies from the Royal Military College of Canada. Currently, Henry also holds academic positions as Adjunct Professor of Anthropology at Saint Mary's University and lecturer in Visual & Material Culture at Mount Allison University.

Luke Fischer, MA, CAHP – Cultural Heritage Specialist - Mr. Fischer is a Cultural Heritage Specialist and Senior Archaeologist at Wood who has worked in the Cultural Resource Management field since 2002. He is a professional member of the Canadian Association of Heritage Professionals (CAHP). Mr. Fischer has successfully authored and managed the production of cultural heritage deliverables including Cultural Heritage Evaluation Reports, Heritage Impact Assessments, and Heritage Documentation Reports during his time at Wood. Mr. Fischer has experience applying municipal, Provincial, and Federal heritage guidelines and regulations to evaluate protected and potential cultural heritage properties. Mr. Fischer is familiar with completing cultural heritage projects under a variety of processes, including: Environmental Assessment Act, Planning Act, Ontario Heritage Act, and Transit Project Assessment Process. Mr. Fischer has extensive experience conducting Stage 1 to 4 archaeological assessments

throughout Ontario. In addition to his experience in Ontario, Mr. Fischer has worked as an archaeologist on linear corridor studies in Alberta, British Columbia, and Illinois. Mr. Fischer is a member of the London Advisory Committee on Heritage and holds a professional archaeological license (P219).

Chelsea Dickinson, B.A – Cultural Heritage Specialist | Research Archaeologist -

Ms. Dickinson holds an Honours B.A. Degree in Near Eastern and Classical Archaeology from Wilfrid Laurier University, and a Post-Graduate Certificate in Geographical Information Systems from Fanshawe College, she has been working in the field of archaeological consulting since 2015. Ms. Dickinson holds an Applied Research license (License R1194) in Archaeology from the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries. Ms. Dickinson has conducted all aspects of Stage 1 to 4 archaeological assessments (AAs) throughout Ontario, including environmental assessments (EA) conducted for the development of wind and solar farms, hydro line corridors and municipal roadway improvements. Ms. Dickinson has been the co-author on a multitude of archaeological assessment reports and has experience working on cultural heritage assessment reports, heritage impact assessments, and documentation reports specializing in historical background research spanning across Southern Ontario. Ms. Dickinson has had the privilege of working alongside a multitude of First Nation community members while conducting archaeological assessments in both Northern and Southern Ontario. Ms. Dickinson has experience using high precision GPS technologies, specifically Top Con Hi SR and FC5000 positioning systems, used to map in architectural features, diagnostic artifacts, as well as topographical anomalies and site boundaries. Ms. Dickinson has experience using ArcGIS in addition to Collector for ArcGIS while conducting archaeological assessments.

Appendix E: Limitations

Limitations

1. The work performed in the preparation of the Cultural Heritage Evaluation Report (CHER) and the conclusions presented are subject to the following:
 - a. The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - b. The Scope of Services;
 - c. Time and Budgetary limitations as described in our Contract; and,
 - d. The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in the report are based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.
4. The potential and protected cultural heritage resources encountered at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
5. Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' guidelines. It is possible that built heritage resources and cultural heritage landscape elements not visible from the public realm may be within, or adjacent to the Study Area.
6. The utilization of Wood Environment & Infrastructure's services during the implementation of any further cultural heritage work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained the CHRA. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
7. This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. Wood Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.
8. This report is not to be given over to any third-party other than a governmental entity, for any purpose whatsoever without the written permission of Wood Environment & Infrastructure, which shall not be unreasonably withheld.

V3.3.4

REGIONAL MUNICIPALITY OF NIAGARA
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

Cultural Heritage Assessments

Cultural Heritage Assessment Report
- Preferred Trunk Sewer

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Falls Wastewater Treatment Plant, Phase 1 Sewer
Alignment/Construction Shaft Locations, City of Niagara Falls, Ontario

Project #: OCUL2001

April 4, 2022

Prepared for:
Niagara Region
1815 Sir Isaac Brock Way, Thorold, Ontario, L2V 4T7

wood.

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Falls Wastewater Treatment Plant, Phase 1 Sewer
Alignment/Construction Shaft Locations, City of Niagara Falls, Ontario

Project # OCUL2001

PREPARED FOR:

Niagara Region Water & Wastewater Engineering
1815 Sir Isaac Brock Way, Thorold, Ontario, L2V 4T7

PREPARED BY:

Wood Environment & Infrastructure Solutions, a Division of Wood Canada
Limited
3450 Harvester Road
Burlington, ON, Canada

April 4, 2022

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wood.

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

Executive Summary

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A.

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed Phase 1 Sewer Alignment/Construction Shaft Locations. The Study Area is comprised of a small section of land located south of Welland River and north of Reixinger Road, and runs along the following roadways: Reixinger Road, Montrose Road and Brown Road and finally includes a small section of land within the 6811 Reixinger Road property and a second small section of land running east-west from Montrose Road towards the Welland Canal in the City of Niagara Falls, Ontario. The Study Area encompasses the alignment plus a 50m buffer.

Following the completion of background research, consultation, and a field review, it was determined that there are ten (10) potential and protected heritage properties within the Study Area. Of these one (1) is listed as a National Historic Site/Provincial Heritage Property of Provincial Significance and is designated under Part III of the *Ontario Heritage Act* (Sir Adam Beck I Generating Station Complex) and three (3) (6811 Reixinger Road, Dell Cemetery, and Welland River) were previously identified as having potential cultural heritage value by Golder Associates Ltd (Golder 2019).

The proposed work includes the construction and installation of 15 below grade sewer alignment pipes and eight (8) open cut shaft locations. As a result, there is potential for indirect impacts to one (1) Provincial Heritage Property of Provincial Significance (CHR 5: Sir Adam Beck Generating Station Power Canal) and one potential heritage property (CHR 3: 6811 Reixinger Road). The preliminary impact assessment for the Phase 1 was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) There is potential for indirect impacts to one (1) Provincial Heritage Property of Provincial Significance (CHR 5 – Sir Adam Beck Generating Station Power Canal):
 - a. The location of CHR 5 (Sir Adam Beck Generating Station Power Canal) should be identified on construction mapping so that project personnel are aware of the presence of this Provincial Heritage Property of Provincial Significance, which is adjacent to, the proposed work at Montrose-Shaft-01.

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- b. The proposed work for Montrose-Shaft-01 should be planned in a manner that avoids the Power Canal. Where feasible the proposed work should be contained within 7606 Oakwood Drive.
 - c. If containing work for Montrose-Shaft_01 within 7606 Oakwood Drive is not feasible, then minimize encroachment onto the adjacent Sir Adam Beck Power Canal property. If encroachment is anticipated, then consultation with Ontario Power Generation (OPG) is recommended to determine and obtain any approval or permits. Further cultural heritage studies may be required by OPG, such as a property-specific Heritage Impact Assessment (HIA). If required by OPG, the HIA should be completed during the detailed design of the project.
- 2) Where land disturbance occurs, post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where feasible. There is potential for direct impacts to one (1) potential heritage property, CHL 3 (6811 Reixinger Road) as a result of open cut excavation and property acquisition to accommodate the installation of the Reixinger-Shaft-02 and wastewater pipeline within the property.
 - a. Should direct impacts to this property be required and no other technically feasible options are available, then this property should be evaluated for CHVI in a Cultural Heritage Evaluation Report (CHER).
 - 3) While no indirect or direct impacts are anticipated to the potential heritage properties of CHR 2, CHR 6-CHR 9 it is recommended that they be identified on construction mapping so that project personnel are aware of the presence of potential heritage properties within, and adjacent to, the proposed work.
 - 4) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix D. Should the proposed work be updated or changed, then the impact assessment should be revised to confirm impacts and recommended mitigation measures.

It should be noted that the above recommendations pertain only to impacts related to the Phase 1 component of the project. Recommendations relevant to the Phase 2 component of the project are addressed under a separate cover prepared by Wood. The results and recommendations of the Phase 2 component should be coordinated with the results of the Phase 1 CHAR.

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Abbreviations

CHER	Cultural Heritage Evaluation Report
CHSR	Cultural Heritage Screening Report
CHVI	Cultural Heritage Value or Interest
HIA	Heritage Impact Assessment
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
OHA	Ontario Heritage Act
PHP	Provincial Heritage Property
PPS	Provincial Policy Statement
SCHV	Statement of Cultural Heritage Value

Glossary

Term	Definition
Built Heritage Resource:	Means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the <i>Ontario Heritage Act</i> , or that may be included on local, provincial, federal and/or international registers (Government of Ontario 2020).
Conserved:	Means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (Government of Ontario 2020).
Cultural Heritage Landscape:	Means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces,

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Term	Definition
	views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the <i>Ontario Heritage Act</i> , or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms (Government of Ontario 2020).
Heritage Attributes:	Means the principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g. significant views or vistas to or from a protected heritage property) (Government of Ontario 2020).
Protected Heritage Property:	Means property designated under Parts IV, V or VI of the <i>Ontario Heritage Act</i> ; property subject to a heritage conservation easement under Parts II or IV of the <i>Ontario Heritage Act</i> ; property identified by the Province and prescribed public bodies as provincial heritage property under the <i>Standards and Guidelines for Conservation of Provincial Heritage Properties</i> ; property protected under federal legislation, and UNESCO World Heritage Sites (Government of Ontario 2020).
Significant:	In regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the <i>Ontario Heritage Act</i> (Government of Ontario 2020).

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1.0 Introduction

1.1 Project Context

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage and archaeology staff are depicted in Appendix A and summarized in the table below.

Proposed Project Components	Work Completed by Wood
Phase 1 Sewer Alignment/Construction Shaft Locations	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Current Report)
Phase 2 Wastewater Treatment Plant	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022a) • Cultural Heritage Evaluation Report for 6811 Reixinger Road (Wood 2022b)
South Thorold Trunk and Blackhorse Sewage Pumping Station	<ul style="list-style-type: none"> • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (Wood 2022c)

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed Phase 1 Sewer Alignment/Construction Shaft Locations. The Study Area is comprised of a small section of land located south of Welland River and north of Reixinger Road, and runs along the following roadways: Reixinger Road, Montrose Road and Brown Road and finally includes a small section of land within the 6811 Reixinger Road property and a second small section of land running east-west from Montrose Road towards the Welland Canal in the City of Niagara Falls, Ontario. The Study Area encompasses the alignment plus a 50m buffer (Figure 1 and Figure 2).

The purpose of this CHAR is to establish the historical context of the Study Area, identify known and potential heritage properties through information gathering and fieldwork, and develop an inventory of built heritage resources and cultural heritage landscapes within the Study Area. A preliminary impact assessment and recommended mitigation measures were also prepared.

1.2 Objectives



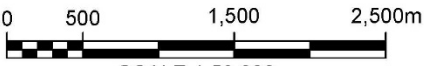


The tasks required for the preparation of this CHAR are:

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

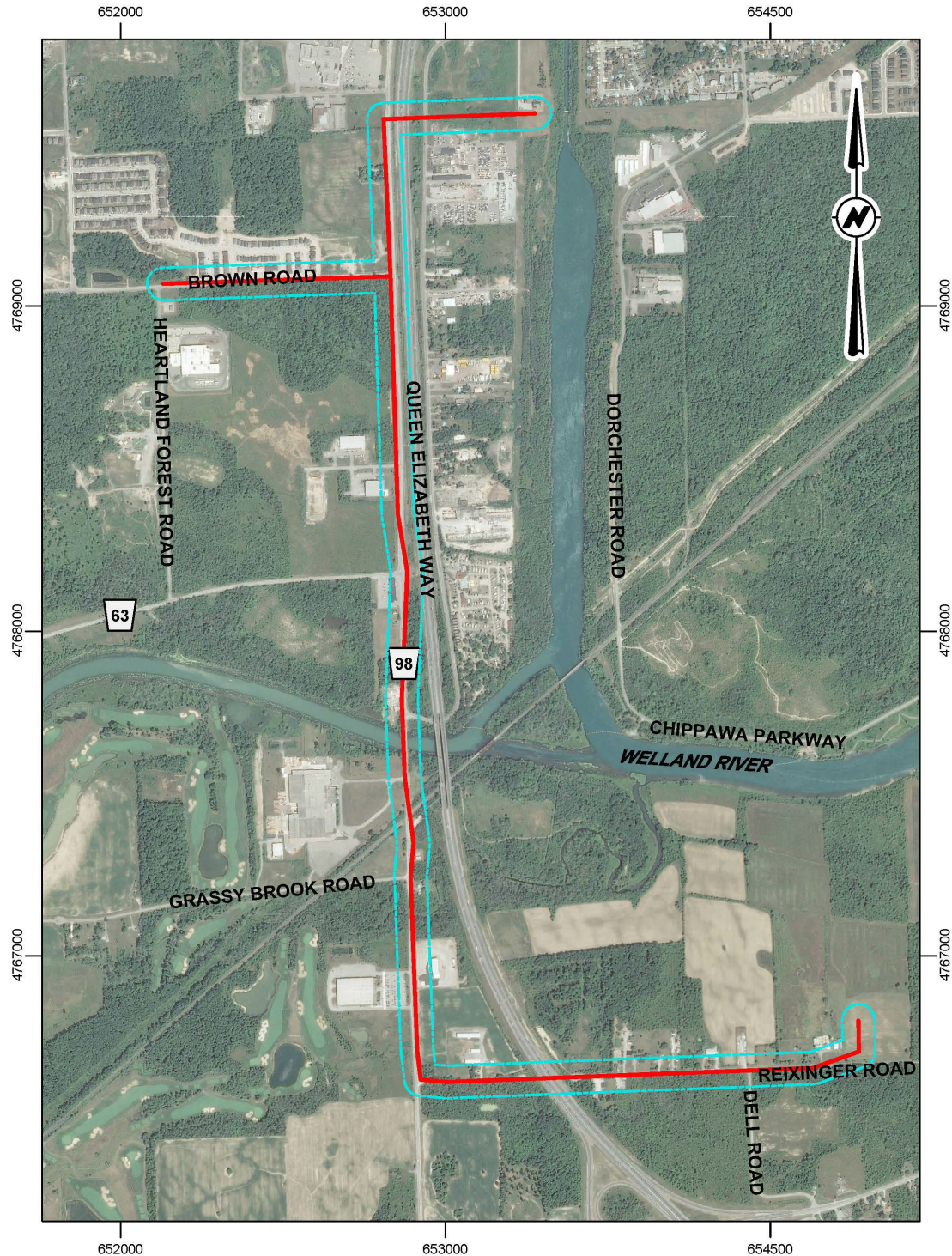
- Background research, including consultation of primary and secondary sources and review historical maps/aerial imagery to gain an understanding of the historical evolution of the Study Area;
- Online data collection and submission of agency information requests to the local municipality, Ontario Heritage Trust, and Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) to determine the presence of protected and potential built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area;
- Carry out a field investigation to establish the existing conditions of the Study Area, confirm the presence of protected heritage properties, and identify potential built heritage resources and/or cultural heritage landscapes;
- Create an inventory of built heritage resources and cultural heritage landscapes. Identify the statement of significance and list of heritage attributes for protected properties. Complete a high-level description of the property and preliminary list of heritage attributes for potential heritage properties; and,
- Complete an impact assessment to identify potential impacts to identified built heritage resources and cultural heritage landscapes that may result from the proposed work. Prepare mitigation measures where impacts are anticipated.

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TITLE: LOCATION OF THE STUDY AREA		
LEGEND:  ALIGNMENT  50m BUFFER		
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 Wood Environment & Infrastructure Solutions 201 KING STREET LONDON, ONTARIO N6A 1C3 519-681-2400		
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DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.200
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PROJECT:

SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLAN
 CULTURAL HERITAGE ASSESSMENT REPORT FOR THE SEWER
 ALIGNMENT/CONSTRUCTION SHAFT LOCATIONS

TITLE:

AERIAL PHOTOGRAPH SHOWING THE
 LOCATION OF THE STUDY AREA

LEGEND:

- ALIGNMENT
- 50m BUFFER

NOTES:

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REFERENCES:

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 PURPOSES ONLY AND NOT TO BE USED FOR MEASUREMENTS.



CLIENT:



**NIAGARA REGION WATER &
 WASTEWATER ENGINEERING**

1815 SIR ISAAC BROCK WAY
 THOROLD, ONTARIO, L2V 4T7



**Wood Environment &
 Infrastructure Solutions**

201 KING STREET
 LONDON, ONTARIO
 N6A 1C3
 519-681-2400

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2.0 Methodology

2.1 Regulatory Requirements

The requirements to consider cultural heritage under the Environmental Assessment process are found in the *Provincial Policy Statement (PPS)* (Government of Ontario 2020), *Environmental Assessment Act* (Government of Ontario 2020), and the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990).

2.1.1 Provincial Policy Statement

The PPS provides policy direction on matters of provincial interest related to land use planning and development (Government of Ontario 2020:1). The PPS is applicable to the entire Province of Ontario. Under the PPS, the conservation of cultural heritage is identified as a matter of provincial interest. Section 2.6 of the PPS gives direction on the consideration of cultural heritage and archaeology (Government of Ontario 2020:31). Specifically, the following direction is given regarding built heritage resources, cultural heritage landscapes, and protected heritage properties:

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved

2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

(Government of Ontario 2020)

2.1.2 Environmental Assessment Act

The *Environmental Assessment Act (EAA)* sets out planning and decision-making processes so that potential environmental effects are considered before a project begins (Government of Ontario 1990b). The *EAA* applies to provincial ministries and agencies, municipalities, and public bodies. Under the *EAA*, there are two types of assessments: Individual EAs and Streamlined EAs. Individual EAs are large-scale, complex projects with the potential for significant environmental effects. Streamlined EAs are routine projects that have predictable and manageable environmental effects. Streamlined EAs typically fall under the Municipal Class Environmental Assessment (MCEA) which are classified in terms of Schedules. The Schedule A, B and C Municipal Class EAs are defined within the MCEA Manual as follows:

Schedule A: These projects generally apply to normal, or emergency operational/maintenance procedures and the resulting effects are usually minimal and, therefore, these projects are pre-approved.

Schedule A+: These projects, similarly to the Schedule 'A', are pre-approved and typically involved minimal effects/impacts. Unlike the

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Schedule 'A' these projects require the public to be notified prior to the planned work.

Schedule B: These projects generally include improvements and minor expansions to existing facilities and there is a potential for some adverse environmental impacts.

Schedule C: These projects generally include the construction of new facilities and/or major expansions to existing facilities. As a result these projects have the potential for significant environmental effects.

(MCEA 2015)

The requirement to consider cultural heritage in Class EAs is discussed in the MCEA Manual (2015) where the cultural environment is identified as one of the key considerations in the MCEA process (MCEA 2015: B.1.1). Under Section B of the MCEA Manual, the cultural environment includes archaeological resources, areas of archaeological potential, built heritage resources, and cultural heritage landscapes (MCEA 2015: B.1.1[4]). Further, the MCEA Manual (2015: B.1.1[4]) gives the following direction regarding the cultural environment:

Significant cultural heritage and archaeological resources features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts, in accordance with provincial and municipal policies and procedures. Cultural heritage features should be identified early in the process in order to determine significant features and potential impacts.

In order to account for anticipated environmental effects to identified built heritage resources and cultural heritage landscapes Wood uses the following approach for each Schedule MCEA:

Schedule A: No additional buffer added to the Study Area for Schedule 'A' MCEA projects given the low potential for impacts to cultural heritage resources.

Schedule A+: No additional buffer added to the Study Area for Schedule 'A+' MCEA projects given the low potential impacts to cultural heritage resources.

Schedule B: Add a 25 m buffer to the Study Area for Schedule 'B' MCEA projects to capture potential adverse impacts to cultural heritage resources.

Schedule C: Add a 50 m buffer to the Study Area for Schedule 'C' MCEA projects to capture potential adverse impacts to cultural heritage resources.

This project falls under the Streamlined EA process as a Schedule 'C' Municipal Class EA. Accordingly, Wood has added a 50m buffer to the Study Area in order to account for the risk of potential adverse impacts to cultural heritage resources.

2.1.3 Ontario Heritage Act

The *Ontario Heritage Act*, R.S.O. 1990, c.018, provides a framework for the protection of cultural heritage resources in the Province. It gives municipalities and the provincial government powers to protect heritage properties and archaeological sites. The *Ontario Heritage Act* includes two regulations for determining Cultural Heritage Value or Interest (CHVI): *Ontario Regulation* (O. Reg.) 9/06 and O. Reg. 10/06. O. Reg. 9/06 provides criteria to determine the CHVI of a property at a local level while O. Reg. 10/06 provides criteria to determine if a property has CHVI of provincial significance.

2.2 City of Niagara Falls Official Plan

The City of Niagara Falls outlines the long term objectives and policies of the City with respect to the growth and development of urban lands; the protection of agricultural lands and the conservation of natural heritage areas; and the provision of the necessary infrastructure (City of Niagara Falls, 2019). Policies relevant to cultural heritage are included below:

Section 4 of the Official Plan is entitled “Cultural Heritage Conservation” and outlines that the City of Niagara Falls has a rich historical background and promotes the following measures concerning development on significant heritage properties:

4.19 Development adjacent to and surrounding significant heritage properties shall be designed as to not adversely impact on the character, quality or amenity associated with the heritage resource.

4.21 City-owned heritage properties and buildings shall be conserved, maintained and, where possible, restored in accordance with the policies of this Plan.

2.3 Guidance Documents

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is responsible for the administration of the *Ontario Heritage Act* and has developed checklists, information bulletins, standards and guidelines, and policies to support the conservation of Ontario’s cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological sites.

The MHSTCI *Ontario Heritage Toolkit* gives guidance and information on the heritage conservation process in Ontario (Government of Ontario 2017). Specifically, the information sheets contained in the *Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* were used to guide the general preparation of this report (Government of Ontario 2006b). *InfoSheet#5: Heritage Impact Assessment and Conservation Plans* was used to guide the assessment of potential impacts resulting from the proposed work.

2.4 Background Research

Background research was carried out during the preparation of this CHAR to gain a thorough understanding of the historical context of the Study Area. Primary sources, secondary sources, historical maps, and aerial photographs were consulted, as appropriate, to identify historical themes relevant to the Study Area. Specifically, research regarding the physiography, survey and settlement, 19th century land use, and 20th century land use of the Study Area was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historical maps from 1833, 1859, 1875, 1916, 1921, 1928, 1934, 1940, 1968 and 1976 were reviewed. In addition, recent aerial photographs and Google Earth imagery were reviewed to identify changes within, and adjacent to, the Study Area.

The results of the background research are presented in Section 3.0 of this report.

2.5 Information Gathering

Information gathering was carried out to identify known and potential built heritage resources and cultural heritage landscapes in the Study Area. For this CHAR, the City of Niagara Falls, Ontario Heritage Trust, and the MHSTCI were contacted directly via email and/or phone to determine the presence of listed, designated, or protected heritage properties within, and adjacent to, the Study Area.

The results of information gathering activities are presented in Section 4.1 of this report.

2.6 Field Review

A field review of the Study Area was completed to identify properties containing protected and potential cultural heritage resources, including both built heritage resources and cultural heritage landscapes. During the field review, the 40-year 'rule of thumb' was used to identify properties with the potential to have CHVI. The 40-year rule is generally accepted by federal and provincial agencies as a preliminary screening measure for CHVI. It should be noted, however, that the 40-year threshold is a guide only and does not imply that all properties of 40 years of age have CHVI. Nor does it exclude properties that are less than 40 years of age and exhibit CHVI. The professional judgement of Wood's Cultural Heritage Specialist was used during the field review to apply the 40-year rule and identify properties with potential CHVI.

The results of the field review are presented in Section 4.2 of this report.

2.7 Inventory of Built Heritage Resources and Cultural Heritage Landscapes

Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area was created. The inventory is presented in Section 4.3 of this report.

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

2.8 Impact Assessment

An assessment was completed to determine impacts—direct or indirect—to identified built heritage resources and cultural heritage landscapes by the proposed work. The impact assessment for this CHAR was prepared using MHSTCI *InfoSheet #5: Heritage Impact Assessment and Conservation Plans* (InfoSheet #5) (2005). The following impacts to cultural heritage resources were considered:

- Destruction of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;
- Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces; and,
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect and archaeological resource.

In addition, mitigation measures outlined in MHSTCI InfoSheet#5 were used to guide the preparation of considered alternatives, mitigation and conservation methods. These include methods of minimizing or avoiding a negative impact to cultural heritage resources, such as:

- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setbacks, settings, and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations; and,
- Buffer zones, site plan control, and other planning mechanisms.

The results of the impact assessment and recommended mitigation measures are contained in Section 5.0 of this report.

3.0 Historical Context

3.1 Introduction

In order to gain a thorough understanding of the history of the Study Area, a review of its physiography, survey and settlement, 19th century land use, and 20th century land use was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historically, the Study Area is located within Lots 186-187, 197-198, and 209-210 in the Township of Stamford, Lot 1 Broken Front at Chippewa Creek, Township of Crowland and Lots 8-10 Broken Front at Chippewa Creek, Township of Willoughby, Welland County.

3.2 Physiography

The Study Area is situated in the Haldimand Clay Plain physiographic region (Chapman and Putnam 1984). This area is made up of a series of parallel belts that were once submerged in Lake Warren. The highest ground adjoins the Niagara Escarpment. The main part of Welland County is characterized by level topography and poor drainage and several square miles are covered in peat bogs.

The *Soil Survey of Welland County* (Acton 1935) indicates that the dominant surface soil types within the Study Area is Niagara Clay and Welland Clay. Niagara Clay has fair to good surface drainage while Welland Clay experiences fair to poor natural drainage. The topography of the Study Area is generally smooth to undulating uplands with some low swales and pond holes.

The Welland River, a tributary of the Niagara River transects the southern portion of the Study Area.

3.3 Indigenous Land Use

The Study Area is located within the limits of the 1981 Niagara Purchase (Treaty Number 381) boundaries (Government of Ontario 2021). The Niagara Purchase was signed on May 9, 1781, by the British Government and certain Anishinaabe peoples. The purchase covers a four-mile (approximately 6.4 kilometre) strip on the west side of the Niagara River. On May 16, 1928, the Niagara land purchases were designated a National Historic Event. A commemorative plaque is located at 43 Castlereagh Street in Niagara-on-the-Lake, Ontario. (Government of Ontario 2021, The Canadian Encyclopaedia 2021). It is presently acknowledged that the land of the Study Area is situated on the traditional territory Haudenosaunee and Anishinaabe peoples (Brock University 2021a). The following, read by Councillor Paul Grenier of the Niagara Regional Council from the June 06, 2019, council meeting includes the present land acknowledgement from the Niagara Region:

“We begin this meeting by acknowledging the land on which we gather is the traditional territory of the Haudenosaunee and Anishinaabe peoples,

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many of whom continue to live and work here today. This territory is covered by the Upper Canada Treaties and is within the land protected by the Dish with One Spoon Wampum agreement. Today this gathering place is home to many First Nations, Metis, and Inuit peoples and acknowledging reminds us that our great standard of living is directly related to the resources and friendship of Indigenous people."

(Brock University 2019)

3.4 Township Survey and Settlement

Historically, the Study Area is located within the former Townships of Willoughby, Crowland, and Stamford, Welland County. The County of Welland was formed in 1851 when land from the southern section of Lincoln County separated (Mika & Mika 1983). The county got its name after the Welland River, formally known as Chippawa Creek, which was named after a stream in Lincolnshire, England by John Graves Simcoe (Middleton & Landon 1927). The townships in this county were among the earliest settlements in Upper Canada, made up of United Empire Loyalists who came to the area after the American Revolutionary War (Carter 1984). The building of the first Welland Canal in the 1820s also helped stimulate the growth of settlement in the area (Mika & Mika 1983). The earliest recorded European visitor to the county is Father Louis Hennepin, who explored the area as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page 1876).

Willoughby Township was first settled in 1784 and was surveyed in 1787 (Armstrong 1930). The first settlers were mainly United Empire Loyalists escaping the American Revolutionary War. More groups of pacifist Pennsylvania Dutch families arrived in the 1790s. The 19th century saw increasing settlement, mainly by German-speaking farmers from Switzerland, and other German regions attracted by affordable land (Page 1876). Within Willoughby Township is the site of the Battle of Chippawa, fought between British and American forces on July 5, 1814 (Page 1876).

Crowland Township was first settled in 1788 and was named after a town in Lincolnshire and a municipal organization was developed in 1803. The first post office was opened in 1841 at Cooks Mill in the store of Luther Boardman. Multiple churches were erected including one Methodist church, one Presbyterian church in 1850, and a Wesleyan and Episcopal Methodist church in 1862. A schoolhouse was erected in the mid-1800s at Cooks Mill on land donated by a Mr. Street (Mika and Mika 1977).

Stamford Township Welland County was first settled in 1784 by Colonel John Butlers Rangers and other United Empire Loyalists. It was originally named Township #2 because it was the second township surveyed in Welland County (Page 1876:14). The Township was first surveyed in 1787 by Philip R. Frey. Portage Road was the first road constructed in the Niagara Peninsula; this road runs from Chippawa to Queenston. Its route follows a trail used by Indigenous people to portage around the Falls in the Niagara River. The townships first settler was Philip George Bender, who settled near

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the Falls who arrived in 1781 (Mika & Mika 1983:39). By the 1790s the township was well populated, largely with Loyalists and other British settlers (Mika & Mika, 1981). In 1793, Governor Simcoe changed the name of Township #2 to Mount Dorchester Township, and the name changed officially to Stamford shortly after (Carter 1984b). In 1831, Drummondville was the first incorporated village in the township.

The closest historic community to the Study Area is the Village of Chippawa which was established in 1792. The first permanent Euro-Canadian settler in Chippawa was Thomas Cummings, who took up land on the south side of the Welland River 1783. Chippawa housed a post office and was mainly utilized historically for shipbuilding and foundry work (Bond 1964; Jackson 1997).

Dell Cemetery is located 220 metres to the west of the Study Area, north of Reixinger Road at Dell Road (CanadaGenWeb Cemetery Project 2020). The cemetery was established in 1851 when Henry Dell Sr. deeded one acre of land to the Methodist Episcopal Church which was known as the Dell Chapel and Cemetery (Find a Grave 2020). The first known burial is associated with Mary Dell, wife of Robert Dell on November 14, 1849. The City of Niagara Falls acquired ownership in 1973, the cemetery is currently inactive (Bereavement Authority of Ontario 2017).

3.5 Review of Historical Mapping

3.5.1 19th Century Land Use

The Study Area is located within Lots 186-187, 197-198, and 209-210 in the Township of Stamford and Lots 1 and 8-10 Broken Front at Chippewa Creek, Township of Willoughby, Lincoln and Welland Counties.

Historical records and mapping were examined to gain an understanding of 19th century land use in the Study Area. A summary of these historical records are presented below in Table 1.

Table 1: Review of 19th Century Historical Mapping

Year	Map Title	Historical Feature (s)																								
1795 (Figure 3)	1795 Augustus Jones Willoughby Township No. 1 Map (Jones 1795)	<ul style="list-style-type: none"> Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> Lot 8-10 Broken Front at Chippewa Creek A tributary of Welland River is illustrated transecting the parcel Property owners are listed but due to degradation of the document and file resolutions the names are primarily illegible, names that are legible are provided below: <ul style="list-style-type: none"> Lot 7 - Jonas N/A Lot 8 - John Thomas Lot 9 – John N/A Lot 10 – James N/A 																								
1797 (Figure 3)	1795 Augustus Jones Stamford Township No. 2 Map (Jones 1797)	<ul style="list-style-type: none"> Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> Lot 1 Broken Front at Chippewa Creek A tributary of Welland River is illustrated transecting the parcel Property owners are listed but due to degradation of the document and file resolutions the names are primarily illegible, names that are legible are provided below: <ul style="list-style-type: none"> Lot 1 – James N/A 																								
1862 (Figure 4)	1862 Tremaine’s Map of the Counties of Lincoln and Welland (Tremaine 1862)	<ul style="list-style-type: none"> Study Area is located within the following Lots and Concessions: <ul style="list-style-type: none"> Lots 186-187, 197-198, 209-211 Stamford Township Lot 1 Broken Front at Chippewa Creek, Township of Crowland Lots 8-10 Broken Front at Chippewa Creek, Township of Willoughby Information concerning the various property owners is included below <table border="1"> <thead> <tr> <th colspan="3">Concession N/A, Stamford Township</th> </tr> <tr> <th>Lot</th> <th>Listed Property Owner</th> <th>Historical Feature(s)</th> </tr> </thead> <tbody> <tr> <td>Lot 186</td> <td>John Howey and Isaac Howey</td> <td>No additional feature(s)</td> </tr> <tr> <td>Lot 187</td> <td>Everat De Witt</td> <td> <ul style="list-style-type: none"> Tributary depicted intersecting parcel </td> </tr> <tr> <td>Lot 197</td> <td>Henry Spencer and John Malone</td> <td> <ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted within 100 m to the south of the Study Area </td> </tr> <tr> <td>Lot 198</td> <td>Isaac Howey</td> <td>No additional feature(s)</td> </tr> <tr> <td>Lot 209</td> <td>Archibald Thompson</td> <td> <ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted 100 m to the west of the study area </td> </tr> <tr> <td>Lot 210</td> <td>Archibald Grey</td> <td> <ul style="list-style-type: none"> Tributary depicted intersecting parcel Three (3) residence depicted within 100 m to the east of the study area </td> </tr> </tbody> </table>	Concession N/A, Stamford Township			Lot	Listed Property Owner	Historical Feature(s)	Lot 186	John Howey and Isaac Howey	No additional feature(s)	Lot 187	Everat De Witt	<ul style="list-style-type: none"> Tributary depicted intersecting parcel 	Lot 197	Henry Spencer and John Malone	<ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted within 100 m to the south of the Study Area 	Lot 198	Isaac Howey	No additional feature(s)	Lot 209	Archibald Thompson	<ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted 100 m to the west of the study area 	Lot 210	Archibald Grey	<ul style="list-style-type: none"> Tributary depicted intersecting parcel Three (3) residence depicted within 100 m to the east of the study area
Concession N/A, Stamford Township																										
Lot	Listed Property Owner	Historical Feature(s)																								
Lot 186	John Howey and Isaac Howey	No additional feature(s)																								
Lot 187	Everat De Witt	<ul style="list-style-type: none"> Tributary depicted intersecting parcel 																								
Lot 197	Henry Spencer and John Malone	<ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted within 100 m to the south of the Study Area 																								
Lot 198	Isaac Howey	No additional feature(s)																								
Lot 209	Archibald Thompson	<ul style="list-style-type: none"> Tributary depicted intersecting parcel One (1) residence depicted 100 m to the west of the study area 																								
Lot 210	Archibald Grey	<ul style="list-style-type: none"> Tributary depicted intersecting parcel Three (3) residence depicted within 100 m to the east of the study area 																								

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Year	Map Title	Historical Feature (s)		
		Lot 211	Estate of James Thompson	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel
		Broken Front at Chippewa Creek, Crowland Township		
		Lot	Listed Property Owner	Historical Feature(s)
		Lot 1	W.t Wilkins and Johnathan Dell	No additional feature(s)
		Broken Front at Chippewa Creek, Willoughby Township		
		Lot	Listed Property Owner	Historical Feature(s)
		Lot 8	H. Dell	<ul style="list-style-type: none"> • Dell Cemetery 100 m to the east of the Study Area • Dell Chapel 100 m to the east of the Study area • Tributary depicted intersecting parcel
		Lot 9	No Listed property owner	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel
		Lot 10	William Miller	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel
		Additional Feature(s):		
		<ul style="list-style-type: none"> • Roadways depicted intersecting the Study Area 		
1876 (Figure 5)	1876 Illustrated Historical Atlas of Lincoln and Welland Counties (Page1876)	Information concerning the various property owners is included below:		
		Concession N/A, Stamford Township		
		Lot	Listed Property Owner	Historical Feature(s)
		Lot 186	Richard Howey and John Howey	<ul style="list-style-type: none"> • One (1) residence and orchard is depicted within 100 m to the west of the Study Area
		Lot 187	Everat De Witt	<ul style="list-style-type: none"> • One (1) residence is depicted within 100 m to the south of the Study Area • Tributary depicted intersecting parcel
		Lot 197	James Walch	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel • One (1) residence depicted within 100 m to the east of the Study Area
		Lot 198	Archie Gray and Lanty McGilly	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel • One (1) residence and orchard are depicted within 100 m to the east of the Study Area
		Lot 209	Archibald Thompson	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel • One (1) residence depicted 500m to the east of the study area
		Lot 210	Archibald Grey	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel • Three (3) residence depicted within 100 m to the east of the study area
		Lot 211	Murray	<ul style="list-style-type: none"> • Tributary depicted intersecting parcel
		Broken Front at Chippewa Creek, Crowland Township		
		Lot	Listed Property Owner	Historical Feature(s)
		Lot 1	T. Wilkins and Thomas Dell	<ul style="list-style-type: none"> • Three (3) residences are depicted within Lot 1 • Five (5) orchards are depicted within Lot 1 • One (1) hotel is depicted within Lot 1
		Broken Front at Chippewa Creek, Willoughby Township		
		Lot	Listed Property Owner	Historical Feature(s)

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

Year	Map Title	Historical Feature (s)	
		Lot 8	Henry Dewitt
		Lot 9	Edward Dell and James Malone
		Lot 10	Edward Dell and James Malone
		Additional Feature(s) <ul style="list-style-type: none"> • Roadways depicted intersecting the Study Area 	

- Dell Cemetery within 100 m to the east of the Study Area
- Dell Chapel within 100 m to the east of the Study area
- Tributary depicted intersecting parcel
- Three (3) residences are depicted within Lots 8-10
- Three (3) orchards are depicted within Lots 8-10

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3.5.2 20th Century Land Use

Land use at the beginning of the 20th century remained largely unchanged in the Study Area as agricultural land use was still predominant and the process of industrialization ongoing. The 20th century saw dramatic changes as the population increased including city expansion, and residential developments. Aerial imagery from 1934-2020 demonstrates that the Study Area was predominately farmland and remained largely unchanged until 1965/1968. At this point additional roadways and residential complexes can be seen (Appendix B).

