APPENDIX C

Cultural Heritage Report

DUFFERIN COUNTY

CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT DUFFERIN COUNTY ROAD 109 / 2ND LINE REALIGNMENT

DECEMBER 18, 2023







CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

DUFFERIN COUNTY ROAD 109 / 2ND LINE REALIGNMENT

DUFFERIN COUNTY

ORIGINAL REPORT

FINAL

PROJECT NO.: 221-08590-00

DATE: DECEMBER 18, 2023

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EXECUTIVE SUMMARY

WSP Canada Inc. (WSP) was retained by Dufferin County (the City) to complete a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) to support the Dufferin County Road 109/ 2nd Line Realignment Schedule 'C' Municipal Class Environmental Assessment (the Project). The study provides a comprehensive and environmentally sound planning process, open to public participation, to select the preferred solution which fully addresses the current issues regarding the realignment of Dufferin County Road 109 and 2nd Line.

The Study Area consist of lands to be impacted by the Project and all adjacent properties, it includes part of Lot 1, Concession I, in the former Township of Amaranth, and parts of Lot 5, Concession C, in the former Township of East Garafraxa (Study Area 1); and it includes parts of Lots 1 and 2, Concession II in the former Township of Amaranth, and part of Lots 4 to 7, Concession A, Lots 5-7, Concession B and in the former Township of East Garafraxa (Study Area 2).

The overall objective of the project is to address the near and long term transportation needs of Dufferin County Road. The project includes the following components:

- The recommended plan is a four-legged signalized intersection connecting County Road 109 with 2nd Line and County Road 3
- The realigned 2nd line has two lanes in either direction and widens to a four lane roadway at the intersection of County Road 109 and Realigned 2nd Line
- The existing County Road 109 is widened at the four-legged intersection from a three lane roadway to a six lane roadway
- The existing County Road 3 is widened at the realigned County Road 23 T-intersection from a two lane roadway to a three lane roadway to accommodated a dedicated southbound left turn from County Road 3 onto Realigned County Road 23
- The realigned County Road 23 has two lanes in either direction and widens to a three lane roadway at the intersection of County Road 3 and Realigned County Road 23

The purpose of this Cultural Heritage Report 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. Based on the current understanding of the Study Area, a preliminary impact assessment and recommended mitigation measures were prepared. Study Area 1 was selected as the preferred alternative.

The results of background research, information gathering, and a field review determined that there are six (6) potential cultural heritage resources located within the Study Area. Based on the results of the background data collection and assessment of impacts imposed by the preferred alternative in Study Area 1, it has been determined that there will be potential direct impacts to CHL-5.

WSP makes the following recommendations:

- 1 Storage and construction staging areas should be appropriately located and/or planned to avoid impacts to any of the identified CHLs.
- 2 A CHER should be completed for CHL-5 to establish whether this property possesses CHVI. If the property is found to possess CHVI, an HIA should also be completed to determine appropriate alternatives or mitigation measures early in the project.

- 3 Storage and construction staging areas should be appropriately located and/or planned to avoid impacting any of the identified CHLs.
- 4 Should future work require expansion of the Dufferin Road County Road 109 and 2nd Line Realignment Study Area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on known or potential BHRs and CHLs.

ABBREVIATIONS

BHR	Built Heritage Resource
CHER	Cultural Heritage Evaluation Report
CHL	Cultural Heritage Landscape
CHVI	Cultural Heritage Value or Interest
HIA	Heritage Impact Assessment
MCM	Ministry of Citizenship and Multiculturalism
OHA	Ontario Heritage Act
PHP	Provincial Heritage Property
PPS	Provincial Policy Statement
SCHVI	Statement of Cultural Heritage Value of Interest

GLOSSARY

Adjacent lands	Those lands contiguous to a protected heritage property or as otherwise defined in the municipal official plan (PPS 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 [Indigenous Nations]. 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 (PPS 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 (PPS 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 [Indigenous Nations]. 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 (PPS 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) (PPS 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 (PPS 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> (PPS 2020).

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1 INTRODUCTION

1.1 STUDY PURPOSE AND OBJECTIVES

WSP Canada Inc. (WSP) was retained by Dufferin County (the Client), to conduct a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) as part of the Dufferin County Road 109/ 2nd Line Realignment Schedule 'C' Municipal Class Environmental Assessment (MCEA). The study provides a comprehensive and environmentally sound planning process, open to public participation, to select the preferred solution which fully addresses the current issues regarding the realignment of Dufferin County Road 109 and 2nd Line.

This Cultural Heritage Report was undertaken to identify municipally, provincially, and federally recognized heritage properties as well as potential heritage properties within the Study Area and assess the impacts that the Project may have on cultural heritage resources.

A Cultural Heritage Report is required for the MCEA review process to: identify existing and potential built heritage resources (BHR) and cultural heritage landscapes (CHL); review the background history of the Study Area; complete a site visit to confirm existing conditions; provide a preliminary impact assessment to conserve BHRs and CHLs; identify mitigation and/or monitoring for potential impacts; and determine whether additional heritage reporting is required.

To meet these objectives, the report will:

- Introduce the study including the purpose and methodology used to undertake the work.
- Review background studies to complete a summary history of the Study Area using local histories, historical mapping, and aerial photographs. This work will trace the evolution of the Study Area and aid in the identification of existing and potential BHRs and CHLs.
- Obtain information regarding Dufferin County's heritage recognitions and identification of listed and/or designated heritage properties within the Study Area.
- Confirm the presence of previously recognized built heritage resources and cultural heritage landscapes. This process will aid in the identification of built heritage resources and cultural heritage landscapes that may be impacted by the undertaking. This task will include a review of municipal, provincial, and federal heritage registers and inventories.

This work will be conducted in accordance with the *Ontario Heritage Act* (OHA, 2005), the *Provincial Policy Statement* (2020), and the *Dufferin County Official Plan* (2017).

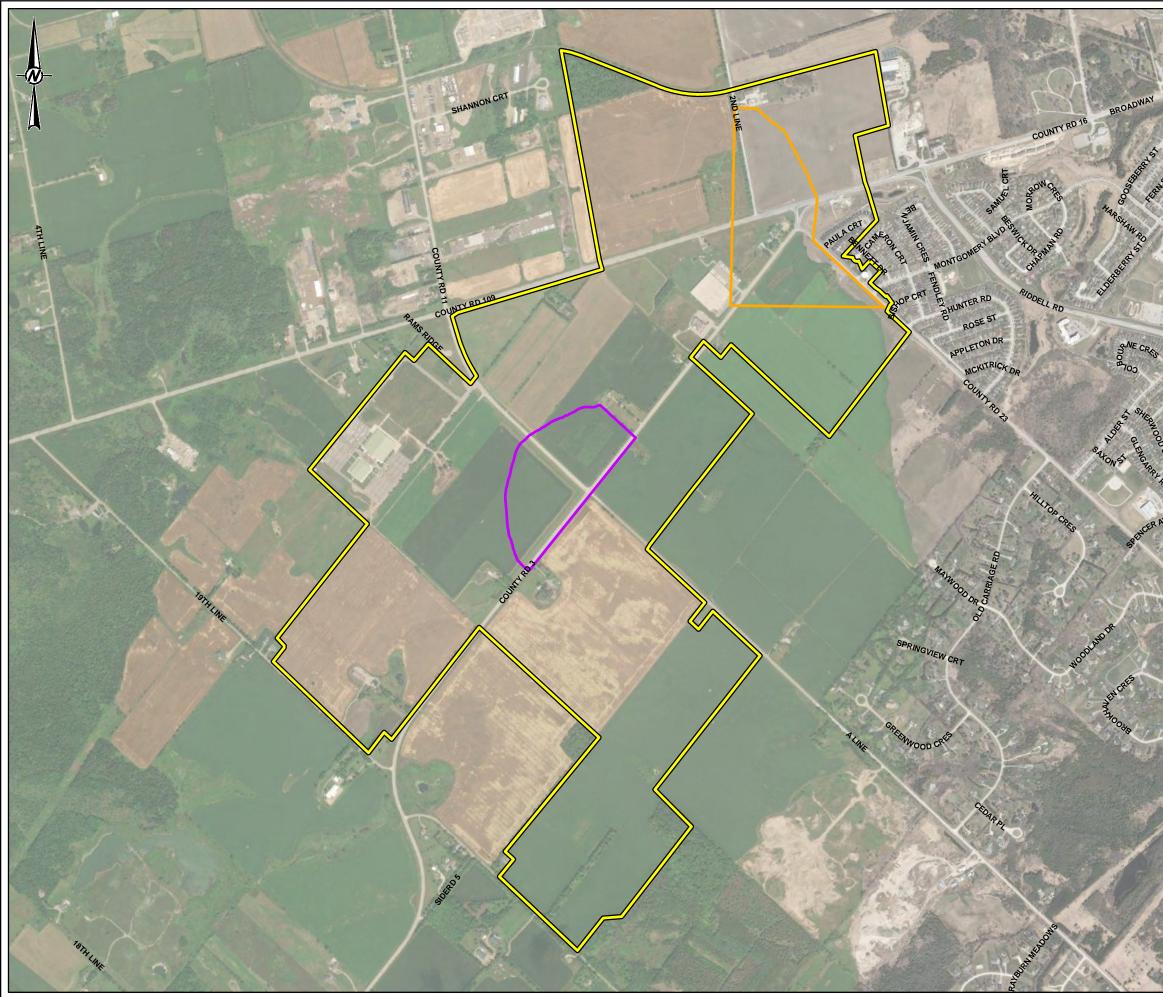
1.2 PROJECT DESCRIPTION AND STUDY AREA

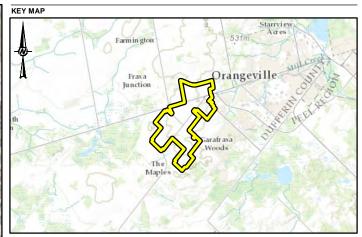
2nd Line is proposed to be realigned as the fourth leg of the County Road 109 and County Road 3 intersection. This realignment could impact other intersections, namely County Road 3 and County Road 23, which is less than 100m south of the County Road 109 and County Road 3 intersection.

The recommended plan is a four-legged signalized intersection connecting County Road 109 with 2nd Line and County Road 3. In this plan, the proposed 2nd Line is realigned to the east of the existing 2nd Line to connect at the existing T-intersection; County Road 109 and County Road 3. Existing County Road 3 is realigned at the intersection such that the connection meets at a 90 degree angle and a tangent with County Road 109. County Road 23 is realigned further south of the existing County Road 23 to ensure the intersection of County Road 3 and County Road 23 doesn't conflict with the proposed four-legged intersection. In addition, realignment of County Road 23 provides adequate left turn storage and taper for vehicles turning left from County Road 3 onto County Road 23. As a result of realigning County Road 23 to the south, existing Paula Court is extended further south to maintain a T-intersection with County Road 23. Proposed alignment ensures all roadways connects at a 90 degree angle and maintains minimum tangent lengths.

Realigned 2nd line has two lanes in either direction and widens to a four lane roadway at the intersection of County Road 109 and Realigned 2nd Line. Which include a dedicated right and left turn lane for south bound traffic, one through lane for northbound traffic and one through lane for south bound traffic. Existing County Road 109 is widened at the four-legged intersection from a three lane roadway to a six lane roadway; comprising of two through lanes, one dedicated left turn lane and one dedicated right turn lane for east and westbound traffic. Existing County Road 3 is widened at the realigned County Road 23 T-intersection from a two lane roadway to a three lane roadway to accommodated a dedicated southbound left turn from County Road 3 onto Realigned County Road 23. At the four legged intersection, County Road 3 is further widened to a four lane road; comprising of one dedicated left turn and right turn lane for northbound traffic, and one through lane in each direction. Realigned County Road 23 has two lanes in either direction and widens to a three lane roadway at the intersection of County Road 3 and Realigned County Road 23; with one dedicated westbound left turn lane, one westbound right turn lane and one eastbound through lane. Extended Paula Court maintains the existing two lane configuration.

The Study Area consist of lands to be impacted by the Project and all adjacent properties, it includes part of Lot 1, Concession I, in the former Township of Amaranth, and parts of Lot 5, Concession C, in the former Township of East Garafraxa (Study Area 1); and it includes parts of Lots 1 and 2, Concession II in the former Township of Amaranth, and part of Lots 4 to 7, Concession A, Lots 5-7, Concession B and in the former Township of East Garafraxa (Study Area 2). A location map is provided in Figure 1.



