

**CULTURAL HERITAGE REPORT:
EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT**

**GROWTH-RELATED ROADS DETAILED DESIGN 2023
SEGMENTS 1789 AND 1134, CHINGUACOUSY ROAD (OLD SCHOOL ROAD TO MAYFIELD ROAD)
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT**

**TOWN OF CALEDON
REGION OF PEEL, ONTARIO**

FINAL REPORT

Prepared for:

Ainley Group
195 County Court Blvd., Suite 300
Brampton, ON L6W 4P7

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March 2021 (Revised June 2022, December 2022, and March 2023)



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TOWN OF CALEDON, ONTARIO

EXECUTIVE SUMMARY

ASI was contracted by Ainley Group, on behalf of the Town of Caledon, to conduct a Cultural Heritage Report as part of the Growth-Related Roads Detailed Design 2023 Municipal Class Environmental Assessment. The project is part of a Growth-Related Roads program, with the following three roads identified for construction in 2023: Bramalea Road from King Street to Old School Road (Segment 1123); Chinguacousy Road from Old School Road to Mayfield Road (Segments 1789 and 1134); and McLaughlin Road from King Street to Old School Road (Segments 295 and 1787). This report addresses Chinguacousy Road from Old School Road to Mayfield Road (Segments 1789 and 1134), including a 50 m buffer.

The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the early nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are eight previously identified BHRs and CHLs with known cultural heritage value or interest within the Chinguacousy Road study area.

Based on the results of the assessment, the following recommendations have been developed:

1. Impacts and mitigation measures need to be considered as early in the design process as possible to allow for appropriate and innovative mitigation. Mitigation measures may include, but are not limited to, completing a property-specific heritage impact assessment or documentation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate. In this regard, provincial guidelines should be consulted for advice and further heritage assessment work should be undertaken as necessary.
2. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified BHRs and CHLs. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified cultural heritage resources, etc.
3. Direct adverse impacts to BHR 1 (12016 Chinguacousy Road), CHL 2 (12306 Chinguacousy Road), and CHL 3 (12472 Chinguacousy Road) are anticipated in the proposed undertaking. As



BHR 1 is Included in the Built Heritage Resource Inventory, and CHL 2 and CHL 3 are listed on the Municipal Heritage Register, a resource-specific HIA should be completed for these properties as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible. Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR and CHLs, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required. To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.

4. Minor direct impacts to BHR 2 (12540 Chinguacousy Road), BHR 3 (12669 Chinguacousy Road), CHL 1 (12259 Chinguacousy Road), CHL 4 (12710 Chinguacousy Road), and CHL 5 (12846 Chinguacousy Road) are anticipated to include property acquisition. Further, indirect impacts are anticipated through encroachment of the Chinguacousy Road ROW. However, these impacts are not considered to be adverse as no structure or potential heritage attribute is anticipated to be impacted in the proposed work. As BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 are Listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the properties, heritage planning staff at the Town of Caledon should consider waiving the requirement for HIAs in these cases in favour of suitable avoidance and mitigation measures. Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required. The Town of Caledon confirmed that the HIAs for BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).
5. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.
6. This report should be submitted to the Town of Caledon and the Ministry of Citizenship and Multiculturalism for review and comment, and any other local heritage stakeholders that may have an interest in this project. The final report should be submitted to the Town of Caledon for their records.



PROJECT PERSONNEL

<i>Senior Project Manager:</i>	Lindsay Graves, MA, CAHP Senior Cultural Heritage Specialist Senior Project Manager - Cultural Heritage Division
<i>Project Coordinator:</i>	Katrina Thach, Hon. BA Archaeologist Project Coordinator - Environmental Assessment Division
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<i>Report Reviewer(s):</i>	Lindsay Graves John Sleath



QUALIFIED PERSONS INVOLVED IN THE PROJECT

Lindsay Graves, MA, CAHP

Senior Cultural Heritage Specialist | Senior Project Manager - Cultural Heritage Division

The Senior Project Manager for this Cultural Heritage Report is **Lindsay Graves** (MA, Heritage Conservation), Senior Cultural Heritage Specialist and the Environmental Assessment Coordinator for the Cultural Heritage Division at ASI. She was responsible for: overall project scoping and approach; development and confirmation of technical findings and study recommendations; application of relevant standards, guidelines and regulations; and implementation of quality control procedures. Lindsay is academically trained in the fields of heritage conservation, cultural anthropology, archaeology, and collections management and has over 15 years of experience in the field of cultural heritage resource management. This work has focused on the assessment, evaluation, and protection of above ground cultural heritage resources. Lindsay has extensive experience undertaking archival research, heritage survey work, heritage evaluation and heritage impact assessment. She has also contributed to cultural heritage landscape studies and heritage conservation plans, led heritage commemoration and interpretive programs, and worked collaboratively with multidisciplinary teams to sensitively plan interventions at historic sites/places. In addition, she is a leader in the completion of heritage studies required to fulfil Class EA processes and has served as Project Manager for over 100 heritage assessments during her time at ASI. Lindsay is a member of the Canadian Association of Heritage Professionals.

John Sleath, MA

Cultural Heritage Specialist | Project Manager - Cultural Heritage Division

Project Management and report review was conducted by **John Sleath** (MA, Anthropology) who is a Cultural Heritage Specialist and Project Manager within the Cultural Heritage Division with ASI. John has worked in a variety of contexts within the field of cultural heritage resource management for the past 13 years, as an archaeologist and as a cultural heritage professional. In 2015 John began working in the Cultural Heritage Division researching and preparing a multitude of cultural heritage assessment reports and for which he was responsible for a variety of tasks including: completing archival research, investigating built heritage and cultural heritage landscapes, report preparation, historical map regression, and municipal consultation. Since 2018 John has been a project manager responsible for a variety of tasks required for successful project completion. This work has allowed John to engage with stakeholders from the public and private sector, as well as representatives from local municipal planning departments and museums. John has conducted heritage assessments across Ontario, with a focus on transit and rail corridor infrastructure including bridges and culverts.

Kristina Martens

Cultural Heritage Specialist | Project Manager – Cultural Heritage Division

Historical research and report preparation was conducted by **Kristina Martens** (BA, Dipl. Heritage Conservation). Kristina is a heritage professional with ten years' experience in the not-for-profit and heritage sectors. She has experience in research, project management, documentation, built form analysis, architectural history, built heritage conservation, and cultural heritage landscapes. Kristina



also has experience in the identification of cultural heritage resources, evaluation of potential resources against Ontario Regulation 9/06 and 10/06 of the *Ontario Heritage Act*, writing statements of cultural heritage value and identifying attributes, with a specialty in large-scale heritage inventories and planning studies. I have experience in the review and analysis of planning policy related to cultural heritage resources and cultural heritage landscapes.

Meredith Stewart, MA, MSc

Cultural Heritage Technician | Researcher and Technical Writer - Cultural Heritage Division

Report preparation and field review was conducted by **Meredith Stewart** (MA, Art History, MSc, Historic Preservation). Meredith's work as a cultural heritage professional has focused on historical research, large-area studies, and survey work. Meredith holds a MA in Art History from Carleton University, where she focused on architectural history and the built environment, and graduated with a MSc in Historic Preservation from the School of the Art Institute of Chicago. Meredith utilizes her knowledge of architectural history and building materials in the identification and evaluation of heritage buildings and structures. Meredith is an intern member of CAHP.



GLOSSARY

Built Heritage Resource (B.H.R.)

Definition: "...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 Indigenous community. built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers" (Ministry of Municipal Affairs and Housing, 2020, p. 41).

Cultural Heritage Landscape (C.H.L.)

Definition: "...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 *Ontario Heritage Act*, 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" (Ministry of Municipal Affairs and Housing, 2020, p. 42).

Known Built Heritage Resource or Cultural Heritage Landscape

Definition: A known built heritage resource or cultural heritage landscape is a property that has recognized cultural heritage value or interest. This can include a property listed on a Municipal Heritage Register, designated under Part IV or V of the *Ontario Heritage Act*, or protected by a heritage agreement, covenant or easement, protected by the *Heritage Railway Stations Protection Act* or the *Heritage Lighthouse Protection Act*, identified as a Federal Heritage Building, or located within a U.N.E.S.C.O. World Heritage Site (Ministry of Tourism, Culture and Sport, 2016).