Historical records and mapping were examined to gain an understanding of 20th century land use in the Study Area. While maps from 1906, 1907, 1908, 1915, 1920, 1925, 1928, 1930, 1938, 1939, and 1942 were examined. It was concluded that historic maps from the years 1906, 1925 and 1942 best illustrated the prominent changes of the Study Area within the early 20th-century and its surrounding areas. A summary of these historical records are presented below in Table 2.

Table 2: Review of 20th Century Historical Mapping

Year	Map Title	Historical Feature (s)
1906 (Figure 6)	1906 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defense 1906)	<ul style="list-style-type: none"> • Nine (9) wood residences depicted within 100 m of the Study Area • One (1) Schoolhouse depicted within 100 m of the Study Area • One (1) brick/stone Blacksmith depicted within 100 m of the Study Area • One (1) Post Office depicted within 100 m to the west of the Study Area • One (1) Hotel depicted within 100 m to the west of the Study Area • One (1) Railway transecting Study Area • Welland River transecting Study Area • Dell Cemetery is located 100 m to the West of the Study Area • Dell Chapel is located 100 m to the West of the Study Area
1925 (Figure 7)	1925 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defense 1925)	<ul style="list-style-type: none"> • Thirteen (13) wood residences depicted within 100 m of the Study Area • One (1) Post Office depicted located within 100 m to the west of the Study Area • One (1) Hotel depicted located within 100 m to the west of the Study Area • One (1) Railway depicted transecting the Study Area

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Year	Map Title	Historical Feature (s)
		<ul style="list-style-type: none"> Welland River depicted transecting Study Area Dell Cemetery is located 100 m to the West of the Study Area Dell Chapel is located 100 m to the West of the Study Area
1942 (Figure 8)	1942 Department of National Defence Geographical Section, Canada Sheet 30 (Department of National Defense 1942)	<ul style="list-style-type: none"> Nineteen (19) wood residences depicted within 100 m of the Study Area One (1) Railway transecting Study Area Welland River transecting Study Area Dell Cemetery is located 100 m to the West of the Study Area Dell Chapel is located 100 m to the West of the Study Area

A review of recent aerial photographs was completed to gain an understanding of 20th-21st century land use in the Study Area. A summary of the review is provided in Table 3. Aerial photographs are provided in Appendix B.

Table 3: Review of 20th-Century Historical Records

Year	Features
1934 (Appendix B: Plate B1; Brock University 2021b)	<p>The following features are observed.</p> <ul style="list-style-type: none"> The Welland River transects the Study Area The Great Trunk Railway transects the Study Area
1954-55 (Appendix B: Plate B2; Brock University 2021b)	<p>The following features are observed.</p> <ul style="list-style-type: none"> The following features are observed. The Welland River transects the Study Area The Great Trunk Railway transects the Study Area The QEW is depicted transecting the Study Area
1965 (Appendix B: Plate B3; Brock University 2021b)	<p>The following features are observed.</p> <ul style="list-style-type: none"> The following features are observed. The Welland River transects the Study Area The Great Trunk Railway transects the Study Area The QEW is depicted transecting the Study Area Additional Roadways depicted to the west of the Study Area on the south side of the Welland River
1968 (Appendix B: Plate B4;	<p>The following features are observed.</p> <ul style="list-style-type: none"> The Welland River transects the Study Area

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

Year	Features
Brock University 2021b)	<ul style="list-style-type: none"> • The Great Trunk Railway transects the Study Area • The QEW is depicted transecting the Study Area • Additional Roadways depicted to the west of the Study Area on the south and north side of the Welland River
1995 (Appendix B: Plate B5; Brock University 2021b)	<p>The following features are observed.</p> <ul style="list-style-type: none"> • The Welland River transects the Study Area • The Great Trunk Railway transects the Study Area • The QEW is depicted transecting the Study Area • Additional residences located to the east of the Study Area
Various (2000 to 2020 Online Google Earth Aerial Imagery)	<p>The configuration of the Study Area is very stable and little change takes place.</p>

The Ontario Heritage Trust plaque database was reviewed in order to determine if there are any commemorative markers documenting federal, provincial, or municipal historic landmarks sites or and properties that local histories or informants have identified with possible CHVI. Presently there are no known historical plaques located within the Study Area or adjacent properties on the Ontario Heritage Trust provincial plaque database however field review identified one commemorative plaque at the Dell Cemetery (Ontario Heritage Trust 2021). Further details regarding the Dell Cemetery property can be found within the inventory of built heritage resources and cultural heritage landscapes presented in Section 4.3 of this report

3.6 Previous Investigations

3.6.1 Cultural Heritage Screening Report (Golder Associates Ltd. 2019)

In 2019, Golder Associates Ltd. was retained by GM BluePlan Engineering on behalf of the Regional Municipality of Niagara to complete a Cultural Heritage Screening Report, for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated collection and conveyance impacts (Golder 2019). The CHSR Study Area included approximately 125 km² of the city of Niagara Falls, 24 km² of the City of Thorold, and 7 km² of the City of Welland. The CHSR was a desktop study and used the MHSTCI Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes (the Checklist) to screen for the presence of known and potential heritage properties in the Study Area. The CHSR identified the following known and potential heritage properties:

- Six (6) National Historic Sites of Canada
- One (1) designated Heritage Railway
- 60 Protected Heritage Properties designated under Part IV of the Ontario

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Heritage Act

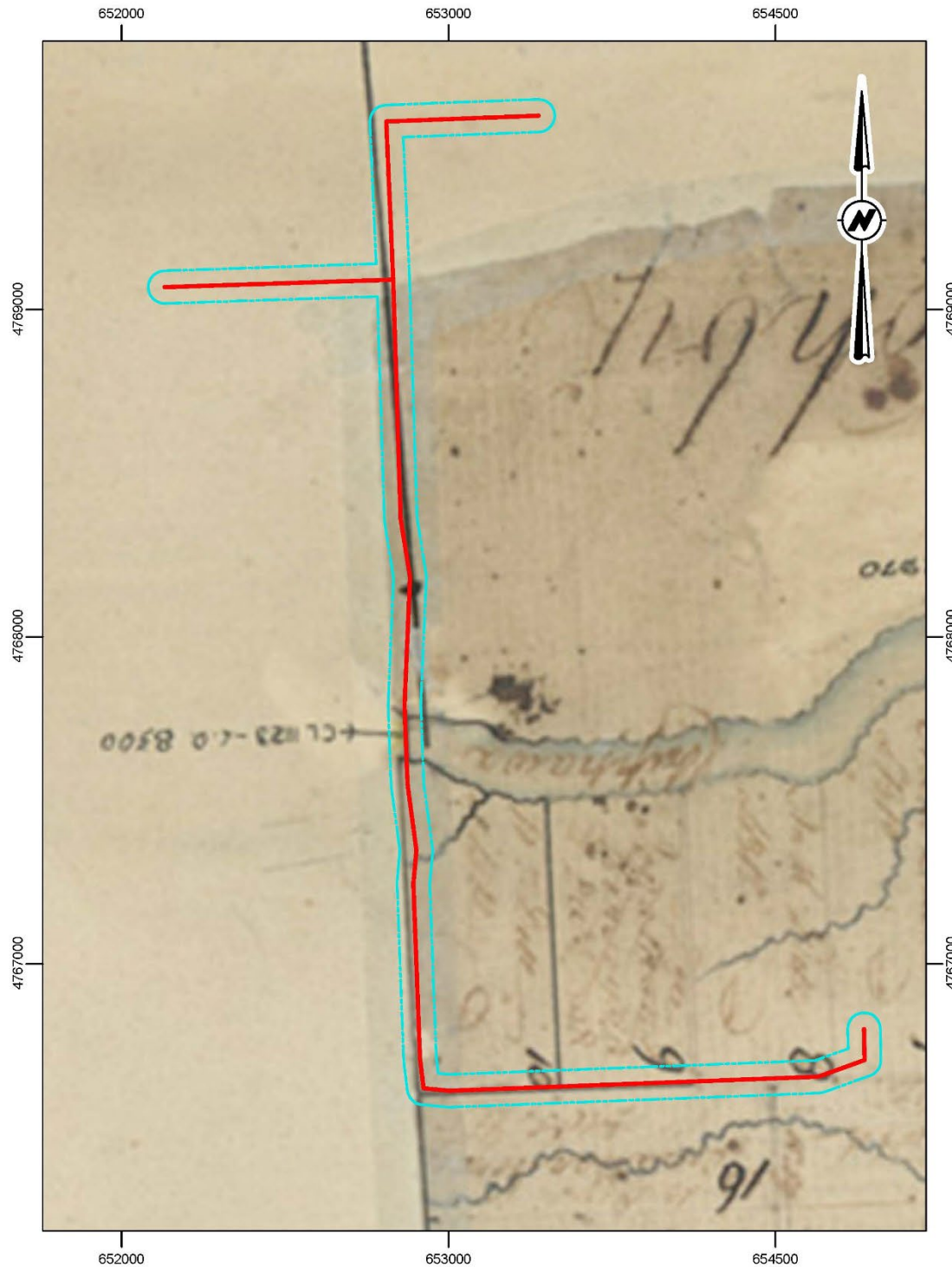
- 58 commemorative or interpretive plaques from various government agencies
- 24 cemeteries
- Numerous properties with buildings over 40 years old, points of interest related to the Welland Canal, placed related to the War of 1812, and public art and monuments

Golder recommended avoidance of the identified heritage properties (Golder 2019). Golder further recommended if avoidance of heritage properties was not feasible, then a Cultural Heritage Assessment Report (CHAR) with field investigations should be completed to identify all known and potential cultural heritage resources potentially impacted by the Project and provided mitigation recommendations to avoid or reduce adverse impacts. Golder noted that the CHAR may recommend subsequent site-specific studies, such as Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs)

Presently, the Study Area contains three (3) potential heritage properties identified in the Golder CHSR. These are:

- 6811 Reixinger Road
- Dell Cemetery
- Welland River

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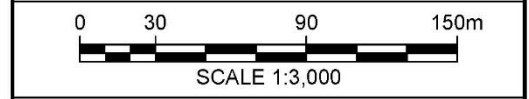


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLAN
 CULTURAL HERITAGE ASSESSMENT REPORT FOR THE SEWER
 ALIGNMENT/CONSTRUCTION SHAFT LOCATIONS

TITLE:
 1795 AUGUSTUS JONES WILLOUGHBY TOWNSHIP
 NO. 1 MAP

LEGEND:
 — ALIGNMENT
 □ 50m BUFFER

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
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 ALL LOCATIONS ARE APPROXIMATE.
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 AUGUSTUS JONES 1795. WILLOUGHBY TOWNSHIP NO. 1 MAP.
 COPIED FROM AN ORIGINAL MAP SIGNED BY JOHN FREDERIK
 HOLLAND, SAMUEL HOLLAND AND D.W. SMITH. SOURCE:
 ONTARIO HERITAGE PROPERTY INDEX.



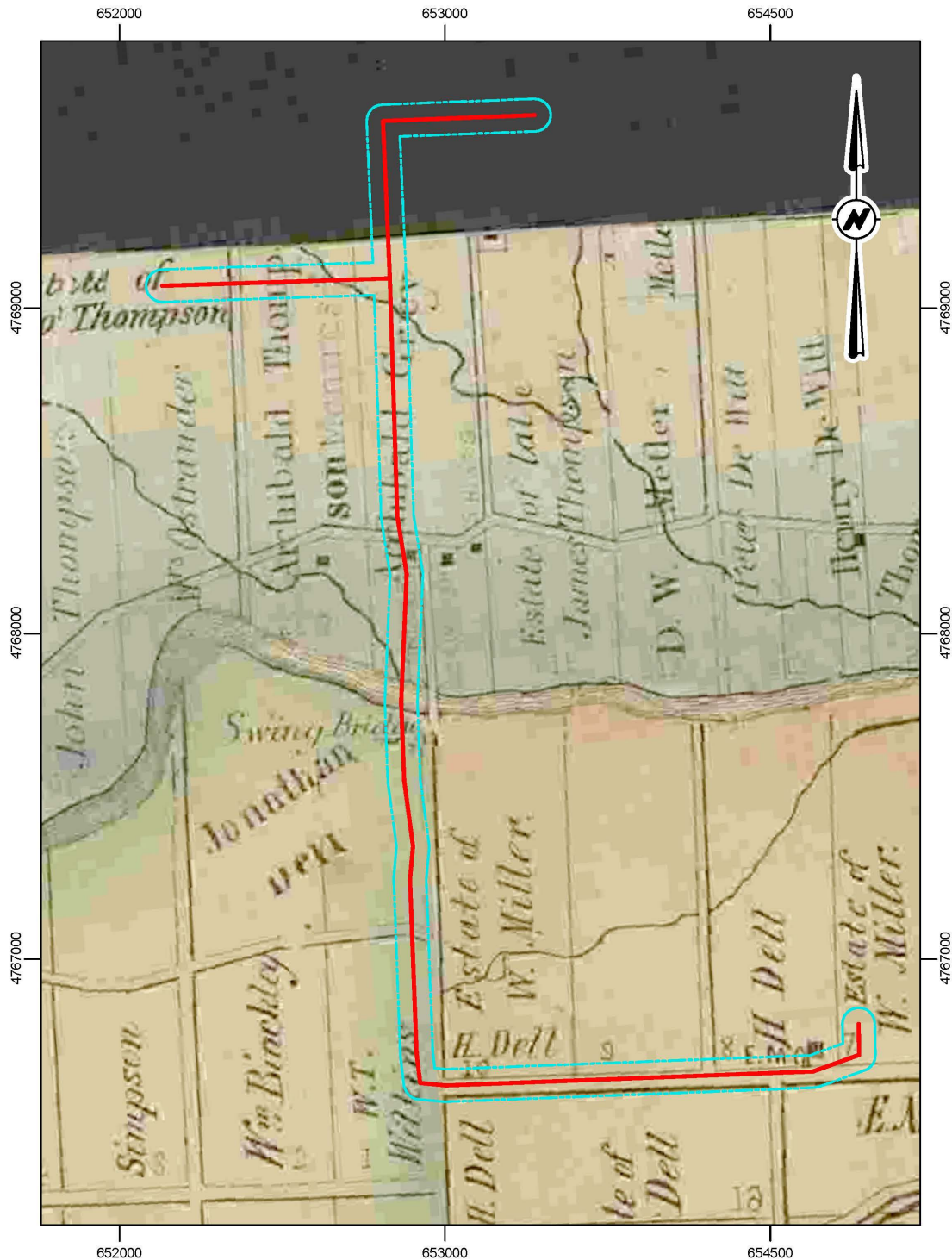
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 Wood Environment &
 Infrastructure Solutions
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 LONDON, ONTARIO
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 519-681-2400

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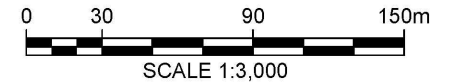


PROJECT:
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 LINCOLN AND WELLAND SHOWING THE LOCATION
 OF THE STUDY AREA

LEGEND:
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 TREMAINE 1862.



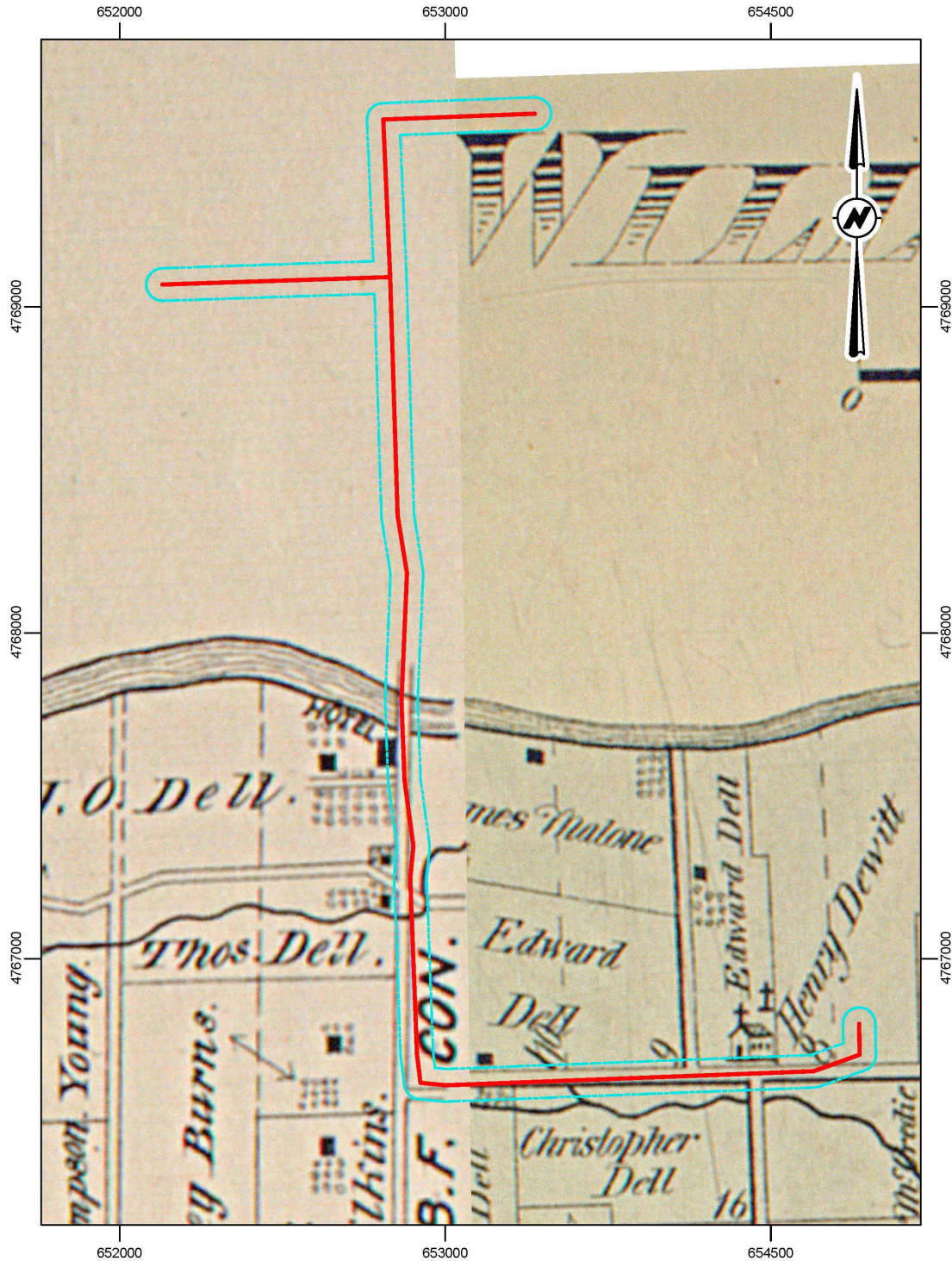
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 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLAN
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TITLE:
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 AND WELLAND COUNTIES SHOWING THE LOCATION
 OF THE STUDY AREA

LEGEND:
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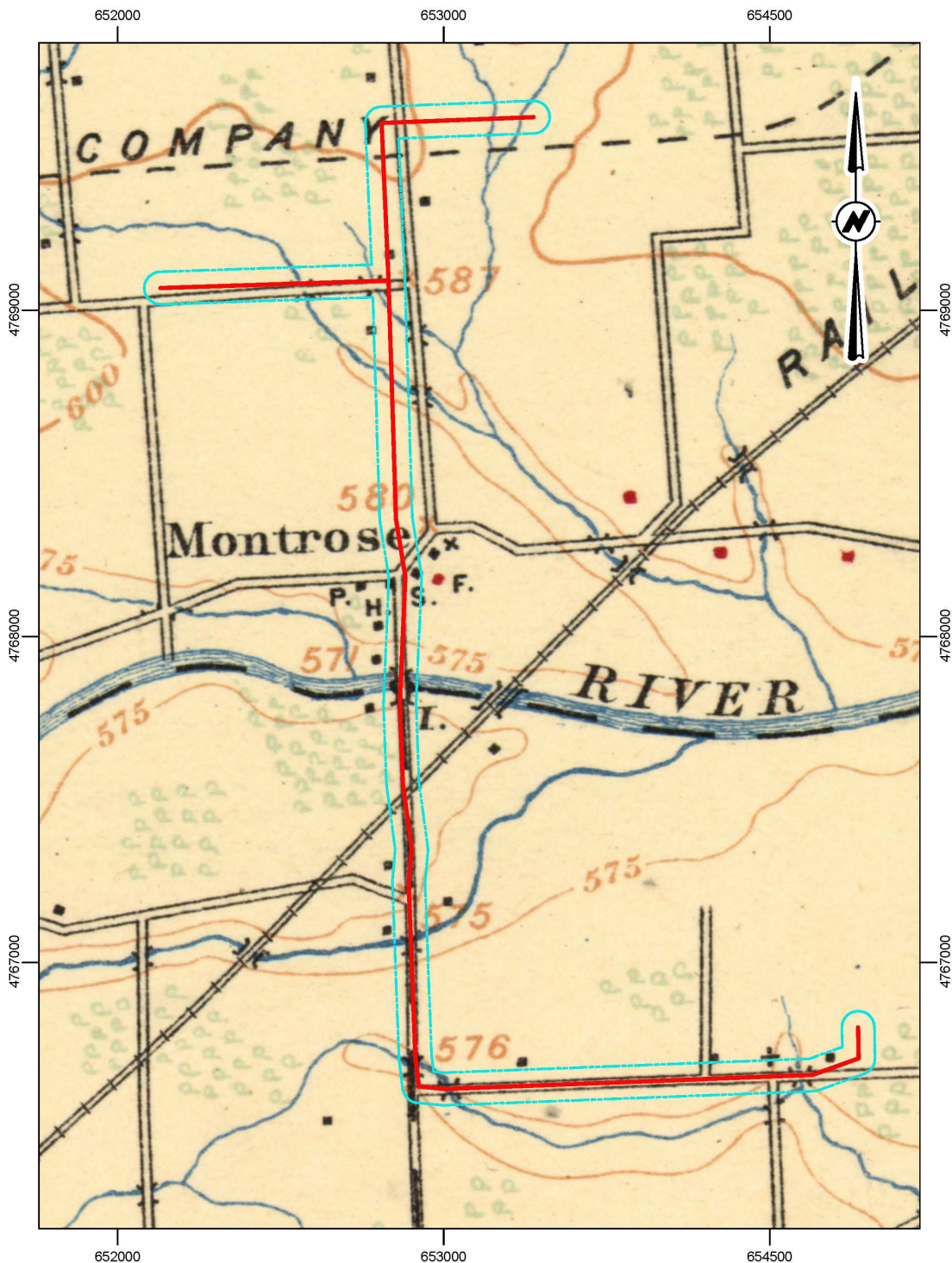
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 SHEET

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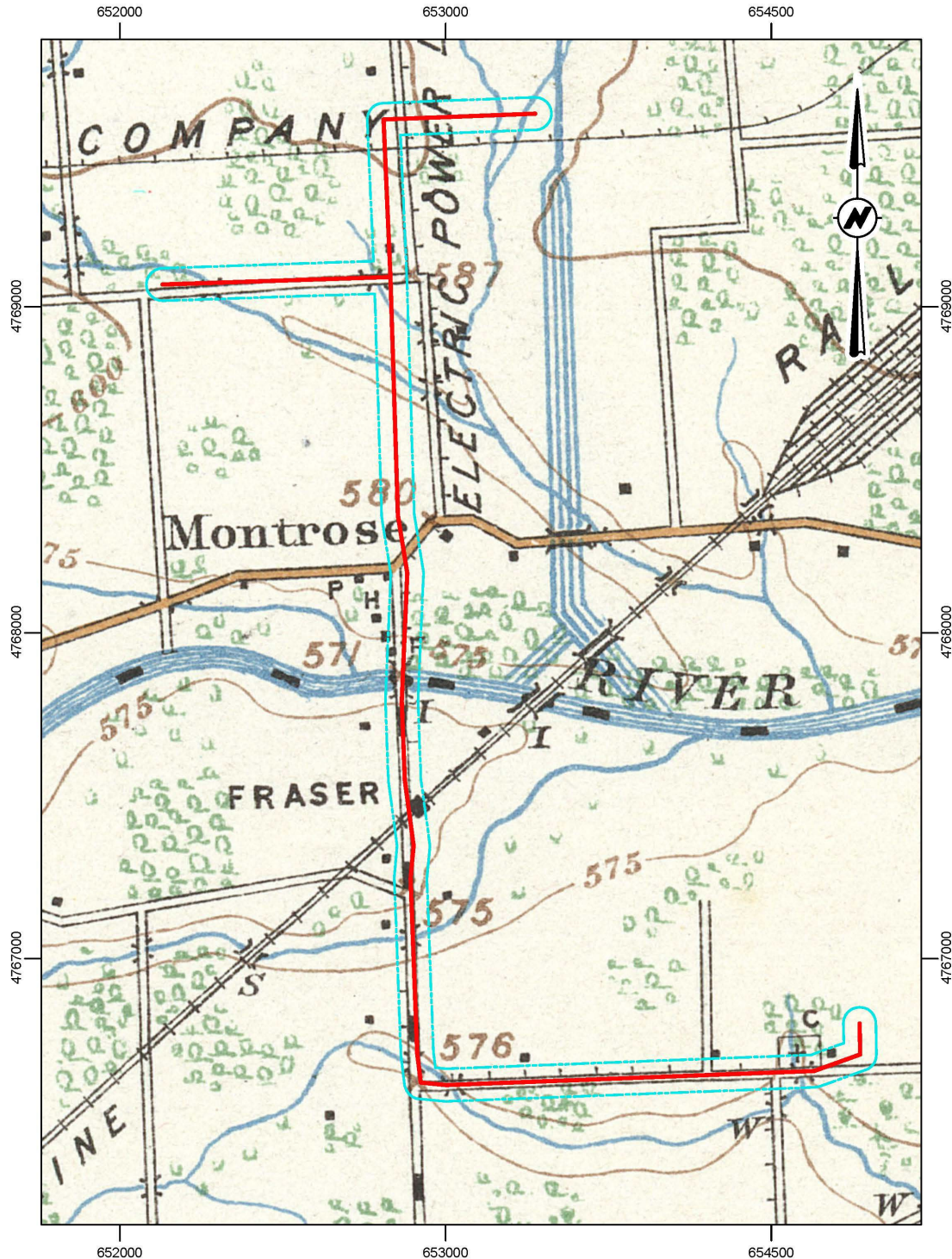
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TITLE:
 1925 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA
 SHEET

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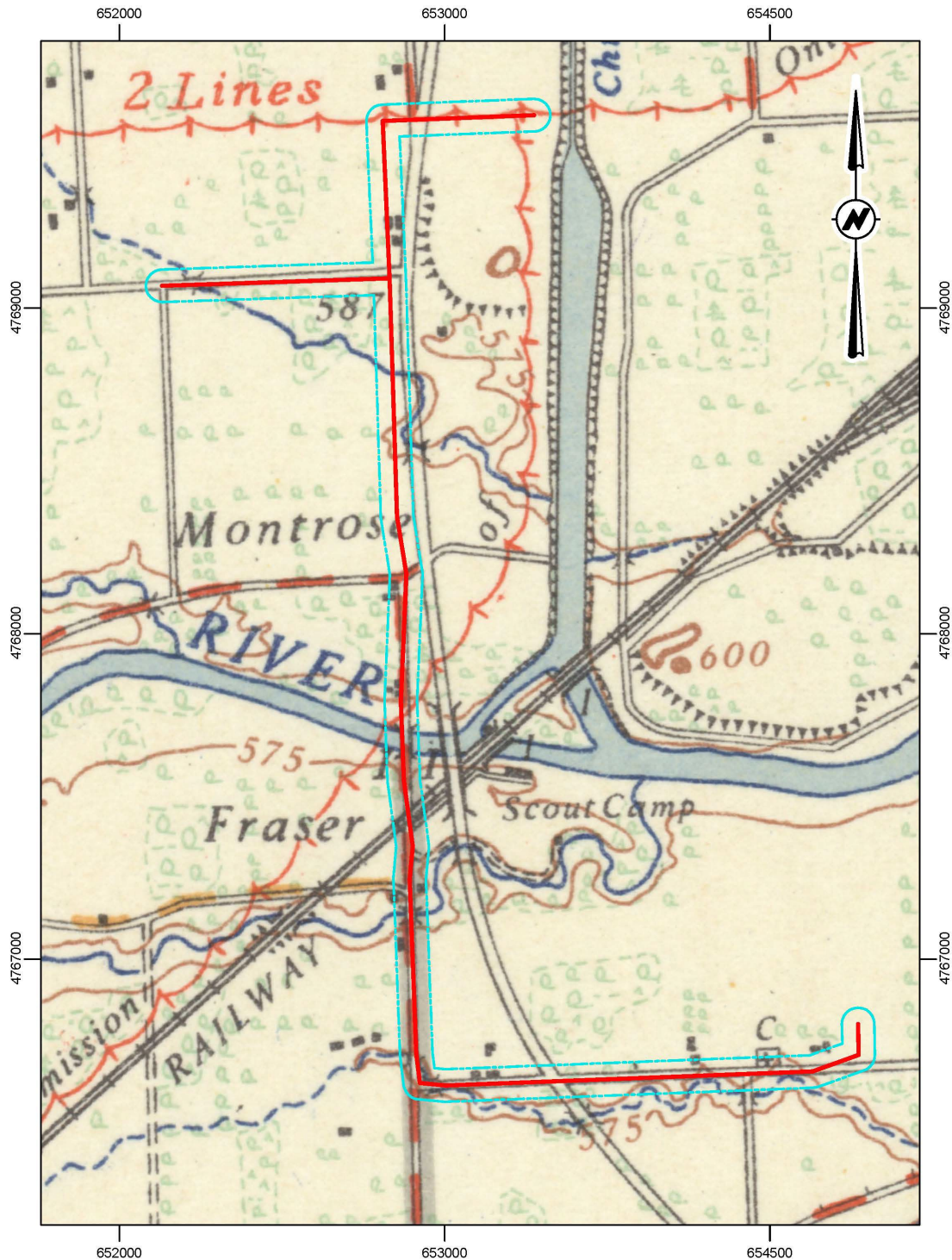
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 Infrastructure Solutions
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 LONDON, ONTARIO
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PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLAN
 CULTURAL HERITAGE ASSESSMENT REPORT FOR THE SEWER
 ALIGNMENT/CONSTRUCTION SHAFT LOCATIONS

TITLE:
 1942 DEPARTMENT OF NATIONAL DEFENCE
 GEOGRAPHICAL SECTION, CANADA SHEET 30

LEGEND:
 — ALIGNMENT
 □ 50m BUFFER

NOTES:
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 REPORT No. OCUL2001.200.
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REFERENCES:
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CLIENT:



NIAGARA REGION
 1815 Sir Isaac Brock Way
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wood.
 Wood Environment &
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 201 KING STREET
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DWN BY: LMK	CHKD BY: CD	DATE: NOV. 10, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.200
REV No: 0		FIGURE No: 8

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4.0 Results

4.1 Information Gathering Results

The City of Niagara Falls, Ontario Heritage Trust, and the MHSTCI were contacted to gather information on known heritage properties within, and adjacent to, the Study Area. Copies of the information gathering emails are provided in Appendix C.

Peggy Boyle, City of Niagara Falls, reported that the Study Area does not include:

- Any properties designated under Part IV or Part V of the *Ontario Heritage Act*
- Any properties that are the subject of an agreement, covenant or easement under Parts II or IV of the *Ontario Heritage Act*
- Any properties that are currently listed on a municipal heritage register nor recommended for listing through the Heritage Register Project
- Any properties subject to a Notice of Intention to Designate under the OHA
- Any property on the MHSTCI's list of provincial heritage properties

Karla Barboza, Acting Team Lead at the MHSCTI, reported that there are no properties designated under the *Ontario Heritage Act* within, or adjacent to, the Study Area but did identify a Provincial Heritage Property located adjacent to the Study Area:

- Sir Adam Back I Generating Station Complex (Provincial Heritage Property)

Kevin DeMille, Natural Heritage Coordinator at the Ontario Heritage Trust, reported that the Study Area does not contain any Trust conservation easements or Ontario Heritage Trust-owned properties. Mr. DeMille also confirmed that there are no properties listed on the Ontario Heritage Trust's register within the Study Area.

4.2 Field Review Results

The field review was completed by Chelsea Dickinson, Cultural Heritage Specialist at Wood, on Thursday, November 05, 2020. The field review confirmed that the Study Area is comprised of mostly roadways, agricultural lands and shrublands, interspersed with residential and commercial properties. The Study Area is comprised of a small section of land located south of Welland River and north of Reixinger Road, and runs along the following roadways: Reixinger Road, Montrose Road and Brown Road and finally includes a small section of land running east-west from Montrose Road towards the Welland Canal in the City of Niagara, Ontario. In addition, the Study Area includes three (3) historically surveyed roads intersecting the Study Area including: Reixinger Road, Dell Road, and Montrose Road (Regional Road 98). While these roads were laid out in the 19th century they do not appear to retain the physical characteristics of a historical roadscape.