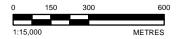


SCALE 1:150,000

LEGEND



CULTURAL HERITAGE STUDY AREA STUDY AREA 1 STUDY AREA 2



NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S) 1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO 2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT DUFFERIN COUNTY

PROJECT

CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY ROAD 109 AND 2ND LINE REALIGNMENT

TITLE

STUDY AREA

CONSULTANT		YYYY-MM-DD	2023-01-19	
		DESIGNED		
	SD.	PREPARED	TP	
		REVIEWED		
		APPROVED		
PROJECT NO.	CONTROL	RE	V.	FIGURE
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2 LEGISLATIVE FRAMEWORK

This report reviews BHRs and CHLs within the Project Areas to ensure that the requirements under the Ontario *Environmental Assessment Act* (1990) are satisfied. This section outlines the various legislative frameworks and policies relevant to the report.

2.1 ENVIRONMENTAL ASSESSMENT ACT

The purpose of the Ontario Environmental Assessment Act (1990) is "the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management, in Ontario, of the environment" (*Environmental Assessment Act* 2009, *Part I-Section 2*). The *Environmental Assessment Act* (1990) defines the environment broadly to include the built and cultural environment and outlines a planning and decision-making process to ensure that potential environmental effects are considered before a project begins. This legislation applies to provincial ministries and agencies, municipalities and other public bodies.

2.2 PROVINCIAL POLICY STATEMENT

The *Provincial Policy Statement* (PPS) (2020) outlines provincial "policy direction on matters of provincial interest related to land use planning and development" (Part I: Preamble PPS 2020). The intent is to provide for appropriate development that protects resources of public interest, public health and safety and the quality of the natural and built environment. The PPS 2020 identifies the conservation of significant built heritage resources and cultural heritage landscapes as a provincial interest in Section 2.6.1.

Relevant definitions from the PPS 2020 include:

Built Heritage Resources (BHR): 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 OHA, or that may be included on local, provincial, federal and/or international registers.

Cultural Heritage Landscapes (CHL): 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 OHA, 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.

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.

2.3 ONTARIO HERITAGE ACT

The OHA (2005) gives municipalities and the provincial government powers to preserve the heritage of Ontario, with a primary focus on protecting heritage properties and archaeological sites. The OHA grants the authority to municipalities and to the province to identify and designate properties of heritage significance, provide standards and guidelines for the preservation of heritage properties and enhance protection of heritage conservation districts, marine heritage sites and archaeological resources.

Designation ensures the conservation of important places and can take the form of individual designations (Part IV of the OHA) or as part of a larger group of properties, known as a Heritage Conservation District (Part V of the OHA). An evaluation using the criteria outlined in Ontario Regulation (O. Reg) 9/06 is used to determine whether a property possesses cultural heritage value or interest and may be worthy of designation under the OHA. Designation offers protection for properties under Sections 33, 34 and 42 of the OHA, prohibiting the owner of a designated property from altering, demolishing or removing a building or structure on the property unless the owner applies to the council of the municipality and receives written consent to proceed with the alteration, demolition or removal.

In addition to designated properties, the OHA allows municipalities to list properties that are considered to have cultural heritage value or interest on their Municipal Heritage Register. Under Part IV, Section 27 of the OHA, municipalities must maintain a Register of properties situated in the municipality that are of cultural heritage value or interest. Section 27 (1.1) states that the register shall be kept by the clerk and that it must list all designated properties (Part IV and V). Under Section 27 (1.2), the Register may include property that has not been designated, but that council believes to be of cultural heritage value or interest. Listed properties, although recognized as having cultural heritage value or interest, are not protected under the OHA to the same extent as designated properties, but are acknowledged under Section 2 of the PPS 2020 under the *Planning Act*. An owner of a listed heritage property must provide the municipality with 60 days' notice of their intention to demolish a building or structure on the property.

The OHA also allows for the designation of provincial heritage properties (PHP). Part III.1 of the OHA enables the preparation of standards and guidelines that set out the criteria and process for identifying the cultural heritage value or interest of PHPs (Part II of the OHA) and cultural heritage value or interest of provincial heritage properties of provincial significance (PHPPS) (Ontario Regulation (O. Reg.) 10/06 of the OHA) and to set standards for their protection, maintenance, use, and disposal.

2.3.1 ONTARIO REGULATION 9/06

The criteria for deterimining cultural heritage value or interest is defined in O. Reg. 9/06. This regulation was created to ensure a consistent approach to the designation of heritage properties under the OHA. All designations under the OHA made after 2006 must meet the criteria outlined in the regulation. A property may be designated under Section 29 of the OHA if it meets one or more of the following criteria for determining whether it is of cultural heritage value or interest:

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.

2.4 DUFFERIN COUNTY OFFICIAL PLAN

The Dufferin County *Official Plan* was approved by the Ministry of Municipal Affairs and Housing on Mary 27, 2015. In 2017, the *Official Plan* was consolidated. Section 3 of the *Official Plan* provides policies specific to heritage planning.

Relevant policies include:

- 3.10 Cultural heritage resources are an important component of the County's history and community identify and will be *conserved* and enhanced. It is the intent of this Plan that the County's *significant built heritage resources* and *significant cultural heritage landscapes* be identified, *conserved* and enhanced and that all new *development* occur in a manner that *conserves* the County's rich cultural heritage. The cultural heritage resources of the County include:
 - built heritage resources;
 - cultural heritage landscapes; and
 - archaeological resources.

3.10.1 Built heritage and cultural heritage landscapes: it is the policy of the County that:

- a) *Significant built heritage resources* and *significant cultural heritage landscapes* will be conserved.
- b) Local municipal official plans will include policies that encourage Council to utilize its authority under the *Ontario Heritage Act* to designate individual properties under Part IV and heritage conservation districts under Part V that are of cultural heritage value or interest. Local municipalities may also prepare a conservation plan for municipally owned heritage properties to address their on-going care and management of the cultural heritage resource or protected property.

- c) A heritage impact assessment by a qualified professional will be required whenever cultural heritage resources may be impacted by a proposed development. Such an assessment will include recommendations regarding mitigation measures on how impacted cultural heritage resources will be conserved.
- d) Local municipalities are encouraged to establish Municipal Heritage Committees pursuant to the Ontario Heritage Act to advice and assist local municipal Councils on matters related to Parts IV and V of the Ontario Heritage Act and on cultural heritage matters. Local municipal councils are encouraged to seek the advice of the Municipal Heritage Committee.
- e) The municipal clerk of the local municipality will maintain a register of all properties designated under Part IV and Part V of the *Ontario Heritage Act*.
- f) *Development* and *site alteration* will not be permitted on adjacent lands to protected heritage properties except where proposed *development* and *site alteration* has been evaluated and it has been demonstrated that the *heritage attributes* of the protected property will be *conserved*.

Relevant definitions include:

Built Heritage Resources: means 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 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 (Source: PPS, 2014).

Conserve: 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 under the *Ontario Heritage Act*. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (Source: PPS, 2014).

Cultural Heritage Landscapes: 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 Aboriginal 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, mainstreets and neighbourhoods, cemeteries, trailways, 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) (Source: PPS, 2014).

Development: means the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the *Planning Act*, but does not include:

a) activities that create or maintain infrastructure authorized under an environmental assessment process; and

b) works subject to the Drainage Act (Source: PPS, 2014).

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 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) (Source: PPS, 2014).

Significant: means (e) in regard to cultural heritage and archaeology, resources that have been 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. Criteria for determining significance for the resources identified in sections c. – e. are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (Source: Adapted from PPS, 2014).

Site Alteration: means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site. For the purposes of policy 2.1.4(a) of the PPS, site alteration does not include underground or surface mining of minerals or advanced exploration on mining lands in significant areas of mineral potential in Ecroregion 5E, where advanced exploration has the same meaning as in the *Mining Act*. Instead, those matters shall be subject to policy 2.1.5(a) of the PPS.

2.4.1 TOWNSHIP OF AMARANTH

Part of the Study Area is situated in the Township of Amaranth. In the Amaranth Official Plan (2018), Section 4.2.7 refers to "Heritage Resources" which indicates that in order to protect the integrity of potentially sensitive sites, heritage resources in the Township are not shown on a map. Where an application is made to develop lands in the vicinity of a potentially significant site, the following development criteria shall apply:

- a) Care shall be taken to preserve known archaeological sites or areas of high archaeological potential.
- b) Existing heritage features, areas and properties should be retained. To determine whether such actions are feasible, consideration shall be given to both economic and social benefits and costs. Council may require an impact assessment report prepared by a professional archeologist where development is proposed on a site containing heritage resources.
- c) New development including reconstruction and alterations should be designed in harmony with the area's character and the existing heritage features and buildings in terms of mass, height and setback and in the treatment of architectural details, especially on building facades.
- d) Where new development involves a heritage feature it should express the feature in some way. This may include one or more of the following:
 - i. preservation and display of fragments of the former building's features and landscaping;
 - ii. marking the traces of former locations, shapes and circulation lines;
 - iii. displaying graphic and verbal descriptions of the former use;

- iv. reflection of the former architecture and use in the new development.
- e) Where development will destroy or significantly alter cultural landscapes or heritage features, actions should be taken to salvage information of the features being lost. Such actions could include archaeological salvage excavation, and the recording of buildings or structures through measured drawings, photographs or their physical removal to an alternative location.

Section 4.28 refers to "Architectural Preservation" and states:

- a) It is the intent of this Plan to encourage the retention and conservation of buildings of architectural and/or historical merit on their original sites and to promote the integration of these resources into new development proposals in their original use or an appropriate adaptive re-use.
- b) Demolition, destruction or inappropriate alteration to cultural resources shall be prevented.

2.4.2 TOWN OF ORANGEVILLE

Part of the Study Area is situated in the Town of Orangeville. In the Town of Orangeville Official Plan (2020), Section D.4 refers to "Heritage Resources" and defines heritage resources as those man-made features, which are indicative of past human activities, achievements, or events. The resources include, but are not limited to, buildings, archaeological sites, structures and artifacts of architectural or historical significance, man-made or modified landscape and their respective features. The goal of the Heritage Resources Policy is to support the retention and recognition of Orangeville's built heritage and cultural heritage landscapes in order to build a sense of community identity and a degree of continuity between the past and the present. General relevant policies include:

- D4.3.1 Council will seek to ensure that heritage resources are maintained and enhanced within a compatible context. Council will address this objective as part of its consideration of any application for development approval that affects the property occupied by a heritage resource, or an adjoining property.
- D4.3.2 Council may establish guidelines for signage on heritage properties that would be used as a guide to provide for the preparation of signage which is consistent with the 19th Century architecture which exists within downtown Orangeville.
- D4.3.3 Public works, whether municipal or provincial, will be undertaken in such a way as to be sensitive to the impact of those works on the Town's heritage resources.
- D4.3.4 Council will participate in federal or provincial programs to maintain or restore heritage resources, and Council may also establish its own programs for such a purpose.
- D4.3.5 Heritage Orangeville will act as the municipal heritage committee for the Town and will continue to operate as a Local Architectural Conservation Advisory Committee under the *Ontario Heritage Act*.
- D4.3.6 The alteration or demolition of a designated heritage building or a building in a designated heritage conservation district will require the approval of Council, in consultation with Heritage Orangeville.
- D4.3.7 Council will strive to maintain any heritage assets which it owns to as high a standard as possible in order to demonstrate Council's commitment to heritage preservation. If municipally owned heritage designated

buildings are sold, Council may require a heritage easement agreement to be adopted to ensure the on-going preservation of that building.

- D4.3.8 As a condition of approval of a proposed development involving the retention of a heritage feature, Council may require the owner to enter into an agreement that safeguards the future of the heritage feature. This agreement may require the owner to provide a financial security to the Town to ensure compliance with the agreement.
- D4.3.9 Council, through Heritage Orangeville, will maintain an inventory of heritage resources in the Town. This inventory will foster awareness of Orangeville's heritage resources by residents and businesses.
- D4.3.10 Council may designate heritage resources under Part IV of the *Ontario Heritage Act* where such a resource is considered to be of historical significance and meets one or more of the following criteria:
 - a) represents a unique or rare example, or is one of the only remaining examples of its architectural style;
 - b) is a work of exceptional quality in terms of its plan, design, construction, materials or details;
 - c) represents a significant example of the work of a celebrated designer, architect or builder;
 - d) represents an aspect of the early development of the Town;
 - e) is associated with a person or persons who became prominent locally, provincially or nationally; or,
 - f) is associated with an historically significant event in the development of the Town, the county, or the province.
- D4.3.11 Council may designate heritage conservation districts under Part V of the *Ontario Heritage Act* where such districts meet the following criteria:
 - a) the majority of the structures or elements in the district have a unique character and reflect an important aspect of the heritage of the community or are of historical, architectural, natural or cultural significance; or,
 - b) a major part of the heritage value of the district derives from the consideration of the heritage resources in that district as a group rather than as individual buildings.