Impact

Definition: Includes negative and positive, direct and indirect effects to an identified built heritage resource and cultural heritage landscape. Direct impacts include destruction of any, or part of any, significant heritage attributes or features and/or unsympathetic or incompatible alterations to an identified resource. Indirect impacts include, but are not limited to, creation of shadows, isolation of heritage attributes, direct or indirect obstruction of significant views, change in land use, land disturbances (Ministry of Tourism, Culture and Sport, 2006b). Indirect impacts also include potential vibration impacts (See Section 2.5 for complete definition and discussion of potential impacts).

Mitigation

Definition: Mitigation is the process of lessening or negating anticipated adverse impacts to built heritage resources or cultural heritage landscapes and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the cultural heritage landscape and/or built heritage resource if to be demolished or relocated (Ministry of Tourism, Culture and Sport, 2006a).

Potential Built Heritage Resource or Cultural Heritage Landscape

Definition: A potential built heritage resource or cultural heritage landscape is a property that has the potential for cultural heritage value or interest. This can include properties/project area that contain a



parcel of land that is the subject of a commemorative or interpretive plaque, is adjacent to a known burial site and/or cemetery, is in a Canadian Heritage River Watershed, or contains buildings or structures that are 40 or more years old (Ministry of Tourism, Culture and Sport, 2016).

Significant

Definition: With regard to cultural heritage and archaeology resources, significant means “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 *Ontario Heritage Act*. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation” (Ministry of Municipal Affairs and Housing, 2020, p. 51).

Vibration Zone of Influence

Definition: Area within a 50 metre buffer of construction-related activities in which there is potential to affect an identified built heritage resource or cultural heritage landscape. A 50 metre buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction (Carman et al., 2012; Crispino & D’Apuzzo, 2001; P. Ellis, 1987; Rainer, 1982; Wiss, 1981). This buffer accommodates the additional threat from collisions with heavy machinery or subsidence (Randl, 2001).



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1.0 INTRODUCTION

1.1 Report Purpose

ASI was contracted by Ainley Group, on behalf of the Town of Caledon, to conduct a Cultural Heritage Report as part of the Growth-Related Roads Detailed Design 2023 Municipal Class Environmental Assessment. The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

1.2 Project Overview

The Growth-Related Roads Detailed Design 2023 Municipal Class Environmental Assessment project is part of a Growth-Related Roads program in the Town of Caledon, with the following three roads identified for construction in 2023: Bramalea Road from King Street to Old School Road (Segment 1123); Chinguacousy Road from Old School Road to Mayfield Road (Segments 1789 and 1134); and McLaughlin Road from King Street to Old School Road (Segments 295 and 1787). The project involves a comprehensive assessment of all asset categories of the roadway in order to manage the wide range of assets needing repair and rehabilitation due to increased wear and tear and traffic use on existing infrastructure, as well as an increased amount of new infrastructure, all resulting from continued growth in the population of Caledon.

The proposed work includes widening Chinguacousy Road to four lanes with a centre median, adding a 3.5 metre boulevard and a 3.5 metre multiuse path on both sides of the roadway from Mayfield Road north to approximately halfway to Old School Road, and a slight widening to accommodate a bicycle-accessible shoulder and road reconstruction on Chinguacousy Road north to Old School Road. The proposed work also includes widening at the intersections of Chinguacousy Road and Mayfield Road, Tim Manley Road, and Old School Road to accommodate the addition of turning lanes.

1.3 Description of Study Area

This Cultural Heritage Report will focus on the segment of Chinguacousy Road from Old School Road to Mayfield Road (Segments 1789 and 1134) with an additional 50 m buffer beyond the proposed 36 m width of the right-of-way and the extant intersections (Figure 1). This project study area has been defined as inclusive of those lands that may contain BHRs or CHLs that may be subject to direct or indirect impacts as a result of the proposed undertaking. Properties within the study area are located in the Town of Caledon.



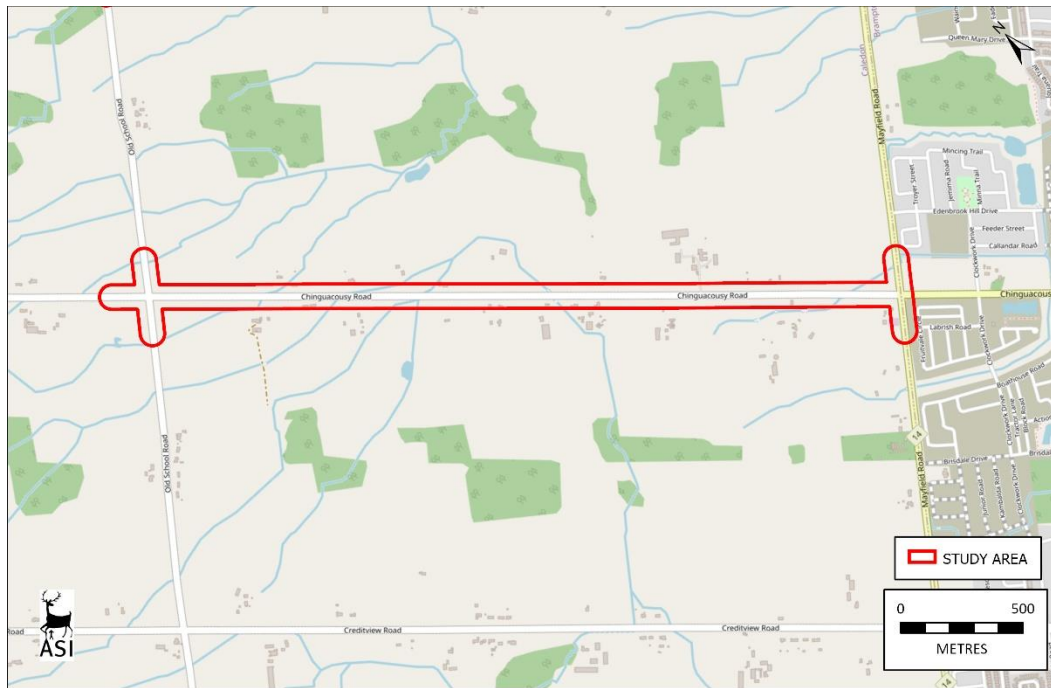


Figure 1: Location of the study area

Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

2.0 METHODOLOGY

2.1 Regulatory Requirements

The *Ontario Heritage Act* (OHA) (Ministry of Culture, 1990) is the primary piece of legislation that determines policies, priorities and programs for the conservation of Ontario’s heritage. There are many other provincial acts, regulations and policies governing land use planning and resource development support heritage conservation including:

- The *Planning Act* (Planning Act, R.S.O. 1990, c. P.13, 1990), which states that “conservation of features of significant architectural, cultural, historical, archaeological or scientific interest” (cultural heritage resources) is a “matter of provincial interest”. The Provincial Policy Statement (Ministry of Municipal Affairs and Housing, 2020), issued under the Planning Act, links heritage conservation to long-term economic prosperity and requires municipalities and the Crown to conserve significant cultural heritage resources.
- The *Environmental Assessment Act* (Environmental Assessment Act, R.S.O., 1990), which defines “environment” to include cultural conditions that influence the life of humans or a community. Cultural heritage resources, which include archaeological resources, built heritage resources and cultural heritage landscapes, are important components of those cultural conditions.

The Ministry of Citizenship and Multiculturalism (MCM) is charged under Section 2.0 of the OHA with the responsibility to determine policies, priorities, and programs for the conservation, protection, and



preservation of the heritage of Ontario. The Ministry of Citizenship and Multiculturalism published *Standards and Guidelines for Conservation of Provincial Heritage Properties* (Ministry of Citizenship and Multiculturalism, 2010) (hereinafter “Standards and Guidelines”). These Standards and Guidelines apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest (CHVI). The Standards and Guidelines provide a series of guidelines that apply to provincial heritage properties in the areas of identification and evaluation; protection; maintenance; use; and disposal. For the purpose of this report, the Standards and Guidelines provide points of reference to aid in determining potential heritage significance in identification of BHRs and CHLs. While not directly applicable for use in properties not under provincial ownership, the Standards and Guidelines are regarded as best practice for guiding heritage assessments and ensure that additional identification and mitigation measures are considered.

Similarly, the *Ontario Heritage Tool Kit* (Ministry of Culture, 2006) provides a guide to evaluate heritage properties. To conserve a BHR or CHL, the *Ontario Heritage Tool Kit* states that a municipality or approval authority may require a heritage impact assessment and/or a conservation plan to guide the approval, modification, or denial of a proposed development.