The Queen Elizabeth Way (QEW) is a multilane intercity highway connecting Toronto with Niagara and the border at Buffalo. The QEW continues as the Gardiner

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Expressway into downtown Toronto (Hamilton Spectator 2020).

Reixinger Road, located within the Study Area, is a narrow two-lane asphalt roadway which is bordered by interspersed mature tree lines. Mostly bordered by agricultural land the roadway does contain some residential properties that primarily date to the early to mid-20th century (Plate 1-Plate 6).

Montrose Road (Regional Road 98), located within the Study Area, is a narrow two-lane asphalt roadway which is bordered by interspersed woodlots and agricultural lands. The roadway does contain some residential properties that primarily date to the early to mid-20th century interspersed with commercial developments (Plate 6-Plate 9).

Brown Road, located within the Study Area, is a narrow two-lane asphalt roadway that is bordered by interspersed woodlots/farmland and recent residential complexes (Plate 10-Plate 12).

Previous investigations of the Study Area and surrounding lands by Golder in 2019 identified three (3) sites of potential cultural heritage interest including the Welland River, Dell Cemetery and the property at 6811 Reixinger Road. An additional seven (7) sites of potential cultural heritage interest were identified during field review.

The property at 6811 Reixinger Road contains farm complex with one (1) one-and-a-half-storey residence with Ontario Gothic Revival style influences that includes additions to the original structure (CHL3). The property also contains one (1) one and a half storey barn with a gambrel roof, two (2) Quonset huts, one (1) single-story building with a clear-span roof construction, and two (2) silos (Plate 13-Plate 15).

Dell Cemetery is located on the north side of Reixinger Road at Dell Road. The cemetery is bounded by an agricultural field/residential property on the east (CHL2), agricultural lands to the north and south and Reixinger Road on the south. The cemetery is bounded by a black chain link fence and mature trees/tree lines and includes numerous grave plots with markers (Plate 16-Plate 17). A commemorative plaque (Plate 18) describing the history of the cemetery is located directly outside the fence line.

The Study Area intersects with the CN Railway, which crosses Montrose Road (Regional Road 98). This rail corridor was formally known as the Michigan Central Railroad (MC) and currently identified as the Montrose Junction (CHL4). The rail line intersects the Study Area running Northeast-Southwest and extends from Welland to Niagara Falls (Plate 19-Plate 20).

Located directly adjacent to the Study Area is the canal of the Sir Adam Beck Power Generating Station Complex, which includes the main generating station, canal and associated features/elements (CHL5) (Plate 21).

An additional four (4) properties with potential CHVI were identified during the field review including a farm complex at 7473 Reixinger Road (CHL6) which contains one (1) one-and-a-half-storey residence, and four (4) recent structures. (Plate 22-Plate 23). The

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property at 7874 Regional Road 98 (CHL7) contains one (1) one-and-a-half-storey residence, mature trees and a rear pond, as seen through aerial imagery, and a fixed fenced line (Plate 24-Plate 26). The properties at 9304 Regional Road 98 (BHR1) and 8760 Regional Road 98 (CHL8) both contain one-and-a-half-storey residences (Plate 27-Plate 28).

One (1) additional built heritage resource identified during field review was the Montrose Road Bridge (BHR2) which crosses the Welland River (Plate 29-Plate 31).

The field review identified three additional one-storey residences at 8891 Regional Road 98, 8841 Regional Road 98, 8825 Regional Road 98 and 8762 Regional Road 98. Further review of historical aerial photographs depicts these residences on 1954-55 historic imagery. While these residences are over 40-years old, the residence at 8841 Regional Road 98 appears to have been highly altered while the other three properties are in serious disrepair. As such, these properties are not considered further in this study due to their relatively recent construction dates and highly altered and/or deteriorated conditions (Plate 32-Plate 35).

Additional properties located outside the Study Area and adjacent lands were documented in order to develop an understanding of the current land use context. This included a review of the Grand Niagara Golf Club which while designed by world-renowned golf architect Rees Jones. The golf course dates to 2005-2006 and as such it was deemed to have no potential CHVI due to its recent construction date (Plate 36-Plate 42).

Welland River, originally known as Chippawa Creek, is located north and east of the Study Area and is known as the largest river tributary to the Niagara River (Plate 43-Plate 46).



Plate 1: West view of Reixinger Road



Plate 2: South view of Dell Road running perpendicular to Reixinger Road

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Plate 3: East view of Reixinger Road



Plate 4: West view of Reixinger Road



Plate 5: East view of Reixinger Road



Plate 6: South view of Reixinger Road at Montrose Road (RR 98)



Plate 7: Northwest view of Montrose Road (RR 98) looking towards 9515 Montrose Road (98)



Plate 8: Northwest view of Montrose Road (RR 98) looking towards 8675 Montrose Road

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Plate 9: South view of Montrose Road (RR 98) looking towards Chippawa Creed Road



Plate 10: Northeast view of Brown Road showing recent residential development



Plate 11: North view of Brown Road showing recent residential development to the North



Plate 12: Northwest view of Brown Road showing recent residential development to the North



Plate 13: North view of the farm complex located at 6811 Reixinger Road



Plate 14: Northwest view of 6811 Reixinger Road (farm complex)

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Plate 15: Northwest view of the residence located at 6811 Reixinger Road (farm complex)



Plate 16: West view of Reixinger Road and Dell Road intersection showing the Dell Cemetery on the north (right)



Plate 17: Dell Cemetery located north of Reixinger Road



Plate 18: Dell Cemetery commemorative plaque



Plate 19: Southwest view of CN Railway



Plate 20: Northeast view of CN Railway from Montrose Road (RR98)

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Plate 21: View of the Power Canal associated with Sir Adam Beck from McLeod Road Bridge



Plate 22: North view of 7473 Reixinger Road farm complex



Plate 23: North view of 7473 Reixinger Road farm complex



Plate 24: Southwest view of 7847 Regional Road 98 farm complex



Plate 25: West view of 7847 Regional Road 98 farm complex



Plate 26: Northwest view of 7847 Regional Road 98 farm complex

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Plate 27: East view of 9304 Montrose Road (RR98)



Plate 28: West view of 8760 Montrose Road (RR98)



Plate 29: Northwest view of Montrose Road (RR98) Bridge



Plate 30: Montrose Road (RR98) Bridge Commemorative Plaque



Plate 31: Northeast view of Montrose Road Bridge



Plate 32: West view of 8891 Montrose Road (RR98)

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Plate 33: West view of 8841 Montrose Road (RR98)



Plate 34: West view of 8825 Montrose Road (RR98)



Plate 35: West view of 8762 Montrose Road (RR98)



Plate 36: 8275 Heartland Forest Road



Plate 37: Northwest view of Oakwood Drive facing Oakwood Place Shopping Centre (7481 Oakwood Dr)



Plate 38: East view of Oakwood Drive

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Plate 39: South view of 7721 Oakwood Drive



Plate 40: Shrubland located south of Oakwood Drive



Plate 41: Grand Niagara Golf Club Entrance



Plate 42: West view of Grand Niagara Golf Club from Grassy Brook Road



Plate 43: Southwest view of Welland River from George Bukator Park (West public parking lot and boat ramp)



Plate 44: Northeast view of Welland River from George Bukator Park trails

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Plate 45: Southeast view of Welland River from George Bukator Park trails





Plate 46: Southwest view of Welland River from George Bukator Park trails

4.3 Inventory of Built Heritage Resources and Cultural Heritage Landscapes



Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area was compiled. The inventory is provided in Table 4. The locations of identified built heritage resources and cultural heritage landscapes in relation to the Study Area are depicted in Figure 9.

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Table 4: Inventory of Cultural Heritage Resources

CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 1	CHL	Welland River	- Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>The Welland River intersects with the Phase 2 SNFWWTP Study Area. Originally known as Chippawa Creek, Welland River is known as the largest river tributary to the Niagara River (NPCA 2011). The river flows in an easterly and westerly direction toward the Queenston-Chippawa Power Canal (“Power Canal”; NPCA 2011). Due to the construction of the Welland Canal and the completion of the SAB1 Generating Station complex and associated Power Canal in 1920/1921, the river now partially flows into the Power Canal which has resulted in a flow reversal between the meeting of the Welland River, the Power Canal, and the mouth of the Welland River at the Niagara River (NPCA 2011). The river was renamed in 1792 by John Graves Simcoe Welland River is still commonly referred to as Chippawa Creek (Hogue 2014).</p> <p>The Welland River is directly linked to the Welland Canal which is identified as a cultural heritage landscape by Niagara Region in the Regional Policy Plan Chapter 10 Creative Niagara (Golder 2019). Golder also notes that the Welland River from Port Robinson to the Niagara River at Chippawa, was part of the first Welland Canal from 1829-1833. The Welland River may have historical/associative and/or contextual value.</p>	
CHR 2	CHL	Dell Cemetery (Reixinger Road at Dell Road)	- Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>Dell Cemetery is located at Reixinger Road at Dell Road in the vicinity of the Study Area (CanadaGenWeb Cemetery Project, 2020). The cemetery was established in 1851 when Henry Dell Sr. deeded one acre of land to the Methodist Episcopal Church which was known as the Dell Chapel and Cemetery (Find a Grave, 2020). The first known burial is associated with Mary Dell, wife of Robert Dell on November 14, 1849. The City of Niagara Falls acquired ownership in 1973, the cemetery is currently inactive (Bereavement Authority of Ontario 2017).</p> <p>The cemetery is bounded by an agricultural field/residential property on the east (CHL2), agricultural lands to the north and south and Reixinger Road on the south. The cemetery is bounded by a black chain link fence and mature trees/tree lines and includes numerous grave plots with markers. A commemorative plaque describing the history of the cemetery is located directly outside the fence line.</p> <p>The Dell Cemetery may have physical, historical/associative, and/or contextual value.</p>	

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CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 3	CHL	6811 Reixinger Road	- Previously identified by Golder Associates Ltd (2019)	<p>This property landscape contains one (1) one-and-a-half-storey residence with Ontario Gothic Revival style influences with additions to the original structure located in the vicinity of the Study Area. Other buildings on the property include a one and a half storey barn with a gambrel roof, two (2) Quonset huts, one (1) single-story building with a clear-span roof construction, and two (2) silos (Plate 4).</p> <p>The residence is clad in clapboard siding with a cross gable roof with pronounced, projecting eaves. The front façade (north elevation) is asymmetrically arranged with the front entrance offset to the right (east). The windows are a mix of sash one-over-one (upper level), sash two-over-two (lower level) and a flat bay window (lower level). All windows and the front door appear to have wood trim and the front entrance is covered by a wood awning supported by wooden beams. The front entrance also includes mature trees. This residence appears on 1963 mapping but likely dates to the late 19th century or early 20th century based on architectural style and materials.</p> <p>As one of the few late 19th century/early 20th century residences in this section of Reixinger Road, this property may have design/physical, historical/associative, and/or contextual value.</p>	
CHR 4	CHL	Railway	- Identified during field review	<p>This potential cultural heritage landscape consists of the CN Railway formally known as the Michigan Central Railroad (MC). This rail line appears on 1907 mapping but dates back to 1883 when the Michigan Central Railroad as part of their Canadian division built a double track from Welland to Niagara Falls which subsequently connected to the Grand Trunk Railway (Duncan 2009; Niagara Falls Info 2020). Originally leased for 21 years the Michigan Central Railroad extended its lease in 1904 for 999 years which was later taken over by the Michigan Central Railroads parent company New York Central Railroad. Currently the Canadian Division of the Michigan Central Railroad is owned by the CN Railway and Canadian Pacific Railway companies (Canada Rail 2020).</p> <p>Established in the late 19th/early 20th centuries, the CN Railway may have historical/associative and/or contextual value.</p>	



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CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 5	CHL	Sir Adam Beck I Generating Station Complex	<ul style="list-style-type: none"> - Provincial Heritage Property under Part III of the <i>Ontario Heritage Act</i> - National Historic Site of Canada under the <i>Historic Sites and Monuments Act</i> 	<p>This canal is part of the Sir Adam Beck Generating Station Complex, which is a Provincial Heritage Property under Part III of the <i>Ontario Heritage Act</i>. This site is also known as the Queenston-Chippewa Hydro-Electric Development National Historic Site of Canada and is designated under the <i>Historic Sites and Monuments Act</i>.</p> <p>The Description of Historic Place, Heritage Value, and Character-Defining Elements from the National Historic Site listing are provided below:</p> <p>Description of Historic Place</p> <p>Queenston-Chippewa Hydro-Electric Development National Historic Site of Canada is located at Queenston, Ontario, at the Niagara Falls. Built between 1917-1925, it was the first large hydro-electric project in the world and was created by Ontario’s Hydro-Electric Power Commission (HEPC). The HEPC created the project in response to increasing urban and industrial demands for more electrical power in Toronto and southwestern Ontario. The site consists of a very large crescent-shaped site stretching approximately 22 kilometres from the mouth of the Welland River where it meets the Niagara River, through the city of Niagara Falls to the hydro-electric generating station situated on the Niagara River between the Whirlpool and Queenston. Official recognition refers to the entire development associated with the power project from its intake at the junction of the Welland River and Niagara River to the outtake at the Sir Adam Beck No. 1 Generating Station near Queenston including the gatehouse, penstocks, and powerhouse on their footprints.</p> <p>Heritage Value</p> <p>Queenston-Chippewa Hydro-Electric Development was designated a national historic site of Canada in 1990 because: it claimed to be the first true hydro-electric mega-project in the world the design of the Queenston-Chippewa installation presented unique problems and required construction equipment, power conversion units, and a power canal of a size not seen prior to their use at Queenston-Chippewa. By 1913, there was an increasing industrial and urban demand for more electrical power in Toronto and southwestern Ontario. As a result, Ontario’s Hydro Electric-Power Commission began to consider proposals for a possible generating station at Niagara Falls. After consideration, the HEPCO agreed to a proposal that utilized the watercourse of the Welland River, the building of a power canal around the city of Niagara Falls, and the building of a generating station on the Niagara River between the Whirlpool and Queenston. The project began in 1917 with the passing of “The Ontario Niagara Development Act” and the first unit of the development went into service in 1922.</p> <p>The design of the Queenston-Chippewa Hydro-Electric Development presented many unique challenges. The size of the development required construction equipment and</p>	




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CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
				<p>power conversion units of a size not seen prior to their use at Queenston-Chippawa. In addition, the 13.2 kilometre long power canal had to meet specific design characteristics rarely found in ship canals. When the installation was completed in 1925, the Queenston-Chippawa Hydro-Electric Development was the largest hydroelectric generation project in the world.</p> <p>Character Defining Elements: Key elements that contribute to the heritage character of the site include:</p> <ul style="list-style-type: none"> - its location in Niagara Falls, Ontario, beginning at the mouth of the Welland River and continuing to the hydro-electric generating station situated on the Niagara River between the Whirlpool and Queenston; - its mixed urban and rural setting adjacent to the Niagara River; - the individual components of the site and the spatial relationship between these components; - the Welland River from its junction with the Niagara River, 6.8 kilometres to its entry into the power canal, including its placement and immediate banks; - the single-leaf, roller type, motor operated control gate measuring 14.6 metres by 12.6 metres, constructed of steel and located at the upper end of the canal to allow water from the Welland River to enter the power canal; - the 13.2 kilometre long concrete lined power canal, including the wide earth-cut trapezoidal section that extends from the Welland River to the control gates, and the rectangular rock-cut sections that eventually widen into a forebay with a maximum width of approximately 91.5 metres and sealed with gunite; - the gatehouse with its reinforced concrete walls surmounted by a structural steel framework roof, including any remaining interior features, finishes and equipment such as the nine main units, a service unit, an ice chute, a 25 ton travelling crane, gates, racks, and other equipment necessary for the units; - the steel plate penstocks that are nearly vertical and held in massive concrete anchor blocks, approximately 138 metres long and are joined to the powerhouse by a Johnson valve and supply line to which was connected a turbine scroll case; - the monumental effect achieved by the powerhouse's stepped-level massing set below the buttressed dam wall with a substructure constructed of concrete and a superstructure with a structural steel framework with reinforced concrete floors and roof; and concrete, brick and tile walls and partitions; - the powerhouse's interior configuration, features and finishes, including the main operating floor, erection space, and main station elevator; - elements that facilitate daily work within the powerhouse including the maintenance shops and stores, lubricating and insulating oil plants, battery room, staircases, fully equipped hospital room, kitchen, dining room, and offices; - remaining power generating equipment such as the turbine runner tunnel, main generators, transformers, generator units and sump pumps, motors, air compressors, 	

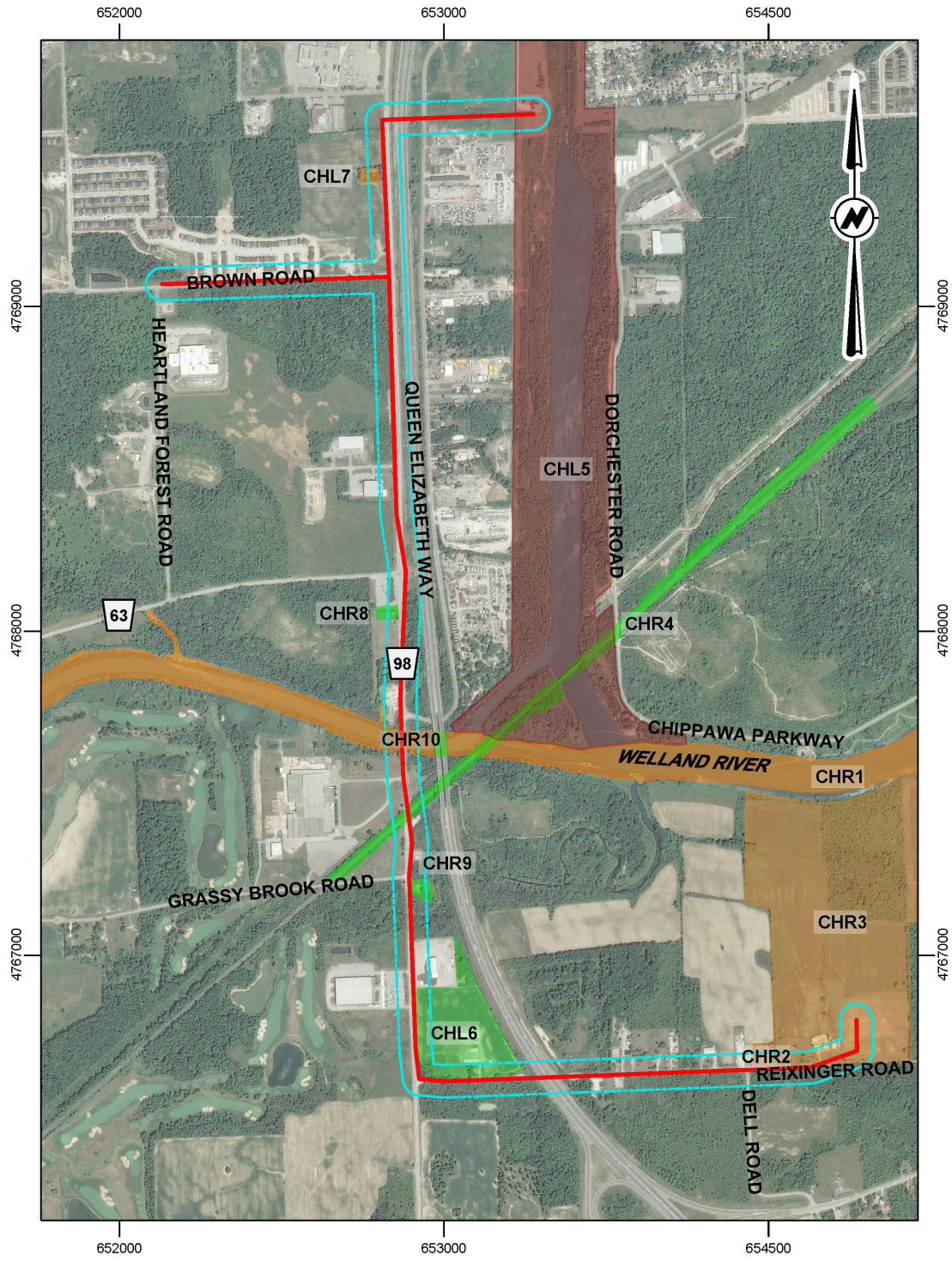
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CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
				<p>and hydraulic equipment;</p> <ul style="list-style-type: none"> - views from the powerhouse across the forebay to the rock-cut sections of the power canal; - views from the Welland River to the earth-cut trapezoidal section of the power canal to the northwest and the Niagara River to the east; - views from the power canal across the city of Niagara Falls. 	
CHR 6	BHR	7473 Reixinger Road	- Identified during field review	<p>This property landscape contains one (1) one-and-a-half-storey residence on a rectangular footprint with Colonial/Georgian Revival influences. Other buildings on the property include four modern structures with rectangular footprints with aluminum or steel siding and a side gable roofs.</p> <p>The residence is clad in clapboard siding with a side gable roof with pronounced, projecting eaves. The front façade (north elevation) is symmetrically arranged with the front entrance set in the centre of the façade. The windows are a mix of two-panel slider (upper level), and flat bay windows (lower level). All windows and the front door appear to have an unknown trim. The front entrance also includes mature trees. This residence appears on 1962 mapping but likely dates to the early 20th century based on architectural style and materials (Department of Militia and Defense 1962).</p> <p>As one of the few late early/mid 20th century residences in this section of Reixinger Road, this property may have design/physical, historical/associative, and/or contextual value.</p>	
CHR 7	BHR	7874 Regional Road 98	- Identified during field review	<p>This property landscape contains one (1) one-and-a-half-storey residence with a rectangular footprint with a side gable roof and pronounced projecting eaves as well as an addition at the rear with Ontario Vernacular style influences clad in clapboard siding, a second structure resides on the property with a rectangular footprint and gable roof with pronounced projecting eaves also clad in clapboard siding. The residence has a front façade (west elevation) that is symmetrically arranged with the front entrance centered. The residence has two rectangular molded flat fixed picture windows with exterior wooden shutters and all windows appear to have an unknown trim. The property landscape also includes mature trees a rear pond as seen through aerial imagery and fixed fenced line.</p> <p>This residence appears in 1906 mapping and 1954 historical imagery and likely dates to the early 20th century based on architectural style and materials.</p> <p>As one of the few late early/mid 20th century residences in this section of Regional Road 98, this property may have design/physical, historical/associative, and/or contextual value.</p>	

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CHR No.	Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest (CHVI)	Photographs/Digital Image
CHR 8	BHR	8760 Regional Road 98	- Identified during field review	<p>This property contains one (1) one-and-a-half-storey Ontario Vernacular or Victory style residence that is clad in clapboard siding with a front gable roof with pronounced, projecting eaves. The front façade (west elevation) is asymmetrically arranged with the front entrance offset left (south) front door. The residence has a mix of single hung windows (upper level) and flat bay and horizontal sliding windows (lower level) and all windows appear to have an unknown trim. The property landscape also includes an agricultural field.</p> <p>This residence appears in 1954 historical imagery and likely dates to the early 20th century based on architectural style and materials.</p> <p>As one of the few late early/mid 20th century residences in this section of Regional Road 98, this property may have historical/associative and/or contextual value.</p>	
CHR 9	BHR	9304 Regional Road 98	- Identified during field review	<p>This property contains one (1) one-and-a-half-storey Ontario Vernacular style residence with clapboard siding with a rectangular footprint with a gable roof with pronounced, projecting eaves. No entrances are visible on the east, north or south elevations, which suggests that the front façade of this structure faces west (away from Regional Road 98). The east façade is symmetrically arranged with a mix of sash one-over-one (upper and lower level), and a sash two-over-two window (centered on the lower level) and all windows appear to have an unknown trim. This residence appears on 1906 mapping and 1934 aerial images and likely dates to the early 20th century based on architectural style and materials.</p> <p>As one of the few late early 20th century residences in this section of Regional Road 98, this property may have design/physical, historical/associative, and/or contextual value.</p>	
CHR 10	BHR	Montrose Bridge	- Identified during field review	<p>The Montrose Road bridge was identified during field review, spans the Welland River, and located within the southern portion of the Study Area. Originally built in 1970 and rehabilitated in 2008 the Montrose Road Bridge is a concrete stringer beam bridge with concrete abutments and piers supported by Caissons (Historic Bridges, 2020).</p> <p>The Montrose Road bridge crosses the Welland River, which is identified as a potential cultural heritage landscape. Accordingly, this bridge may have historical/associative and/or contextual value.</p>	

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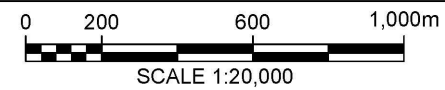


PROJECT:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLAN
 CULTURAL HERITAGE ASSESSMENT REPORT FOR THE SEWER
 ALIGNMENT/CONSTRUCTION SHAFT LOCATIONS

TITLE:
 AERIAL PHOTOGRAPH SHOWING THE
 LOCATION OF THE STUDY AREA

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 - IDENTIFIED DURING FIELD REVIEW
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CLIENT:


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DWN BY:	LMK	CHK'D BY:	CD	DATE:	NOV. 10, 2021
DATUM:	NAD83	PROJECTION:	UTM Zone 17	PROJECT No:	OCUL2001.200
REV No:	0			FIGURE No:	9

5.0 Impact Assessment

The MHSTCI InfoSheet #5 gives guidance on how to complete impact assessments for cultural heritage resources in the land use planning process. As discussed, the purpose of an impact assessment is to determine if identified cultural heritage resources will be impacted by the proposed work. This assessment considers two categories of impacts:

- **Direct Impact:** A permanent or irreversible negative affect on the CHVI of a property that results in the loss of a heritage attribute. Direct impacts include *destruction or alteration*.
- **Indirect Impact:** An impact that is the result of an activity on or near a cultural heritage resource that may adversely affect the CHVI and/or heritage attributes of a property. Indirect impacts include *shadows, isolation, direct or indirect obstruction of significant views or vistas, a change in land use, or land disturbances*.

It should be noted that land disturbances, as defined in MHSTCI InfoSheet #5, and described above, also apply to archaeological resources. An archaeological assessment is beyond the scope of this study since recommendations regarding archaeological resources must be made by a professional archaeologist licensed by the MHSCTI. An archaeological assessment for this project has been undertaken under separate cover by Wood.

5.1 Description of Proposed Work

The proposed work for Phase 1 of the SNFWWTP project involves the construction of 15 below grade sewer alignment pipes and eight (8) open cut shaft locations. The proposed work is largely contained within the right-of-way (ROW) with the exception the shaft locations and associated alignments for Montrose Shaft 01 (located at 7606 Oakwood Drive) and Reixinger Shaft 02 (located at 6811 Reixinger Road). It should be noted that the sewer alignment pipeline will be completed by tunneling below grade at a depth that varies between 8 and 15 metres

Drawings of the proposed work are provided in Appendix D.

5.2 Assessment of Potential Impacts

An impact assessment to evaluate the potential impacts of the proposed work on built heritage resources and cultural heritage landscapes in the Study Area is contained in Table 5. The preliminary impact assessment determined that indirect impacts are anticipated to one (1) Provincial Heritage Property of Provincial Significance (CHR 5: Sir Adam Beck Generating Station Power Canal) and one potential heritage property (CHR 3: 6811 Reixinger Road). The impact assessment for the Phase 1 was prepared based on drawings of the proposed work depicted in Appendix D.

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

Table 5: Impact Assessment and Mitigation Measures

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
CHR 1	CHL	Welland River	-Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	<p>Anticipated Impact: Below grade trenchless installation of the wastewater pipeline 3 m below the bottom of the Welland River.</p> <p>Type of Impact: <i>Indirect Adverse Impacts:</i> Land Disturbance</p>	<p>Discussion: The proposed pipeline will be installed 3 metres below the bottom of the Welland River. While land disturbance will occur, no impacts to the heritage attributes of the Welland River are anticipated. Accordingly, no mitigation measures are proposed.</p>
CHR 2	CHL	Dell Cemetery (Reixinger Road at Dell Road)	-Previously identified as potential cultural heritage landscape by Golder Associates Ltd (2019)	None	This property should be noted on project drawings as a “potential heritage property” to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 3	CHL	6811 Reixinger Road	-Previously identified by Golder Associates Ltd (2019)	<p>Anticipated Impact: Open cut excavation to install the Reixinger-Shaft-02 and wastewater pipeline within the property.</p> <p>Type of Impact: <i>Direct and Indirect Adverse Impacts:</i></p> <ol style="list-style-type: none"> 1) Alteration 2) Land Disturbance 3) Change in land use 	<p>Preferred Option: <i>Avoidance:</i> The proposed work should be planned in a manner that avoids the property. This property should be noted on project drawings as a “potential heritage property” to identify the heritage status of the property to project personnel.</p> <p>Alternative Option: <i>Additional Study:</i> Should direct impacts to this property be required and no other technically feasible options are available, then this property should be evaluated for CHVI in a Cultural Heritage Evaluation Report (CHER). If the CHER determines that the property has CHVI, then a Heritage Impact Assessment (HIA) must also be prepared.</p> <p>The above Mitigation Measures should be planned in co-ordination with the Phase 2 component of the project, completed by Wood under a separate cover.</p>
CHR 4	CHL	Railway	-Identified during field review	<p>Anticipated Impact: Below grade trenchless installation of the wastewater pipeline at a depth of approximately 15 m below the railway.</p> <p>Type of Impact: <i>Indirect Adverse Impacts:</i> Land Disturbance</p>	<p>Discussion: The proposed pipeline will be installed 15 metres below grade. While land disturbance will occur, no impacts to the heritage attributes of the railway are anticipated. Accordingly, no mitigation measures are proposed.</p>
CHR 5	CHL	Sir Adam Beck I Generating	-Provincial Heritage Property under Part III of the Ontario Heritage Act	<p>Anticipated Impact: Below grade trenchless installation of the wastewater pipeline at a depth of approximately 12 m. The</p>	<p>Preferred Option: <i>Avoidance:</i> The proposed work should be planned in a manner that avoids Power Canal associated with the Sir Adam Beck I</p>

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
		Station Complex	-National Historic Site of Canada under the Historic Sites and Monuments Act	<p>pipeline will connect Montrose-Shaft-02 to Montrose-Shaft-01 (located along the south property boundary of 7606 Oakwood Drive). Montrose-Shaft-01 will involve open cut construction at this location. The location of the open cut construction for Montrose-Shaft-01 falls immediately adjacent to the Power Canal associated with the Sir Adam Beck I Generating Station Complex. However, no direct impact to the Power Canal is anticipated since the construction is proposed approximately 85 metres west of the canal.</p> <p>Type of Impact: <i>Indirect Adverse Impacts:</i> 1) Land Disturbance</p>	<p>Generating Station. Work for Montrose-Shaft-01 should be contained with 7606 Oakwood Drive where possible. This property should be noted on project drawings as a "Provincial Heritage Property of Provincial Significance" to identify the heritage status of the property to project personnel.</p> <p>Alternative Option: <i>Minimize Encroachment:</i> If containing work for Montrose-Shaft_01 within 7606 Oakwood Drive is not feasible, then minimize encroachment onto the adjacent Sir Adam Beck Power Canal property. If encroachment is anticipated, then consult with OPG as part of the detailed design phase regarding any physical impact to the property in order to determine and obtain any approval or permits required. If required, complete any cultural heritage technical studies, which may include a HIA.</p> <p><i>Post Construction Landscaping:</i> Post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where feasible.</p>
CHR 6	CHL	7473 Reixinger Road	-Identified during field review	None	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 7	CHL	7874 Regional Road 98	-Identified during field review	None	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 8	CHL	8760 Regional Road 98	-Identified during field review	None	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 9	BHR	9304 Regional Road 98	-Identified during field review	None	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
CHR 10	BHR	Montrose Bridge	-Identified during field review	<p>Anticipated Impact: Below grade trenchless installation of the wastewater sewer pipeline 14 m below the bottom of the Montrose Bridge.</p> <p>Type of Impact: <i>Indirect Adverse Impacts:</i> Land Disturbance</p>	<p>Discussion: The proposed pipeline will be installed through directional drilling at a depth of approximately 14 metres below the Montrose Bridge. While land disturbance will occur, no impacts to the heritage attributes of the Bridge are anticipated. Accordingly, no mitigation measures are proposed.</p>

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

6.0 Recommendations

Wood Environment & Infrastructure Solutions (“Wood”) was retained by the Niagara Region to complete a CHAR in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls SNFWWTP Sewer Alignment/Construction Shaft Locations (the Project). The Study Area is comprised of a small section of land located south of Welland River and north of Reixinger Road, and runs along the following roadways: Reixinger Road, Montrose Road and Brown Road and finally includes a small section of land running east-west from Montrose Road towards the Welland Canal in the City of Niagara, Ontario. The Study Area includes sections of agricultural fields, roadways and sections of shrubland.

Following the completion of background research, consultation, and a field review, it was determined that there are ten (10) potential and protected heritage properties within, and adjacent to, the Study Area. Of these one (1) is listed as a National Historic Site/Provincial Heritage Property of Provincial Significance and is designated under Part III of the *Ontario Heritage Act* (Sir Adam Beck I Generating Station Complex). Of the ten potential and protected heritage properties three (3) (6811 Reixinger Road, Dell Cemetery, and Welland River) were previously identified as having potential cultural heritage value by Golder Associates Ltd (Golder 2019).

The proposed work includes the construction and installation of 15 below grade sewer alignment pipes and eight (8) open cut shaft locations. As a result, there is potential for impacts to one (1) Provincial Heritage Property of Provincial Significance (CHR 5: Sir Adam Beck Generating Station Power Canal) and one potential heritage property (CHR 3: 6811 Reixinger Road). The preliminary impact assessment for the Phase 1 was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) There is potential for indirect impacts to one (1) Provincial Heritage Property of Provincial Significance (CHR 5 – Sir Adam Beck Generating Station Power Canal):
 - a. The location of CHR 5 (Sir Adam Beck Generating Station Power Canal) should be identified on construction mapping so that project personnel are aware of the presence of this Provincial Heritage Property of Provincial Significance, which is adjacent to, the proposed work at Montrose-Shaft-01.
 - b. The proposed work for Montrose-Shaft-01 should be planned in a manner that avoids the Power Canal and should be contained within 7606 Oakwood Drive.
 - c. If containing work for Montrose-Shaft_01 within 7606 Oakwood Drive is not feasible, then minimize encroachment onto the adjacent Sir Adam Beck Power Canal property. If encroachment is anticipated, then

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

consultation with OPG is recommended to determine and obtain any approval or permits required. If required, complete any cultural heritage technical studies, which may include a HIA.