Heritage conservation districts may include buildings of no present architectural or historical value.

A heritage impact assessment will be required for any new development proposed within a designated heritage conservation district.

D4.3.13 Development and site alteration on lands adjacent to protected heritage properties may be permitted where it has been demonstrated that identified heritage attributes will be conserved and protected, wherever possible. Mitigative measures and/or alternative development approaches may be required to conserve those heritage attributes.

2.4.3 TOWNSHIP OF EAST GARAFRAXA

Part of the Study Area is situated in the Township of East Garafraxa. In the East Garafraxa Official Plan (2005), Section 7.13 refers to "Heritage Resources" which indicates that in order to protect the integrity of potentially sensitive sites, heritage resources in the Township are not shown on a map. Where an application is made to develop lands in the vicinity of a potentially significant site, the following development criteria shall apply:

- a) Care shall be taken to preserve known archaeological sites or areas of high archaeological potential.
- b) Existing heritage features, areas and properties should be retained. To determine whether such actions are feasible, consideration shall be given to both economic and social benefits and costs. Council may require an impact assessment report prepared by a professional archeologist where development is proposed on a site containing heritage resources.
- c) New development including reconstruction and alterations should be designed in harmony with the area's character and the existing heritage features and buildings in terms of mass, height and setback and in the treatment of architectural details, especially on building facades.
- d) Where new development involves a heritage feature it should express the feature in some way. This may include one or more of the following:
 - i. preservation and display of fragments of the former building's features and landscaping;
 - ii. marking the traces of former locations, shapes and circulation lines;
 - iii. displaying graphic and verbal descriptions of the former use;
 - iv. reflection of the former architecture and use in the new development.
- e) Where development will destroy or significantly alter cultural landscapes or heritage features, actions should be taken to salvage information of the features being lost. Such actions could include archaeological salvage excavation, and the recording of buildings or structures through measured drawings, photographs or their physical removal to an alternative location.

3 METHODOLOGY

3.1 CONSULTATION

BHRs and CHLs already recognized by the municipality, the Ontario Heritage Trust (OHT), provincially and federally were identified by reviewing the following:

- The inventory of OHT easements;
- The OHT's Ontario Heritage Plaque Guide, an online, searchable database of Ontario Heritage Plaques;
- Ontario's Historical Plaques website;
- The Ontario Genealogical Society's Ontario Cemetery Index;
- Parks Canada's Historic Places website, an online, searchable register that provides information on historic places recognized at the local, provincial/territorial and national levels;
- Parks Canada's Directory of Federal Heritage Designations, a searchable on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings and Heritage Lighthouses;
- Canadian Heritage River System, a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage; and
- UNESCO World Heritage Sites.

For the purposes of this study, any property previously identified by a municipality, municipal staff, provincial or federal agencies as containing, or having the potential to contain, cultural heritage value or interest (CHVI) will be determined to be a BHR or CHL, and if applicable, will be discussed in Section 5.4.

3.2 FIELD ASSESSMENT

Field assessment for this report included a survey of the cultural heritage Study Area from the publicly accessible right-of-way to confirm or identify existing and/or potential BHRs and CHLs. Where identified, potential resources were photographed and mapped, and physical characteristics visible from the right-of-way or aerial imagery were described.

The use of a 40-year-old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (MCM, 2016). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value.

Similarly, if a resource is younger than 40 years old it does not preclude this resource from having CHVI, however it does provide a systematic means of identifying properties that have a higher likelihood of retaining cultural heritage value.

This report includes background research that summarizes the history of the Study Area. In addition to textual sources, historical mapping and aerial photography was consulted to identify the presence of structures/building, settlement patterns and other previously recognized BHRs and CHLs.

3.3 IDENTIFICATION OF CULTURAL HERITAGE VALUE OR INTEREST

Properties identified during field review were screened by employing an application of the 40-year threshold used to identify potential BHRs and/or CHLs, followed by a high-level and cursory assessment based on a theoretical understanding of the criteria outlined in O. Reg. 9/06 for determining CHVI (see Section 2.3.1 for full criteria). The criteria in O. Reg. 9/06 were established to identify properties with sufficient CHVI to warrant designation under the OHA. It is considered best practice when identifying potential BHRs and CHLs to employ O. Reg. 9/06 as it provides a general framework for understanding and interpreting heritage value. It should be noted, however, that the application of this framework is used as a theoretical underpinning, not as a strict measurement applied, to a greater or lesser degree, to each property under study. This report does not provide a comprehensive evaluation of a property according to O. Reg. 9/06 and does not satisfy the requirement for a CHER.

3.4 AGENCY DATA REQUESTS

As part of this study, the WSP contacted the Township of East Garafraxa via telephone to determine if properties and structures have been previously identified and/or have been designated under the OHA. A conversation with a representative from the Township of East Garafraxa confirmed the township does not have a municipal heritage register, as a result there are no listed or designated properties within the study area.

A request was sent to the OHT on October 17, 2022, to obtain information related to OHT easements and owned properties. A response was received on October 19, 2022, confirming there are no conservation easements or Trust-owned properties are located within the study area.

A request was sent to MCM on October 17, 2022, to confirm if any provincial heritage properties (PHPs) were located within the Study Area. A response was received on October 20, 2022, confirming that no properties have been designated by the Minister in the Study Area, nor is the MCM aware of any PHPs located within the study area.

A summary of data requested through consultation with the agencies noted above is provided in Table 3-1.

Contact Name / Position	Organization	Contact Information	Dates of Communication	Description of Information Received
Michele Hill, Administration	Township of East Garafraxa	226-259-9400	Telephone conversation: October 17, 2022	The Township of East Garafraxa does not have a municipal heritage register.
Kevin Baksh, Provincial Heritage Registrar	OHT	kevin.baksh@herit agetrust.on.ca	Sent: October 17, 2022 Received: October 19, 2022	Mr. Baksh confirmed that no conservation easements or Trust- owned properties are located within the study area.
Karla Barboza, Team Lead, Heritage	МСМ	karla.barboza@ont ario.ca	Sent: October 17, 2022 Received: October 20, 2022	Ms. Barboza confirmed there are no Provincial Heritage Properties and/or Provincial Heritage Properties of Provincial Significance within the study area. MCM requested that any technical heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for MCM review as part of the environmental assessment process.

4 HISTORICAL CONTEXT

4.1 HISTORICAL CONTEXT OVERVIEW

The Study Area consist of lands to be impacted by the Project and all adjacent properties, it includes part of Lot 1, Concession I, in the former Township of Amaranth, and parts of Lot 5, Concession C, in the former Township of East Garafraxa (Study Area 1); and it includes parts of Lots 1 and 2, Concession II in the former Township of Amaranth, and part of Lots 4 to 7, Concession A, Lots 5-7, Concession B and in the former Township of East Garafraxa (Study Area 2). The following provides a generalized cultural history of the Indigenous people within the Study Area's surroundings.

The sections below present a sequence of Indigenous land-use for the region from the earliest known human occupation following deglaciation, as well as more recent Euro-Canadian land-use history in the region. These periods are the Pre-Contact period and the Post-Contact (Historic) period.

4.1.1 PRE-CONTACT PERIOD

The pre-contact period in Ontario has been reconstructed, primarily, from the archaeological record and interpretations made by archaeologists through an examination of material culture and site settlement patterns. Technological and temporal divisions of the pre-contact period have been defined by archaeologists based on changes to natural, cultural, and political environments that are observable in the archaeological record. It is pertinent to state that although these divisions provide a generalized framework for understanding the broader events of the pre-contact period, they are not an accurate reflection of the fluidity and intricacies of cultural practices that spanned thousands of years. The following presents a sequence of Indigenous land-use from the earliest human occupation following deglaciation to the more recent past based on the following periods as defined by archaeologists:

- The Paleo Period
- The Archaic Period
- The Woodland Period
- The Post-Contact Period

PALEO PERIOD

Paleo period populations were the first to occupy what is now Southern Ontario, moving into the region following the retreat of the Laurentide Ice Sheet approximately 11,000 years before present (BP). The first Paleo period populations to occupy Southern Ontario are referred to by archaeologists as Early Paleo (Ellis & Deller, 1990).

Early Paleo period groups are identified by their distinctive projectile point morphological types, exhibiting long grooves, or 'flutes', that likely functioned as a hafting mechanism (method of attaching the point to a wooden shaft). These Early Paleo group projectile point types include Gainey (ca. 10,900 BP), Barnes (ca. 10,700), and Crowfield (ca. 10,500) (Ellis & Deller, 1990). By approximately 10,400 BP, Paleo projectile points transitioned to various unfluted varieties, such as Holcombe (ca. 10,300 BP), Hi Lo (ca. 10,100 BP), and Unstemmed and Stemmed Lanceolate (ca. 10,400 to 9,500 BP). These tool types were used by Late Paleo period groups (Ellis & Deller, 1990). Both Early and Late Paleo period populations were highly mobile, participating in the hunting of large game

animals. Paleo period sites often functioned as small campsites where stone tool production and maintenance occurred (Ellis & Deller, 1990).

ARCHAIC PERIOD

By approximately 8,000 BP, climatic warming supported the growth of deciduous forests in Southern Ontario. These forests introduced new flora and faunal resources, which resulted in subsistence shifts and a number of cultural adaptations. This change is reflected in the archaeological record by new tool-kits that are reflective of a shift in subsistence strategies and has been categorized as the Archaic period.

The Archaic period in Southern Ontario is sub-divided into the Early Archaic (ca. 10,000 to 8,000 BP), Middle Archaic (ca. 8,000 to 4,500 BP), and the Late Archaic (ca. 4,500 to 2,800 BP) periods. Generally, in North America, the Archaic period represents a transition from big game hunting to broader, more generalized subsistence strategies based on local resource availability. This period is characterized by the following traits:

- An increase in stone tool variation and reliance on local stone sources,
- The emergence of notched and stemmed projectile point types,
- A reduction in extensively flaked tools,
- The use of native copper,
- The use of bone tools for hooks, gorges, and harpoons,
- An increase in extensive trade networks, and
- The production of ground stone tools and an increase in larger, less portable tools.

The Archaic period is also marked by population growth with archaeological evidence suggesting that, by the end of the Middle Archaic period (ca. 4,500 BP), populations had steadily increased in size (Ellis, et al., 1990).

Over the course of the Archaic period, populations began to rely on more localized hunting and gathering territories and were shifting to more seasonal encampments. From the spring into the fall, settlements were focused in lakeshore/riverine locations where a variety of different resources could be exploited. Settlement in the late fall and winter months moved to interior sites where the focus shifted to deer hunting and the foraging of wild plants (Ellis et al., 1990, p. 114). The steady increase in population size and the adoption of a more localized seasonal subsistence strategy led to the transition into the Woodland period.

EARLY AND MIDDLE WOODLAND PERIODS

The beginning of the Woodland period is defined by the emergence of ceramic technology. Similar to the Archaic period, the Woodland period is separated into three timeframes: the Early Woodland (ca. 2,800 to 2,000 BP), the Middle Woodland (ca. 2,000 to 1,200 BP), and the Late Woodland (ca. 1,200 to 350 BP) (Spence et al., 1990; Fox, 1990).

The Early Woodland period is represented in Southern Ontario by two cultural complexes: the Meadowood Complex (ca. 2,900 to 2,500 BP), and the Middlesex Complex (ca. 2,500 to 2,000 BP). During this period, the life ways of Early Woodland populations differed little from that of the Late Archaic with hunting and gathering representing the primary subsistence strategies. The pottery of this period is characterized by its relatively crude construction and lack of decoration. These early ceramics exhibit cord impressions, which are likely the result of the techniques used during manufacture rather than decoration (Spence et al., 1990).