2.2 Municipal/Regional Heritage Policies

The study area is located within the Town of Caledon, in the Region of Peel. Policies relating to cultural heritage resources were reviewed from the following sources:

- Town of Caledon Official Plan (Town of Caledon, 2018)
- Mayfield West Secondary Plan (Town of Caledon, 2021)
- Region of Peel Official Plan (Region of Peel, 2018)

2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes

This Cultural Heritage Report follows guidelines presented in the *Ontario Heritage Tool Kit* (Ministry of Culture, 2006) and *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (Ministry of Citizenship and Multiculturalism, 2016a). The objective of this report is to present an inventory of known and potential BHRs and CHLs, and to provide a preliminary understanding of known and potential BHRs and CHLs located within areas anticipated to be directly or indirectly impacted by the proposed project.

In the course of the cultural heritage assessment process, all potentially affected BHRs and CHLs are subject to identification and inventory. Generally, when conducting an identification of BHRs and CHLs within a study area, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of BHRs and CHLs in a geographic area: background research and desktop data collection; field review; and identification.

Background historical research, which includes consultation of primary and secondary source research and historical mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine



the presence of sensitive heritage areas that correspond to nineteenth- and twentieth-century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain information about specific properties that have been previously identified and/or designated as having cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles or construction methods, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.

A field review is then undertaken to confirm the location and condition of previously identified BHRs and CHLs. The field review is also used to identify potential BHRs or CHLs that have not been previously identified on federal, provincial, or municipal databases or through other appropriate agency data sources.

During the cultural heritage assessment process, a property is identified as a potential BHR or CHL based on research, the MCM screening tool, and professional expertise. In addition, use of a 40-year-old benchmark is a guiding principle when conducting a preliminary identification of BHRs and CHLs. While identification of a resource that is 40 years old or older does not confer outright heritage significance, this benchmark provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from having cultural heritage value or interest.

2.4 Background Information Review

To make an identification of previously identified known or potential BHRs and CHLs within the study area, the following resources were consulted as part of this Cultural Heritage Report.

2.4.1 Review of Existing Heritage Inventories

A number of resources were consulted in order to identify previously identified BHRs and CHLs within the study area. These resources, reviewed on 25 November, 2020, 5 February 2021, and June 29 2022 include:

- The Town of Caledon Heritage Register (Town of Caledon, 2020);
- Town of Caledon Cultural Heritage Landscape Inventory (Scheinman, 2009) was reviewed to determine if any known cultural heritage landscapes were within the study area;
- Town of Caledon's Criteria for the Identification of Cultural Heritage Landscapes (Scheinman, 2003) was reviewed for guidance on identifying and describing CHLs;
- Town of Caledon's Built Heritage Resources Inventory (Stewart & Dilse, 2008);
- Region of Peel Cemetery Database (Regional Municipality of Peel, 2019);
- The *Ontario Heritage Act Register* (Ontario Heritage Trust, n.d.b);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust, n.d.a);
- The *Places of Worship Inventory* (Ontario Heritage Trust, n.d.c);
- *Ontario Heritage Plaque Database* (Ontario Heritage Trust, n.d.d);



- Database of known cemeteries/burial sites curated by the Ontario Genealogical Society (Ontario Genealogical Society, n.d.);
- *Canada's Historic Places* website (Parks Canada, n.d.a);
- *Directory of Federal Heritage Designations* (Parks Canada, n.d.b);
- Canadian Heritage River System (Canadian Heritage Rivers Board and Technical Planning Committee, n.d.); and,
- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites (U.N.E.S.C.O. World Heritage Centre, n.d.).

2.4.2 Review of Previous Heritage Reporting

Additional cultural heritage studies undertaken within parts of the study area were also reviewed. These include:

- Cultural Heritage Resource Assessment Review – Update of the Mayfield West Phase II Secondary Plan (ASI, 2017)

2.4.3 Community Data Collection

The following individuals, groups, and/or organizations were contacted to gather information on known and potential BHRs and CHLs, active and inactive cemeteries, and areas of identified Indigenous interest within the study area:

- Cassandra Jasinski, Heritage Planner, Town of Caledon (email communication 5, 11, 12, 17, 18, and 24 February and 10 and 19 March 2021). Consultations confirmed the addresses of properties that have been included on the Town of Caledon's Heritage Register and Built Heritage Resource Inventory (BHRI) as well as additional information on reasons for listing for the properties included on the Heritage Register and in the BHRI was provided. Heritage staff at the Town of Caledon reviewed the draft version of this report and provided comments in May 2022. Additional comments were received in June 2022. The June 2022 draft report was updated to reflect comments received.
- Sally Drummond, Senior Planner, Heritage, Town of Caledon (client email communications 10 January and 24 February 2023). Email correspondence confirmed that the Town was satisfied with the updated June 2022 draft report and that recommended mitigation strategies were amenable to heritage staff. A memorandum prepared 3 March 2023 by Ms. Drummond confirmed that the HIAs for BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 could be waived in favour of suitable mitigation measures, and that HIAs were required for BHR 1, CHL 2, and CHL 3 (Appendix A).



- The MCM (email communication 5 and 8 February 2021)¹. A response confirmed there are no properties designated by the Minister within the study area and they were not aware of any Provincial Heritage Properties within or adjacent to the study area.
- The Ontario Heritage Trust (email communications 5 and 12 February 2021). A response indicated that there are no conservation easements or Trust-owned properties within the study area.

2.5 Preliminary Impact Assessment Methodology

To assess the potential impacts of the undertaking, identified BHRs and CHLs are considered against a range of possible negative impacts, based on the *Ontario Heritage Tool Kit InfoSheet #5: Heritage Impact Assessments and Conservation Plans* (Ministry of Citizenship and Multiculturalism, 2006). These include:

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

Indirect impacts from construction-related vibration have the potential to negatively affect BHRs or CHLs depending on the type of construction methods and machinery selected for the project and proximity and composition of the identified resources. Potential vibration impacts are defined as having potential to affect identified BHRs and CHLs where work is taking place within 50 m of features on the property. A 50 m buffer is applied outside of the proposed limit of construction-related activities in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction provided from the MCM (Carman et al., 2012; Crispino & D'Apuzzo, 2001; P. Ellis, 1987; Rainer, 1982; Wiss, 1981). This buffer accommodates any additional or potential threat from collisions with heavy machinery or subsidence (Randl, 2001). In the case of this project, a 50 m buffer was applied to the proposed 36 m wide right-of-way.

Several additional factors are also considered when evaluating potential impacts on identified BHRs and CHLs. These are outlined in a document set out by the Ministry of Culture and Communications (now

¹ Contacted at registrar@ontario.ca.



MCM) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992). While this document has largely been superseded in some respects by more current policies and legislation, the guidance provided that continues to be of relevance to this specific project includes the following definitions:

- Magnitude: the amount of physical alteration or destruction which can be expected;
- Severity: the irreversibility or reversibility of an impact;
- Duration: the length of time an adverse impact persists;
- Frequency: the number of times an impact can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse impact; and
- Diversity: the number of different kinds of activities to affect a heritage resource.

The proposed undertaking should endeavor to avoid adversely affecting known and potential BHRs and CHLs and interventions should be managed in such a way that identified significant cultural heritage resources are conserved. When the nature of the undertaking is such that adverse impacts are unavoidable, it may be necessary to implement alternative approaches or mitigation strategies that alleviate the negative effects on identified BHRs and CHLs. Mitigation is the process of lessening or negating anticipated adverse impacts to cultural heritage resources and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the BHR or CHL if to be demolished or relocated.

Various works associated with infrastructure improvements have the potential to affect BHRs and CHLs in a variety of ways, and as such, appropriate mitigation measures for the undertaking need to be considered.

3.0 SUMMARY OF HISTORICAL DEVELOPMENT WITHIN THE STUDY AREA

This section provides a brief summary of historical research. A review of available primary and secondary source material was undertaken to produce a contextual overview of the study area, including a general description of physiography, Indigenous land use, and Euro-Canadian settlement.