- 2) Where land disturbance occurs, post-construction landscaping should be completed to return the landscape to pre-construction conditions. Post-construction landscaping should utilize plant species that are native to Ontario where feasible. There is potential for direct impacts to one (1) potential heritage property, CHL 3 (6811 Reixinger Road) as a result of open cut excavation and property acquisition to accommodate the installation of the Reixinger-Shaft-02 and wastewater pipeline within the property.
 - a. Should direct impacts to this property be required and no other technically feasible options are available, then this property should be evaluated for CHVI in a Cultural Heritage Evaluation Report (CHER).
- 3) While no indirect or direct impacts are anticipated to the potential heritage properties of CHR 2, CHR 6-CHR 9 it is recommended that they be identified on construction mapping so that project personnel are aware of the presence of potential heritage properties within, and adjacent to, the proposed work.
- 4) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix B. Should the proposed work be updated or changed, then the impact assessment should be revised to confirm impacts and recommended mitigation measures.

It should be noted that the above recommendations pertain only to Impacts related to the Phase 1 component of the project will be addressed under a separate cover prepared by Wood. The results and recommendations of the Phase 2 component should be coordinated with the results of the Phase 1 CHAR.

7.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix E.

8.0 Closure

This report was prepared for the exclusive use of City of Niagara and is intended to provide a Cultural Heritage Assessment (Existing Conditions and Impact Assessment) of the Study Area. The Study Area is comprised of a small section of land located south of Welland River and North of Reixinger Road, and runs along the following roadways: Reixinger Road, Montrose Road and Brown Road and finally includes a small section of land running east-west from Montrose Road towards the Welland Canal in the City of Niagara, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the cultural heritage assessment conducted by Wood. It is based solely a review of historical information, a property reconnaissance conducted in November 2020 and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the cultural heritage assessment. In evaluating the Study Area, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix F.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

**Wood Environment & Infrastructure,
a Division of Wood Canada Limited**

Prepared by:



Chelsea Dickinson, B.A. (R1194)
Cultural Heritage Specialist

Reviewed by:



Heidy Schopf, MES, CAHP
Built Heritage and Cultural Landscape
Team Lead

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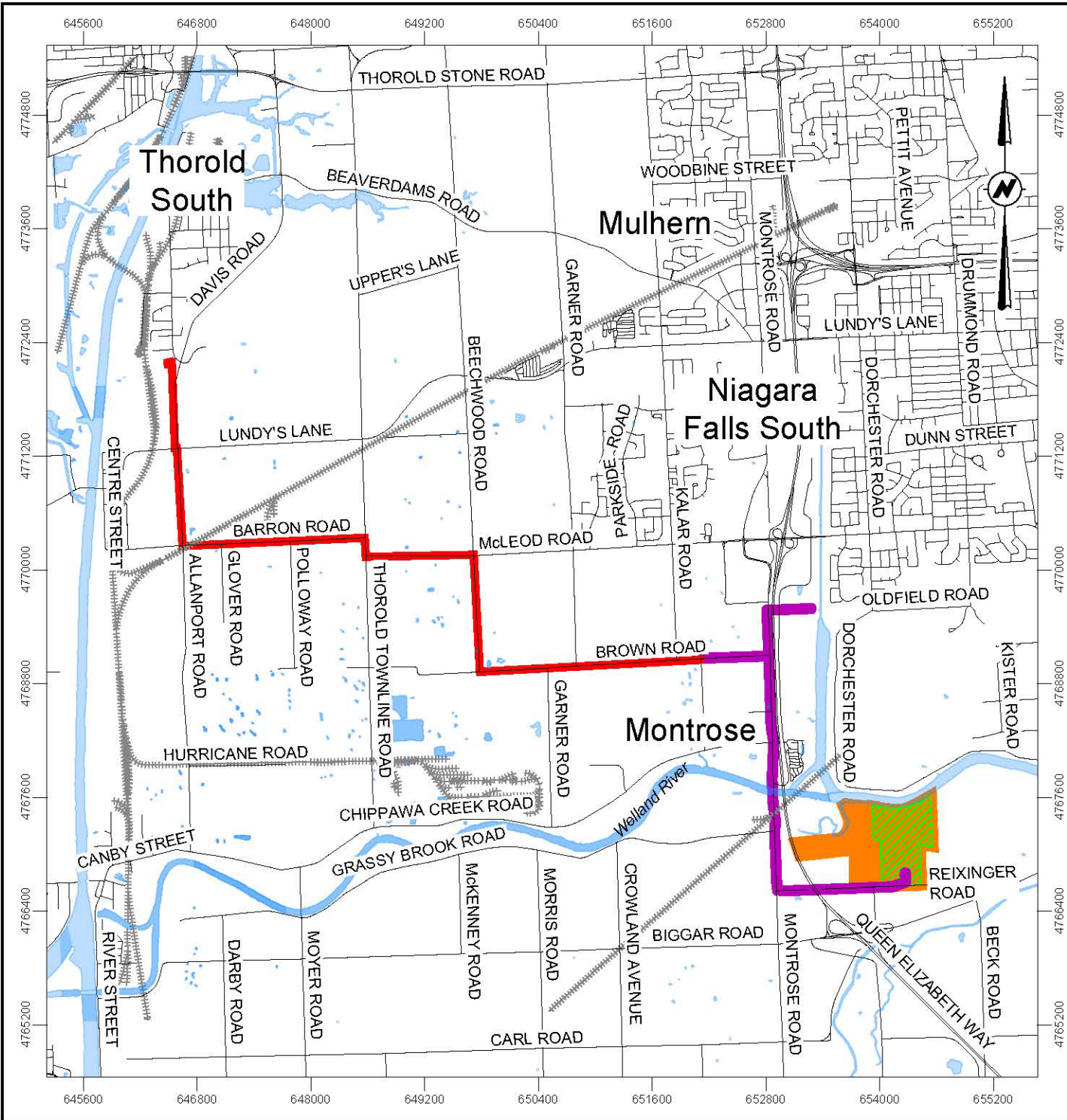
Wood

South Niagara Falls Wastewater Treatment Plant (Phase 1) CHAR

- 2022a *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Falls Wastewater Treatment Plant, Phase 2 Site, City of Niagara Falls, Ontario* DRAFT Report on File with Wood.
- 2022b *Cultural Heritage Evaluation Report for 6811 Reixinger Road, City of Niagara Falls, Ontario, South Niagara Falls Wastewater Treatment Plant Site (Phase 2), City of Niagara Falls, Regional Municipality of Niagara, Ontario* DRAFT Report on File with Wood.
- 2022c *Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment South Niagara Wastewater Treatment Plant, South Thorold Trunk and Blackhorse Sewage Pumping Station (SPS), Cities of Niagara Falls and Thorold, Ontario* DRAFT Report on File with Wood.

Appendix A: Summary of Cultural Heritage Assessments

DATE PLOTTED: 2/10/2022 5:27:23 PM
 FILE LOCATION: P:\2021\Archaeology\Projects\Other Offices\OCUL2001 - Niagara Region - Summary of Arch Assessments, SNIWTP - Niagara\Drafting\AutoCAD_files\OCUL2001-RD2001.dwg

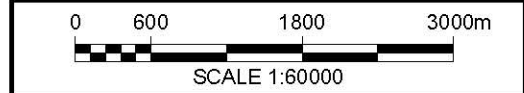


PROJECT:
 CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 FORMER COUNTY OF WELAND
 NOW IN THE CITY OF NIAGARA FALLS
 REGIONAL MUNICIPALITY OF NIAGARA, ONTARIO

TITLE:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SUMMARY OF ARCHAEOLOGICAL ASSESSMENTS

- LEGEND:**
- PHASE 1 CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)
 - PHASE 2 CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)
 - CULTURAL HERITAGE EVALUATION REPORT (CHER)
 - SOUTH THOROLD TRUNK AND BLACKHORSE SPS CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)


NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. OCUL2001.
 ALL LOCATIONS ARE APPROXIMATE.
ORIGINAL PAPER SIZE: 8 1/2 x 11.
REFERENCES:
 CANMAP STREETFILES V2008.4.



Niagara Region
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Wood
 Environment & Infrastructure Solutions
 50 VOGELL ROAD, UNIT 3
 RICHMOND HILL, ONTARIO, L4B 3K6
 647-689-4958



DWN BY:	SJL	CHK'D BY:	CD	DATE:	FEB. 10, 2022
DATUM:	NAD83	PROJECTION:	UTM Zone 17	PROJECT No.	OCUL2001
REV No.	0				

Appendix B: Aerial Photographs



Aerial Photograph
Dated: 1934

SNFWWTP: CHAR Sewer Alignment/Construction Shaft Locations (Phase 1)
Plate: B1





LEGEND
— Alignment
□ 50m Buffer

Aerial Photograph
Dated: 1954/55

SNFWWTP: CHAR Sewer Alignment/Construction Shaft Locations (Phase 1)
Plate: B2



wood.



Aerial Photograph
Dated: 1965

SNFWWTP: CHAR Sewer Alignment/Construction Shaft Locations (Phase 1)
Plate: B3



wood.

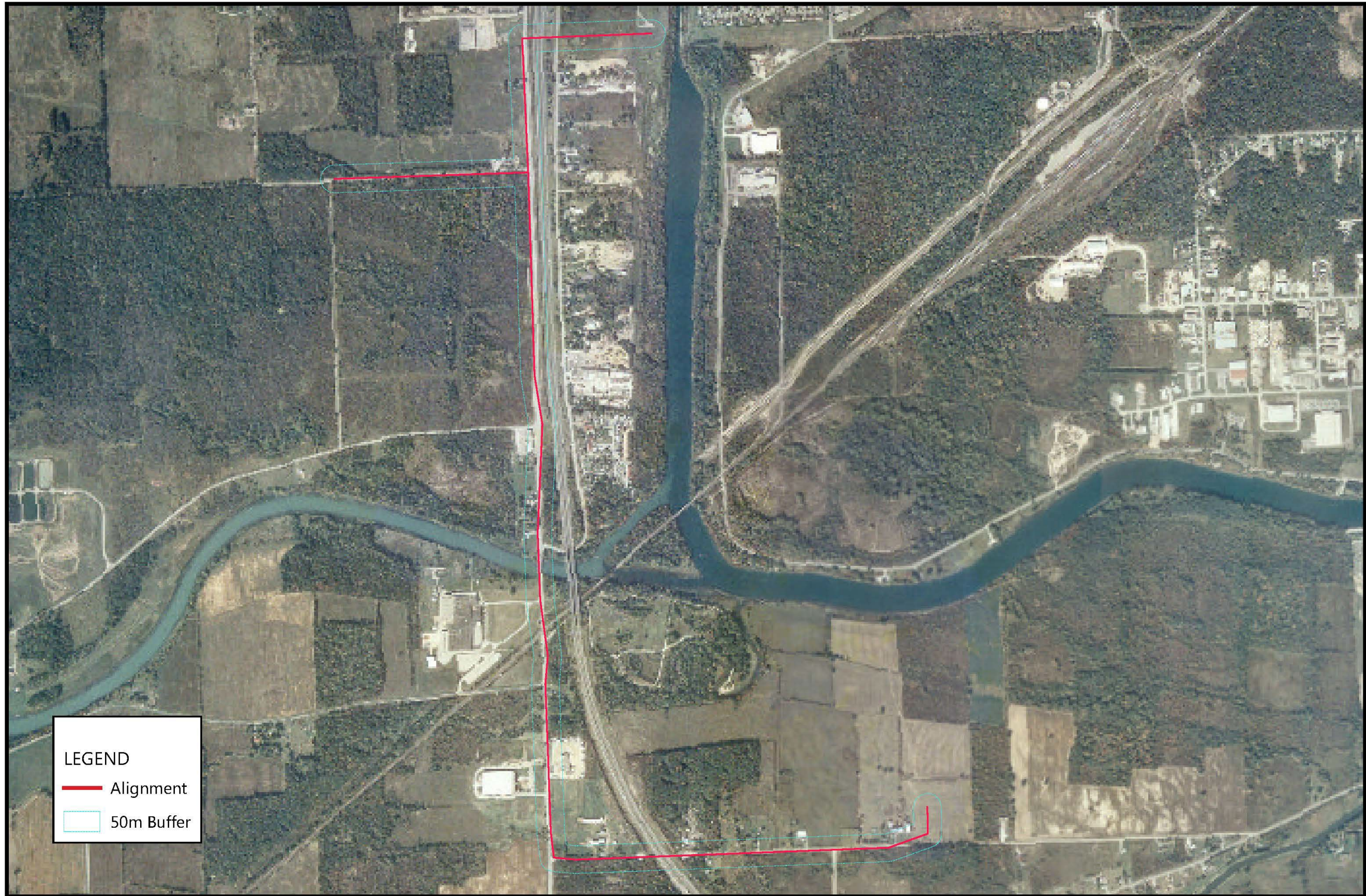


LEGEND
— Alignment
□ 50m Buffer

Aerial Photograph
Dated: 1968

SNFWWTP: CHAR Sewer Alignment/Construction Shaft Locations (Phase 1)
Plate: B4





Aerial Photograph
Dated: 1995

SNFWWTP: CHAR Sewer Alignment/Construction Shaft Locations (Phase 1)
Plate: B5



wood.

Appendix C: Information Gathering

LIST OF INFORMATION GATHERING DOCUMENTATION

SECTION 1: CORRESPONDENCE WITH THE CITY OF NIAGARA FALLS

SECTION 2: CORRESPONDENCE WITH THE MHSTCI

SECTION 3: CORRESPONDENCE WITH THE OHT

Section 1: Correspondence with the City of Niagara

Email correspondence with the City of Niagara (City) regarding the Study Area are provided on the following pages.

From: [Peggy Boyle](#)
To: [Dickinson, Chelsea](#); [Schopf, Heidi](#)
Subject: South Niagara Falls Wastewater Treatment Plan
CHAR
Date: Thursday, November 12, 2020 2:00:11 PM

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hi Chelsea,

I am responding regarding the expanded study area for the above project. My reply is essentially like the other study area, based on the mapping provided, there are no designated properties in the study area, nor are any of the properties listed on the Municipal Register of Heritage properties.

None of the properties in that area are subject to any covenants or easements under the Ontario Heritage Act nor are any of the properties included on a list of Provincially significant properties.

Please let me know if you have any further questions,
Regards Peggy

Peggy Boyle CAPH | Assistant Planner | Planning, Building & Development | City of Niagara Falls |
4310 Queen Street | Niagara Falls, ON L2E 6X5 | (905) 356-7521 ext 4334 | Fax 905-356-2354 |
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Section 2: Correspondence with the MHSTCI

Email correspondence with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) regarding the Study Area are provided on the following pages.

To: [Schopf, Heidi](#); [Registrar \(MHSTCI\)](#); [Dickinson, Chelsea](#)
Subject: RE: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHAR for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations
Date: Friday, November 6, 2020 5:01:30 PM
Attachments: [image001.png](#)
[image002.png](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hi Heidi,

It the Sir Adam Back I Generating Station **complex** (SAB1) which includes the main generating station, canal and associated features/elements. In my previous email, I attached a map depicting the property boundaries. It is adjacent to this recent inquiry.

Let me know if there are any other questions or if you would like to discuss over the phone.

Thanks and have a great weekend!

Karla

From: Schopf, Heidi <heidy.schopf@woodplc.com>
Sent: November-06-20 11:34 AM
To: Registrar (MHSTCI) <Registrar@ontario.ca>; Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Subject: RE: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHAR for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

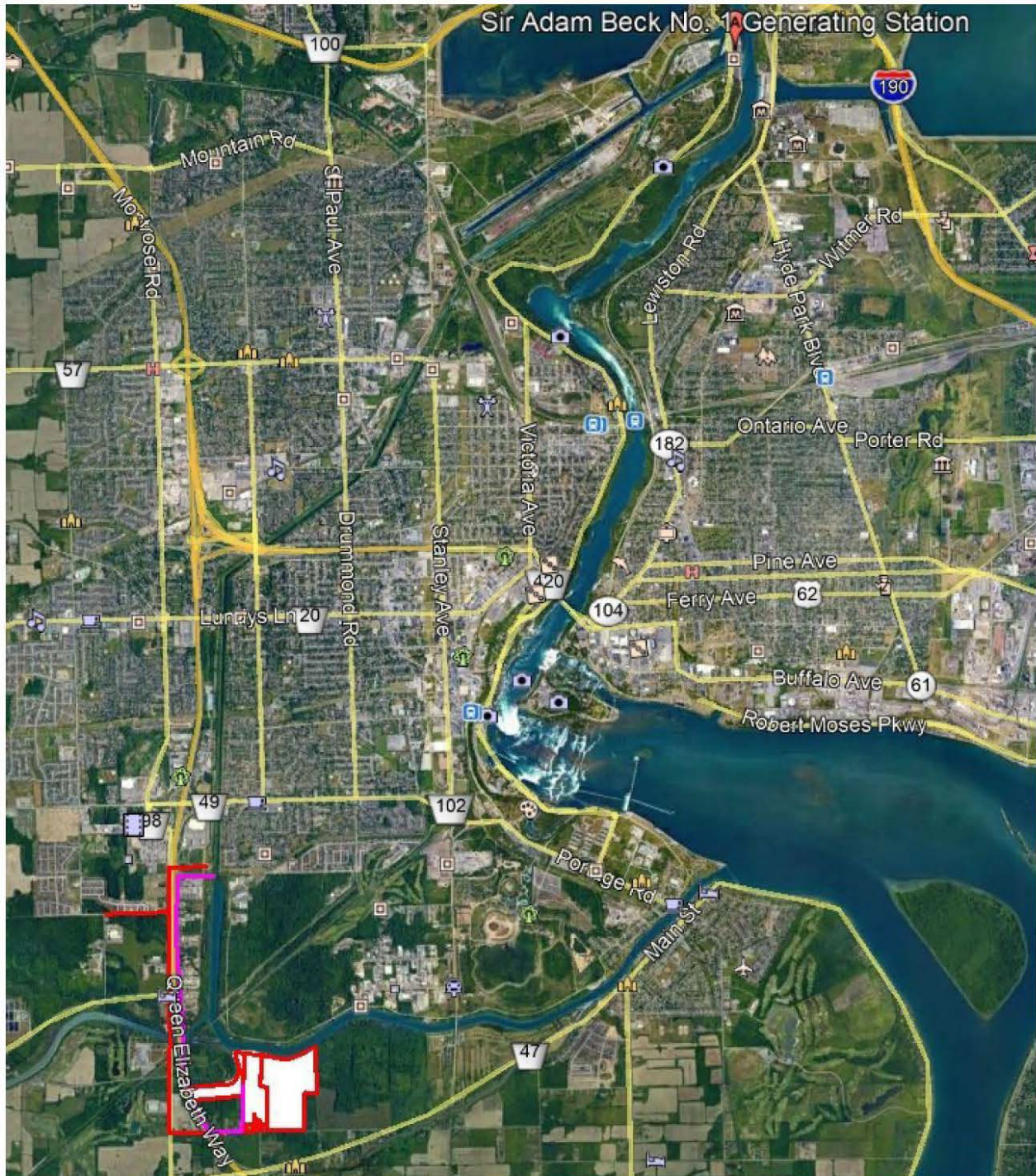
CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Thanks Karla,

Can you confirm what part of the Sir Adam Beck Generating Station is adjacent to the Study Area? I am familiar with the Sir Adam Beck GS and I don't believe it is adjacent to the current SNFWWTP study area (bottom left corner in the Google Earth image below). Let me know if this is incorrect.

Happy to discuss!

-Heidy



From: Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca> On Behalf Of Registrar (MHSTCI)
Sent: Thursday, November 5, 2020 12:26 PM
To: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Cc: Registrar (MHSTCI) <Registrar@ontario.ca>; Schopf, Heidy <heidy.schopf@woodplc.com>
Subject: MHSTCI Response: Information Request - South Niagara Falls Wastewater Treatment Plan: CHAR for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

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File 0010857 – South Niagara Falls Wastewater Treatment Plant & Servicing

Hi Chelsea,

Hope this email finds you well.

As you may know, the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) developed screening checklists to assist property owners, developers, consultants and others to identify known and potential cultural heritage resources:

- [Criteria for Evaluating Archaeological Potential](#)
- [Criteria for Evaluating Marine Archaeological Potential](#)
- [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#)

I have used the document above (Built Heritage and Cultural Heritage Landscapes) in order to respond to your question:

- Question 3a. i. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value e.g. a property that is designated by order of the Minister of Heritage, Sport, Tourism and Culture Industries as being of cultural heritage value or interest of provincial significance [s.34.5]?

MHSTCI Response: To date, no properties have been designated by the Minister.

- Question 3a.v. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value included in the Ministry of Heritage, Sport, Tourism and Culture Industries' list of provincial heritage properties?

MHSTCI Response: The study area is adjacent to the Sir Adam Back I Generating Station complex (SAB1), a provincial heritage property of provincial significance – a map depicting the property boundaries is attached. MHSTCI recommends that you connect with Ontario Power Generation for further information about this property (Statement of Cultural Heritage Value and potential impacts to heritage attributes). You can contact Tali Laurenson, Real Estate Strategy Manager at 416-592-4154 or talitha.laurenson@opg.com.

Please note that if the subject lands or parts of the subject lands are owned or controlled by an Ontario Ministry or Prescribed Public Body (PPB) on behalf of the Crown (the list of PPBs is available as O. Reg. 157/10), a Ministry or PPB may have responsibilities under the [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

MHSTCI would appreciate if any technical cultural heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for MHSTCI review.

I hope this helps. Let me know if you have any questions.

Regards,
Karla

Karla Barboza MCIP, RPP, CAHP | (A) Team Lead, Heritage
Ministry of Heritage, Sport, Tourism and Culture Industries
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit T.
416.314.7120 | Email: karla.barboza@ontario.ca

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>

Sent: November-02-20 4:25 PM

To: Registrar (MHSTCI) <Registrar@ontario.ca>

Cc: Schopf, Heidi <heidyschopf@woodplc.com>

Subject: Information Request - South Niagara Falls Wastewater Treatment Plan: CHAR for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

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Good Afternoon,

Wood was retained by the Niagara Region to complete a Cultural Heritage Impact Assessment (CHAR) in support of the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations in the City of Niagara Falls, Ontario. To complete the CHAR, Wood is looking to identify protected and potential cultural heritage resources within, and adjacent to, the Study Area. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Research Archaeologist

Environment and Infrastructure Solutions

Work: (226) 821-2497

chelsea.dickinson@woodplc.com

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wood.

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Section 2: Correspondence with the OHT

Email correspondence with the Ontario Heritage Trust (OHT) regarding the Study Area are provided on the following pages.

From: [Kevin DeMille](#)

To: [Dickinson, Chelsea](#); [registrar](#)

Cc: [Schopf, Heidi](#)

Subject: Re: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

Date: Tuesday, November 30, 2021 8:54:00 AM

Attachments: [image001.png](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Good morning Chelsea,

I'm sorry for the delay. I did not receive your request. Thank you for your information request related to a Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) in Niagara Falls. Your request to verify the presence of OHT heritage properties or easements within or adjacent to the study area has been processed. I've reviewed the study area against our database of OHT easements and properties. We can confirm that the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the study area provided in your map.

If you have not already done so, I recommend you check the Trust's Plaque Database (PDF available online) <https://www.heritagetrust.on.ca/en/index.php/pages/tools/data-inventories> to verify the presence of plaques. Additionally, I recommend you check the Trust's register (available

online) <http://www.heritagetrust.on.ca/en/index.php/pages/tools/ontario-heritage-act-register> and contact the local municipality to verify no local heritage properties are present within the identified study area.

As described in Section 23 of the Ontario Heritage Act, the Trust holds and maintains the provincial Ontario Heritage Act Register of properties that have been designated by municipalities under sections 29 and 41 of the Act as well as properties designated under the Act by the Minister. We rely on municipalities to send us information and it is advisable to check with the clerk's office to verify information.

Under Section 27 of the Act (OHA) the clerk of a municipality is required to maintain a local register of all designated properties. Section 27 also states that municipalities may keep a register of property that has not been designated, but that the municipality has determined to be of cultural heritage value or interest. These are often referred to as "listed" properties. These non-designated heritage properties are not reflected in the OHA Register.

Kind regards,

Kevin

Kevin De Mille

Natural Heritage Coordinator Telephone: 437-246-5854

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: November 29, 2021 4:15 PM
To: registrar <registrar@heritagetrust.on.ca>; Kevin DeMille <Kevin.DeMille@heritagetrust.on.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>
Subject: RE: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

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Good Afternoon,

I am following up on the below information gathering request pertaining to the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations in the City of Niagara Falls.

Any information you could provide would be greatly appreciated. Thanks,

Chelsea

From: Dickinson, Chelsea

Sent: Monday, November 2, 2020 4:25 PM
To: registrar@heritagetrust.on.ca
Cc: Heidi Schopf (heidy.schopf@woodplc.com) <heidy.schopf@woodplc.com>
Subject: Information Request - South Niagara Falls Wastewater Treatment Plan: CHIA for the Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations

Good Afternoon,

Wood was retained by the Niagara Region to complete a Cultural Heritage Impact Assessment (CHIA) in support of the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) associated sewer alignments/construction shaft locations in the City of Niagara Falls, Ontario. To complete the CHIA, Wood is looking to identify protected and potential cultural heritage resources within, and adjacent to, the Study Area. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Research Archaeologist

Environment and Infrastructure Solutions Work: (226) 821-2497

chelsea.dickinson@woodplc.com

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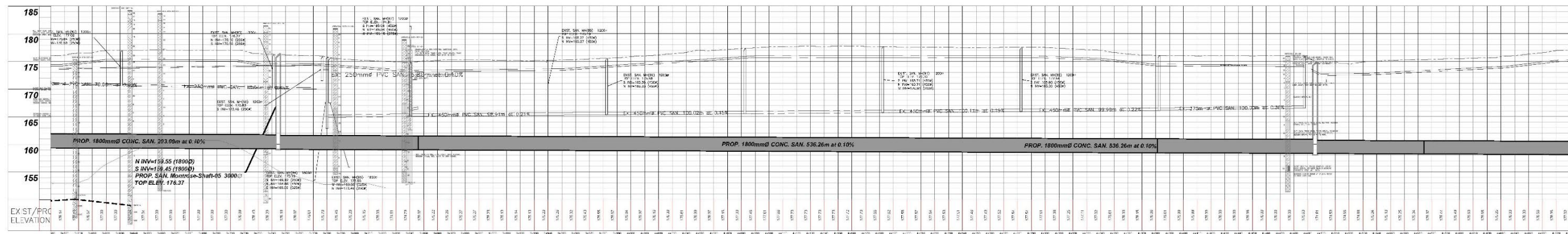
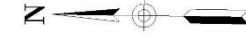
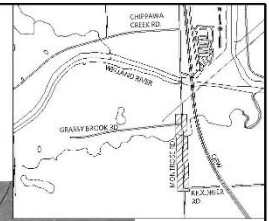
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Appendix D: Proposed Work





NOTES/LEGEND

1. THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWER AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

2. PROPERTY LINES WERE PROVIDED USING REGISTERED PLANS AND BARS LOCATED IN THE FIELD. TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

DRAFTING	DR
DESIGN	MF
CHECKED BY	
APPROVED BY	



SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
from STA 3+590 to STA 4+680
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No.	718002
DATE	2021-09-24
SCALE	Hor : 1:1500 Ver : 1:375
REV.	
DWG No.	C6
REV.	0

Appendix E: Assessor Qualifications

Assessor Qualifications

Heidy Schopf, MES, CAHP – Built Heritage and Cultural Landscape Team Lead -

Ms. Schopf is a Senior Cultural Heritage Specialist at Wood and has worked in the field of Cultural Resource Management since 2007. She is a Professional Member of CAHP. She has worked on a wide variety of projects throughout Ontario, including cultural heritage resources assessments, heritage impact assessments, heritage documentation reports (photographic and 3D/LiDAR), cultural heritage evaluations, strategic conservation plans, HCD studies and plans, heritage feasibility studies, and archaeological assessments. Ms. Schopf has extensive experience applying local, Provincial, and Federal heritage guidelines and regulations to evaluate protected and potential cultural heritage properties. She is skilled at carrying out impact assessments and developing mitigation measures to conserve the heritage attributes of properties where changes are proposed. Ms. Schopf has completed hundreds of cultural heritage projects under a variety of processes, including: Environmental Assessment Act, Planning Act, Ontario Heritage Act, Transit Project Assessment Process, Renewable Energy Approval, and Ontario Energy Board.

Chelsea Dickinson B.A., Cultural Heritage Specialist and Research Archaeologist

(R1194) - Ms. Dickinson has been working in consulting archaeology since 2015. During this time, Ms. Dickinson has developed a variety of archaeological skills, from background research to Stage 4 excavations laboratory work, and environmental assessments (EA) conducted for the development of wind and solar farms, hydro line corridors and municipal roadway. Ms. Dickinson has had the privilege of working alongside a multitude of First Nation community members while conducting archaeological assessments in both Northern and Southern Ontario. Ms. Dickinson holds an honorary Degree in Near Eastern and Classical Archaeology from Wilfrid Laurier University, and a Post-Graduate Certificate in Geographical Information Systems from Fanshawe College. Ms. Dickinson holds an Applied Research Licence (R1194) from the Ontario MHSTCI.

Appendix F: Limitations

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:
 - a. The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - b. The Scope of Services;
 - c. Time and Budgetary limitations as described in our Contract; and,
 - d. The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in this report were based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.
4. The potential and protected built heritage resources and cultural heritage landscapes at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
5. Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' guidelines. It is possible that unforeseen and undiscovered cultural heritage resources may be present at the Study Area.
6. The utilization of Wood Environment & Infrastructure's services during the implementation of any further archaeological work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained in the report. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
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A faint, purple-tinted map of a region with roads, rivers, and buildings serves as the background for the top section of the cover.

V3.3.5

REGIONAL MUNICIPALITY OF NIAGARA
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

Cultural Heritage Assessments

Cultural Heritage Assessment Report
- Preferred Thorold South Servicing Strategy

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Wastewater Treatment Plant, South Thorold Trunk and Blackhorse
Sewage Pumping Station (SPS), Cities of Niagara Falls and Thorold, Ontario

Project # OCUL2001.1000

April 4, 2022

Prepared for:
Niagara Region
1815 Sir Isaac Brock Way, Thorold, ON, L2V 4T7

wood.

Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

South Niagara Wastewater Treatment Plant, South Thorold Trunk and Blackhorse SPS, Cities of Niagara Falls and Thorold, Ontario

Project # OCUL2001.1000

PREPARED FOR:

Niagara Region

1815 Sir Isaac Brock Way, Thorold, ON, L2V 4T7

PREPARED BY:

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited

50 Vogell Rd Unit No. 3 & 4

Richmond Hill, Ontario L4B 3N6, Canada

April 4, 2022

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Executive Summary

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage and archaeology staff are depicted in Appendix A.

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed South Thorold Trunk alignment and Blackhorse Sewage Pumping Station (SPS) in the Cities of Niagara Falls and Thorold, Regional Municipality of Niagara, Ontario (the Project). The Study Area includes the South Thorold Trunk sewer alignment, which runs west along Brown Road from its east terminus at Heartland Forest Road in the City of Niagara Falls, turns north on Beechwood Road, turns west at McLeod Road, jogs at Thorold Townline Road to Barron Road, then turns north on Allanport Road to Davis Road to end at the Blackhorse SPS site at 701 Allanburg Road in the City of Thorold. The Study Area encompasses the project footprint plus a 50 m buffer.

Following the completion of background research, information gathering, and a field review, it was determined there are no designated heritage properties or properties listed on the municipal heritage registries within the Study Area. Eight properties within the Study Area, three within the City of Niagara Falls (CHR 1-CHR 3) and four within the City of Thorold (CHR 4 -CHR 7) were identified to have potential cultural heritage value or interest.

The proposed work for South Thorold Trunk alignment and Blackhorse involves the construction of the below grade sanitary sewer alignment, eleven (11) open cut shaft locations, a forcemain, and a sewage pumping station. It is understood that construction methods will be primarily open cut construction with trenchless construction methods used in the vicinity of natural areas and rail line. As a result, indirect impacts are anticipated to one potential heritage property (CHR 3: 10111 McLeod Road) due to nearby land disturbance that will introduce the risk of structural damage related to vibration caused by construction activity. The impact assessment for the South Thorold Trunk alignment and Blackhorse SPS was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) Potential indirect impacts are anticipated to one potential heritage property (CHR 3: 10111 McLeod Road).
 - a. To mitigate impacts related to potential vibration impacts resulting from the installation of new/modified infrastructure or construction activities, Wood

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

recommends that a qualified vibration specialist is consulted to develop an appropriate vibration monitoring program to avoid or reduce impacts to structures on this property.

- 2) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix D. If the proposed work is updated or changed, this impact assessment should be revised to confirm impacts and recommended mitigation measures.

It should be noted that the above recommendations pertain only to impacts related to the South Thorold Trunk/Blackhorse SPS component of the project. Impacts related to Phase 1 and Phase 2 of the project are addressed under separate covers prepared by Wood.

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CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

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CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

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- Appendix E: Assessor Qualifications
- Appendix F: Limitations

Project Personnel

Project Manager:	Heidy Schopf, MES, CAHP
Cultural Heritage Specialist:	Chelsea Dickinson, B.A.
Fieldwork Assistant:	Lauren Zaphishny
Report Preparation:	Chelsea Dickinson, B.A.
Graphics:	Steve LaBute, CAD
Report Reviewers:	Henry Cary, Ph.D., CAHP, RPA Heidy Schopf, MES, CAHP

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

1.0 Introduction

1.1 Project Context

Wood Environment & Infrastructure Solutions (“Wood”) was retained by Niagara Region to complete cultural heritage and archaeological consulting services in support of the Schedule “C” Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated infrastructure in the City of Niagara Falls and City of Thorold, Niagara Region, Ontario. The project components assessed by Wood cultural heritage staff are depicted in Appendix A and summarized below.

Project Component	Work Completed by Wood
Phase 1 Sewer Alignment/Construction Shaft Locations	<ul style="list-style-type: none"> • Stage 1 Archaeological Assessment (P327-0013-2021) • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment
Phase 2 Wastewater Treatment Plant	<ul style="list-style-type: none"> • Stage 1-2 Archaeological Assessment (P348-0106-2020 and P348-0107-2020) • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment • Cultural Heritage Evaluation Report for 6811 Reixinger Road • Marine Archaeological Assessment (Marine Archaeological License 2021-222)
South Thorold Trunk and Blackhorse Sewage Pumping Station	<ul style="list-style-type: none"> • Stage 1 Archaeological Assessment (P327-0012-2021) • Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment • Stage 2 Archaeological Assessment for Blackhorse Sewage Pumping Station (P327-0019-2021)

This report contains the Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) for the proposed South Thorold Trunk alignment and Blackhorse Sewage Pumping Station (SPS) in the Cities of Niagara Falls and Thorold, Regional Municipality of Niagara, Ontario (the Project). The Study Area includes the South Thorold Trunk sewer alignment, which runs west along Brown Road from its east terminus at Heartland Forest Road in the City of Niagara Falls, turns north on Beechwood Road, turns west at McLeod Road, jogs at Thorold Townline Road to Barron Road, then turns north on Allanport Road to Davis Road to end at the Blackhorse SPS site at 701 Allanburg Road in the City of Thorold. The Study Area encompasses as the project footprint plus a 50 m buffer (Figure 1 and Figure 2).