The Middle Woodland period has been differentiated from the Early Woodland period by changes in lithic tool forms (e.g. projectile points, expedient tools), and the increased decorative elaboration of ceramic vessels (Spence et al., 1990). Additionally, archaeological evidence suggests the rudimentary use of maize (corn) horticulture by the end of the Middle Woodland Period (Warrick, 2000).

In Southern Ontario, the Middle Woodland has been divided into three different complexes based on regional cultural traditions: the Point Peninsula Complex, the Couture Complex, and the Saugeen Complex. These groups are differentiated by sets of characteristics that are unique to regions within the province, specifically regarding ceramic decorations.

The Point Peninsula Complex extends from south-central and eastern Ontario into southern Quebec. The northernmost borders of the complex can be found along the Mattawa and French Rivers. Ceramics are coil constructed with conical bases, outflaring rims, and flat, rounded, or pointed lips. The interior surfaces of vessels are often channelled with a comb-like implement, creating horizontal striations throughout. The exterior is smoothed, or brushed, and decoration generally includes pseudo-scallop stamps or dentate impressions. Occasionally, ceramics will have been treated with a red ochre wash (Spence et al, 1990).

The Saugeen Complex is found generally in south-central Ontario and along the eastern shores of Lake Huron. The Saugeen Complex ceramics are similar in style to Point Peninsula Complex; however, the vessels tended to be cruder than their Point Peninsula counterparts. They were characterized by coil construction with thick walls, wide necks, and poorly defined shoulders. Usually, the majority of the vessel was decorated with pseudo-scallop stamps or dentate impressions, with the latter occurring more frequently at later dates (Spence et al., 1990). The Couture Complex is found in southwestern Ontario and outside of the scope of the Study Area.

LATE WOODLAND PERIOD

There is much debate as to whether a transitional phase between the Middle and Late Woodland periods is present in Southern Ontario, but it is generally agreed that the Late Woodland period begins around 1,100 BP. The Late Woodland period in Southern Ontario can be divided into three cultural sub-phases: The early, middle, and late Late Woodland periods. The early Late Woodland is characterized by the Glen Meyer and Pickering cultures and the middle Late Woodland is characterized by the Uren and Middleport cultures. These groups are ancestral to the Iroquoian-speaking Neutral-Erie (Neutral), the Huron-Wendat (Huron), and Petun Nations that inhabited Southern Ontario during the late Late Woodland period (Smith, 1990, p. 285).

The Pickering and Glen Meyer cultures co-existed within Southern Ontario during the early Late Woodland period (ca. 1250-700 BP). Pickering territory is understood to encompass the area north of Lake Ontario to Georgian Bay and Lake Nipissing (Williamson, 1990). Glen Meyer is centred around Oxford and Norfolk counties, but also includes the southeastern Huron basin and the western extent is demarcated by the Ekfrid Clay Plain southwest of London, Ontario (Noble, 1975). Villages of either tradition were generally smaller in size (~1 ha) and composed of smaller oval structures, which were later replaced by larger structures later in the Late Woodland period. Archaeological evidence suggested a mixed economy where hunting and gathering played an important role, but small-scale horticulture was present, indicating a gradual shift from hunting-gathering to a horticultural economy (Williamson, 1990).

The first half of the middle Late Woodland period is represented by the Uren culture (700-650 BP) and the second half by the Middleport (650-600 BP). Uren and Middleport sites of the middle Late Woodland share a similar distribution pattern across much of southwestern and south-central Ontario. (Dodd et al., 1990). Significant changes in material culture and settlement-subsistence patterns are noted during this short time. Iroquois Linear, Ontario

Horizontal, and Ontario Oblique pottery types are the most well-represented ceramic assemblages of the middle Late Woodland period (Dodd et al., 1990). At Middleport sites, material culture changes included an increase in the manufacture and use of clay pipes as well as bone tools and adornments (Dodd et al., 1990; Ferris & Spence, 1995).

During this period, evidence in the archaeological record of small year-round villages, secondary ossuary burials, and what are thought to be semi-subterranean sweat lodges suggest a marked increase in sedentism in Southern Ontario during the Uren and Middleport cultures (Ferris & Spence, 1995). The increasing permanency of settlements was a result of the development of small-scale cultivation and a subsequent increased reliance on staple crops such as maize, beans, and squash (Dodd et al., 1990; Warrick, 2000; Ferris & Spence, 1995).

Archaeological evidence from the middle Late Woodland sites also documents increases in population size, community organization and village fissioning, and the expansion of trade networks. The development of trade networks with northern Algonquian peoples has also been inferred from findings at Middleport sites along the northern parts of southwestern and south-central Ontario. These changes resulted in the more organized and complex social structures observed in the late Late Woodland period.

During the late Late Woodland period, village size significantly increased as did the complexity of community and political systems. The settlement patterns of the period can be categorized into three types: large village sites, smaller hamlets or cabin sites, and special resource extraction sites. The larger villages and smaller hamlets are typically on small creeks with sandy soils suitable for agriculture. Both larger village and small hamlet sites were both typically surrounded by palisades and activities were focused on subsistence (Lennox & Fitzgerald, 1990, p. 441). Larger longhouses oriented differently than others in the village have been associated with primary familial groups, while longhouses that were located outside of palisade walls may have been for visiting groups for the purposes of trade or social gatherings (Ramsden, 1990). The cabin sites were occupied on a more seasonal basis and typically only had one or two longhouses. By this time, large-scale agriculture had taken hold, making year-round villages even more practical with the improved ability to store large crop yields over winter.

The communities located in Simcoe County and its surrounds formed the Confederation of Nations in 1600 BP, as encountered by European missionaries and explorers. The dispersal of the Huron-Wendat was caused by hostility between the Haudenosaunee and the Huron-Wendat (including their allies the Nipissing and Odawa) during the 1640s. After the dispersal of the Wendat, the Ojibwa expanded into Michigan and Southern Ontario from the east shore of Georgian Bay, the northeast shore of Lake Superior, and west along the north shore of Lake Huron and also onto the Upper Peninsula of Michigan (Rogers, 1978).

The Haudenosaunee started to pressure the Ojibwa in north of Georgian Bay after the Huron had been dispersed. The Ojibwa's population had decreased through starvation, European diseases, and warfare. However, the merging of different Anishinaabek groups resulted in enhanced political and social strength (Thwaites, 1901). A series of settlements at strategic locations on inland trade routes from the north shore of Lake Ontario were established by the Haudenosaunee. These locations included Ganneious on Napanee Bay near the Quinte Peninsula, Ganaraske at the start of the Ganaraska River, Quintio at the start of the Trent River near Rice Lake, Ganatsekwyagon near the start of the Rouge River, Teyaiagon near the start of the Humber River, and Quianouatoua located on the portage between the Grand River and the western end of Lake Ontario (Konrad, 1981).

Early contact with European settlers at the end of the Late Woodland period resulted in extensive changes to the traditional lifestyles of most populations inhabiting Ontario including settlement size, population distribution, and material culture. The introduction of European-borne diseases significantly increased mortality rates, resulting in a drastic drop in population size (Warrick, 2000).

4.1.2 POST-CONTACT PERIOD

The County of Dufferin is located on the highest plateau of land in the province of Ontario and forms the watershed for much of the productive agricultural lands of Western Ontario (Mika and Mika, 1977). To its northwest is the County of Grey, and to its southwest is the County of Wellington. To the northeast is the County of Simcoe and to the southeast is the Regional Municipality of Peel. Dufferin County forms the watershed between the four lakes: Huron, Erie, Ontario, and Simcoe, as well as the watershed from the Saugeen, Grand, Credit, and Nottawasaga Rivers and has been labelled the "Roof of Ontario" because of its altitude (Mika and Mika, 1977).

The earliest European presence within the Study Area began as early as 1819 by Michael McLaughlin, who was the first settler to arrive after following the Humber River to a site just north of Mono Mills. McLaughlin was an Irish carpenter, who built a grist mill, a flour mill, a carding mill, and a sawmill with the help of his two brothers in an area called Market Hill in Mono Mills (Mika and Mika, 1977). A decade after Mono Mills was surveyed and laid out, the town of Orangeville was founded. Orangeville was situated adjacent to a running stream that flowed into the nearby Credit River (Mika and Mika, 1977). Between 1845-1848, surveying parties cleared land and constructed two leading roads that passed through Dufferin County, Huron-Ontario Street (Centre Road) that connected Port Credit to Collingwood, and the Toronto and Sydenham Road between Toronto and Owen Sound (Sawden, 1952).

Prior to the founding of Dufferin County, Melancthon Township and the village of Shelburne were located in Grey County, Mono and Mulmur Townships were located in Simcoe County, and the village of Orangeville and Townships of Amaranth, and parts of Garafraxa and Luther were under the jurisdiction of Wellington County (Mika & Mika, 1977). By 1879, Dufferin County was founded and included the townships of Amaranth, East Garafraxa, East Luther, Melancthon, Mono, Mulmur, and Orangeville. All of the townships were previously parts of Grey, Simcoe, and Wellington Counties. Prior to this reorganization, major grievances were voiced from leading citizens concerning how far communities were located from their county seats, which made for inefficient government (Mika & Mika, 1977). The County was named after Lord Dufferin, Canada's Governor-General (Mika and Mika, 1977).

Agriculture was essential to the county's economy even though the early farmers were barely self-sufficient. Agricultural production increased after the clearing of more land, advances in farming techniques and machinery, and the increasing numbers of settlers to the area. Initially, population growth was hindered due to the lack of quick access to other communities and export markets until the introduction of railway lines and road improvements. Other essential businesses to the county's economic base include livestock, timber, and maple syrup industries (Mika and Mika, 1977).

During the early 1900s, the population of Dufferin County was in decline, in part due to the very little Crown land left in the county. The children of the settlers had to move to other places if they too wanted to start their own farms. Furthermore, the soil in the area had deteriorated since forests had been cleared and erosion began to occur, causing water tables to drop (Orangeville, 2020).

Adverts for the Boer War, World War I and World War II appeared in Dufferin County newspapers. Both men and women from the county played important roles in the wars and support efforts. In 1945, the existing farms did well out of the war, and recovered from the Depression. Farms produced 140% of their pre-war volume with only 80% of their pre-war labour supply (Graham, 1982). Prosperous times followed in the 1950s and 1960s, when hydro power came to farmers and an array of other inter-related products were in high demand. Today, the county's economy has diversified to include retail and commercial businesses, and industries related to commercial and residential construction and manufacturing.

TREATY CONTEXT

The Study Area is within the Haldimand Proclamation of 1784, and two of the Williams Treaties of 1818: Treaty 18, the Nottawasaga Purchase, and Treaty 19, the Ajetance treaty.

In 1784, Sir Haldimand, the Governor of Quebec, signed a decree granting the Haudenosaunee tracts of land in compensation for their alliance with the British during the American Revolution. The land consisted of 10km on either side of the Grand River from its source to Lake Erie, and included "the Source", the northernmost section of the lands and the starting point of the Grand River (Museum of Dufferin, 2020). In Dufferin County, the areas covered by this proclamation include: Shelburne, East Luther, East Garafraxa, Melancthon, and Amaranth. In 1791, when the province of Upper Canada was formed, the Haldimand Proclamation came under review, and it was deemed that Sir Haldimand had made a mistake and "The Source" was not a part of the land purchased and given to the Haudenosaunee. In 1793, new boundaries were drawn under the direction of Lieutenant-Governor John Graves Simcoe, resulting in the "Simcoe Pact of 1793" (Museum of Dufferin, 2020). This patent was rejected by the Haudenosaunee. Today, the Source is still seen as a part of the original treaty agreement and the Haldimand Proclamation is overseen by the Six Nations of the Grand River.

On October 17, 1818, Treaty 18, the Nottawasaga Treaty, was signed by the Superintendent General of Indian Affairs, William Claus, and four chiefs of the Chippewa (Ojibway) nation. In Dufferin County, the areas covered by this treaty include: Mulmur, Mono, Shelburne, Melancthon, East Luther, and Amaranth. The treaty covered the surrender and sale of 1.5 million acres of Chippewa Nation land to the Crown. On October 28, 1818, Treaty 18, the Ajetance Treaty, was signed by William Claus, and five leaders of the Mississauga (Ojibway) nation who inhabited the lands along the Credit River. In Dufferin County, the areas covered by this treaty include part of Orangeville and East Garafraxa. The treaty covered the surrender and sale of 648,000 acres of lands. Today, Treaties 18 and 19 and the other Williams Treaties are overseen by the Williams Treaties First Nations who have come together with the same mission to "ensure their rights to and the relationship with the land is respected" (Museum of Dufferin, 2020).