3.1 Physiography

The study area is situated within the till plains (drumlinized) landform of the South Slope physiographic region of southern Ontario (Chapman & Putnam, 1984). The South Slope physiographic region is the southern slope of the Oak Ridges Moraine. The South Slope meets the Moraine at heights of approximately 300 metres above sea level, and descends southward toward Lake Ontario, ending, in some areas, at elevations below 150 metres above sea level. Numerous streams descend the South Slope, having cut deep valleys in the till. In the vicinity of the study area, the South Slope is ground moraine of limited relief (Chapman & Putnam, 1984). The South Slope contains a variety of soils, some of which promoted agricultural success and development. The establishment of farmsteads within the study area reflects the physiographic support of the agricultural land use.



3.2 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years ago, or 11,000 Before the Common Era (B.C.E.) (Ferris, 2013).² During the Paleo period (c. 11,000 B.C.E. to 9,000 B.C.E.), groups tended to be small, nomadic, and non-stratified. The population relied on hunting, fishing, and gathering for sustenance, though their lives went far beyond subsistence strategies to include cultural practices including but not limited to art and astronomy. Fluted points, beaked scrapers, and gravers are among the most important artifacts to have been found at various sites throughout southern Ontario, and particularly along the shorelines of former glacial lakes. Given the low regional population levels at this time, evidence concerning Paleo-Indian period groups is very limited (Ellis & Deller, 1990).

Moving into the Archaic period (c. 9,000 B.C.E. to 1,000 B.C.E.), many of the same roles and responsibilities continued as they had for millennia, with groups generally remaining small, nomadic, and non-hierarchical. The seasons dictated the size of groups (with a general tendency to congregate in the spring/summer and disperse in the fall/winter), as well as their various sustenance activities, including fishing, foraging, trapping, and food storage and preparation. There were extensive trade networks which involved the exchange of both raw materials and finished objects such as polished or ground stone tools, beads, and notched or stemmed projectile points. Furthermore, mortuary ceremonialism was evident, meaning that there were burial practices and traditions associated with a group member's death (Ellis et al., 2009; Ellis & Deller, 1990).

The Woodland period (c. 1,000 B.C.E. to 1650 C.E.) saw several trends and aspects of life remain consistent with previous generations. Among the more notable changes, however, was the introduction of pottery, the establishment of larger occupations and territorial settlements, incipient horticulture, more stratified societies, and more elaborate burials. Later in this period, settlement patterns, foods, and the socio-political system continued to change. A major shift to agriculture occurred in some regions, and the ability to grow vegetables and legumes such as corn, beans, and squash ensured long-term settlement occupation and less dependence upon hunting and fishing. This development contributed to population growth as well as the emergence of permanent villages and special purpose sites supporting those villages. Furthermore, the socio-political system shifted from one which was strongly kinship based to one that involved tribal differentiation as well as political alliances across and between regions (Birch & Williamson, 2013; Dodd et al., 1990; Ellis & Deller, 1990; Williamson, 1990).

The arrival of European trade goods in the sixteenth century, Europeans themselves in the seventeenth century, and increasing settlement efforts in the eighteenth century all significantly impacted traditional ways of life in Southern Ontario. Over time, war and disease contributed to death, dispersion, and displacement of many Indigenous peoples across the region. The Euro-Canadian population grew in both numbers and power through the eighteenth and nineteenth centuries and treaties between colonial administrators and First Nations representatives began to be negotiated.

² While many types of information can inform the precontact settlement of Ontario, such as oral traditions and histories, this summary provides information drawn from archaeological research conducted in southern Ontario over the last century.



The study area is within Treaty #19 (Ajetance Purchase) territory, which included 648,000 acres of land occupying portions of present-day Halton and Peel Region as well as Dufferin and Wellington County. This area was the last large tract of land ceded by the Mississaugas of the Credit First Nation, following the settlement of the Head of the Lake purchase (Treaty #14) in 1806, and is also surrounded by Treaty #3 (1784/1792) to the west, Treaty #13 (1788/1805) to the east, and Treaty #18 (1818) to the north (Crown-Indigenous Relations and Northern Affairs, 2016). By 1818, the Mississaugas were experiencing a rapid decline in population due to increased encroachment by settlers, declining resources, and the area to the north had just been ceded by Chippewa nations (Mississaugas of the Credit First Nation, 2017).

On October 23, 1818, Deputy Superintendent William Claus met with Chief Ajetance and other delegates of the Mississaugas of the Credit First Nation to negotiate the sale of this tract of land. The payment offered for this land consisted of the yearly sum of £522 and 10 shillings in goods annually. By 1820, the Mississaugas of the Credit negotiated the sale of the remainder of their lands except for a 200-acre parcel near the mouth of the Credit River (Mississaugas of the Credit First Nation, 2017; Surtees, 1984).

The Ajetance Purchase is also significant due to its relationship to the Haldimand Tract. On October 25, 1784, the Governor of Quebec Sir Frederick Haldimand signed a proclamation that allotted land six miles (10 km) on either side of the Grand River to the Six Nations People for their assistance during the American revolutionary war (Filice, 2018; Surtees, 1984). Upon review of the Haldimand Proclamation, however, politician and Indian Department official Sir John Johnson noted an error involving the location of the northern boundary of the tract. Governor Haldimand had mistakenly assumed in 1784 that the headwaters of the Grand River resided within the area negotiated under Treaty #3. However, the headwaters of the Grand River extend to the present-day community of Dundalk, Ontario, in Grey County, which was not negotiated until 1818 under Treaty #18. Additionally, the northern reach of the Grand River crosses through the northwestern corner of the Ajetance Purchase lands in Dufferin and Wellington County (Crown-Indigenous Relations and Northern Affairs, 2016; Filice, 2018; Surtees, 1984). Due to this inconsistency, the northern boundaries of the Haldimand Tract were redefined in 1793 under Treaty #4 to end at Jones Base Line in Fergus, Ontario – at the boundary of Treaty #3 and Treaty #19. This decision to end the Haldimand tract within Treaty #3 lands rather than continuing the tract up to the headwaters of the Grand River is still disputed by Six Nations of the Grand River and the community continues to contest the redefined territory with the Government of Canada (Filice, 2018).

3.3 Historical Euro-Canadian Township Survey and Settlement

Historically, the study area is located in the Former Chinguacousy Township, County of Peel, in parts of Lots 17 to 23, Concession 2 West of Centre Road and Lots 17 to 23, Concession 3 West of Centre Road. Note that Centre Road was later renamed Hurontario Street.



3.3.1 County of Peel

In 1788, the County of Peel was part of the extensive district known as the “Nassau District”. Later called the “Home District”, its administrative centre was located in Newark, now called Niagara. After the province of Quebec was divided into Upper and Lower Canada in 1792, the Province was separated into nineteen counties, and by 1852, the entire institution of districts was abolished and the late Home Districts were represented by the Counties of York, Ontario and Peel. Shortly after, the County of Ontario became a separate county, and the question of separation became popular in Peel. A vote for independence was taken in 1866, and in 1867 the village of Brampton, in the Township of Albion, was chosen as the capital of the new county (Armstrong, 1985).

3.3.2 Township of Chinguacousy

Chinguacousy Township is said to have been named by Sir Peregrine Maitland after the Mississauga word for the Credit River meaning “young pine.” Other scholars assert that it was named in honour of the Ottawa Chief Shinguacose, which was corrupted to the present spelling of ‘Chinguacousy,’ “under whose leadership Fort Michilimacinac was captured from the Americans in the War of 1812” (Mika & Mika, 1977; Rayburn, 1997). The township was formally surveyed in 1818, and the first legal settlers took up their lands later in that same year. The extant Survey Diaries indicate that the original timber stands within the township included oak, ash, maple, beech, elm, basswood, hemlock, and pine. It was recorded that the first landowners in Chinguacousy included settlers from New Brunswick, the United States, and also United Empire Loyalists and their children (Armstrong, 1985; Mika & Mika, 1977; Pope, 1877).

Due to the small population of the newly acquired tract, Chinguacousy was initially amalgamated with the Gore of Toronto Township for political and administrative purposes. In 1821, the population of the united townships numbered just 412. By 1837, the population of the township had reached an estimated 1,921. The numbers grew from 3,721 in 1842 to 7,469 in 1851. Thereafter the figures declined to 6,897 in 1861, and to 6,129 by 1871 (Pope, 1877; Walton, 1837). Chinguacousy Township was the largest in Peel County and was described as one of the best settled townships in the Home District. It contained excellent, rolling land which was timbered mainly in hardwood with some pine intermixed. Excellent wheat was grown here. The township contained one grist mill and seven saw mills. By 1851, this number had increased to two grist mills and eight sawmills (Smith, 1846, 1851). The principal crops grown in Chinguacousy included wheat, oats, peas, potatoes, and turnips. It was estimated that the only township in the province which rivaled Chinguacousy in wheat production at that time was Whitby. Other farm products included maple sugar, wool, cheese, and butter (Smith, 1851).