The purpose of this CHAR is to establish the historical context of the Study Area, identify known and potential heritage properties through information gathering and

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

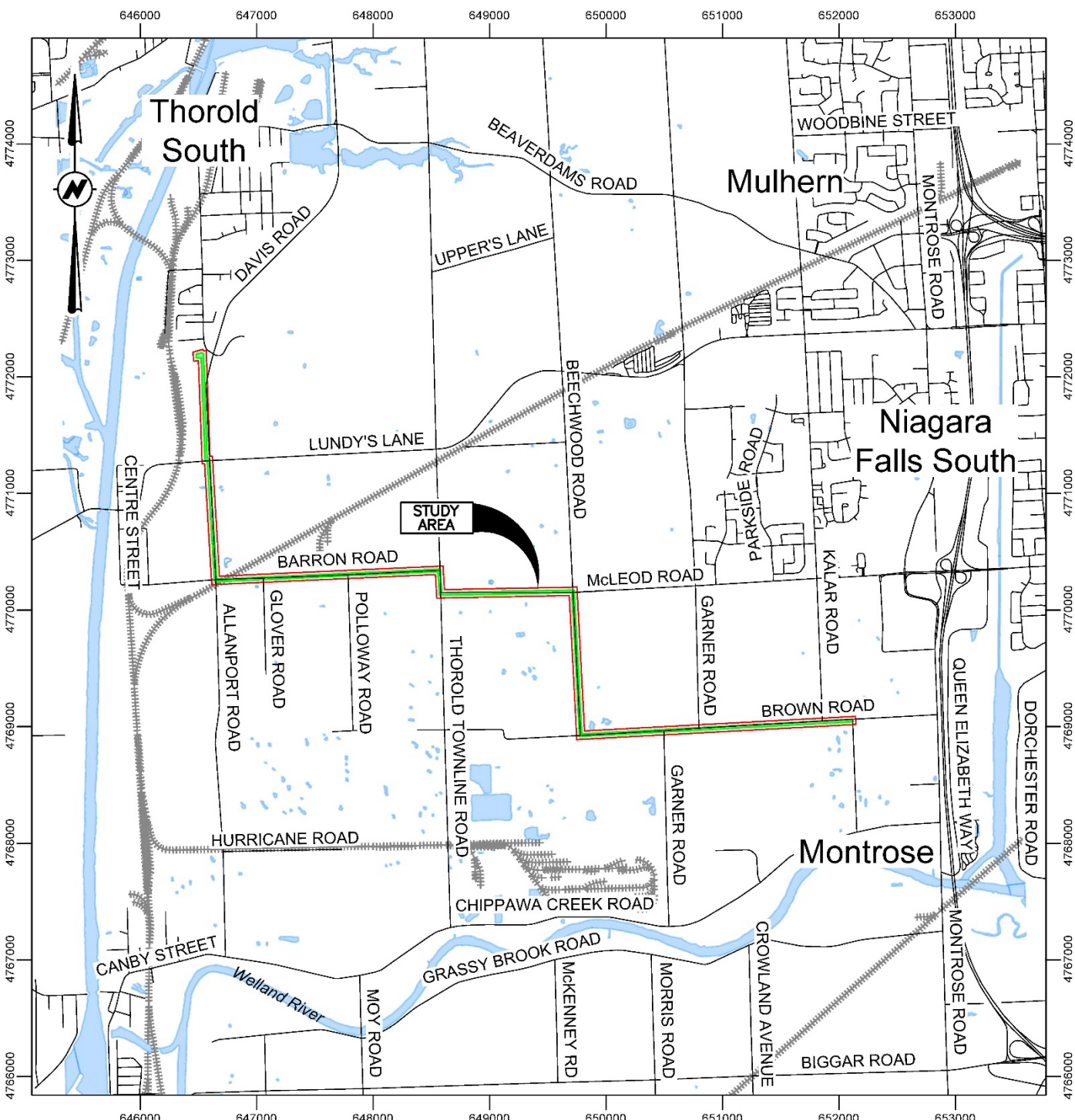
fieldwork, and develop an inventory of built heritage resources and cultural heritage landscapes within the Study Area. From this understanding of the Study Area, and review of the proposed work a preliminary impact assessment and recommended mitigation measures were prepared.

1.2 Objectives

The tasks completed for this CHAR are:

- Background research, including consultation of primary and secondary sources and review historical maps/aerial imagery to gain an understanding of the historical evolution of the Study Area;
- Online data collection and submission of agency information requests to the local municipality, Ontario Heritage Trust, and Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) to determine the presence of protected and potential built heritage resources and cultural heritage landscapes within, and adjacent to, the Study Area;
- Carry out a field investigation to establish the existing conditions of the Study Area, confirm the presence of protected heritage properties, and identify potential built heritage resources and/or cultural heritage landscapes;
- Create an inventory of built heritage resources and cultural heritage landscapes, identify the statement of significance and list of heritage attributes for protected properties, and complete a high-level description of the property and preliminary list of heritage attributes for potential heritage properties; and,
- Complete an impact assessment to identify potential impacts to identified built heritage resources and cultural heritage landscapes that may result from the proposed work, and prepare mitigation measures where impacts are anticipated.

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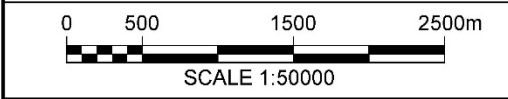
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 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 LOCATION OF THE STUDY AREA

LEGEND:
 [Red Outline] STUDY AREA
 [Green Outline] PROJECT FOOTPRINT

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
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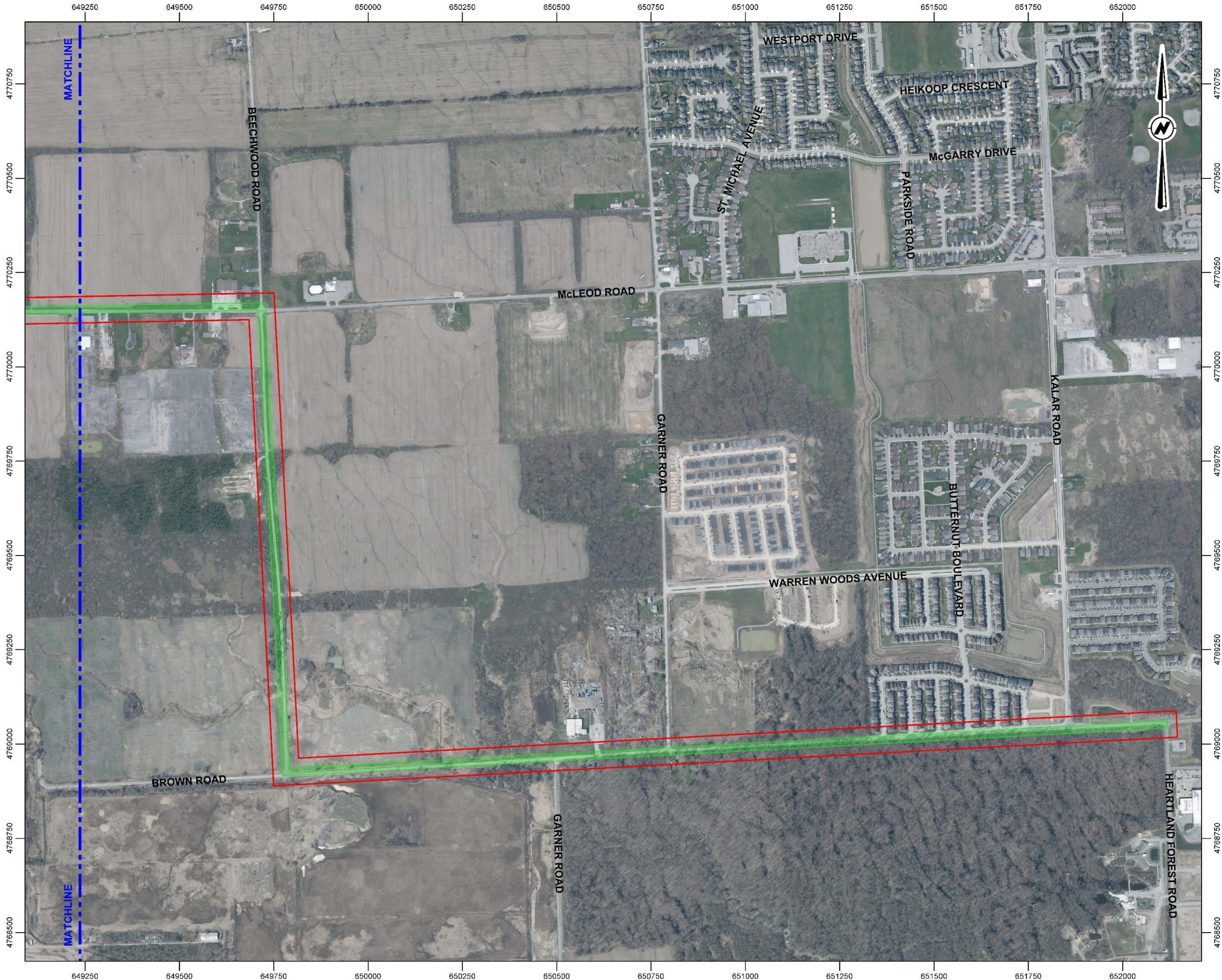


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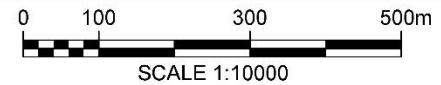


PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 AERIAL PHOTOGRAPH SHOWING THE
 LOCATION OF THE STUDY AREA

LEGEND:
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 [Green Line] PROJECT FOOTPRINT

NOTES:
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 REFERENCES:
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PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
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 LOCATION OF THE STUDY AREA

LEGEND:
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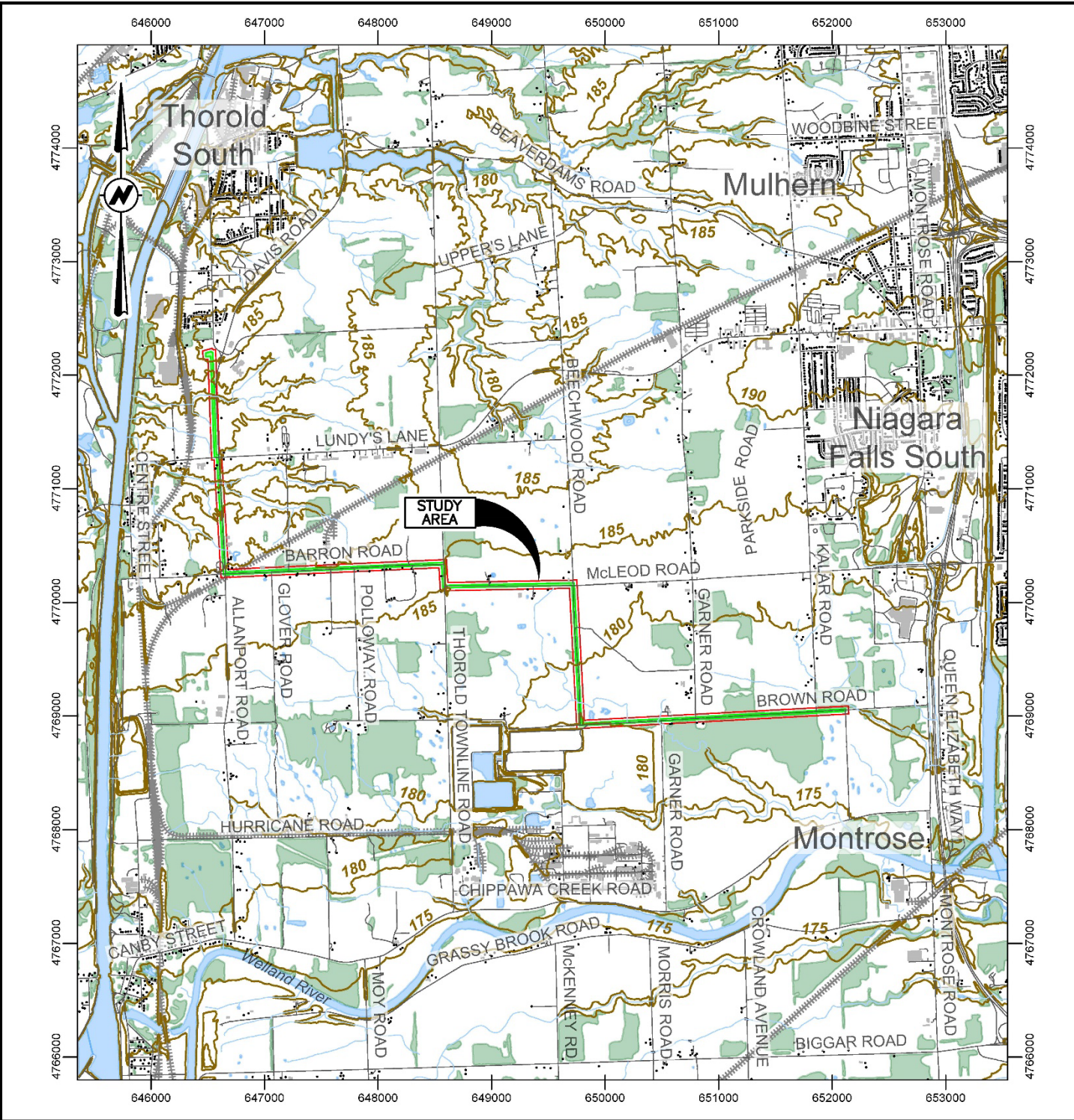
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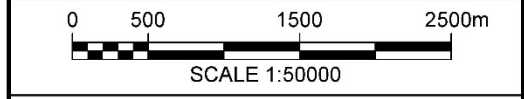
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 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE: TOPOGRAPHIC MAP SHOWING THE
 LOCATION OF THE STUDY AREA

LEGEND:

- STUDY AREA
- PROJECT FOOTPRINT


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 ESRI CANADA, "ONTARIO BASIC MAPPING (OBM)"; CANMAP
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2.0 Methodology

2.1 Regulatory Requirements

The requirements to consider cultural heritage under the Environmental Assessment process are found in the Provincial Policy Statement (PPS) (Government of Ontario 2020), Environmental Assessment Act (Government of Ontario 2020a), and the Ontario Heritage Act, R.S.O. 1990, c. O.18 (Government of Ontario 1990b).

2.1.1 Provincial Policy Statement

The PPS provides policy direction on matters of provincial interest related to land use planning and development (Government of Ontario 2020:1). The PPS is applicable to the entire Province of Ontario. Under the PPS, the conservation of cultural heritage is identified as a matter of provincial interest. Section 2.6 of the PPS gives direction on the consideration of cultural heritage and archaeology (Government of Ontario 2020:31). Specifically, the following direction is given regarding built heritage resources, cultural heritage landscapes, and protected heritage properties:

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved

2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

(Government of Ontario 2020)

2.1.2 Environmental Assessment Act

The *Environmental Assessment Act (EAA)* sets out planning and decision-making processes so that potential environmental effects are considered before a project begins (Government of Ontario 1990a). The *EAA* applies to provincial ministries and agencies, municipalities, and public bodies. Under the *EAA*, there are two types of assessments: Individual EAs and Streamlined EAs. Individual EAs are large-scale, complex projects with the potential for significant environmental effects. Streamlined EAs are routine projects that have predictable and manageable environmental effects. Streamlined EAs typically fall under the Municipal Class Environmental Assessment (MCEA) which are classified in terms of Schedules. The Schedule A, B and C Municipal Class EAs are defined within the MCEA Manual as follows:

Schedule A: These projects generally apply to normal, or emergency operational/maintenance procedures and the resulting effects are usually minimal and, therefore, these projects are pre-approved.

Schedule A+: These projects, similarly to the Schedule 'A', are pre-approved and typically involved minimal effects/impacts. Unlike the

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Schedule 'A' these projects require the public to be notified prior to the planned work.

Schedule B: These projects generally include improvements and minor expansions to existing facilities and there is a potential for some adverse environmental impacts.

Schedule C: These projects generally include the construction of new facilities and/or major expansions to existing facilities. As a result these projects have the potential for significant environmental effects.

(MCEA 2015)

The requirement to consider cultural heritage in Class EAs is discussed in the MCEA Manual (2015) where the cultural environment is identified as one of the key considerations in the MCEA process (MCEA 2015: B.1.1). Under Section B of the MCEA Manual, the cultural environment includes archaeological resources, areas of archaeological potential, built heritage resources, and cultural heritage landscapes (MCEA 2015: B.1.1[4]). Further, the MCEA Manual (2015: B.1.1[4]) gives the following direction regarding the cultural environment:

Significant cultural heritage and archaeological resources features should be avoided where possible. Where they cannot be avoided, then effects should be minimized where possible, and every effort made to mitigate adverse impacts, in accordance with provincial and municipal policies and procedures. Cultural heritage features should be identified early in the process in order to determine significant features and potential impacts.

To account for anticipated environmental effects to identified built heritage resources and cultural heritage landscapes, Wood uses the following approach for each Schedule MCEA:

Schedule A: No additional buffer added to the Study Area for Schedule 'A' MCEA projects given the low potential for impacts to cultural heritage resources.

Schedule A+: No additional buffer added to the Study Area for Schedule 'A+' MCEA projects given the low potential impacts to cultural heritage resources.

Schedule B: Add a 25 m buffer to the Study Area for Schedule 'B' MCEA projects to capture potential adverse impacts to cultural heritage resources.

Schedule C: Add a 50 m buffer to the Study Area for Schedule 'C' MCEA projects to capture potential adverse impacts to cultural heritage resources.

Since this project is being assessed as a Schedule 'C' Municipal Class EA, Wood applied a 50 m buffer to the Project Study Area.

2.1.3 Ontario Heritage Act

The *Ontario Heritage Act*, R.S.O. 1990, c.018, provides a framework for the protection of cultural heritage resources in the Province. It gives municipalities and the provincial government powers to protect heritage properties and archaeological sites. The *Ontario Heritage Act* includes two regulations for determining Cultural Heritage Value or Interest (CHVI): *Ontario Regulation* (O. Reg.) 9/06 and O. Reg. 10/06. O. Reg. 9/06 provides criteria to determine the CHVI of a property at a local level while O. Reg. 10/06 provides criteria to determine if a property has CHVI of provincial significance.

2.2 City of Niagara Falls Official Plan

The City of Niagara Falls outlines the long term objectives and policies of the City with respect to the growth and development of urban lands; the protection of agricultural lands and the conservation of natural heritage areas; and the provision of the necessary infrastructure (City of Niagara Falls 2019). Policies relevant to cultural heritage are included below:

Section 4 of the Official Plan is entitled “Cultural Heritage Conservation” and outlines that the City of Niagara Falls has a rich historical background and promotes the following measures concerning development on significant heritage properties:

4.19 Development adjacent to and surrounding significant heritage properties shall be designed as to not adversely impact on the character, quality or amenity associated with the heritage resource.

4.21 City-owned heritage properties and buildings shall be conserved, maintained and, where possible, restored in accordance with the policies of this Plan.

2.3 Guidance Documents

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is responsible for the administration of the *Ontario Heritage Act* and has developed checklists, information bulletins, standards and guidelines, and policies to support the conservation of Ontario’s cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological sites.

The MHSTCI *Ontario Heritage Tool Kit* gives guidance and information on the heritage conservation process in Ontario (Government of Ontario 2017). Specifically, the information sheets contained in the *Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* were used to guide the general preparation of this report (Government of Ontario 2006b). *InfoSheet#5: Heritage Impact Assessment and Conservation Plans* was used to guide the assessment of potential impacts resulting from the proposed work.

2.4 Background Research

Background research was carried out during the preparation of this CHAR to gain a thorough understanding of the historical context of the Study Area. Primary sources, secondary sources, historical maps, and aerial photographs were consulted, as appropriate, to identify historical themes relevant to the Study Area. Specifically, research regarding the physiography, survey and settlement, 19th century land use, and 20th century land use of the Study Area was completed. A review of historical mapping and aerial photographs was also conducted to identify settlements, structures, and landscape features within, and adjacent to, the Study Area. Historical maps from 1862, 1876, 1906, 1907, 1908, 1915, 1920, 1925, 1928, 1930, 1938, 1939, 1942, 1961, 1963 and 1973 were reviewed. In addition, recent aerial photographs and Google Earth imagery were reviewed to identify changes within, and adjacent to, the Study Area.

The results of the background research are presented in Section 3.0 of this report.

2.5 Information Gathering

Information gathering was carried out to identify known and potential built heritage resources and cultural heritage landscapes in the Study Area. For this CHAR, the City of Niagara Falls, City of Thorold, Ontario Heritage Trust, and the MHSTCI were contacted directly via email and/or phone to determine the presence of listed, designated, or protected heritage properties within 50 m of the Project Footprint, the Study Area.

The results of information gathering activities are presented in Section 4.1 of this report.

2.6 Field Review

A field review of the Study Area was completed to identify properties with known or potential built heritage resources and cultural heritage landscapes. During the field review, the 40-year 'rule of thumb' was used to identify properties with the potential to have CHVI. The 40-year rule is generally accepted by federal and provincial agencies as a preliminary screening measure for CHVI. It should be noted, however, that the 40-year threshold is a guide only and does not imply that all properties of 40 years of age have CHVI. Nor does it exclude properties that are less than 40 years of age and exhibit CHVI. The professional judgement of Wood's Cultural Heritage Specialist was used during the field review to apply the 40-year rule and identify properties with potential CHVI.

The results of the field review are presented in Section 4.2 of this report.

2.7 Inventory of Built Heritage Resources and Cultural Heritage Landscapes

Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within 50 m of the Project Footprint, the Study Area was created. The inventory is presented in Section 4.3 of this report.

2.8 Impact Assessment

A preliminary impact assessment (hereafter referred to as “impact assessment”) was completed to determine whether the proposed work would result in direct or indirect impacts to identified built heritage resources and cultural heritage landscapes. The impact assessment for this CHAR was prepared using the impact examples provided in the MHSTCI *InfoSheet #5: Heritage Impact Assessment and Conservation Plans* (InfoSheet #5) (Government of Ontario 2006b). The following impacts to cultural heritage resources were considered:

- Destruction of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;
- Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces; and,
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect and archaeological resource.

In addition, mitigation measures outlined in MHSTCI *InfoSheet#5* were used to guide the preparation of considered alternatives, mitigation and conservation methods. These include methods of minimizing or avoiding a negative impact to cultural heritage resources, such as:

- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setbacks, settings, and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations; and,
- Buffer zones, site plan control, and other planning mechanisms.

The results of the impact assessment and recommended mitigation measures are

contained in Section 5.0

3.0 Historical Context

3.1 Introduction

To gain a thorough understanding of the Study Area, a review of its physiography, survey, and 19th and 20th century land use was completed. Historical mapping and aerial photographs were analyzed to identify settlements, structures, and landscape features within, and adjacent to, the Study Area.

Historically, the Study Area is located within part of Lots 167-168, 181-184, and 198-201 and 203-208 in the Geographic Township of Stamford and part of Lots 93-94, 112-117 and 135-140 in the Geographic Townships of Thorold, Welland County now in the cities of Niagara Falls and Thorold, Regional Municipality of Niagara.

3.2 Physiography

The Study Area is situated in the Haldimand Clay Plain physiographic region (Chapman and Putnam 1984). This region is made up of a series of parallel belts between Lake Erie and the Niagara Escarpment that were once submerged by Glacial Lake Warren. The highest ground adjoins the Niagara Escarpment. The soils of this region are known for their heavy clay texture and are often characterized by poor drainage. Several square kms of Welland County are covered in peat bogs.

The *Soil Survey of Welland County* (Acton 1935) indicates that the dominant surface soil types within the Study Area is Welland Clay and Haldimand Clay. Welland Clay has fair to poor natural drainage while Haldimand Clay has fair to good surface drainage. The topography of the Study Area is a mix of generally rolling to smooth uplands and smooth to undulating uplands with some low swales and pond holes.

3.3 Indigenous Land Use

The Study Area is located within the boundaries of the 1781 Niagara Purchase (Treaty Number 381) (Government of Ontario 2021). The Niagara Purchase was signed on May 9, 1781, by the British Government and Anishinaabe peoples. The purchase covers a four-mile (approximately 6.4 kilometre) strip on the west side of the Niagara River. On May 16, 1928, the Historic Sites and Monuments Board of Canada designated the Niagara land purchases as a National Historic Event of Canada. The commemorative plaque for this event was erected at 43 Castlereagh Street in Niagara-on-the-Lake (Government of Ontario 2021, The Canadian Encyclopedia 2021). It is presently acknowledged that the land of the Study Area is situated on the traditional territory Haudenosaunee and Anishinaabe peoples (Brock University 2021a). The following, read by Councillor Paul Grenier of the Niagara Regional Council from the June 06, 2019, council meeting includes the present land acknowledgement from the Niagara Region:

“We begin this meeting by acknowledging the land on which we gather is the traditional territory of the Haudenosaunee and Anishinaabe peoples, many of whom continue to live and work here today. This territory is covered

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by the Upper Canada Treaties and is within the land protected by the Dish with One Spoon Wampum agreement. Today this gathering place is home to many First Nations, Metis, and Inuit peoples and acknowledging reminds us that our great standard of living is directly related to the resources and friendship of Indigenous people."

(Brock University 2019)

3.4 Township Survey and Settlement

Historically, the Study Area was located within the former Townships of Stamford and Thorold, in the County of Welland. The earliest recorded European visitor to the area is Father Louis Hennepin, who explored as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page 1876). In the last two decades of the 18th century, large numbers of United Empire Loyalists (UEL) moved into the Niagara region after receiving land grants for allying with the British during the American Revolutionary War. By 1784, at least 40 families had settled in what would become Welland County (Murphy 1887). The closest historic community to the Study Area is the Village of Chippawa, established in 1792. The first permanent Euro-Canadian settler in Chippawa was Thomas Cummings, who took up land on the south side of the Welland River 1783. Chippawa had a post office and was a centre for ship building and foundry work (Bond 1964; Jackson 1997).

Welland County was formed in 1851 from land severed from the southern section of Lincoln County (Mika and Mika 1983). The county was named after the Welland River, which had been named in 1792 by John Graves Simcoe after the Welland River in Lincolnshire, England (Middleton and Landon 1927; Rayburn 1997:366). The building of the first Welland Canal in the 1820s stimulated settlement growth in the area (Mika and Mika 1983).

Stamford Township in the County of Welland was first settled in 1784 by Colonel John Butler's Rangers and other UELs. Originally named Township #2 because it was the second township surveyed in Welland County (Page 1876:14), by 1784 it was known as Mount Dorchester, and in 1793 Simcoe named it for the borough of Stamford on the Welland River in Lincolnshire (Rayburn 1997: 328). The Township was first surveyed in 1787 by Philip R. Frey but its Portage Road between Chippawa and Queenston was one of the earliest routes in the Niagara Peninsula, following a trail used by Indigenous people to portage around Niagara Falls. The Township's first Euro-Canadian settler was Philip George Bender, who settled near the Falls in 1781, and by the 1790s the Township was populated with Loyalists and other British settlers (Mika and Mika 1983: 39). In 1831, Drummondville was the first incorporated village in the Township.

Thorold Township, located in the County of Welland was first settled between 1784 or 1787 and included the hamlets of Allanburg, Beaverdams, Port Robinson, St. John's and Thorold South. Both the township and the City of Thorold are named after Sir John

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Thorold, Member of Parliament for Lincolnshire, England from 1779-1796 (Rayburn 1997:342). By the 1800s, the township had several grist and sawmills. One of the first sawmills in the area was built in 1802 by John Darling. During the War of 1812 militia members of the township were called to defend the Niagara Peninsula, which was controlled by the Americans from May to June 1813. It was during this time that Laura Secord made the journey from Queenstown to Lieutenant James Fitzgibbons' house in the township to warn the British forces of the impending attack on the Beaverdams outpost. The subsequent battle at Beaverdams is seen as one of the major turning points for the war.

By 1817, the population of Thorold was 830 and the township was traversed by several major roads. Settlement grew along these roads, as did businesses. The first inn in Welland County —the Blackhorse Inn— which was built in the 1790s west of Allanburg. However, a key development in the township's history was construction of the First Welland Canal was opened through the township on November 27, 1829. By 1849 the population grew to 3,965, leading to incorporation of the Village of Thorold. In 1879, the Niagara, St. Catharines and Toronto Railway was extended through the Town of Thorold and the township, fostering yet more opportunity for industrial and commercial growth (Mika and Mika 1983: 505-507).

3.4.1 19th Century Land Use

Historically, the Study Area is located within part of Lots 167-168, 181-184, and 198-201 and 203-208 in the Geographic Township of Stamford and part of Lots 93-94, 112-117 and 135-140 in the Geographic Townships of Thorold, Welland County.

Historical records and mapping were examined to gain an understanding of 19th century land use in the Study Area. A summary of these historical records is presented in Table 1.

Table 1: Review of Historical Records

Figure No.	Year	Map Title	Historical Feature(s)
Figure 4	1862	1862 Tremaine's Map of the Counties of Lincoln and Welland (Tremaine 1862)	The map lists the following property owners and features: <ul style="list-style-type: none"> • Stamford Township <ul style="list-style-type: none"> ○ Lot 167: Samuel Pew and Benjamin Smoke ○ Lot 168: Samuel Pew ○ Lot 181: Haggi Biggar ○ Lot 182: John Sagar <ul style="list-style-type: none"> ▪ One building located within 100 m of the Study Area in Lot 182 ○ Lot 183: Thomas Garner and George Garner

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

Figure No.	Year	Map Title	Historical Feature(s)
			<ul style="list-style-type: none"> ○ Lot 184: John Wilson and Thomas Wilson ○ Lot 198: Isaac Howey ○ Lot 199: John N/A ○ Lot 200: Thomas Wilson AND John C. Wilson ○ Lot 201: Issac Lonke ○ Lot 203/204: Thomas Reavely ○ Lot 205: Timothy Hixon ○ Lot 206: Jason Hison and James Pew ○ Lot 207: John Thompson ○ Lot 208: N/A Ostrander ○ Lot 209: Archibald Thompson ● Thorold Township <ul style="list-style-type: none"> ○ Lot 93: B. Tucker ○ Lot 94: Joseph Upper ○ Lot 112/113/114: Thomas Allison ○ Lot 115: R.G. Hager ○ Lot 116: D. Skinner ○ Lot 117: Frederick Deceu ○ Lot 135: S. Lutz ○ Lot 136: A. Burnes ○ Lot 137: George Williams ○ Lot 138: A. Mar ○ Lot 139: Chris Mosse and N/A Thomas ○ Lot 140: R. Kemp ● Other Features <ul style="list-style-type: none"> ○ Study Area located within 300 m of the Welland Railway ○ The Study Area follows six historic roadways today known as Brown Road, Beechwood Road, McLeod Road, Thorold Townline Road, Barron Road, Allanport Road and Davis Road
Figure 5	1876	<i>1876 Illustrated Historical Atlas of Lincoln and Welland</i>	The map lists the following property owners and features: <ul style="list-style-type: none"> ○ Stamford Township <ul style="list-style-type: none"> ○ Lot 167: Samuel Pew and Benjamin Smoke

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Figure No.	Year	Map Title	Historical Feature(s)
		<p><i>Counties</i> (Page, H. R. & Co. 1876)</p>	<ul style="list-style-type: none"> ○ Lot 168: Samuel Pew ○ Lot 181: Haggi Biggar ○ Lot 182: John Sagar ○ Lot 183: Thomas Wilson and Robinson ○ Lot 184: John Wilson and Thomas Wilson ○ Lot 198: Archie Gray ○ Lot 199: John Pew and John Lounsdale ○ Lot 200: J. Wilson and Thomas Wilson ○ Lot 201: Thomas Wilson ○ Lot 203 Jamieson and William Reavely ○ Lot 204: Reavely Estate ○ Lot 205: Timothy Hixon ○ Lot 206: Jacob Hixon and James Pew ○ Lot 207: Farrow Estate ○ Lot 208: W.H. Bell ○ Lot 209: Archibald Thompson ● Thorold Township <ul style="list-style-type: none"> ○ Lot 93: B. Tucker ○ Lot 94: J.W. Upper ○ Lot 112/113/114: W. Allison ○ Lot 115: Estate of R.G. Hager ○ Lot 116: J. Hicks and Mrs. J. Britt ○ Lot 117: Samuel Smith ○ Lot 135: T. Wilson ○ Lot 136: Mrs. Gray, J.M. Chinnis, and T.M. ○ Lot 137: John Dixon ○ Lot 138: G. Happell ○ Lot 139: G. Thomas and William Thomas ○ Lot 140: F. Silverthorn ● Historical Feature(s) <ul style="list-style-type: none"> ○ One school located within 100 m of the Study Area

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

Figure No.	Year	Map Title	Historical Feature(s)
			<ul style="list-style-type: none"> ○ One Mill located within 100 of the Study Area ○ Black Horse Inn located within 100 m of the Study Area ○ Ten structures located within 300 m of the Study Area in various lots ○ Study Area located within 300 m of the Welland Railway ○ The Study Area is located along six historic roadways at what is now known as Brown Road, Beechwood Road, McLeod Road, Thorold Townline Road, Barron Road, Allanport Road and Davis Road

3.4.2 20th Century Land Use

Land use in the Study Area at the beginning of the 20th century largely continued the 19th century precedent. Most of the land was farmed with smaller areas experiencing industrialization. However, through the 20th century the land use changed dramatically as the population increased, extending the city limits through residential development.

Historical records and mapping were examined to gain an understanding of twentieth century land use in the Study Area. While maps from 1906-1908, 1915, 1920, 1925, 1928, 1930, 1938, 1939, and 1942 were examined, historic maps from the years 1906, 1925, 1942 and 1963 best illustrate major changes in the Study Area and surrounding areas through the 20th century. A summary of these historical records is presented below in Table 2.