TOWNSHIP OF AMARANTH

The Study Area is partly located in the Township of Amaranth, which is the central township in Dufferin County with Melancthon at the north, Mono on the east, East Garafraxa in the south, and East Luther on the west. Its name comes from the Greek word, "amarantos" meaning "genus of plants of many species, of which the flower long retains its colour" (Sawden, 1952). The whole township was mainly settled at the end of the American Civil War, between 1845 and 1865 (Sawden, 1952). In 1881, the township hit a peak population of 2,914 and people started to move to other areas north to Parry Sound, west to Dakota, and to Manitoba and the Prairies (Museum of Dufferin, n.d.). After the Second World War the population declined to 1,602 residents. Farm holdings were then enlarged and consolidated, and with extensive drainage works subsidized by the Government of Ontario the agricultural economy switched from subsistence to mixed farming and rural communities and organizations thrived (Museum of Dufferin, n.d.). By the 1960s there was a consolidation of institutions and services, church congregations were merged, and one room schools were abandoned for central schools. Today, rural residential development along the various concession roads has increased the population and modified the overall character of the township.

TOWNSHIP OF ORANGEVILLE

The Study Area is partly located in the Town of Orangeville, with its northern boundary being Mono and Amaranth, and its western boundary being East Garafraxa. Orangeville was named after Orange Lawrence who arrived in 1843 (Sawden, 1952). Orangeville rivaled nearby Mono Mills in the mid 1800s as the most thriving community in Dufferin County (Mika & Mika, 1977). The town was chosen as the county seat after the building of the Toronto, Grey and Bruce Railway, bypassing Mono Mills in 1871 and became known as an "urban centre" (Sawden, 1952,

p.19). By the 20th century, the population of the overall county and Orangeville had begun to decline which meant a decreased demand for the services offered by Orangeville. During this time, the soil had deteriorated. However, after the Second World War farming began to thrive once again with new technology and new products to offer. Today, the area has experienced enormous regeneration and growth with many people choosing to live in Orangeville and work in the Greater Toronto Area.

TOWNSHIP OF EAST GARAFRAXA

The Study Area is partly located in the Township of East Garafraxa, the most southern township in the Dufferin County, its northern boundary being East Luther and Amaranth, while its southeastern side borders on Caledon and Erin, and on the southwest lies the Township of West Garafraxa. Its name originates from "sassafras", a small herb that was found throughout the surrounding woods during the early 1800s (Sawden, 1952). Throughout the 19th century popular crops included bushels of wheat, oats, peas, potatoes, turnips, and maple sugar (Sawden, 1952, p.18). After the Second World War, East Garafraxa was a new home for many Dutch immigrant families who purchased farms (Wellington Advertiser, 2019). Today, the township continues to maintain farming and agricultural uses.

4.1.3 HISTORICAL MAPPING REVIEW

A review of historical mapping and aerial photography was undertaken to understand the changing landscape and built environment within the Study Area. To determine the presence of historical features, nineteenth century historical county maps, twentieth century topographic maps, and aerial photos were reviewed. While these maps and photographs were not the only visual sources consulted for the purposes of this study, they were determined to provide the best overview of land development in the Study Area. The maps and aerial photos consulted include: the 1861 Map of the County of Wellington, the 1877 Topographical and Historical Atlas of the County of Wellington Ontario, the 1937 Orangeville Department of National Defense map, the 1950 County of Dufferin Department of Lands and Forests map, the 1954 Hunting Survey Corporation aerial, and the 1994 Orangeville National Topographic Systems map.

The 1861 Map of the County of Wellington shows that all of the lots within the Study Area were occupied (Figure 2). The map also shows that County Road 109 was historically surveyed, and presently follows the same alignment dividing up the neighbouring townships. In 1861, the Town of Orangeville was yet to be incorporated and the eastern boundary of the Study Area was still a part of East Garafraxa. The 1877 Topographical and Historical Atlas of the County of Wellington Ontario (Figure 3) shows that there was no commercial development during this time, and that the lots remained occupied for the purpose of agriculture and farming. Post offices are visible throughout the neighbouring communities in the Study Area, as well as the introduction of railways. In particular, the Toronto, Grey and Bruce Railway is visible where it passes through Orangeville. There is also a bigger concentration of buildings in Orangeville, which developed after the town's incorporation in 1863.

By the twentieth century, as illustrated in the 1937 Orangeville Department of National Defense map (Figure 4), Orangeville continues to develop and a railway in East Garafraxa is now abandoned. Overall, the Study Area continues to retain its rural and agricultural context. The 1954 Hunting Survey Corporation aerial (Figure 5) shows several consolidated lots and fewer buildings present in the Study Area. The 1994 Orangeville National Topographic Systems map (Figure 6) shows that the Study Area maintained its rural and agricultural context, with County Road 109 still serving as a dividing border between townships.

5 EXISTING CONDITIONS

5.1 PROPERTY VISIT

A field visit was conducted on September 23, 2022, by Emily Game, Cultural Heritage Specialist, to record the existing conditions of the Project Study Area. The field review was preceded by a review of available historical and current aerial photographs and maps. These photographs and maps were reviewed for any potential BHRs and CHLs that may be extant in the Study Area. The existing conditions of the Study Area are described below.

5.2 DESCRIPTION OF EXISTING CONDITIONS

The Study Area subject to the scope of the Project is largely composed of active agricultural lands with farmsteads. A modern residential subdivision is located in the south of Dufferin Road 109 and east of B Line. The Study Area consist of part of County Road 109, County Road 3, A Line, and 2nd Line.¹

5.2.1 COUNTY ROAD 109

County Road 109 is a two-lane paved arterial road that is oriented east-west, with lane widening at select intersections and near the road's connection with Broadway in Orangeville. The road has wide gravel shoulders and wide, shallow ditches. Within the Study Area the lands on either side of County Road 109 consist largely of agricultural fields under active cultivation (Image 1 and Image 2).



Image 1: View to County Road 109 from A line



Image 2: View of agricultural lands adjacent to County Road 109

¹ County Road 109 is oriented in an approximately northeast to southwest direction and County Road 23 is oriented in an approximately northwest to southeast direction. For east of description in this report, County Road 109 will be described as being east -west oriented and County Road 23 as being north-south.

5.2.2 DUFFERIN COUNTY ROAD 3 (ORANGEVILLE-FERGUS ROAD / DUTCH LANE)

Dufferin County Road 3 (Orangeville-Fergus Road / Dutch Lane) is a paved road that is oriented northeastsouthwest. The road has wide gravel shoulders and no ditches. Within the Study Area the lands on either side of Dufferin County Road 3 consist largely of agricultural fields under active cultivation, there are several farms and commercial/industrial buildings along Dufferin County Road 3 (Image 3 and Image 4).



Image 3: View of Dufferin County Road 3

Image 4: Township of East Garafraxa building on Dufferin County Road 3

5.2.3 COUNTY ROAD 11

Within the Study Area, County Road 11 is a paved road that is oriented north-south. The road has wide gravel shoulders and no ditches. The lands on either side of County Road 11 consist entirely of agricultural fields under active cultivation (Image 5).



Image 5: View of Dufferin Road 11

5.2.4 2ND LINE

 2^{nd} Line is a paved road that is oriented north-south. The road has no shoulders and shallow ditches. Within the Study Area the lands on either side of 2^{nd} Line consist largely of agricultural fields under active cultivation as well as one modern school building (Image 6 and Image 7).



Image 6: View of 2nd Line



Image 7: View of Maples Academy Private School building on the 2nd line

5.3 PREVIOUS CULTURAL HERITAGE ASSESSMENTS

There are no known previous cultural heritage assessments that include all of part of the current study area.

5.4 IDENTIFIED CULTURAL HERITAGE RESOURCES

A desktop study and a field visit were completed to identify known and potential BHRs and CHLs older than 40 years of age located within or adjacent to the Study Area as described in Section 3. A review was conducted to determine previously identified heritage resources documented within or adjacent to the Study Area, including listed (registered non-designated) and designated properties, heritage conservation districts and known CHLs. Six CHLs were identified in the Study Area.

During the field review, the Study Area was examined for potential heritage resources by employing a high-level and cursory evaluation based on an understanding of the criteria identified in the MCM's Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes. As a result of this review, six CHLs and have been identified within the Study Area. See Table 5-1 on the following page for a description of the heritage resources and Figure 8 in Appendix A for an illustration of their location within the Study Area.

Table 5-1: Identified CHLs with Known or Potential CHVI

CHL #	Type of Property	Location	Heritage Recognition	Description of Known or Potential CHVI	Photograp
CHL-1	Farmstead	205328 Dufferin Road 109	Identified during field review	The property includes a two-and-a-half storey brick house with a projecting front bay and a combination of segmentally arched and round-headed windows. The property is lined with mature trees, making it difficult to discern the configuration of the house, however, based on aerial photographs, it has a hipped roof and a one-story rear addition. Three ancillary buildings are also visible on aerial photographs.	
CHL-2	Farmstead	065252 Orangeville- Fergus Road	Identified during field review	The property is accessed by a straight driveway, lined with mature trees. A one-and-a-half storey house and a complex of barns and silos are set back from Orangeville-Fergus Road approximately 90 metres. The house is clad in vertical siding and features a side-gable roof with a large front-facing addition.	

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CHL #	Type of Property	Location	Heritage Recognition	Description of Known or Potential CHVI	Photograp
CHL-3	Farmstead	065243 Orangeville- Fergus Road	Identified during field review	The residence on the property is a vernacular structure with Gothic Revival influence. The one-and-a-half storey house has an L-shaped plan, is clad in dichromatic brickwork. The building has decorative elements including buff brick quoins, arched-headed windows with brick eyebrow moldings and a bay window with a bellcast roof. A one-storey addition is present on the west façade. The property is accessed by a long, tree-lined driveway which provides access to two ancillary buildings which are set back approximately 80 metres from Orangeville-Fergus Road.	
CHL-4	Farmstead	065175 Orangeville- Fergus Road	Identified during field review	The house on the property is set back approximately 160 metres from Orangeville-Fergus Road, and is accessed by a long, tree-lined driveway. Although difficult to confirm due to the mature tree cover, the house appears to be a one-and-a-half storey Ontario Cottage with Gothic influences, it is clad in red brick, has buff brick quoins and a buff brick stringcourse. The façade facing Orangeville-Fergus Road is symmetrical and centrally placed entrance and a porch covered with a bellcast roof. There is a centrally placed gable in the roof peak. The photograph provided here is taken from 19 th Line and is of the west elevation of the house. A large barn and an outbuilding are also present on the property, which is surrounded by active agricultural fields.	

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CHL #	Type of Property	Location	Heritage Recognition	Description of Known or Potential CHVI	Photograp
CHL-5	Farmstead	065407 Dutch Lane	Identified during field review	The property contains one barn and one driveshed, they are both clad in vertical barnboard and end gable roofs. The barn appears to be partially sited on a high rubble stone foundation. A modern, one-story house of brick construction is located east of the barns. The house and barns are surrounded by active fallow agricultural fields.	
CHL-6	Farmstead	065321 Dutch Lane	Identified during field review	Tree-lined driveway leading to a barn with a gable roof. A one-and-a-half storey red brick house is set back approximately 110 metres from Dutch Lane. The house appears to be of modern construction and has an asymmetrical façade with an enclosed porch and a hipped roof.	

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6 PRELIMINARY IMPACT ASSESSMENT

To establish potential impacts, identified BHRs and CHLs were considered against a range of possible impacts as outlined in the MCM's *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties* (2017) (see Section 1.2 for a full description of impacts).

Where any BHRs and CHLs may experience direct or indirect impacts, appropriate mitigation measures will be developed. If appropriate, this may require the completion of a CHER to identify the property's CHVI and heritage attributes if the property's heritage attributes have yet to be defined. For properties that have been subject to a CHER or their CHVI has otherwise been defined, a HIA may be required to determine appropriate mitigation measures.