Chinguacousy was originally included within the limits of the Home District until 1849, when the old Upper Canadian Districts were abolished. It formed part of the United Counties of York, Ontario and Peel until 1851, when Peel was elevated to independent county status under the Provisions 14 & 15. A provisional council for Peel was not established until 1865, and the first official meeting of the Peel County council occurred in January 1867.

The Town of Caledon was created in January 1974 through the amalgamation of Caledon and Albion Townships as well as the north half of Chinguacousy Township. The south half of Chinguacousy



Township was amalgamated with the City of Brampton, which was also created in January 1974 (Armstrong, 1985; Mika & Mika, 1977; Rayburn, 1997).

3.3.3 Village of Alloo

The Village of Alloo is located southwest of the study area at the intersection of Mayfield Road and Creditview Road. The village was originally named Troughton's Corners after one of the early families to settle in the area. The name Alloo is said to have been suggested by William Sharp, in honour of his birthplace in Scotland. The settlement was established in 1828. Its northern node was at the intersection of Mayfield Road and Creditview Road, and contained an inn, a school, a Methodist Church (the Home Church), and cemetery. The land for these buildings was donated to the community by William Clarridge. Its southern node was at the corner of Lots 15 and 16 at what is now Wanless Drive and Creditview Road. The early churches were located at the southern node. A new Methodist Church was built in 1862, and a new school (S.S. No. 6) was constructed in 1870. The population in 1873 numbered approximately 50 inhabitants. In 1925 a union was formed between the two churches in the village and a new Home Church was built at the north-east corner of Mayfield and Creditview Roads. The Old Church Cemetery is located in the southern node, three lots south of the church on the southwest side of Wanless Drive. The oldest marked burials are dated 1833, 1834, and 1835. The Alloo cemetery was used for burials until c. 1937 (Crossby, 1873; Mann, 2000; Tremaine, 1859).

Presently, the Home Church and its associated cemetery are the only remaining vestiges of this early nineteenth-century settlement. North of Mayfield Road the area retains an agricultural land use. To the south suburban residential development occupies the land.

3.4 Review of Historical Mapping

The 1859 *Map of the County of Peel* and the 1877 *Illustrated Atlas of the County of Peel*, Township of Chinguacousy page (Pope, 1877; Tremaine, 1859) were examined to determine the presence of historical features within the study area during the nineteenth century (Figure 2 and Figure 3).

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

In 1859, the study area is shown to be within a moderately developed area with two watercourses crossing Chinguacousy Road and Old School Road, and another branch crosses Old School Road in two places north on Chinguacousy Road. The area has an agricultural use, and some residences are shown on the mapping. The lots on the northwest side of Mayfield Road within both concessions have been



divided into east and west halves. The road allowances for Chinguacousy Road, Old School Road and Mayfield Road are all opened. By 1877 several more residences with orchards and long driveways are present within the properties that intersect the study area, further supporting an agricultural use of the area. An additional watercourse is represented crossing Chinguacousy Road.

In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. The 1914, 1926, and 1940 National Topographic System (NTS) Bolton Sheet (Department of Militia and Defence 1914; 1926; 1940), the 1954 aerial photograph (Hunting Survey Corporation Limited, 1954), and the 1994 NTS Bolton Sheet (Department of Energy, Mines and Resources, Canada, 1994) were examined to determine the extent and nature of development and land uses within the study area (Figure 4 to Figure 8).

Throughout the twentieth century the study area and surroundings remain consistent with several residences and agricultural uses. In 1914 many of the residences depicted in 1877 remain in the same location. A wood bridge is indicated carrying Chinguacousy Road over the eastern-most watercourse. By 1926 this bridge has been reconstructed using masonry, and two other masonry bridges have been constructed to carry Chinguacousy Road over the waterways to the west. Topographic mapping from 1940 depicts several secondary structures confirming the establishment of farmsteads along Chinguacousy Road and a continued agricultural land use in the area. Chinguacousy and Old School Roads are depicted as concession roads in this year, while Mayfield Road is shown to be improved, with the portion of the roadway east of Chinguacousy Road constructed wider than the west portion. The distinction between the two halves of the roadway are not discernable in 1954 aerial photography. This image confirms an agricultural land use into the mid twentieth century, with large crop fields occupying a majority of the land in the area. Little changed by 1994, and mapping depicts some additional structures within farmsteads and silos on two properties. The southern limit for the Town of Caledon is noted along Mayfield Road, historically the division between the north and south part of the Township of Chinguacousy. Development of the area surrounding the study area also follows an agricultural land use, with several farmsteads containing silos depicted. A tree nursery is noted south of the study area on Mayfield Road.

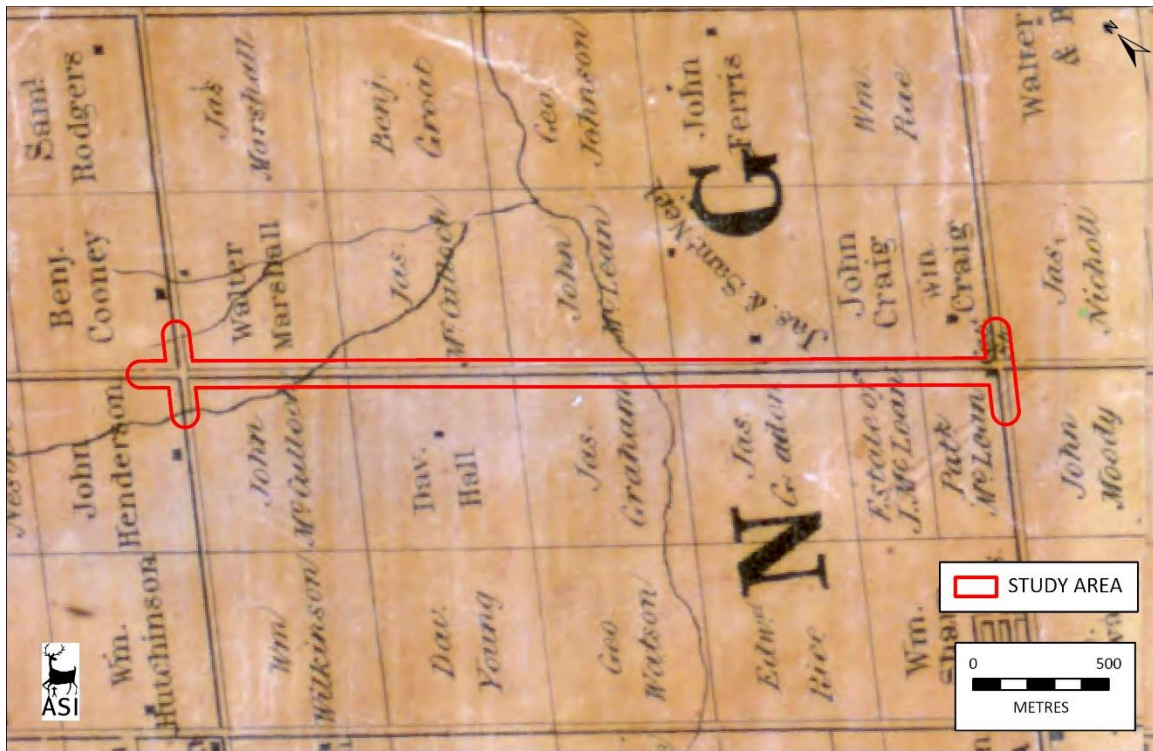


Figure 2: The study area overlaid on the 1859 Tremain's Map of the County of Peel (Tremain, 1859)