Table 2: Review of 20th Century Historical Maps

Year	Map Title	Historical Feature(s)
Figure 6	1906 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defence 1906)	<ul style="list-style-type: none"> ● Nine wood buildings depicted within 300 m of the Study Area ● One masonry building depicted within 100 m of the Study Area ● One masonry schoolhouse depicted within 100 m of the Study Area ● One post office depicted within 100 m of the Study Area ● Black Horse Inn located within 100 m of the Study Area ● Grand Trunk Railway depicted crossing the Study Area

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Year	Map Title	Historical Feature(s)
		<ul style="list-style-type: none"> • Two unnamed tributaries of the Old Welland Canal depicted crossing the Study Area • One unnamed tributary of the Welland River depicted crossing the Study Area
Figure 7	1925 Topographic Map of Ontario, Niagara Sheet (Department of Militia and Defence 1925)	<ul style="list-style-type: none"> • Fifteen buildings depicted within 300 m of the Study Area • Black Horse Inn located within 100 m of the Study Area • Canadian National Railway depicted crossing Study Area • Two unnamed tributaries of the Old Welland Canal depicted crossing the Study Area • One unnamed tributary of the Welland River depicted crossing the Study Area
Figure 8	1942 Department of National Defence Geographical Section, Canada Sheet 30 (Department of National Defense 1942)	<ul style="list-style-type: none"> • More than 20 residences depicted within 300 m of the Study Area • Canadian National Railway depicted crossing Study Area • Two unnamed tributaries of the Old Welland Canal depicted crossing the Study Area • One unnamed tributary of the Welland River depicted crossing the Study Area
Figure 9	1963 Topographic Map of Ontario Allanburg Ontario Sheet (Surveys and Mapping Branch, Department of Energy, Mines and Resources 1963)	<ul style="list-style-type: none"> • More than 25 residences depicted within 300 m of the Study Area • Black Horse Corner, named for the old Black Horse Inn, located within 100 m of the Study Area • Canadian National Railway depicted crossing Study Area • Two unnamed tributaries of the Old Welland Canal depicted crossing the Study Area • One unnamed tributary of the Welland River depicted crossing the Study Area

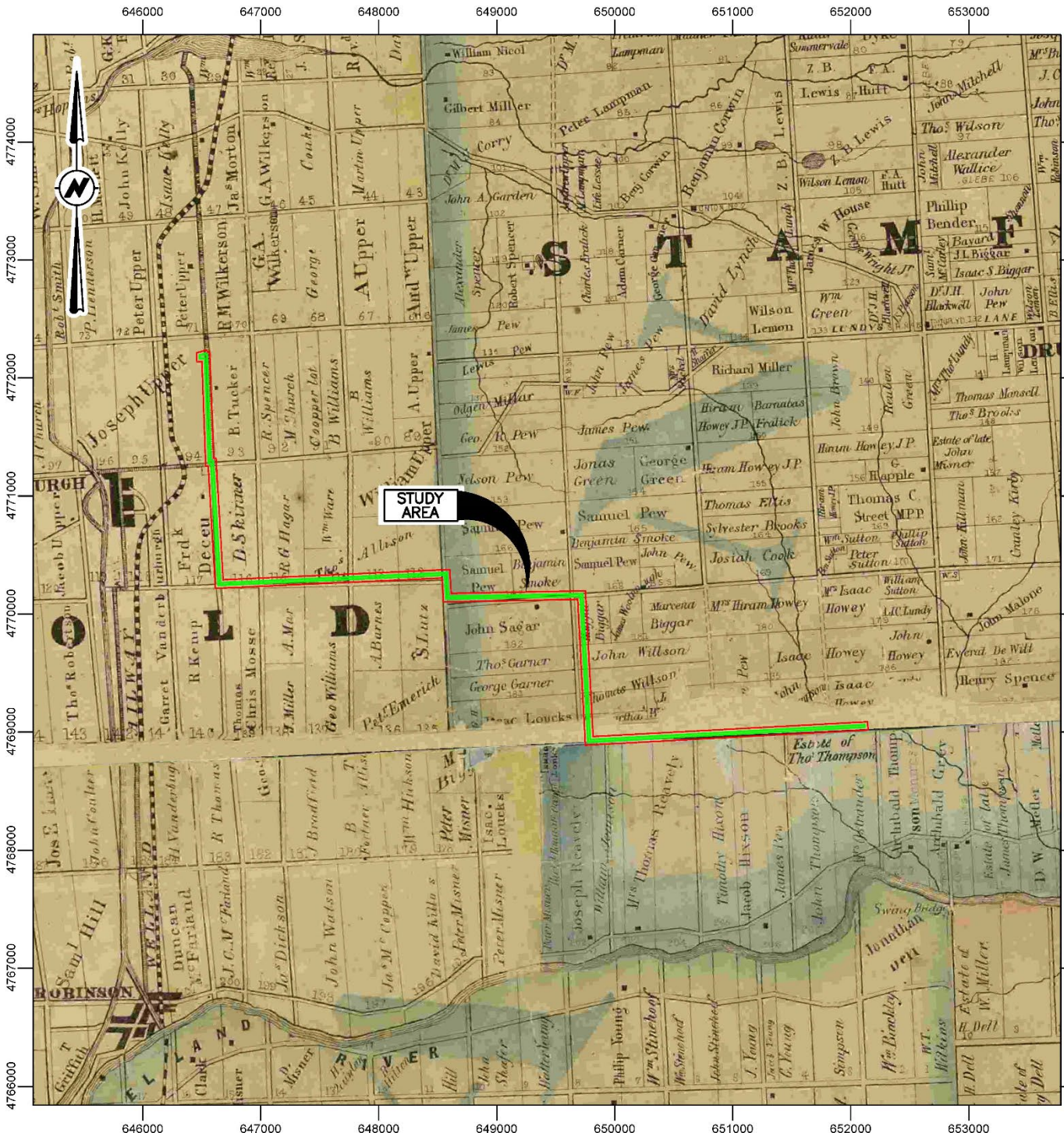
Aerial photographs were also reviewed to discern past and present land uses in the Study Area (Appendix D). Table 3 summarizes the analysis of this aerial imagery.

Table 3: Review of 20th Century Aerial Imagery

Year	Features
1934 (Appendix B: Plate B1; Brock University 2016)	<ul style="list-style-type: none"> • A railway (Canadian National Railway based on NTS mapping) crosses the Study Area
1968 (Appendix B: Plate B2; Brock University 2016)	<ul style="list-style-type: none"> • A railway (Canadian National Railway based on NTS mapping) crosses the Study Area • Realignment of Davis Road depicted directly to and within the Study Area. • Residences and commercial buildings located on both sides of the Study Area
Various (2000 to 2018; Brock University 2016)	<ul style="list-style-type: none"> • Additional residences and commercial buildings located on both sides of the Study Area

The Ontario Heritage Trust plaque database was reviewed to determine if there are any commemorative markers documenting federal, provincial, or municipal historic landmarks sites or and properties that local histories or informants have identified with possible CHVI. Presently there are no known historical plaques located within the Study Area (Ontario Heritage Trust 2021).

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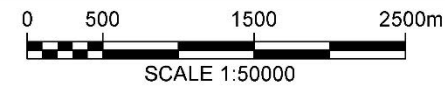


PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE: 1862 TREMAINE'S MAP OF THE COUNTIES
 OF LINCOLN AND WELLAND, CANADA WEST
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 PROJECT FOOTPRINT

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.1000.
 ALL LOCATIONS ARE APPROXIMATE.
 ORIGINAL PAPER SIZE: 8 1/2 x 11.
 REFERENCES:
 G.R. & G.M. TREMAINE, 1862; CANMAP STREETFILES V2008.4.



Niagara Region
 1815 SIR ISAAC BROCK WAY, P.O. BOX 1042
 THOROLD, ONTARIO, L2V 4T7



Wood
 Environment & Infrastructure Solutions
 50 VOGELL ROAD, UNIT 3
 RICHMOND HILL, ONTARIO, L4B 3K6
 647-689-4958



DWN BY:	CHK'D BY:	DATE:
SJL	CD	NOV. 10, 2021
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	OCUL2001.1000
REV No:		FIGURE No:
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 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE: 1876 ILLUSTRATED HISTORICAL ATLAS
 MAP OF THE COUNTIES OF LINCOLN AND WELLAND
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:

- STUDY AREA
- PROJECT FOOTPRINT

NOTES:
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 REPORT No. OCUL2001.1000.
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 REFERENCES:
 H.R. PAGE & Co., 1876; CANMAP STREETFILES V2008.4.

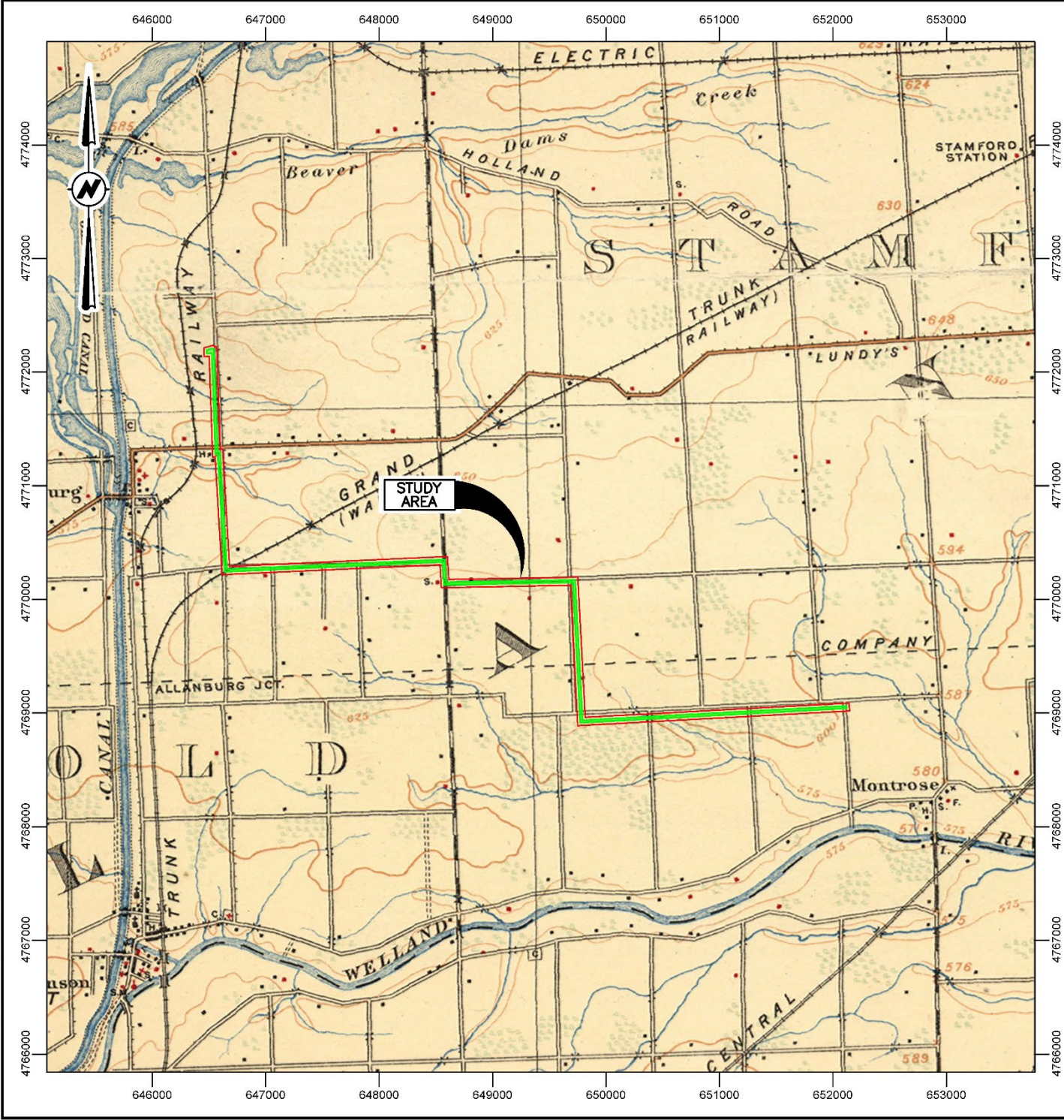


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 647-689-4958



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SJL	CD	NOV. 10, 2021
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 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 1906 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 PROJECT FOOTPRINT

NOTES:
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 REPORT No. OCUL2001.1000.
 ALL LOCATIONS ARE APPROXIMATE.
 ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 DEPARTMENT OF MILITIA AND DEFENSE, 1906; CANMAP
 STREETFILES V2008.4.



Niagara Region
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 THOROLD, ONTARIO, L2V 4T7

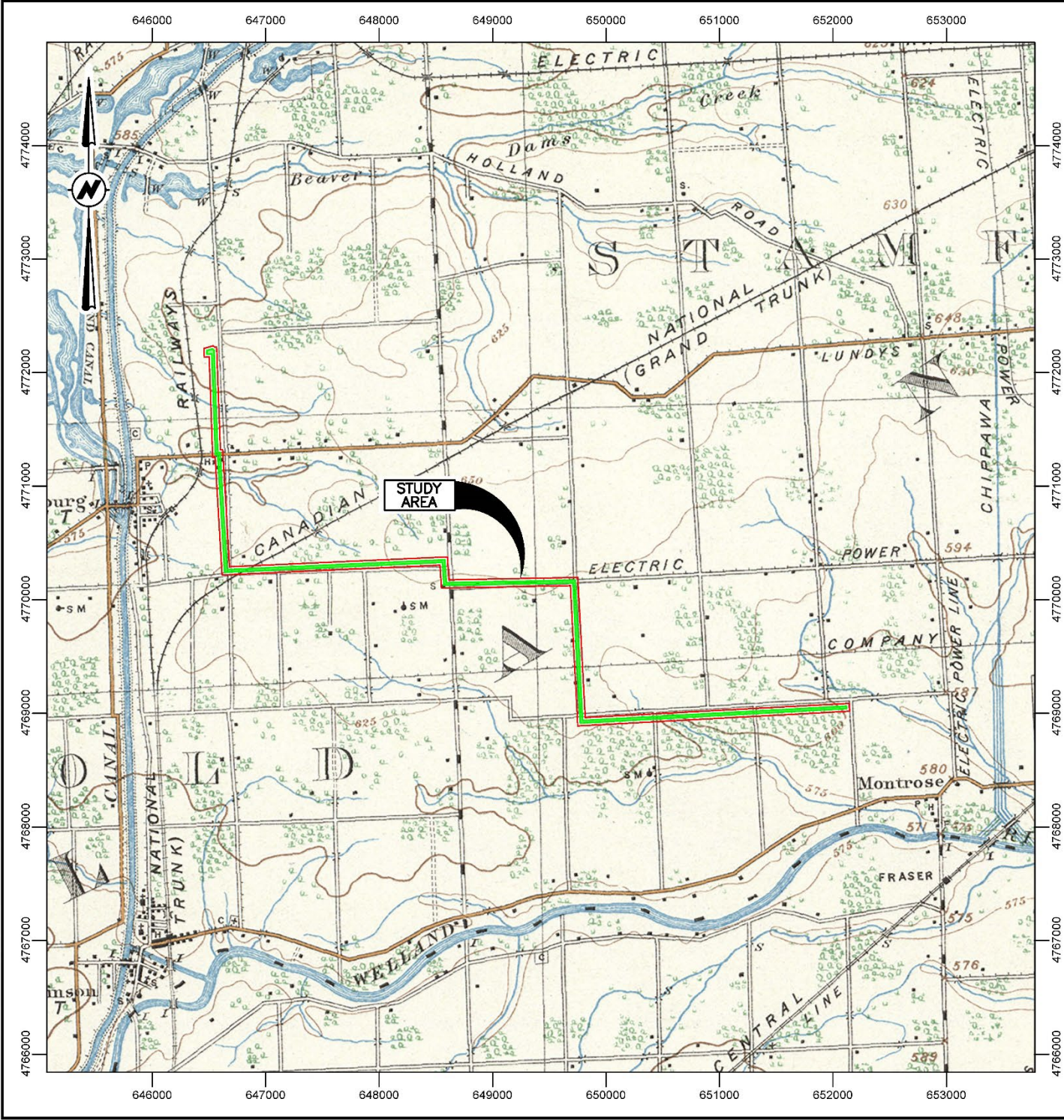


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 647-689-4958



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 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 1925 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:

- STUDY AREA
- PROJECT FOOTPRINT

NOTES:
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 ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 DEPARTMENT OF MILITIA AND DEFENSE, 1925; CANMAP
 STREETFILES V2008.4.



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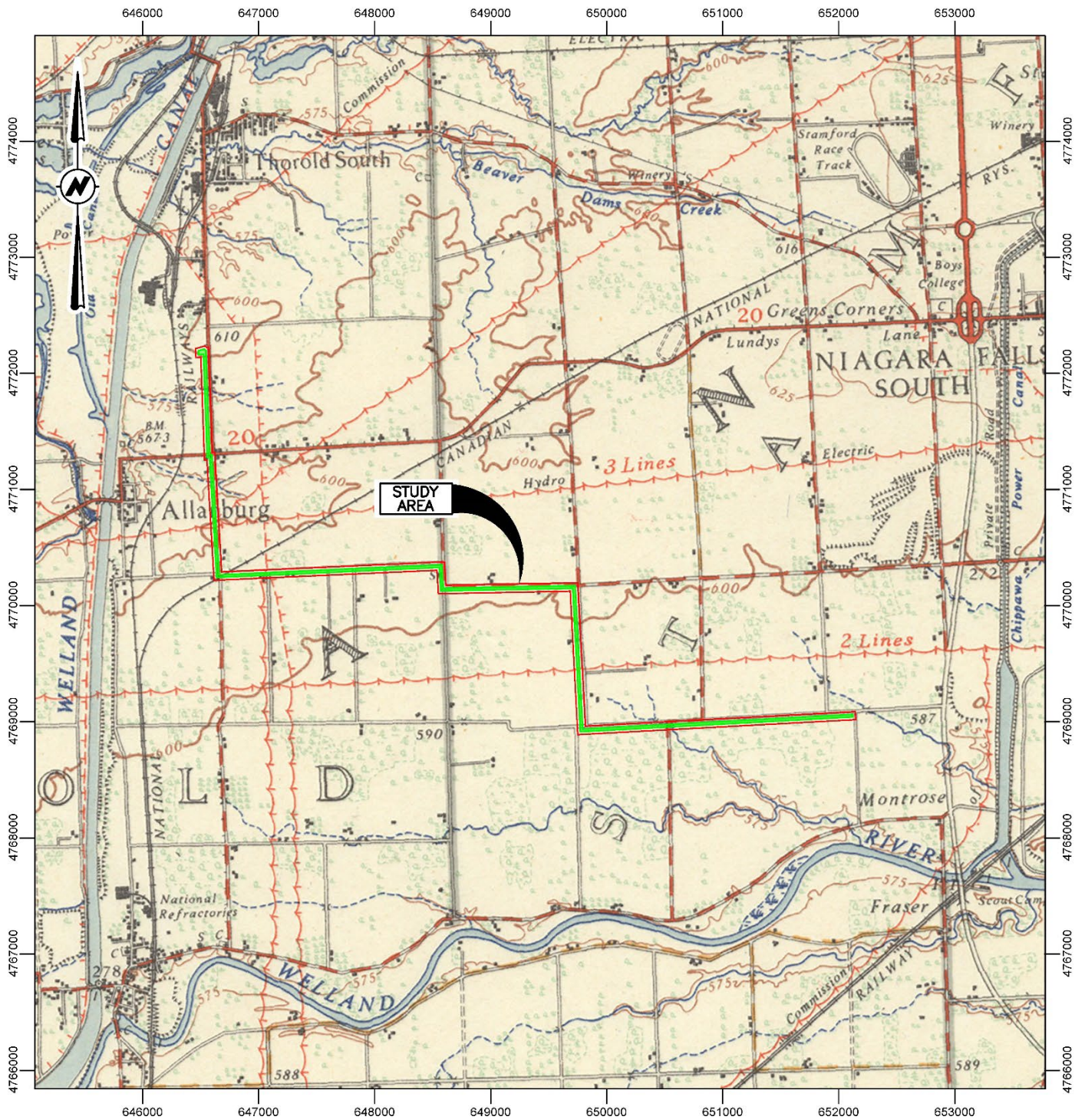


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DWN BY: SJL	CHK'D BY: CD	DATE: NOV. 10, 2021
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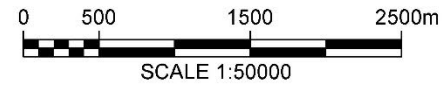


PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 1942 TOPOGRAPHIC MAP OF ONTARIO, NIAGARA SHEET
 SHOWING THE LOCATION OF THE STUDY AREA

LEGEND:
 [Red Outline] STUDY AREA
 [Green Outline] PROJECT FOOTPRINT

NOTES:
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 REPORT No. OCUL2001.1000.
 ALL LOCATIONS ARE APPROXIMATE.
 ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 DEPARTMENT OF MILITIA AND DEFENSE, 1942; CANMAP
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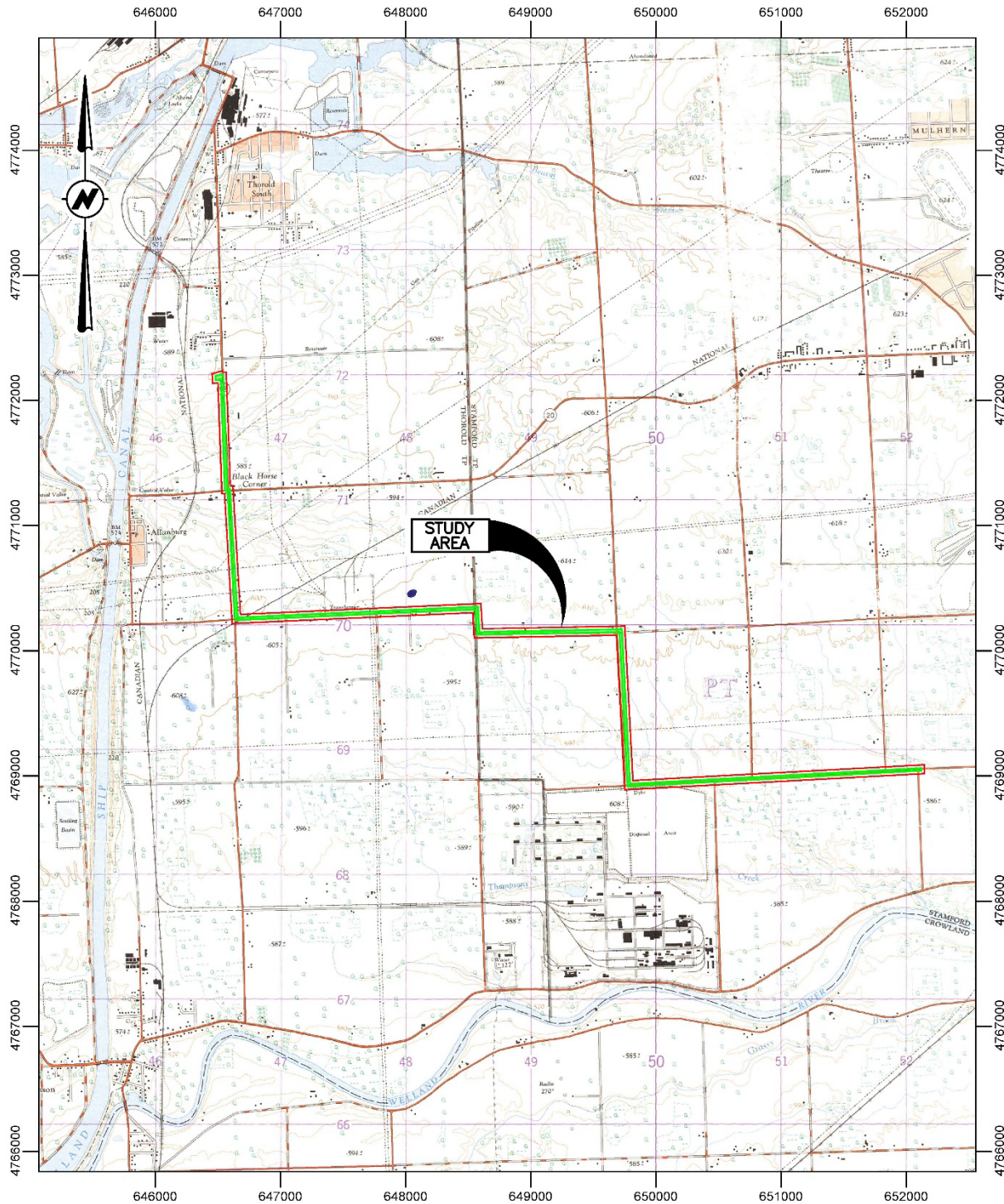


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PROJECT: CULTURAL HERITAGE ASSESSMENT
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 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 1963 TOPOGRAPHIC MAP OF
 ALLANBURG, ONTARIO SHEET SHOWING
 THE LOCATION OF THE STUDY AREA

LEGEND:
 STUDY AREA
 PROJECT FOOTPRINT

NOTES:
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 REPORT No. OCUL2001.1000.
 ALL LOCATIONS ARE APPROXIMATE.
 ORIGINAL PAPER SIZE: 8½ x 11.
 REFERENCES:
 ARMY SURVEY ESTABLISHMENT, R.C.E., 1963; CANMAP
 STREETFILES V2008.4.



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DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.1000
REV No: 0		FIGURE No: 9

3.5 Previous Investigations

3.5.1 Cultural Heritage Screening Report (Golder Associates Ltd. 2019)

In 2019, Golder Associates Ltd. was retained by GM BluePlan Engineering on behalf of the Regional Municipality of Niagara to complete a Cultural Heritage Screening Report (CHSR), for the proposed South Niagara Falls Wastewater Treatment Plant (SNFWWTP) and associated collection and conveyance impacts (Golder 2019). The CHSR Study Area included approximately 125 km² of the City of Niagara Falls, 24 km² of the City of Thorold, and 7 km² of the City of Welland. The CHSR was a desktop study and used the MHSTCI *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist) to screen for the presence of known and potential heritage properties in the Study Area. The CHSR identified the following known and potential heritage properties:

- Six (6) National Historic Sites of Canada
- One (1) designated Heritage Railway Station
- 60 protected heritage properties designated under Part IV of the *Ontario Heritage Act*
- 58 commemorative or interpretive plaques from various government agencies
- 24 cemeteries
- Numerous properties with buildings over 40 years old, points of interest related to the Welland Canal, places related to the War of 1812, and public art and monuments

Golder recommended avoidance of the identified heritage properties (Golder 2019). Golder further recommended that if avoidance of heritage properties was not feasible, a Cultural Heritage Assessment Report (CHAR) with field investigations should be completed to identify all known and potential cultural heritage resources potentially impacted by the Project and to provide mitigation recommendations to avoid or reduce adverse impacts. Golder noted that the CHAR may recommend subsequent site-specific studies, such as Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs).

Presently, the Study Area does not contain, nor is it adjacent to, any potential heritage properties identified in the Golder CHSR.

4.0 Results

4.1 Information Gathering Results

The City of Niagara Falls, City of Thorold, Ontario Heritage Trust, and the MHSTCI were contacted to gather information on known heritage properties within the Study Area. Copies of the information gathering emails are provided in Appendix C.

Suzanne Anderson, Assistant Planner, City of Niagara Falls, provided a map of noted heritage properties within the City of Niagara. None of these properties are located within the Study Area.

At the time of writing, no response was received from either the City of Thorold or the Ontario Heritage Trust.

Karla Barboza, Acting Team Lead at the MHSCTI, reported that there are no Provincial Heritage Properties within the Study Area that are designated under Part IV or Part V of the *Ontario Heritage Act*.

4.2 Field Review Results

The field review was conducted by Chelsea Dickinson (Wood Cultural Heritage Specialist) and Lauren Zaphishny, (Wood Archaeologist) on October 7, 2021.

The Study Area is comprised of two-lane paved roadways bordered predominately by agricultural fields and wooded areas, but interspersed with residential and commercial complexes dating from the late 19th to early 21st centuries (Plate 1 to Plate 11). The Study Area includes sections of Brown Road, McLeod Road, Thorold Townline Road, Allanport Road, Davis Road, and 701 Allanburg Road.

Brown Road, McLeod Road and Thorold Townline Road are bordered by interspersed woodlots/farmland. At the far east end of Brown Road, however, are recent residential complexes (Plate 1-Plate 3).

At Barron Road and Allanport Road, the landscape changes slightly and commercial/industrial complexes are predominantly seen interspersed with woodlots/farmland.

The Study Area terminates at 701 Allanburg Road, the site of the proposed Blackhorse SPS. This property features a multi-level Fire Station with an irregular plan and a large parking lot with turnaround and a fenced in grassed area (south).

A total of eight potential heritage properties, three within the City Niagara Falls (CHR 1-CHR 3) and four within the City of Thorold (CHR 4 -CHR 7), were identified within the Study Area. This includes four built heritage resources (BHRs) and four cultural heritage landscapes (CHLs).

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Plate 1: View of Brown Road facing northeast

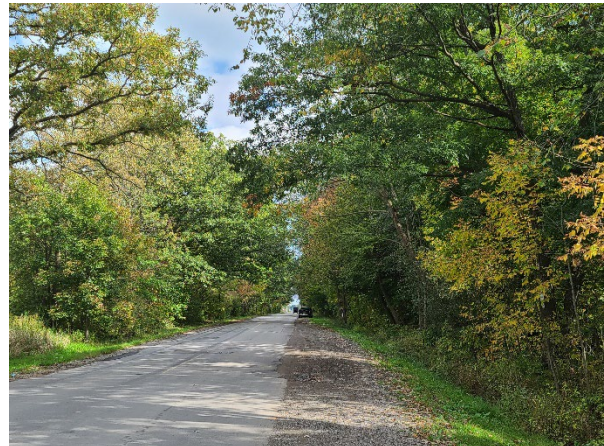


Plate 2: View of Brown Road facing east



Plate 3: View of Brown Road at Beechwood Road facing west



Plate 4: View of Beechwood Road at McLeod Road facing east

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS



Plate 5: View of Beechwood Road at McLeod Road facing west



Plate 6: View of McLeod Road facing west



Plate 7: View of McLeod Road at Thorold Townline Road facing north



Plate 8: View of CN Railway (former Grand Trunk line) tracks facing west towards Barron Road and Allanport Road intersection



Plate 9: View of Allanport Road at Lundy's Lane

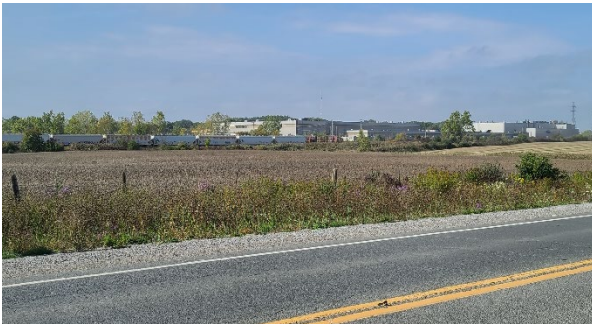


Plate 10: View of CN Railway (former Grand Trunk line) train storage facility near Hayes Road




Plate 11: View of 701 Allanburg Road facing northwest


4.3 Inventory of Built Resources and Cultural Heritage Landscapes


Following the completion of the background research, information gathering, and field review, an inventory of built heritage resources and cultural heritage landscapes within the Study Area was compiled. The inventory is provided in Table 4. The locations of built heritage resources and cultural heritage landscapes in relation to the Study Area are depicted in Figure 10.

Table 4: Inventory of Built Heritage Resources and Cultural Heritage Landscapes


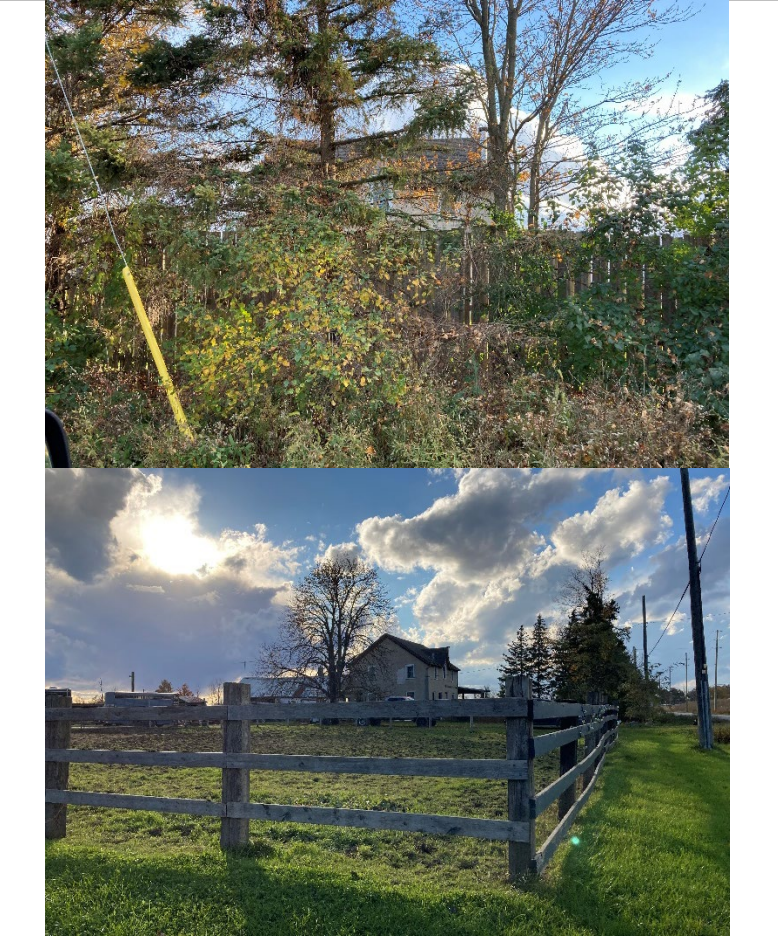
CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 1	-BHR -Residence	8950 Brown Road, City of Niagara Falls	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes an 'Gable and Front wing' residence that was built between 1954/55 and 1965 based on a review of aerials (Brock University 2021a). The residence is a simple two-bay, one and a half storey structure with an L-shaped plan, a cross gable roof with projecting eaves that is clad in vinyl siding. The front façade fenestration includes one (1) large three casement window and two (2) sash one over one tall windows with wooden shutters on the gable and one (1) multi light three-sided bay window on the side hall. Landscape elements on the property include a wooden picket fence with square white-brick pillars, gravel driveways and multiple mature trees.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • Gable and Front wing style residence • L-shaped plan • Cross gable roof • Vinyl siding • One (1) large three casement window • Two (2) sash one over one tall windows with wooden shutters • One (1) multi light three sided bay window. • Wooden picket fence with square white brick pillars <p><u>Summary</u> The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p>	

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS


CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 2	BHR -Residence	9868 McLeod Road, City of Niagara Falls	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes a 'Gable and Front Wing' style residence that was built prior to 1934 based on a review of aerials but likely dates late 19th/early 20th century based on architectural style and materials. An addition was built on the rear portion of the structure between 1968 and 2000 (Brock University 2021a). The residence is a brick, three-bay, one and a half storey structure with a T-shaped plan and cross gable roof with projecting eaves. The front façade (north elevation) features a centered segmental arch head entrance and a portico supported by two posts. The fenestration includes three (3) sash one over one windows with segmental arch heads and brick voussoirs and stone lug sills and one (1) three sash "picture" window with a plain lug sill trim. Landscape elements on the property includes two secondary rectangular structures with gable roofs, mature trees, agricultural fields and a paved driveway.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • 'Gable and Front Wing' style residence • T-shaped plan • Cross gable roof • Brick siding • • Three (3) sash one over one segmental arch heads and brick voussoirs and stone lug sills • One (1) three sash "picture" window with a plain lug sill trim. • Wood portico supported by two posts <p><u>Summary</u> The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p>	

CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 3	-CHL -Farm Complex	10111 McLeod Road, City of Niagara Falls	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes a 'Gable Front' farmhouse that was built prior to 1934 based on a review of aerials but likely dates late 19th/early 20th century based on architectural style and materials (Brock University 2021a). The residence is a simple two bay, storey and a half structure with a rectangular plan and gable front roof clad with projecting eaves and rear shed style dropped roof on the north elevation. The southern elevation features a shed roof covered porch with seven (7) multilight fixed sash tall windows. On the upper storey of the main block are two (2) tall double or single hung windows with six-over-six sash. The residence also features two shed style dormers and side closed porch. Landscape elements on the property include one barn and two outbuildings with gable roofs, gravel driveway and wooden post and wire fencing.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • 'Gable Front' farmhouse • Rectangular plan • Gable roof • Rear shed style dropped roof on the north elevation • • Seven (7) fixed sash tall windows. • Two (2) tall double or single hung windows with six-over-six sash • Shed style dormers • Side closed porch <p><u>Summary</u> The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p>	


CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 4	-CHL -Farm Complex	1965 Polloway Road, City of Thorold	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property features a residence with a rectangular shaped plan and cross gable roof likely constructed prior to 1906 (Brock University 2021a). Unfortunately, this property was not visible via the right of way however due to the fact that it appears on the 1906 aerial it may have significant design/physical, historical/associative, and/or contextual value.</p>	
CHR 5	-CHL -Farm Complex	1315 Barron Road, City of Thorold	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes a storey-and-a-half vernacular Gothic Revival style residence built prior to 1906 as illustrated on the 1906 topographic map and possibly constructed in the last quarter of the 19th century based on architectural style and material (Department of Militia and Defense 1906). It has a rectangular-shaped plan, a central cross-gable and medium gable roof with projecting eaves clad in stucco. Unfortunately, at the time of field review the front façade (north elevation) was largely obscured by picket fencing and heavy vegetation. Landscape elements includes vertical plank, post and rail, and wire fencing, a round horse pen and multiple outbuildings.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • Vernacular Gothic Revival style residence • Rectangular shaped plan • Central cross-gable and medium gable roof • Stucco siding • Picket fence • Vertical plank, post and rail, and wire fencing • Round horse pen <p><u>Summary</u></p>	

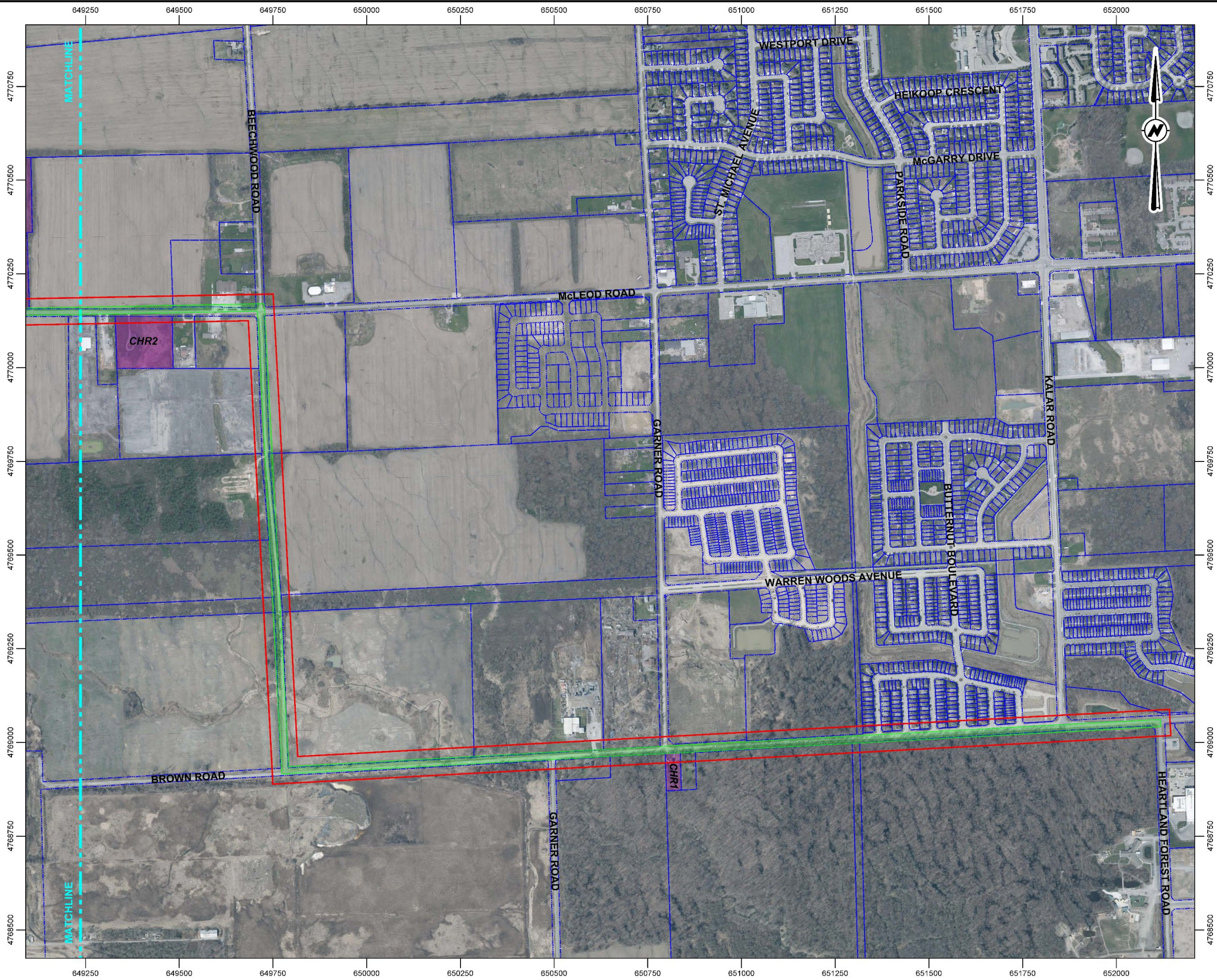
CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 6	-BHR -Residence	1415 Barron Road, City of Thorold	Identified During Field Review	<p>The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p> <p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes a 'Gable Front and Wing' style residence that was built prior to 1906 as illustrated on the 1906 topographic map and possibly constructed in the last quarter of the 19th century based on architectural style and material (Department of Militia and Defense 1906). The residence is a simple one and a half storey structure with an L-shape plan, and a cross gable roof with projecting eaves clad in clapboard siding and exterior chimney. The front façade (west elevation) features two (2) two casement windows with shutters, one (1) cellar style window and a centered entryway that was largely obscured by folding wooden screens. Landscape elements on the property include grass, mature trees and gravel driveway.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • 'Gable Front and Wing' style residence • L-shape plan • Cross gable roof • Clapboard siding • Two (2) two casement windows with shutters • One (1) cellar style window <p><u>Summary</u> The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p>	

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

CHR No.	Property Type	Location	Heritage Recognition	Description of Property	Photographs/Digital Image
CHR 7	-BHR -Residence	2108 Allanport Road, City of Thorold	Identified During Field Review	<p>This property was identified during field review and the property description provided below is based on field observations.</p> <p><u>Property Description</u> This property includes a two story Edwardian style residence clad in brick that was built prior to 1906 as illustrated on the 1906 topographic map and possibly constructed in the last quarter of the 19th century based on architectural style and material (Department of Militia and Defense 1906). The residence is a two storey structure with three bays on a square plan and medium pyramidal roof with moulded fascia and projecting eaves. The front façade (east elevation) features fenestration with plain stone lug sills and segmental arch heads formed in brick voussoirs, with wide windows flanking a single-leaf central entrance and tall windows at the second level. Centered at the second level is a stylized Venetian window and in the roof is a gabled dormer with small square window. The ground floor entryway has a platform with metal railing. Landscape elements include two-car garage, a pond and rear fallow fields.</p> <p><u>Exterior Elements</u></p> <ul style="list-style-type: none"> • Edwardian style residence • Square shaped plan • Brick masonry • Plain stone lug sills and segmental arch heads formed in brick voussoirs • Wide windows flanking a single-leaf central entrance • Tall windows at the second level • Venetian window • Gable dormer <p><u>Summary</u> The residence on the property is a built heritage resource with potential design/physical, historical/associative, and/or contextual value.</p>	

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PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO

TITLE:
 IDENTIFIED CULTURAL HERITAGE RESOURCES

LEGEND:

- STUDY AREA
- PROJECT FOOTPRINT
- PROPERTY LINE
- IDENTIFIED DURING FIELD REVIEW

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE
 WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
 REPORT No. OCUL2001.1000.
 ALL LOCATIONS ARE APPROXIMATE.
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 2020 AERIAL PHOTOGRAPHS BY THE REGION OF NIAGARA;
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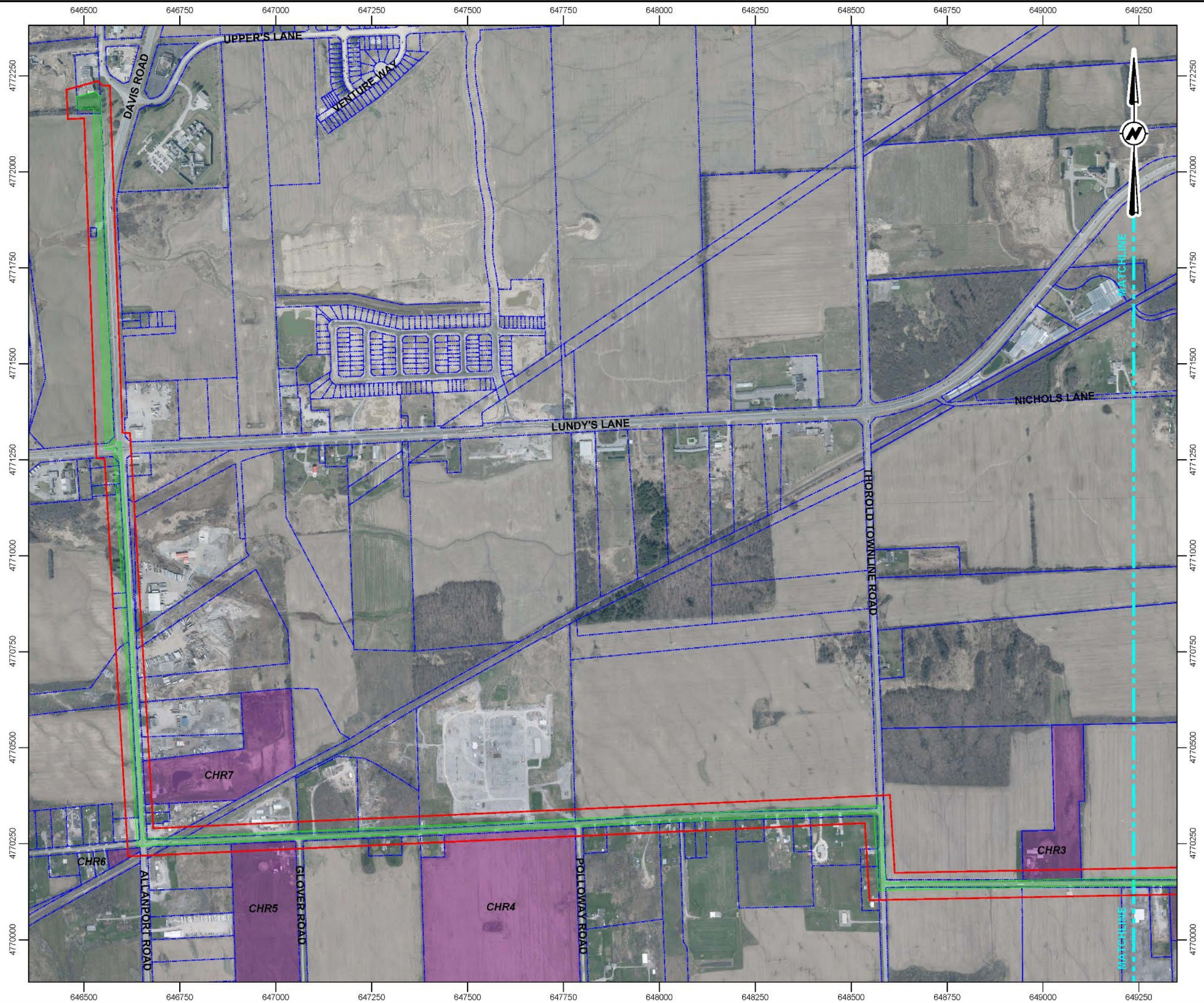
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DWN BY: SJL	CHK'D BY: CD	DATE: DEC. 2, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.1000
REV No: 0		FIGURE No: 10A

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PROJECT: CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SOUTH THOROLD TRUNK &
 BLACKHORSE SEWAGE PUMPING STATION
 DAVIS ROAD
 CITY OF NIAGARA, ONTARIO


TITLE:
 IDENTIFIED CULTURAL HERITAGE RESOURCES


LEGEND:


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NOTES:
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DWN BY: SJL	CHK'D BY: CD	DATE: DEC. 2, 2021
DATUM: NAD83	PROJECTION: UTM Zone 17	PROJECT No: OCUL2001.1000
REV No: 0		FIGURE No: 10B

5.0 Preliminary Impact Assessment

The MHSTCI InfoSheet #5 gives guidance on how to complete impact assessments for cultural heritage resources in the land use planning process. As discussed, the purpose of an impact assessment is to determine if identified cultural heritage resources will be impacted by the proposed work. This assessment considers two categories of impacts:

- **Direct Impact:** A permanent or irreversible negative affect on the CHVI of a property that results in the loss of a heritage attribute. Direct impacts include *destruction or alteration*.
- **Indirect Impact:** An impact that is the result of an activity on or near a cultural heritage resource that may adversely affect the CHVI and/or heritage attributes of a property. Indirect impacts include *shadows, isolation, direct or indirect obstruction of significant views or vistas, a change in land use, or land disturbances*.

It should be noted that land disturbances, as defined in MHSTCI InfoSheet #5, and described above, also apply to archaeological resources. An archaeological assessment is beyond the scope of this study since recommendations regarding archaeological resources must be made by a professional archaeologist licensed by the MHSCTI. An archaeological assessment for this project has been undertaken under separate cover by Wood.

5.1 Description of Proposed Work

The Project will include excavation of eleven (11) open cut shaft locations and construction of the below grade sanitary sewer alignment, a forcemain, and a sewage pumping station. The proposed work is limited to the right-of-way (ROW) with the exception of a section of the sewer alignment along Allanport Road between Lundy's Lane and the proposed Blackhorse Pumping Station at 701 Allanburg Road. It should be noted that the sewer alignment pipeline will be primarily open cut construction with trenchless construction proposed in the vicinity of natural areas and rail lines.

5.2 Assessment of Potential Impacts

Table 5 provides an assessment of the Project's potential impacts (based on the proposed work depicted in Appendix D) on the built heritage resources and cultural heritage landscapes identified in the Study Area. The preliminary impact assessment determined that indirect impacts are anticipated to one potential heritage properties (CHR 3) due to nearby land disturbance that will introduce the risk of structural damage related to vibration caused by construction activity.

Table 5: Impact Assessment and Mitigation Measures

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
CHR 1	-BHR -Residence	8950 Brown Road	Identified During Field Review	Below grade directional drilling to install the sanitary sewer at a depth of approximately 8 metres along Brown Road (approximately 30 metres north of the residence). Open cut construction for shaft MH-S11 at the intersection of Brown Road and Garner Road (approximately 35 metres northwest of the residence). No direct or indirect impacts to this property are anticipated.	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 2	-BHR -Residence	9868 McLeod Road	Identified During Field Review	Below grade directional drilling to install the sanitary sewer at a depth of approximately 8 metres along McLeod Road (approximately 60 metres north of the residence). No direct or indirect impacts to this property are anticipated.	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 3	-CHL -Farm Complex	10111 McLeod Road	Identified During Field Review	<p>Anticipated Impact: Below grade directional drilling to install the sanitary sewer at a depth of approximately 6 metres along the north side of McLeod Road (approximately 20 metres south of the residence).</p> <p>Type of Impact: <i>Indirect Adverse Impacts</i> Land disturbance that will introduce the risk of structural damage related to vibration caused by construction activity.</p>	<p>Preferred Option: <i>Avoidance:</i> Adjust the sanitary sewer alignment to the south to maximize the distance from the residence on this property. This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel.</p> <p><i>Vibration Monitoring:</i> A qualified vibration specialist should be consulted to advise on an appropriate vibration monitoring program to avoid or reduce impacts to structures on this property.</p>
CHR 4	-CHL -Farm Complex	1965 Polloway Road	Identified During Field Review	Below grade directional drilling to install the sanitary sewer at a depth of approximately 4 metres along Barron Road (approximately 565 metres north of the residence and barn). Open cut construction for shaft MH-S3 with Barron Road (approximately 615 metres northeast of the residence and barn). No direct or indirect impacts to this property are anticipated.	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 5	-CHL -Farm Complex	1315 Barron Road	Identified During Field Review	Below grade directional drilling to install the sanitary sewer at a depth of approximately 4 metres along Barron Road (approximately 30 metres north of the residence). Open cut construction for shaft MH-S2 with Barron Road (approximately 65 metres northeast of the residence). No direct or indirect impacts to this property are anticipated.	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 6	-BHR -Residence	1415 Barron Road	Identified During Field Review	Below grade directional drilling to install the forcemain and sanitary sewer at a depth of approximately 4 metres along	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of

CHR No.	Property Type	Location	Heritage Recognition	Anticipated Impacts	Mitigation Measures
				Davis Road and Barron Road (approximately 60 metres northeast of the residence). Open cut construction for shaft MH-S1 at the intersection of Davis Road and Barron Road (approximately 60 metres from the residence). No direct or indirect impacts to this property are anticipated.	the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.
CHR 7	-BHR -Residence	2108 Allanport Road	Identified During Field Review	Below grade directional drilling to install the forcemain at a depth of approximately 4 metres on the west side of David Road (approximately 30 metres west of the residence). No direct or indirect impacts to this property are anticipated.	This property should be noted on project drawings as a "potential heritage property" to identify the heritage status of the property to project personnel. As no impacts to the heritage attributes of the property are anticipated no further mitigation measures are proposed.

6.0 Recommendations

Wood was retained by Niagara Region to a CHAR for the proposed South Thorold Trunk alignment and Blackhorse SPS in the Cities of Niagara Falls and Thorold, Regional Municipality of Niagara, Ontario. The Study Area includes the South Thorold Trunk sewer alignment, which runs west along Brown Road from its east terminus at Heartland Forest Road in the City of Niagara Falls, turns north on Beechwood Road, turns west at McLeod Road, jogs at Thorold Townline Road to Barron Road, then turns north on Allanport Road to Davis Road to end at the Blackhorse SPS site at 701 Allanburg Road in the City of Thorold.

Following the completion of background research, information gathering, and a field review, it was determined that there are seven properties within the Study Area, three within the City of Niagara Falls (CHR 1-CHR 3) and four within the City of Thorold (CHR 4-CHR 7), that were identified during the field review as having potential cultural heritage value or interest.

The proposed work for South Thorold Trunk alignment and Blackhorse involves the construction of the below grade sanitary sewer alignment, eleven (11) open cut shaft locations, a forcemain, and a sewage pumping station. It is understood that construction methods will be primarily open cut construction with trenchless construction methods used in the vicinity of natural areas and rail line. As a result, indirect impacts are anticipated to one potential heritage property (CHR 3: 10111 McLeod Road) due to nearby land disturbance that will introduce the risk of structural damage related to vibration caused by construction activity. The impact assessment for the South Thorold Trunk alignment and Blackhorse SPS was prepared based on the proposed work depicted in Appendix D.

Based on the above, the following recommendations are made:

- 1) Potential indirect impacts are anticipated to one potential heritage property (CHR 3: 10111 McLeod Road).
 - a. To mitigate impacts related to potential vibration impacts resulting from the installation of new/modified infrastructure or construction activities, Wood recommends that a qualified vibration specialist is consulted to develop an appropriate vibration monitoring program to avoid or reduce impacts to structures on this property.
- 2) This report should be submitted to the MHSTCI for review and comment.

The above recommendations were prepared using drawings of the proposed work contained in Appendix D. Should the proposed work be updated or changed, then the impact assessment should be revised to confirm impacts and recommended mitigation measures.

It should be noted that the above recommendations pertain only to impacts

related to the South Thorold Trunk/Blackhorse SPS component of the project. Impacts related to Phase 1 and Phase 2 of the project are addressed under separate covers prepared by Wood.

7.0 Assessor Qualifications

This report was prepared and reviewed by the undersigned, employees of Wood. Wood is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix E.

8.0 Closure

This report was prepared for the exclusive use of Niagara Region and is intended to provide a Cultural Heritage Assessment (Existing Conditions and Impact Assessment) of the Study Area. The Study Area includes the South Thorold Trunk sewer alignment, which runs west along Brown Road from its east terminus at Heartland Forest Road in the City of Niagara Falls, turns north on Beechwood Road, turns west at McLeod Road, jogs at Thorold Townline Road to Barron Road, then turns north on Allanport Road to Davis Road to end at the Blackhorse SPS site at 701 Allanburg Road in the City of Thorold. The Study Area encompasses the project footprint plus a 50 m buffer.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Wood will be required. With respect to third parties, Wood has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the cultural heritage assessment conducted by Wood. It is based solely a review of historical information, a property reconnaissance conducted in October 2021 and data obtained by Wood as described in this report. Except as otherwise maybe specified, Wood disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Wood after the time during which Wood conducted the cultural heritage assessment. In evaluating the Study Area, Wood has relied in good faith on information provided by other individuals noted in this report. Wood has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Wood accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Wood makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix F.

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

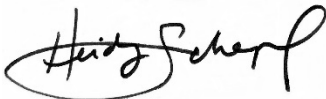
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Senior Staff Archaeologist

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The Canadian Encyclopedia

CHAR: SNFWWTP South Thorold Trunk and Blackhorse SPS

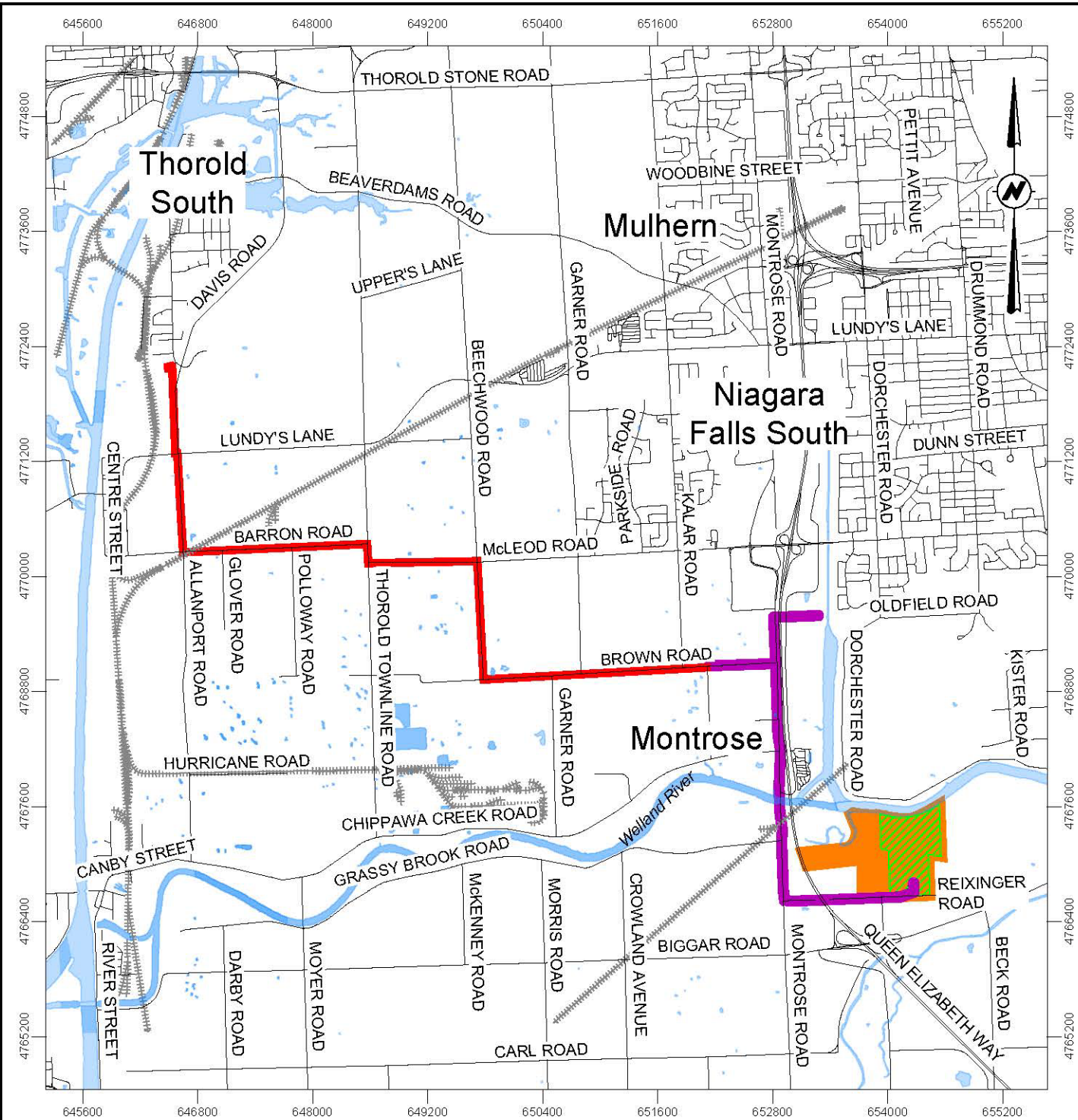
2021 Niagara Purchase. Available Online:
<https://www.thecanadianencyclopedia.ca/en/article/niagara-purchase>. Last
accessed November 30, 2021.

Tremaine, G.R.

1862 *Tremaine's Map of the Counties of Lincoln and Welland, Canada West*. George
R. Tremaine, Toronto.

Appendix A: Summary of Cultural Heritage Assessments

DATE PLOTTED: 2/10/2022 5:57:23 PM
 FILE LOCATION: P:\2021\Technology\Projects\Other Offices\OCUL2001 - Niagara Region - Summary of Arch Assessments_SIR\WIP_Niagara\Drafting\AutoCAD_files\OCUL2001-002001.dwg

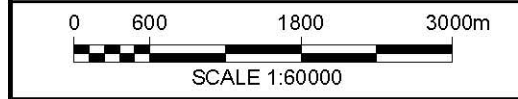


PROJECT:
 CULTURAL HERITAGE ASSESSMENT
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 FORMER COUNTY OF WELLAND
 NOW IN THE CITY OF NIAGARA FALLS
 REGIONAL MUNICIPALITY OF NIAGARA, ONTARIO

TITLE:
 SOUTH NIAGARA FALLS WASTEWATER TREATMENT PLANT
 SUMMARY OF ARCHAEOLOGICAL ASSESSMENTS

- LEGEND:**
- PHASE 1 CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)
 - PHASE 2 CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)
 - CULTURAL HERITAGE EVALUATION REPORT (CHER)
 - SOUTH THOROLD TRUNK AND BLACKHORSE SPS CULTURAL HERITAGE ASSESSMENT REPORT (CHAR)

NOTES:
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS REPORT No. OCUL2001.
 ALL LOCATIONS ARE APPROXIMATE.
ORIGINAL PAPER SIZE: 8 1/2 x 11.
REFERENCES:
 CANMAP STREETFILES V2008.4.



Niagara Region
 1815 SIR ISAAC BROCK WAY, P.O. BOX 1042
 THOROLD, ONTARIO, L2V 4T7

Wood
 Environment & Infrastructure Solutions
 50 VOGELL ROAD, UNIT 3
 RICHMOND HILL, ONTARIO, L4B 3K6
 647-689-4958

DWN BY:	CHK'D BY:	DATE:
SJL	CD	FEB. 10, 2022
DATUM:	PROJECTION:	PROJECT No:
NAD83	UTM Zone 17	OCUL2001
REV No:		
0		

Appendix B: Historical Aerials



LEGEND
— Alignment
— 50m Buffer

Aerial Photograph
Dated: 1934

SNFWWTP: CHAR South Thorold and Blackhorse SPS
Plate: B1



wood.



Aerial Photograph

Dated: 1968

SNFWWTP: CHAR South Thorold and Blackhorse SPS

Plate: B2



wood.

Appendix C: Information Gathering

LIST OF INFORMATION GATHERING DOCUMENTATION

SECTION 1: CORRESPONDENCE WITH THE CITY OF NIAGARA FALLS

SECTION 2: CORRESPONDENCE WITH THE MHSTCI

Section 1: Correspondence with the City of Niagara Falls

Email correspondence with the City of Niagara (City) regarding the Study Area are provided on the following pages.

From: [Suzanne Anderson](#)
To: [Dickinson, Chelsea](#)
Subject: [EXTERNAL]-Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS
Date: Friday, October 22, 2021 2:33:00 PM
Attachments: [image001.png](#)
[OCUL2101 SNFWTP CHAR for the South Thorold Trunk & Blackhorse SPS Information Request.pdf](#)
[Wood Environment.pdf](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Good Afternoon Chelsea,

I have attached a location map of the area you are requesting.

The properties highlighted in green are noted as Heritage Properties.

If you require any more information please let me know and I can be of assistance.

Thank you,

Suzanne Anderson | Assistant Planner | Planning, Building & Development | City of Niagara Falls |
4310 Queen Street | Niagara Falls, ON L2E 6X5 | (905) 356-7521 ext 4246 | Fax 905-356-2354 |
sanderson@niagarafalls.ca

From: Peggy Boyle <pboyle@niagarafalls.ca>
Sent: Friday, October 22, 2021 8:48 AM
To: Suzanne Anderson <sanderson@niagarafalls.ca>
Subject: FW: [EXTERNAL]-Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS

Can you respond?

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: Thursday, October 21, 2021 4:31 PM
To: Peggy Boyle <pboyle@niagarafalls.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>
Subject: [EXTERNAL]-Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS

Good Afternoon,

Wood was retained by the Niagara Region to complete a Cultural Heritage Assessment Report (CHAR) in support of the Schedule "C" Municipal Class Environmental Assessment for the proposed South Niagara Falls Wastewater Treatment Plan (WWTP) associated South Thorold Trunk and Blackhorse Sewage Pumping Station (SPS) in the City of Niagara Falls, Ontario. To complete the CHAR, Wood is looking to identify protected and potential cultural heritage resources within, and

adjacent to, the Study Area. Please find attached a letter and map with study details for your consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Cultural Heritage Specialist | Research Archaeologist

Pronouns – She/Her/Hers

Environment and Infrastructure Solutions

Work: (226) 821-2497

chelsea.dickinson@woodplc.com

www.woodplc.com

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Section 2: Correspondence with the MHSTCI

Email correspondence with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) regarding the Study Area are provided on the following pages.

From: [Barboza, Karla \(MHSTCI\)](#)
To: [Dickinson, Chelsea](#)
Cc: [Schopf, Heidy](#); [Registrar \(MHSTCI\)](#)
Subject: MHSTCI Response: Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS
Date: Monday, October 25, 2021 4:13:09 PM
Attachments: [image001.png](#)
[OCUL2101_SNFWTP CHAR for the South Thorold Trunk & Blackhorse SPS Information Request.pdf](#)

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

File 0010857 – South Niagara Falls Wastewater Treatment Plant

Thanks Chelsea!

At this time, MHSTCI is not aware of any provincial heritage properties within or adjacent to the study area (as per the attached map).

Please note that if the subject lands or parts of the subject lands are owned or controlled by an Ontario Ministry or Prescribed Public Body (PPB) on behalf of the Crown (the list of PPBs is available as O. Reg. 157/10), a Ministry or PPB may have responsibilities under the [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

MHSTCI would appreciate if any technical cultural heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for MHSTCI review.

I hope this helps. Let me know if you have any questions.

Regards,
Karla

Karla Barboza MCIP, RPP, CAHP | (A) Team Lead, Heritage
Ministry of Heritage, Sport, Tourism and Culture Industries
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit
T. 416. 660.1027 | Email: karla.barboza@ontario.ca

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: October-22-21 2:11 PM
To: Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca>
Cc: Schopf, Heidy <heidy.schopf@woodplc.com>
Subject: RE: Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS

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

Good Afternoon Karla,

Please find attached an updated letter and map with street names as per your request.

If you require any additional information please let me know.

Thanks,
Chelsea

From: Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca> **On Behalf Of** Registrar (MHSTCI)
Sent: Friday, October 22, 2021 9:30 AM
To: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>; Schopf, Heidi <heidy.schopf@woodplc.com>
Cc: Registrar (MHSTCI) <Registrar@ontario.ca>
Subject: FW: Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hi Chelsea and Heidi,

Hope this email finds you well.

I know the project and the project area. But could you please label the map with the name of the streets so I can double check our database?

Thanks,
Karla

From: Dickinson, Chelsea <chelsea.dickinson@woodplc.com>
Sent: October-21-21 4:31 PM
To: Registrar (MHSTCI) <Registrar@ontario.ca>
Cc: Schopf, Heidi <heidy.schopf@woodplc.com>
Subject: Information Request: SNFWTP Cultural Heritage Assessment Report for the South Thorold Trunk, Davis Road, and Blackhorse SPS

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

Good Afternoon,

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consideration.

Any information you could provide would be greatly appreciated.

Sincerely,

Chelsea Dickinson, B.A.