6.1 PRELIMINARY IMPACTS ON CULTURAL HERITAGE RESOURCES

This section provides a preliminary assessment of the potential adverse affects that may result from the Project. The conservation of BHRs and CHLs in planning is considered to be a matter of public interest. Changes to transit infrastructure have the potential to adversely affect BHRs and CHLs by displacement and/or disruption during and after construction. These heritage resources may experience displacement (i.e., removal) if they are located within the footprint of the undertaking. There may also be potential for disruption or indirect impacts to BHRs and CHLs by the introduction of physical, visual, audible or atmospheric elements that are not in keeping with their character and/or setting.

Methods of minimizing or avoiding a negative impact on a BHR or CHL include, but are not limited to:

- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setback, setting and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations;
- Buffer zones, site plan control and other planning mechanisms;
- Recommendations for additional studies, including CHERs, HIAs and Strategic Conservation Plans; and,
- Alterations to project design during construction planning and project controls (i.e., vibration reduction, dust suppression or other measures).

Table 6-1 considers the potential impacts of the preferred alternative located in Study Area 1 on the known or potential BHRs and CHLs. Study Area 1 for the Dufferin County Road 109 / 2nd Line Realignment was reviewed to assess impacts to identified heritage resources (Figure 9 in Appendix A).

Table 6-1: Impacts and Preliminary Mitigation Strategies for BHRs and CHLs

RESOURCE

ADDRESS/LOCATION

DISCUSSION OF IMPACT MITIGATION STRATEGIES

CHL-1	205328 Dufferin Road 109	No Impact Rationale: The preferred alternative will be outside the boundaries of CHL-1, therefore no direct or indirect impacts are anticipated to the property.	None required.
CHL-2	065252 Orangeville-Fergus Road	No Impact Rationale: The preferred alternative will be outside the boundaries of CHL-2, therefore no direct or indirect impacts are anticipated to the property.	None required.
CHL-3	065243 Orangeville-Fergus Road	No Impact Rationale: The preferred alternative will be outside the boundaries of CHL-3, therefore no direct or indirect impacts are anticipated to the property.	None required.
CHL-4	065175 Orangeville-Fergus Road	No Impact Rationale: The preferred alternative will be outside the boundaries of CHL-4, therefore no direct or indirect impacts are anticipated to the property.	None required.
CHL-5	065407 Dutch Lane	Potential Direct Impact Rationale: The preferred alternative may result in a direct impact to CHL-5.	A CHER is recommended to be completed prior to selection of the Preferred Alternative to determine if the property possesses CHVI. If the property has CHVI, an HIA should also be completed to evaluate alternatives, assess potential impacts to the

RESOURCE ADDRESS/LOCATION DISCUSSION OF IMPACT MITIGATION STRATEGIES

			resource, and recommend appropriate mitigation measures.
CHL-6	065321 Dutch Lane	No Impact Rationale: The preferred alternative will be outside the boundaries of CHL-6, therefore no direct or	None required.
		indirect impacts are anticipated to the property.	

7 RECOMMENDATIONS

The results of the background historical research and review of the secondary source materials, including historic mapping, revealed that the part of the Study Area consists of lands that have been shaped by early rural settlement dating from the nineteenth and early twentieth centuries. Six CHLs were identified within the Dufferin County Road 109 and 2nd Line Realignment Study Area; and all six of the CHLs were identified during the field review.

Based on the results of the background data collection and assessment of impacts imposed by the preferred alternative in Study Area 1, it has been determined that there will be potential direct impacts to CHL-5. This Cultural Heritage Report has resulted in the following recommendations:

- 1 Storage and construction staging areas should be appropriately located and/or planned to avoid impacts to any of the identified CHLs.
- 2 A CHER should be completed for CHL-5 to establish whether this property possesses CHVI. If the property is found to possess CHVI, an HIA should also be completed to determine appropriate alternatives or mitigation measures early in the project.
- 3 Storage and construction staging areas should be appropriately located and/or planned to avoid impacting any of the identified CHLs.
- 4 Should future work require expansion of the Dufferin Road County Road 109 and 2nd Line Realignment Study Area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on known or potential BHRs and CHLs.

8 REFERENCES

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 321-360). London, Ontario: London Chapter, Ontario Archaeological Society.

Dufferin County. (2017). Official Plan. Dufferin County, Ontario.

Ellis, C. J. & D. B. Deller. (1990). Paleo-Indians. In C.J. Ellis & N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650* (pp. 37-74). London, Ontario: London Chapter, Ontario Archaeological Society.

Ellis, C. J., I. T. Kenyon, & M. W. Spence. (1990). The Archaic. In C.J. Ellis & N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650* (pp. 65-124). London, Ontario: London Chapter, Ontario Archaeological Society.

Ferris, N. & Spence, M. W. (1995). The Woodland Traditions in Southern Ontario. *Revista de Arquologia Americana* 9: (pp. 83-138).

Fox, W. (1990). The Middle Woodland to Late Woodland Transition. In C.J. Ellis & N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650* (pp. 177-181). London, Ontario: London Chapter, Ontario Archaeological Society.

Graham, E. (1982). One Hundred Years Along The Upper Grand 1881-1981, A History of East Luther Township. Dufferin County, Ontario: Dufferin County.

Julig, P. (2002). Archaeological Conclusions from the Sheguiandah Site Research. In P. Julig, *The Sheguiandah Site: Archeological, geological and palaeobotanical studies at a Paleoindian site on Manitoulin Island, Ontario.* Hull, Quebec: Canadian Museum of History.

Konrad, V.A. (1981). An Iroquois Frontier: The North Shore of Lake Ontario During the Late Seventeenth Century. *Journal of Historical Geography* 7(2): (pp. 129-144).

Migizi, G., & Kapyrka, J. (2015). Before, During, and After: Mississauga Presence in the Kawarthas. In D. Verhulst, *Peterborough Archaeology* (pp. 127-136). Peterborough, Ontario: Peterborough Chapter of the Ontario Archaeological Society.

Mika, H. & Nick Mika. (1977). *Places in Ontario: Their Name Origins and History, Part I A-E*. Belleville, Ontario: Mika Publishing Company.

Museum of Dufferin. (n.d.). *Driving Tour of Amaranth Township*. Retrieved from: <u>https://www.dufferinmuseum.com/wp-content/uploads/Amaranth-Driving-Tour-edited.pdf</u>

Museum of Dufferin. (2020). *Indigenous History and Treaty Lands in Dufferin County: A Resource Guide*. Retrieved from: <u>https://www.dufferinmuseum.com/wp-content/uploads/Dufferin-County-IndigenousHistory-and-Treaty-Lands-Resource-Document_v1.5.pdf</u>

Noble, W.C. (1975). Van Besien: A Study in Glen Meyer Development. *Ontario Archaeology* 24: (pp. 3 -83).

Ontario, Government of. (2018). *Map of Ontario Treaties and Reserves*. Retrieved from: <u>https://www.ontario.ca/page/map-ontario-treaties-and-reserves</u>

Ramsden, P.G. (1990). The Hurons: Archaeology and Culture History. In The Archaeology of Southern

Ontario to A.D. 1650, Ed C.J. Ellis and N. Ferris, pp. 361-384. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.

Ramsden, P. (1998). Laurentian Archaic in the Kawartha Lakes and Haliburton. In P. J. Woodley, P.Ramsden, P. J. Woodley, & P. Ramsden (Eds.), *Preceramic Southern Ontario* (pp. 141-147). Dundas, Ontario: Copetown Press.

Rogers, E.S. (1978). Southeastern Ojibwa. In *Handbook of North American Indians: The Northeast* (pp. 15). Washington, D.C.: Smithsonian Institution.

Sawden, S. (1952). History of Dufferin County. Dufferin County, Ontario: Self-published.

Shanahan, Dr. David. (2021). *Head of Lake Purchase*. Retrieved from: https://anishinabeknews.ca/2021/09/23/head-of-the-lake-purchase/

Smith, D. G. (1990). Iroquoian Societies in Southern Ontario: Introduction and Historic Overview. In C.J. Ellis & N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650* (pp. 279-290). London, Ontario: London Chapter, Ontario Archaeological Society.

Spence, M.W., R.H. Phil, and C. Murphy. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In the Archaeology of Southern Ontario to A.D. 1650, Ed C.J. Ellis and N. Ferris, (pp. 125-170). Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.

Thwaites, R.G. (1896-1901). The Jesuit Relations and Allied Documents: Travel and Explorations of the Jesuit Missionaries in New France, 1670-1791; the Original French, Latin and Italian Texts, with English Translation and Notes. Cleveland, Ohio: Burrows Brothers.

Town of Orangeville. (2020). *History of Orangeville*. Retrieved from: <u>https://www.orangeville.ca/en/things-to-do/history-of-</u> <u>orangeville.aspx#:~:text=Settlement%20began%20in%20the%20Town,County%20of%20Dufferin%20in%</u> <u>201881</u>

Town of Orangeville. (2020). Official Plan. Orangeville, Ontario.

Township of Amaranth. (2018). Official Plan. Amaranth, Ontario.

Township of East Garafraxa. (2005). Official Plan. East Garafraxa, Ontario.

University of Toronto. (n.d.). *Toronto Treaties Map.* Retrieved from: https://www.history.utoronto.ca/sites/history.utoronto.ca/files/images/Toronto%20Treaties%20Map_0.pdf

Warrick, G. (2000). The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory* 14(4): (pp. 415-456).

Warrick, G. (2012). Buried Stories: Archaeology and Aboriginal Peoples of the Grand River, Ontario. *Journal of Canadian Studies* 46(2): (pp. 153-177).

The Wellington Advertiser. (2019). *East Garafraxa Celebrates Sesquicentennial*. Retrieved from: <u>https://www.wellingtonadvertiser.com/east-garafraxa-celebrates-sesquicentennial/</u>

Williamson, R.F. (1990). The Early Iroquoian Period of Southern Ontario. In C.J. Ellis & N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650* (pp. 291-320). London, Ontario: London Chapter, Ontario Archaeological Society.

Provincial Standards and Resources

Government of Ontario. (2005). Ontario Heritage Act. Retrieved from: www.ontario.ca/laws/statute/90o18

Government of Ontario. (1990). *Environmental Assessment Act*. Retrieved from: <u>www.ontario.ca/laws/statute/90e18</u>

Ministry of Municipal Affairs and Housing. (2020). *Provincial Policy Statement*. Retrieved from: www.ontario.ca/page/provincial-policy-statement-2020

Ministry of Citizenship and Multiculturalism. (2017). *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties.*

Ministry of Citizenship and Multiculturalism. (2016). *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes*. Retrieved from: www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/MinistryDetail?OpenForm&ACT=RDR&TAB=PRO FILE&ENV=WWE&NO=021-0500E

Ministry of Citizenship and Multiculturalism. (2014). *Standards and Guidelines for Conservation of Provincial Heritage Properties: Heritage Identification & Evaluation Process.* Retrieved from: www.mtc.gov.on.ca/en/heritage/MHSTCI_Heritage_IE_Process.pdf

Ministry of Citizenship and Multiculturalism. (2010). *Standards and Guidelines for Conservation of Provincial Heritage Properties*. Retrieved from: www.mtc.gov.on.ca/en/publications/Standards_Conservation.pdf

Ministry of Citizenship and Multiculturalism. (2007). *Eight Guiding Principles in the Conservation of Historic Properties*. Retrieved from: www.mtc.gov.on.ca/en/publications/InfoSheet_8%20Guiding_Principles.pdf

Ministry of Citizenship and Multiculturalism. (2006). *Heritage Resources in the Land Use Planning Process*. Retrieved from: www.mtc.gov.on.ca/en/publications/Heritage Tool Kit Heritage PPS infoSheet.pdf

Ministry of Citizenship and Multiculturalism. (2006). *Ontario Heritage Tool Kit*. Retrieved from: www.mtc.gov.on.ca/en/heritage/heritage_toolkit.shtml

Ontario, Government of. (2005). Ontario Heritage Act. Retrieved from: www.ontario.ca/laws/statute/90o18

Ontario Heritage Trust. (2021). *Provincial Plaque Program Database*. Retrieved from: www.heritagetrust.on.ca/en/pages/programs/provincial-plaque-program