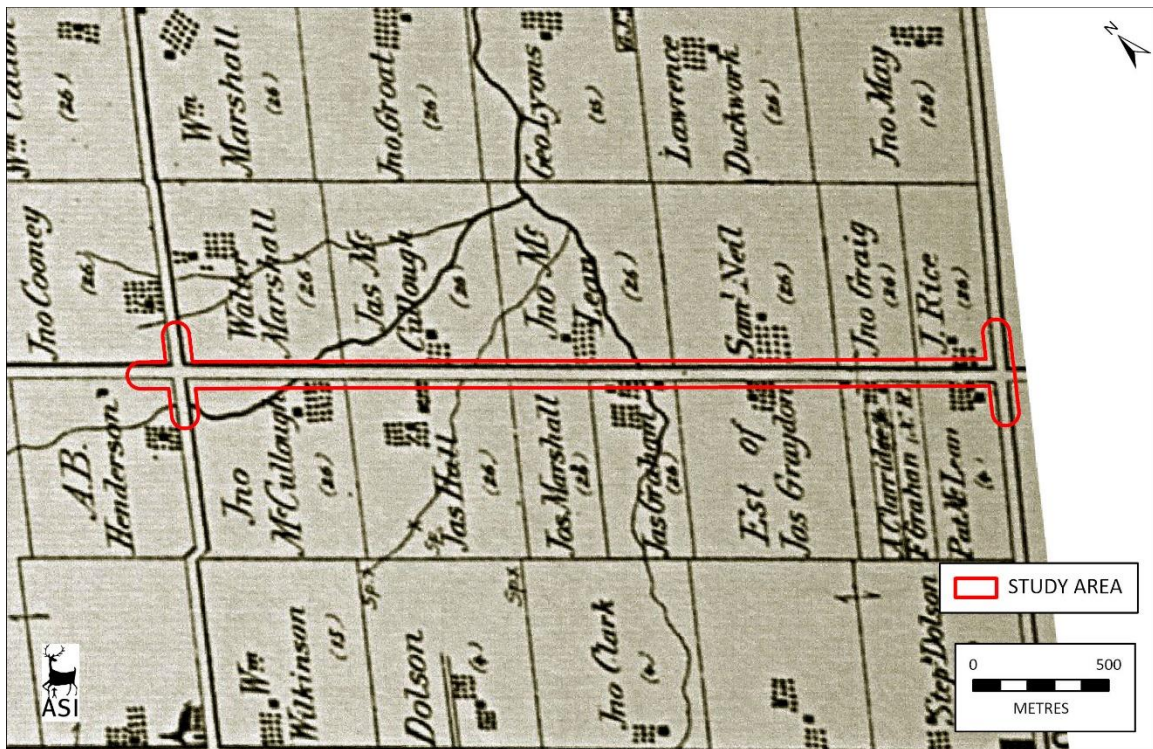


Figure 3: The study area overlaid on the 1877 Historical Atlas of the County of Peel (Pope, 1877)

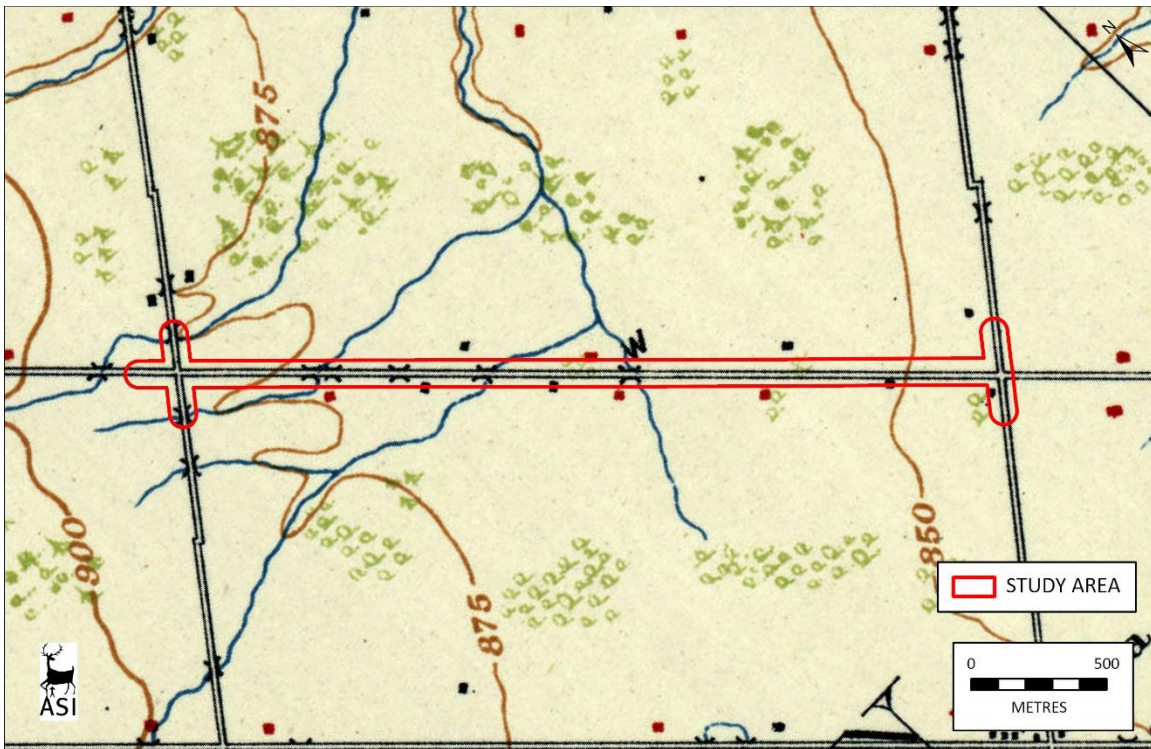


Figure 4: The study area overlaid on the 1914 topographic map of Bolton (Department of Militia and Defence, 1914)

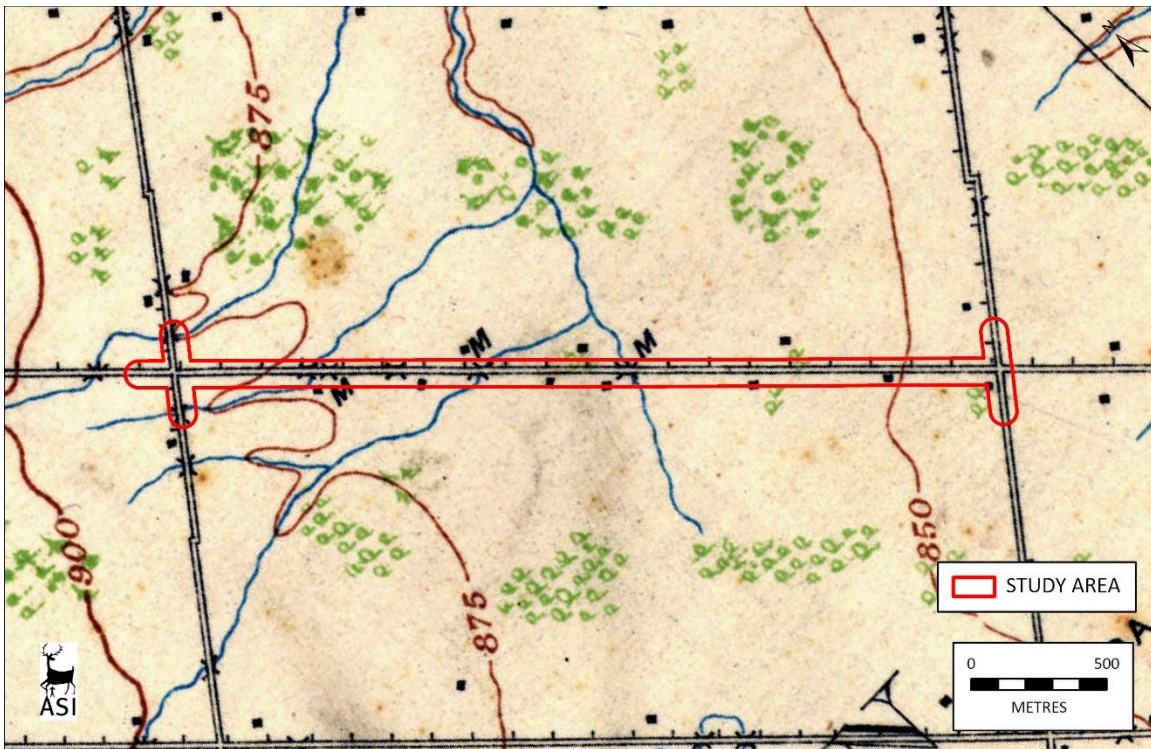


Figure 5: The study area overlaid on the 1926 topographic map of Bolton (Department of National Defence, 1926)