Cultural Heritage Specialist | Research Archaeologist

Pronouns – She/Her/Hers

Environment and Infrastructure Solutions

Work: (226) 821-2497

chelsea.dickinson@woodplc.com

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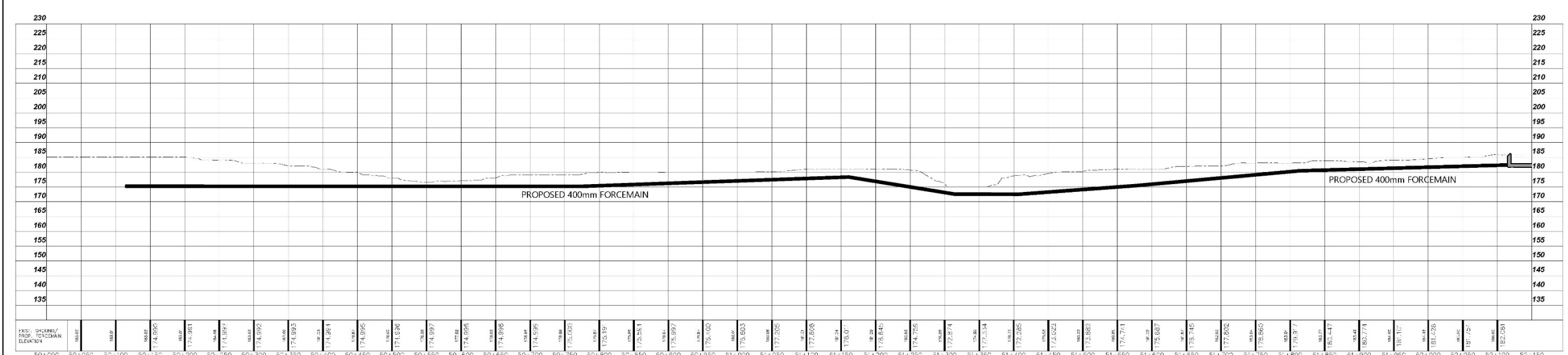
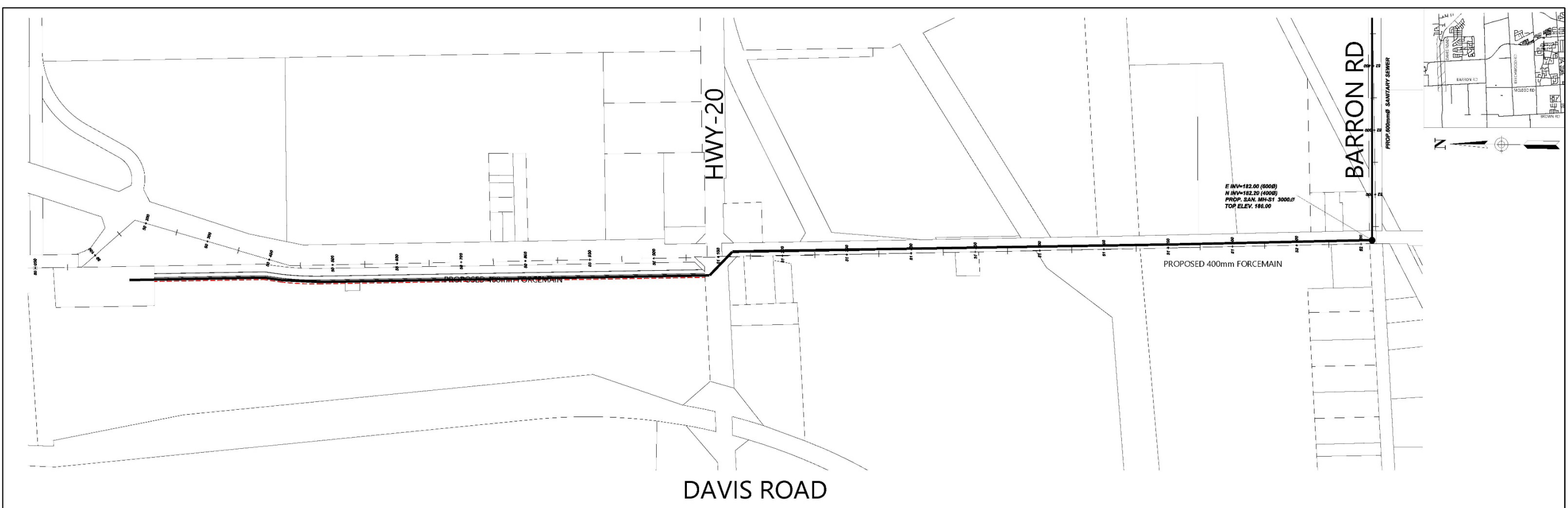
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Appendix D: Proposed Work





NO.	REVISION	DATE	INIT.
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NOTES/LEGEND

1 THE POSITION OF HOLE LINES, CONDUITS, WATERMANS, SEWER AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED BEFORE STARTING WORK. THE CONTRACTOR SHALL INQUIRE HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

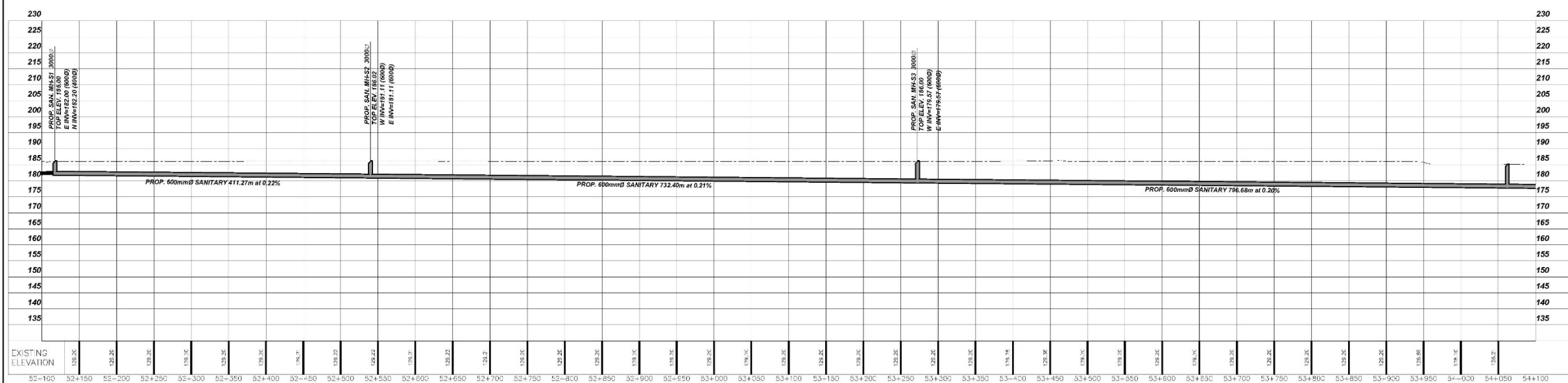
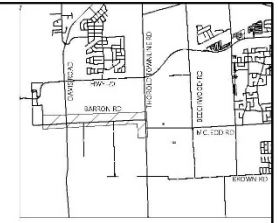
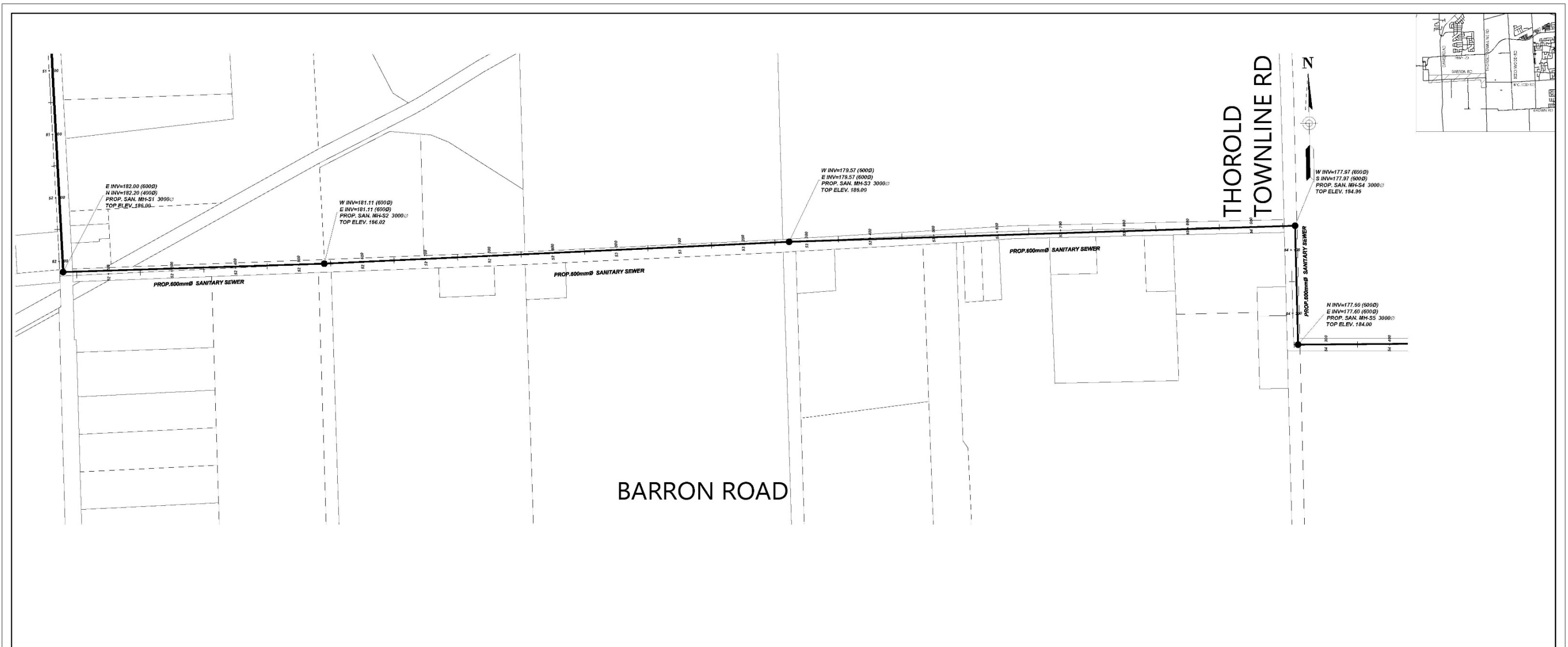
2 PROPERTY LINES WERE PLOTTED USING RECORDED PLANS AND BARS LOCATED IN THE FIELD. TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

DRAFTING	DR
DESIGN	MF
CHECKED BY	
APPROVED BY	



SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
from STA 50+000 to STA 52+150
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No.	718002
DATE	2021-06-21
SCALE	Hor : 1:3000 m Ver : 1:700 m
Sheet No.	#
DWG No.	C1
REV.	0



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2. PROPERTY LINES WERE PLOTTED USING RECORDED PLANS AND BARS LOCATED IN THE FIELD. TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE OBTAINED PRIOR TO CONSTRUCTION.

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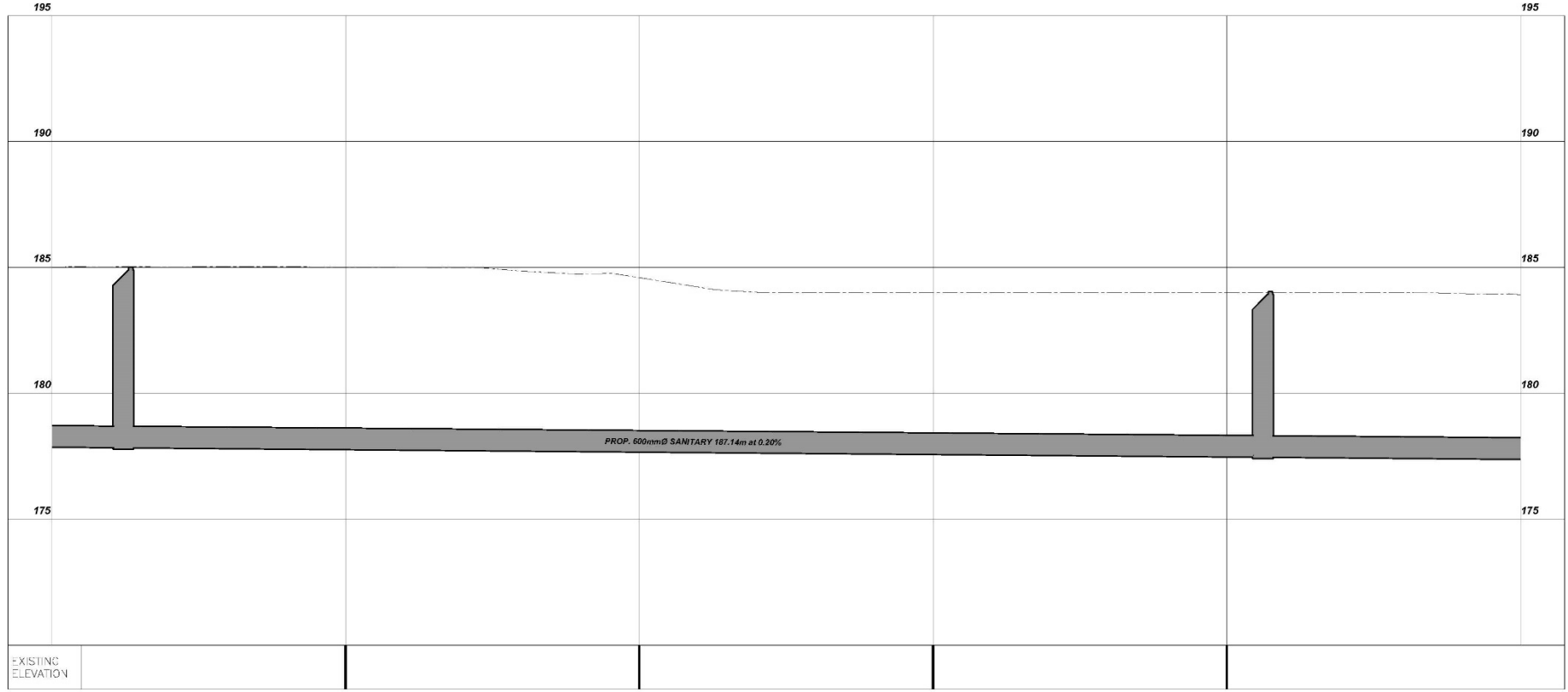
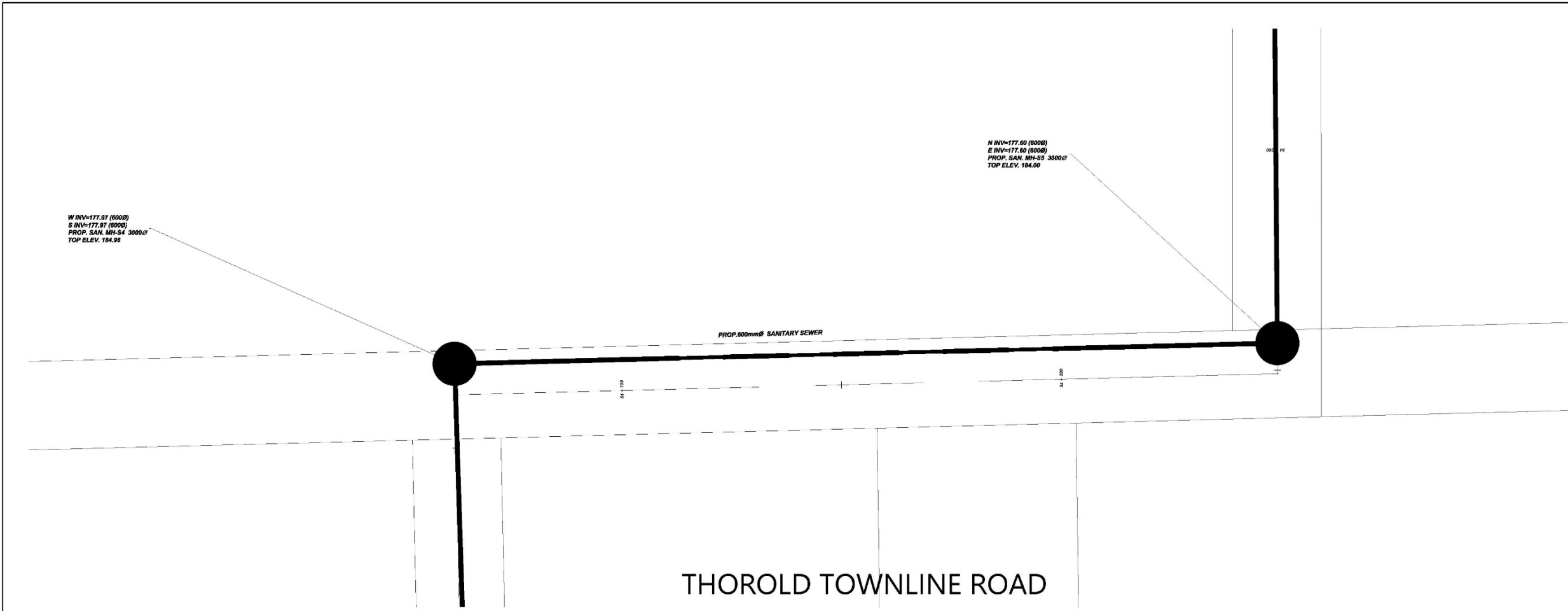
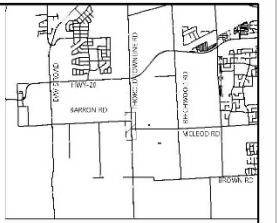
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SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
 CONCEPTUAL DESIGN
 from STA 52+100 to STA 54+100
 NIAGARA REGION
 PLAN & PROFILE

CONSULTANT FILE No.	718002
DATE	2021-06-21
SCALE	Hor : 1:3000 m Ver : 1:700 m
Sheet No.	#
DWG No.	C2
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NO.	REVISION	DATE	INIT.
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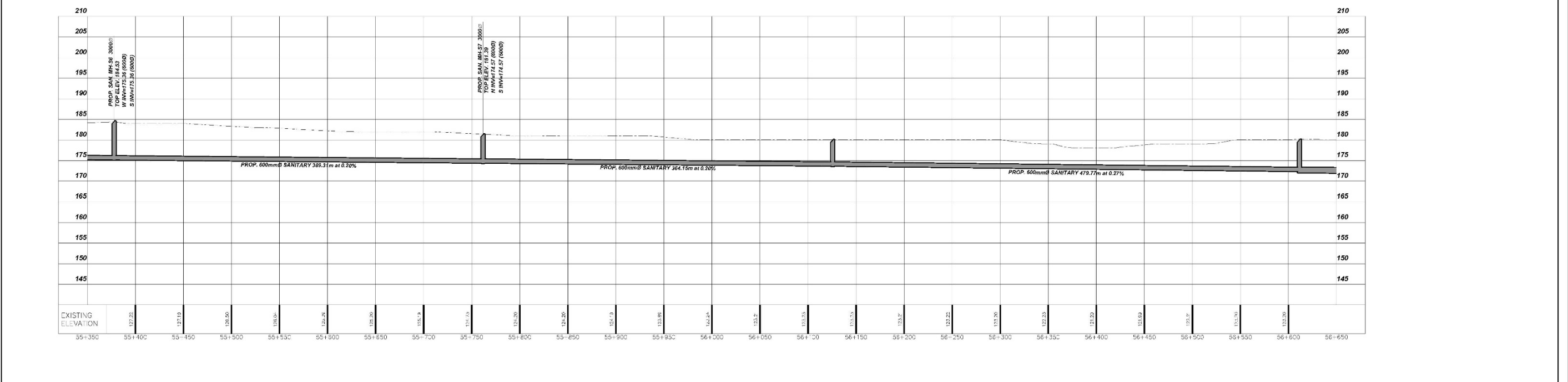
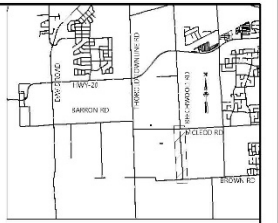
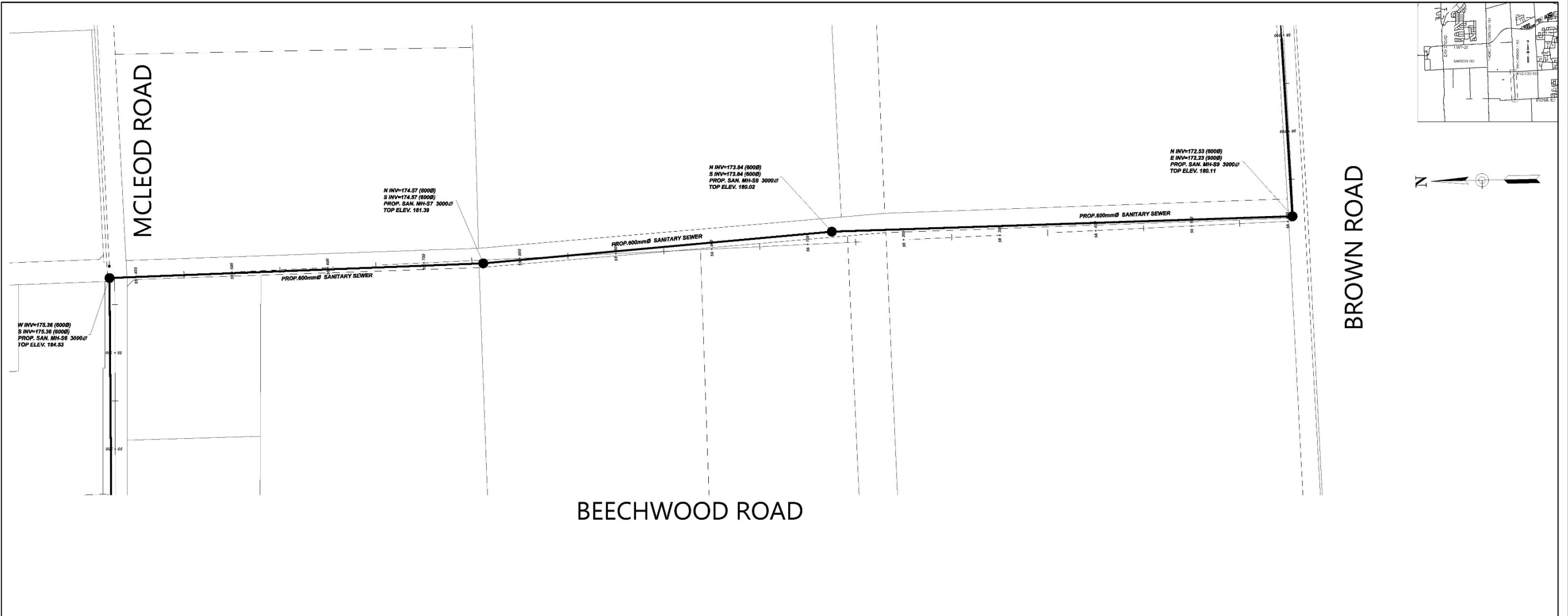
2. PROPERTY LINES WERE PLOTTED USING REGISTERED PLANS AND BARS LOCATED IN THE FIELD TO VERIFY THE ACCURACY OF THESE PROPERTY LINES. A LOCAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

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APPROVED BY	---



SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
 CONCEPTUAL DESIGN
 from STA 54+100 to STA 54+300
 NIAGARA REGION
 PLAN & PROFILE

CONSULTANT FILE No.	718002
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REF. No.	#
DWG. No.	C3
REV.	0



NO.	CONCEPTUAL DESIGN SUBMISSION	2021-XX-XX	MF
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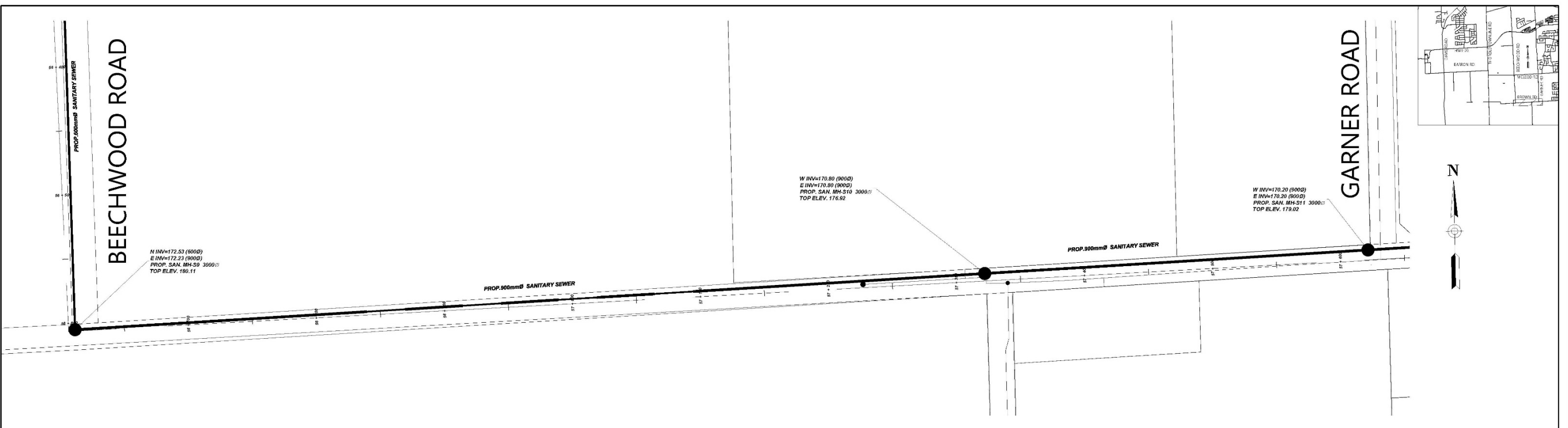
2. PROPERTY LINES WERE PLOTTED USING REGISTERED PLANS AND BARS LOCATED IN THE FIELD TO VERIFY THE ACCURACY OF THESE PROPERTY LINES. A LOCAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

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APPROVED BY	---

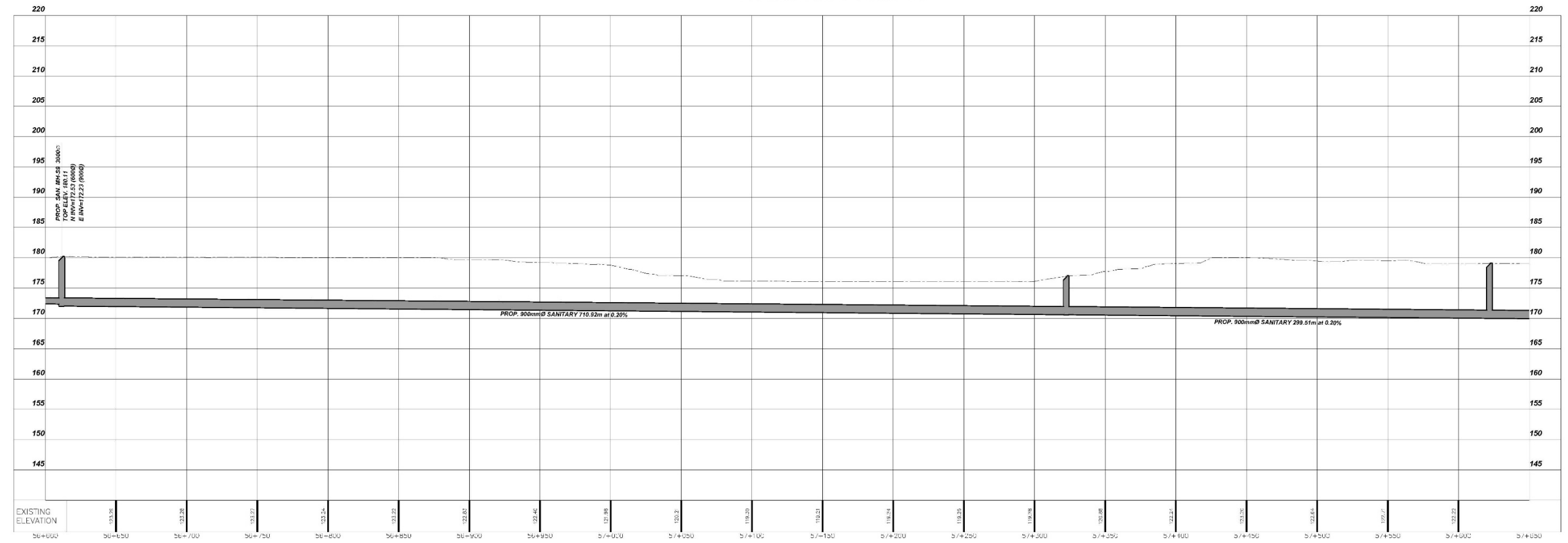


SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
 from STA 55+350 to STA 56+650
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No.	718002
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SCALE	hor : 1:2000 m ver : 1:400 m
REF. No.	#
DWG No.	C5
REV.	0



BARRON ROAD



NO.	REVISION	DATE	INT.
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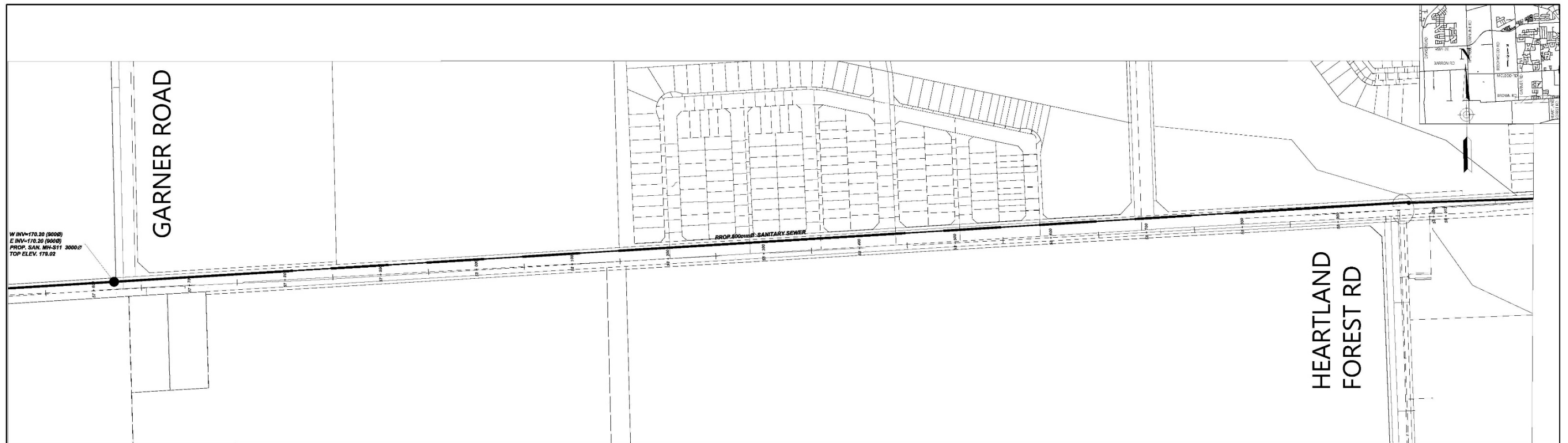
2 PROPERTY LINES WERE PLOTTED USING REGISTERED PLANS AND MARKS LOCATED IN THE FIELD, TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

DRAFTING	JR
DESIGN	MF
CHECKED BY	---
APPROVED BY	---

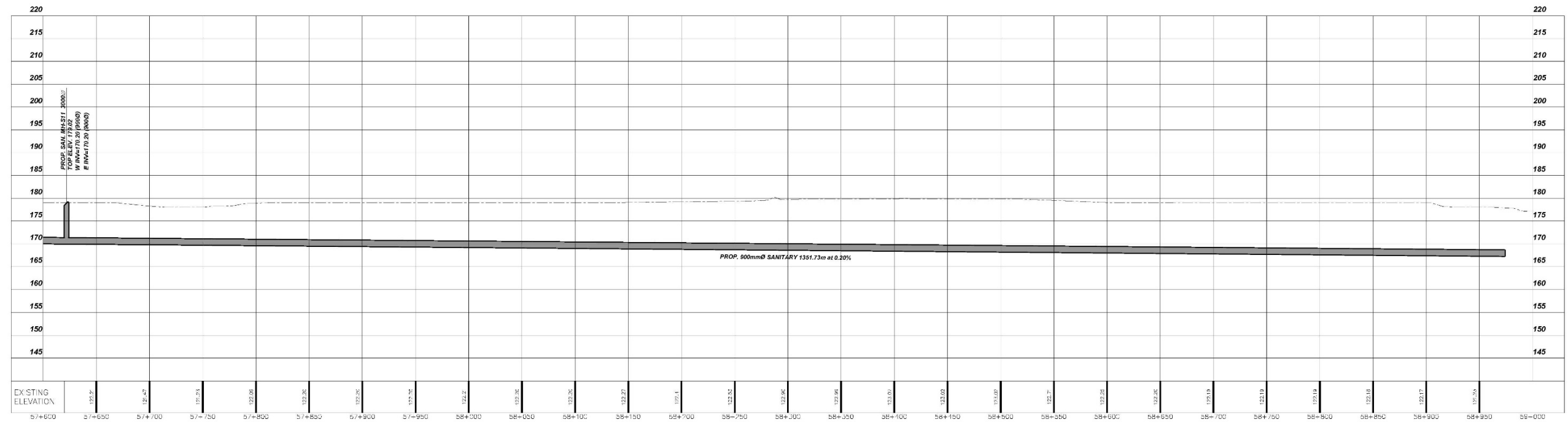


SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
 from STA 56+600 to STA 57+650
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No.	718002
DATE	2021-06-21
SCALE	Hor : 1:1500 m Ver : 1:350 m
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DRG No.	C6
REV.	0



BROWN ROAD



NO.	REVISION	DATE	INIT.
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NOTES/LEGEND

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2. PROPERTY LINES WERE OBTAINED USING REGISTERED PLANS AND MARKS LOCATED IN THE FIELD. TO VERIFY THE ACCURACY OF THESE PROPERTY LINES, A LEGAL SURVEY SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

DRAFTING	JR
DESIGN	MF
CHECKED BY	--
APPROVED BY	--



SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS
TRUNK SANITARY SEWER
CONCEPTUAL DESIGN
 from STA 57+600 to STA 59+000
 NIAGARA REGION
PLAN & PROFILE

CONSULTANT FILE No.	718002
DATE	2021-06-21
SCALE	Hor : 1:2000 m Ver : 1:467 m
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DWG No.	C7
REV.	0

Appendix E: Assessor Qualifications

Assessor Qualifications

Heidy Schopf, MES, CAHP – Built and Landscape Heritage Team Lead - Heidy Schopf the Built and Landscape Heritage Team Lead at Wood. She has over ten years' experience in Cultural Resource Management. She is a professional member of the Canadian Association of Heritage Professionals (CAHP) and is MTO RAQs certified in archaeology/heritage. She has worked on a wide variety of projects throughout Ontario, including: cultural heritage resources assessments, heritage impact assessments, documentation reports, cultural heritage evaluations, strategic conservation plans, heritage conservation district studies and plans and AAs. Ms. Schopf has extensive experience applying local, Provincial, and Federal heritage guidelines and regulations to evaluate protected and potential cultural heritage properties. She is skilled at carrying out impact assessments and developing mitigation measures to conserve the heritage attributes of properties where changes are proposed.

Henry Cary, Ph.D., CAHP, RPA – Senior Cultural Heritage Specialist/ Senior Staff Archaeologist – Dr. Henry Cary has over 20 years public and private-sector experience directing cultural heritage projects in diverse environments across southern and northern Canada. His expertise is in the historic architecture and cultural landscapes of North America, with specialization in industrial and military heritage. He has produced heritage evaluations, impact assessments and conservation plans for a wide range of properties in Ontario, from a pre-War of 1812 stone house in Niagara to the 1930 Glengrove Transformer Station in Toronto, and multiple properties in heritage conservation districts and character areas in the City of Hamilton, City of Vaughan, and Town of Collingwood. He has also evaluated several industrial sites for Hydro One Networks Inc. and the City of Hamilton and has provided policy advice to the City of Cambridge on managing its heritage structural walls. Prior to joining Wood, Dr. Cary worked for Parks Canada, notably for the Fort Henry National Historic Site Conservation Program and Western Arctic Field Unit and served as Heritage Manager for the Town of Lunenburg UNESCO World Heritage Site. He is a member of the Canadian Association of Heritage Professionals (CAHP) and Register of Professional Archaeologists (RPA), an Adjunct Professor at Saint Mary's University, and lecturer at Mount Allison University.

Chelsea Dickinson B.A., Cultural Heritage Specialist | Research Archaeologist (R1194) - Ms. Dickinson holds an Honours B.A. Degree in Near Eastern and Classical Archaeology from Wilfrid Laurier University, and a Post-Graduate Certificate in Geographical Information Systems from Fanshawe College, she has been working in the field of archaeological consulting since 2015. Ms. Dickinson holds an Applied Research license (License R1194) in Archaeology from the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries. Ms. Dickinson has conducted all aspects of Stage 1 to 4 archaeological assessments (AAs) throughout Ontario, including environmental assessments (EA) conducted for the development of wind and solar farms, hydro line corridors and municipal roadway improvements. Ms. Dickinson has been the co-author on a multitude of archaeological assessment reports and has experience working on cultural heritage assessment reports, heritage impact

assessments, and documentation reports specializing in historical background research spanning across Southern Ontario. Ms. Dickinson has had the privilege of working alongside a multitude of First Nation community members while conducting archaeological assessments in both Northern and Southern Ontario. Ms. Dickinson has experience using high precision GPS technologies, specifically Top Con Hi SR and FC5000 positioning systems, used to map in architectural features, diagnostic artifacts, as well as topographical anomalies and site boundaries. Ms. Dickinson has experience using ArcGIS in addition to Collector for ArcGIS while conducting archaeological assessments.

Appendix F: Limitations

Limitations

- 1) The work performed in the preparation of the Cultural Heritage Assessment Report (CHAR) and the conclusions presented are subject to the following:
 - a. The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - b. The Scope of Services;
 - c. Time and Budgetary limitations as described in our Contract; and,
 - d. The Limitations stated herein.
- 2) No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
- 3) The conclusions presented in the report are based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Wood Environment & Infrastructure's opinion, for direct observation.
- 4) The potential and protected cultural heritage resources encountered at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
- 5) Services including a background study and fieldwork were performed. Wood Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' guidelines. It is possible that Cultural heritage resources not visible from the public realm may be within, or adjacent to the Study Area.
- 6) The utilization of Wood Environment & Infrastructure's services during the implementation of any further cultural heritage work recommended will allow Wood Environment & Infrastructure to observe compliance with the conclusions and recommendations contained the CHAR. Wood Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
- 7) This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. Wood Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.

- 8) This report is not to be given over to any third-party other than a governmental entity, for any purpose whatsoever without the written permission of Wood Environment & Infrastructure, which shall not be unreasonably withheld.