National and International Standards and Resources

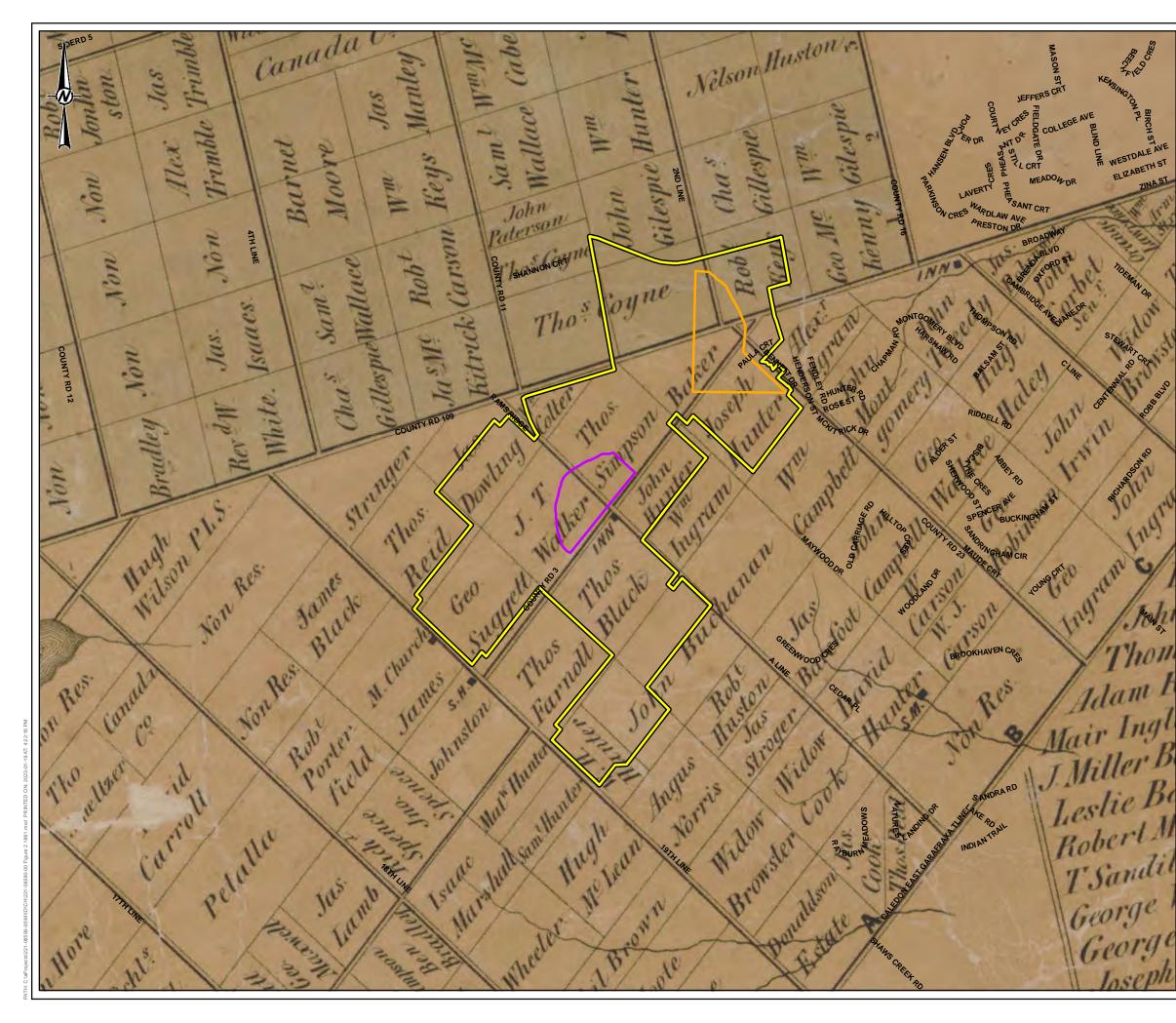
International Council of Monuments and Sites (ICOMOS). (1983). *Appleton Charter*. Retrieved from: www.international.icomos.org/charters/appleton.pdf

Parks Canada. (2020b). *Canadian Register of Historic Places*. Retrieved from: www.historicplaces.ca/visit-visite/rep-reg_e.aspx

Parks Canada. (2010). *Standards and Guidelines for the Conservation of Historic Places in Canada*. Retrieved from: <u>www.pc.gc.ca/docs/pc/guide/nldclpc-sgchpc/index_E.asp</u>









STUDY AREA 1

STUDY AREA 2



NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

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CLIENT DUFFERIN COUNTY

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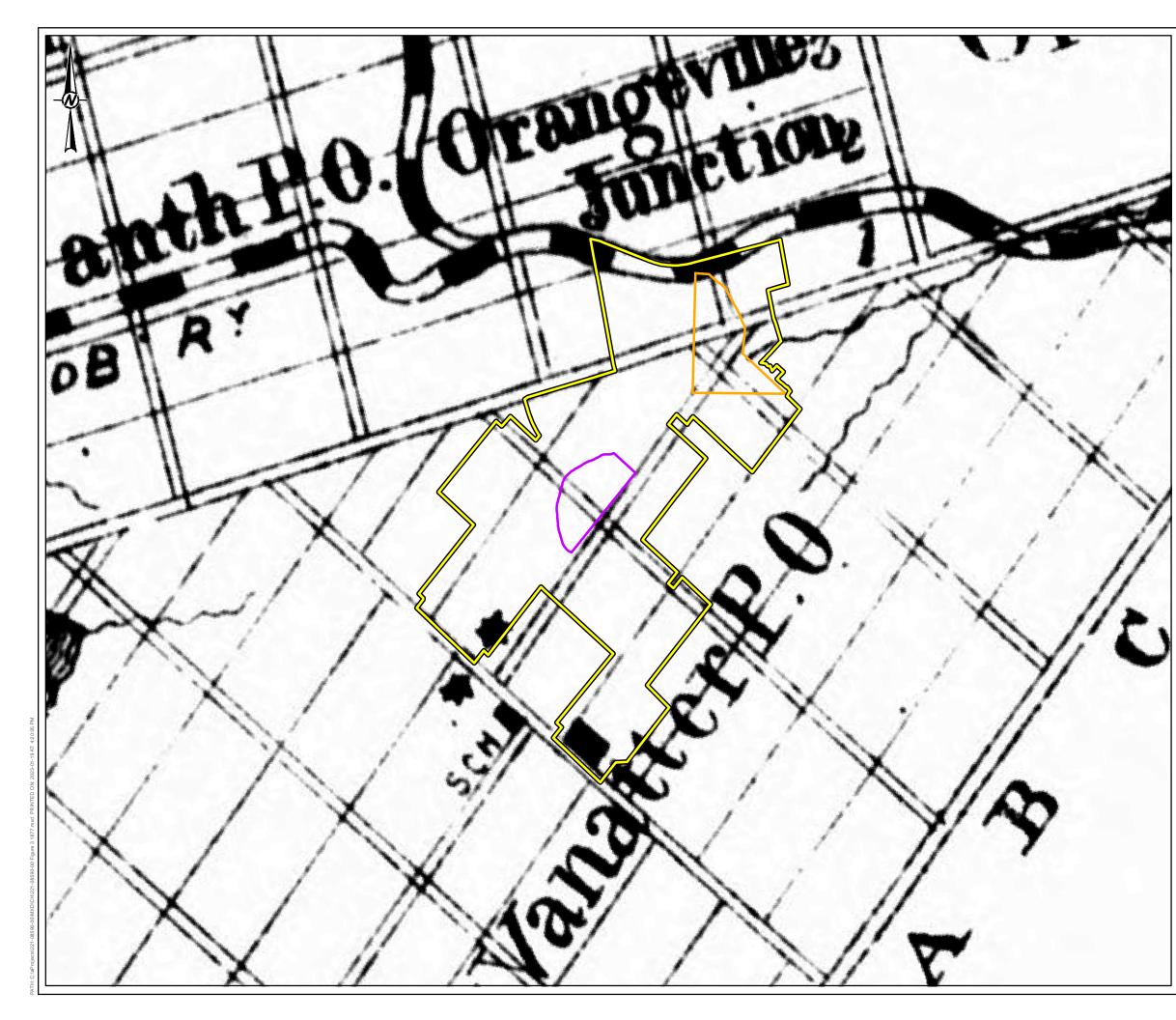
CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY ROAD 109 AND 2ND LINE REALIGNMENT

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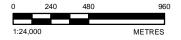
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STUDY AREA 1

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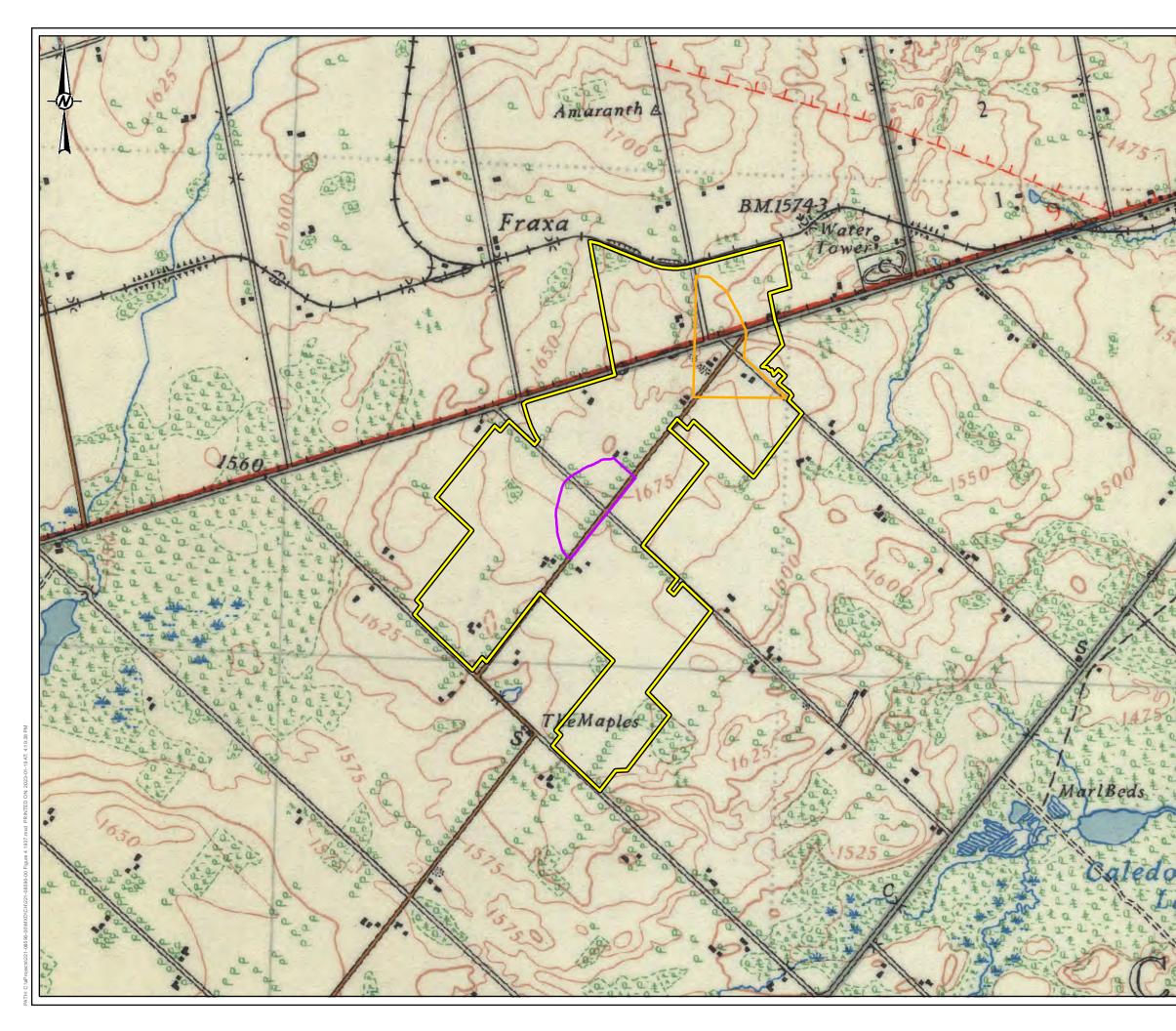
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CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY ROAD 109 AND 2ND LINE REALIGNMENT

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1877 TOPOGRAPHICAL AND HISTORICAL ATLAS OF THE COUNTY OF WELLINGTON ONTARIO

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NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