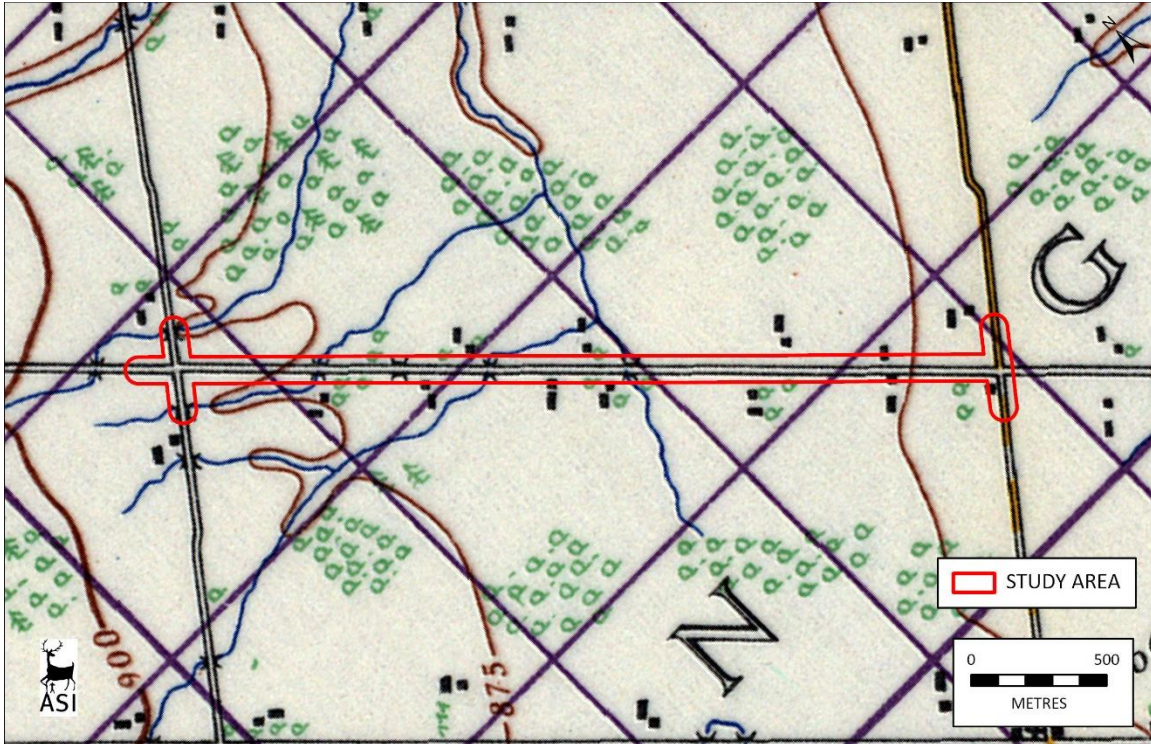


Figure 6: The study area overlaid on the 1940 topographic map of Bolton (Department of National Defence, 1940)

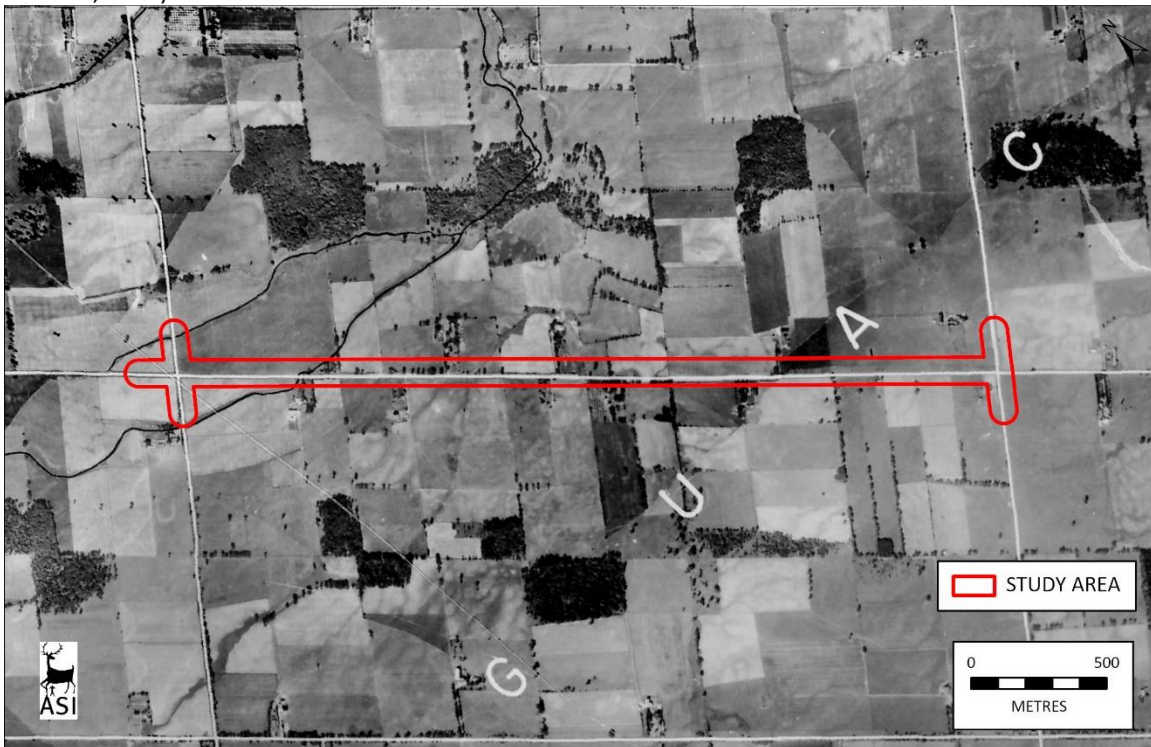


Figure 7: The study area overlaid on the 1954 aerial photograph (Hunting Survey Corporation Limited, 1954)

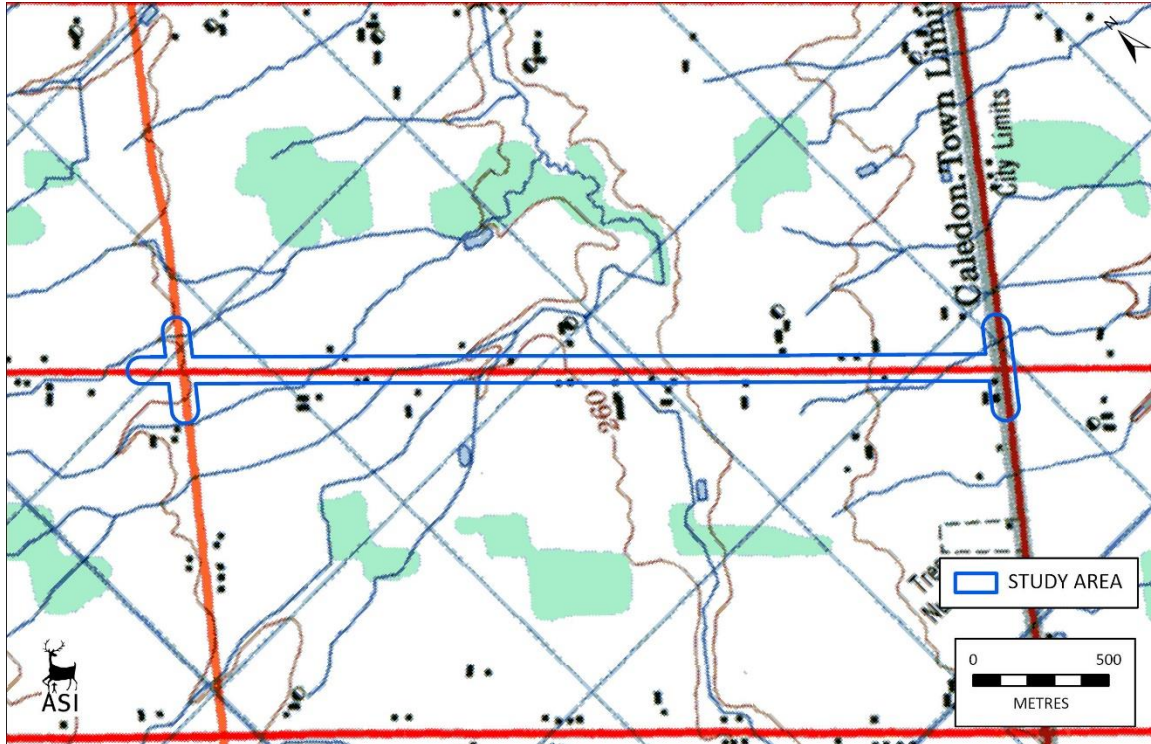


Figure 8: The study area overlaid on the 1994 topographic map of Bolton (Department of Energy, Mines and Resources, Canada, 1994)

4.0 EXISTING CONDITIONS

4.1 Description of Field Review

A field review of the study area was undertaken by Meredith Stewart of ASI, on 10 December 2020 to document the existing conditions of the study area from existing rights-of-way. The existing conditions of the study area are described below and captured in Plate 1 to Plate 6.