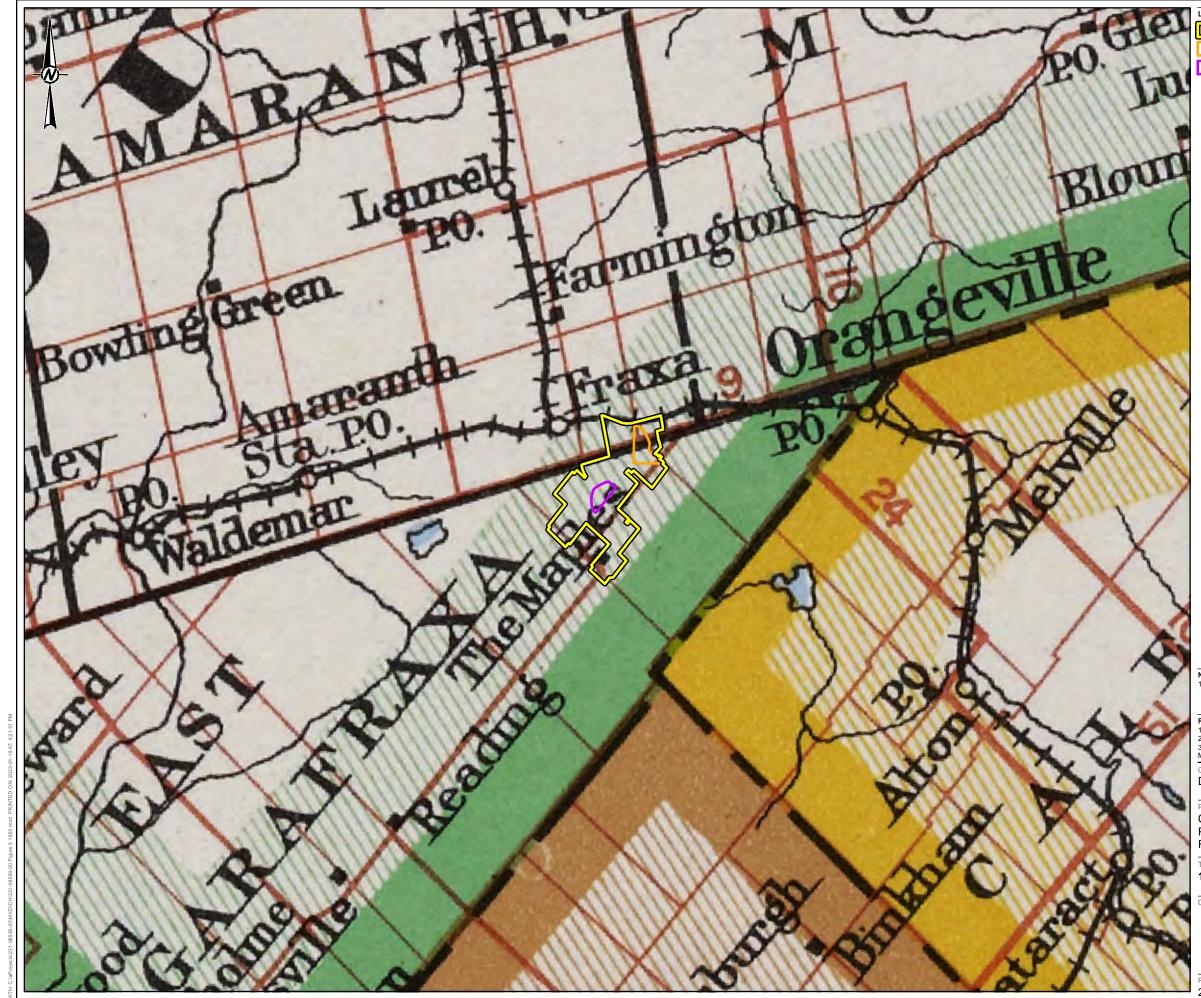


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PROJECT CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY

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NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE



CULTURAL HERITAGE STUDY AREA

STUDY AREA 1

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NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

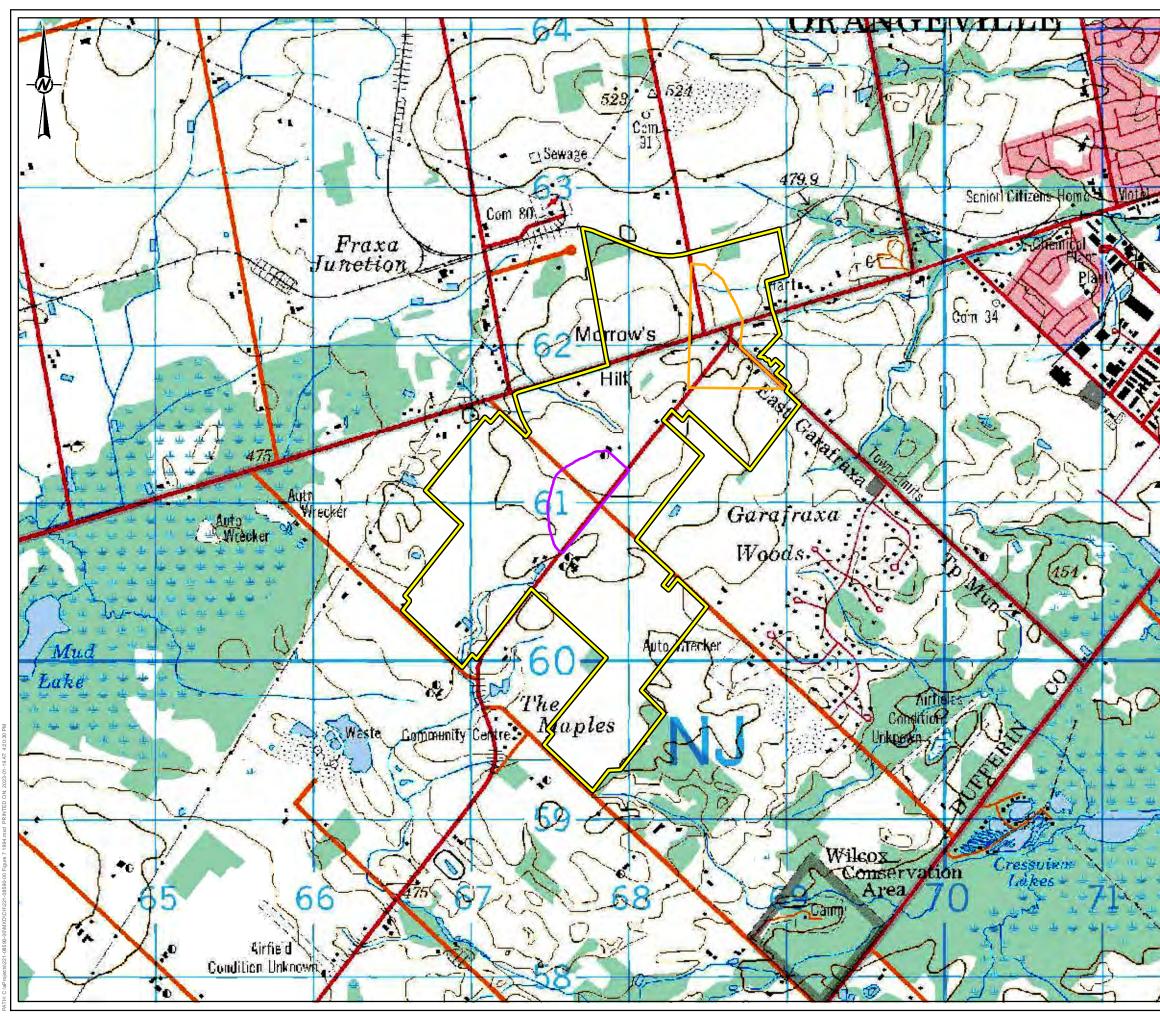




CULTURAL HERITAGE STUDY AREA

STUDY AREA 1

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STUDY AREA 1

STUDY AREA 2



CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY ROAD 109 AND 2ND LINE REALIGNMENT

> YYYY-MM-DD DESIGNED

PREPARED

REVIEWED

APPROVED

DUFFERIN COUNTY

1994 TOPOGRAPHIC MAP

CONTROL

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CLIENT

PROJECT

CONSULTANT

PROJECT NO. 221-08590-00



NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE



FIGURE

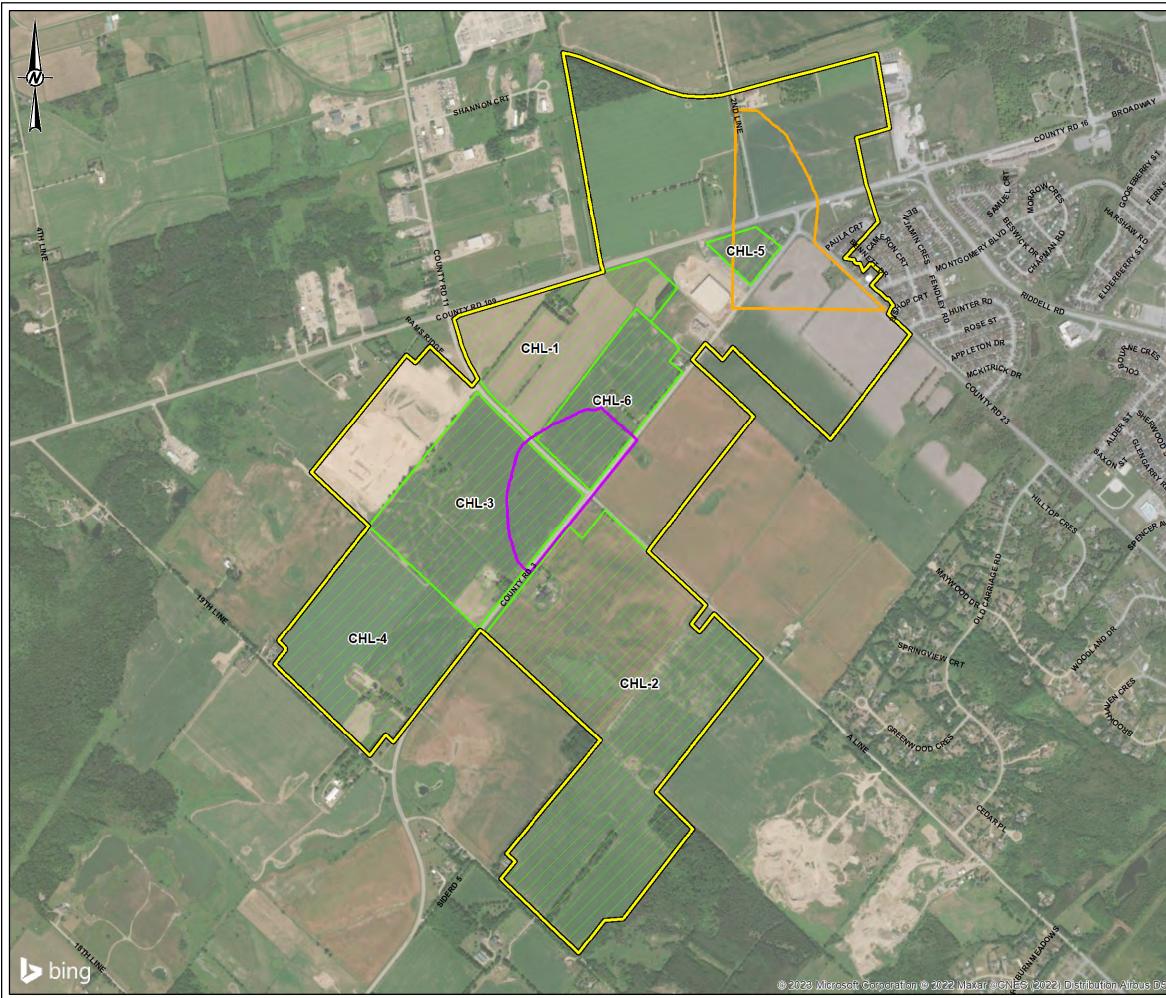
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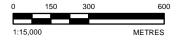


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STUDY AREA 1

STUDY AREA 2

CULTURAL HERITAGE LANDSCAPE



NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S) 1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO 2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N 3. DEPARTMENT OF ENERGY, MINES, AND RESOURCES 1974

TITLE

CLIENT DUFFERIN COUNTY

PROJECT

CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND

PRELIMINARY IMPACT ASSESSMENT: DUFFERIN COUNTY ROAD 109 AND 2ND LINE REALIGNMENT CULTURAL HERITAGE RESOURCES