The study area is confined to Chinguacousy Road from Old School Road to Mayfield Road with a 50 m buffer surrounding the roadway and intersections. The study area consists primarily of large property parcels featuring farmsteads with an agricultural land use, however, a portion of the land near Mayfield Road is currently under development as a residential subdivision. The area southeast of Mayfield Road, beyond the study area, contains a combination of crop fields and contemporary residential subdivision developments. The intersection of Chinguacousy Road and Mayfield Road is controlled with traffic lights (Plate 1). Mayfield Road is an asphalt-paved two-lane roadway with gravel shoulders and grassed ditches on both sides of the roadway.

Chinguacousy Road is an asphalt-paved two-lane roadway with narrow gravel shoulders and grassed ditches on both sides (Plate 2). The area northeast of the intersection of Chinguacousy Road and Mayfield Road is currently fenced off and under development for the length of approximately three lots within the concession. A new roadway has recently been constructed extending northeast from

Chinguacousy Road (Plate 3). The southwest side of Chinguacousy Road maintains an agricultural land use in this area. Further along Chinguacousy Road towards Old School Road agricultural land use resumes on both sides of the roadway. Occasionally watercourses that weave through the agricultural landscape are directed under the roadway through concrete box culvert (Plate 4). Established farmsteads typically feature a residence and outbuildings set back from the roadway and reached by a long driveway. Late twentieth- and early twenty-first-century residential properties are also located on Chinguacousy, set close to the roadway. Agricultural fields and farmsteads occupy the northwest portion of the study area (Plate 5). Some short sections of the roadway are widened and lined with metal guardrails, typically around the entrance drives of nineteenth- and early twentieth-century farmsteads. Mature trees line portions of the roadway. A powerline runs along the north side of Chinguacousy Road

The intersection of Chinguacousy Road and Old School Road is controlled with a four-way traffic stop (Plate 6). Crop fields occupy the land on all four corners of the intersection. Old School Road is an asphalt paved two-lane roadway with paved then gravel shoulders and grassed ditches. A powerline runs along the east side of Old School Road.



Plate 1: Looking southeast towards the intersection of Chinguacousy Road and Mayfield Road (ASI 2020).



Plate 2: Looking north on Chinguacousy Road towards current land development (ASI 2020).



Plate 3: Looking northeast towards new roadway extending east from Chinguacousy Road (ASI 2020).



Plate 4: Watercourse running through agricultural field and under Chinguacousy Road (ASI 2020).



Plate 5: Agricultural fields located on both side of the roadway within the northwest portion of the study area (ASI 2020).





Plate 6: Looking northwest towards the intersection of Chinguacousy Road and Old School Road (ASI 2020).

4.2 Identification of Known and Potential Built Heritage Resources and Cultural Heritage Landscapes



Based on the results of the background research and field review, three BHRs and five CHLs were identified within the Chinguacousy Road study area. Seven of these identified resources are listed properties on the Town of Caledon's Heritage Register (CHL 1-5 and BHR 2-3), and one is in the Built Heritage Resource Inventory (BHR 1). A detailed inventory of known and potential BHRs and CHLs within the study area is presented in Table 1. For the purposes of this report, the distinction between identifying a property as a BHR or CHL was determined based on the relationship between the residence and the associated agricultural fields and agricultural outbuildings. As outlined in the Criteria for the Identification of Cultural Heritage Landscapes (Scheinman, 2003), the loss of character-defining elements on a property diminishes the integrity of the site and impacts the validity of its identification as a CHL. As the BHRs and CHLs are all in-tact or former farmscapes in a largely agricultural context, properties that demonstrate a continued association between the farmhouse and agricultural fields and outbuildings are discussed as CHLs, while former farmscapes where this association has been severed are discussed as BHRs.



Note that the Town of Caledon's Heritage Register (Town of Caledon, 2020) includes a collection of Non-designated Properties listed under Section 27 (1.2) of the *Ontario Heritage Act*. This list includes a property, identified as a CHL, at 12529 Chinguacousy Road, which is within the study area. However, it has not been included below because there is a strike through the listing, indicating that the structures on the property are no longer extant and the reasons for listing are no longer applicable.



Mapping of identified BHRs and CHLs overlaid with the preferred alternative described in Section 5.0 can be found in Figure 9 to Figure 17.



Table 1: Inventory of Known Built Heritage Resources and Cultural Heritage Landscapes within the Study Area

Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known/Potential CHVI	Photographs/ Digital Image
BHR 1	Vacant residential (former farmstead)	12016 Chinguacousy Road	Known BHR – Included in the Built Heritage Resource Inventory	<p>The subject property is located on the west corner of Chinguacousy Road and Mayfield Road. 1859 mapping indicates the property was owned by Patr. [Patrick] McLean and a schoolhouse is depicted on the northeast corner of the parcel (Figure 2). The property remains under McLean’s ownership in 1877 (Figure 3). In this year the schoolhouse is no longer extant and instead a farmstead surrounded by an orchard is indicated. The farmhouse is a one-and-a-half storey vernacular residence with vinyl siding and several additions. The BHRI indicates that construction of the residence is estimated to have been between 1900 and 1924 (Stewart & Dilse, 2008). The BHRI, which was published in 2008, notes that a vertical board gambrel roof barn built between 1875 and 1899 was located on the property, though it no longer appears to be extant. Plus, the BHRI identifies a driveshed, carriage house, and garage which contribute to its reasons for inclusion on the Inventory (Stewart & Dilse, 2008). A long driveway extending from Chinguacousy Road and mature trees along Mayfield Road are evident, though the property is currently vacant. The surrounding agricultural fields are a separate land parcel.</p>	 <p>Looking northwest towards the subject property from Mayfield Road (ASI 2020).</p>
BHR 2	Residential (former farmstead)	12540 Chinguacousy Road	Known BHR - Listed on Municipal Heritage Register	<p>The property is located on the southwest side of Chinguacousy Road. 1859 mapping indicates the property was owned by Jas. [James] Graham and changed ownership in 1877 to Jas. [James] Marshall (Figure 2 and Figure 3). No structures are indicated on either nineteenth-century maps, however, a wood structure is indicated in the approximate location of the extant farmhouse in 1914 mapping (Figure 4). The Town of Caledon Heritage Register notes that the “gothic style farmhouse” on the property was constructed between 1875-1899 (Town of Caledon, 2020). Potential attributes include the one-and-a-half-storey Gothic Revival residence with centre gable feature, vinyl siding, side gable roof and wrap around porch, shed, and vegetative windbreak along the driveway and surrounding the residence.</p>	 <p>Looking west towards the farmstead from Chinguacousy Road (ASI 2020).</p>

Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known/Potential CHVI	Photographs/ Digital Image
BHR 3	Residential (former farmstead)	12669 Chinguacousy Road	Known BHR - Listed on Municipal Heritage Register	The property is located on the northeast side of Chinguacousy Road. 1859 and 1877 mapping indicate the property was owned by Jas. [James] McCulloch (Figure 2 and Figure 3). A structure is indicated in the approximate location of the extant residence in 1914 mapping (Figure 4). Potential attributes include two-and-a-half-storey red brick Edwardian Classical residence with hipped roof and centre dormer, outbuilding, vegetative windbreak along the driveway and surrounding the residence, and landscaped lawn containing plantings and mature trees (Town of Caledon, 2020).	 <p data-bbox="1923 959 2825 989">Looking northeast towards the landscaped lawn and residence from Chinguacousy Road.</p>
CHL 1	Former farmstead	12259 Chinguacousy Road	Known CHL - Listed on Municipal Heritage Register	The property is located on the northeast side of Chinguacousy Road. 1859 mapping indicates the property was owned by Jas. [James] and Saml. [Samuel] Neel and then was under sole ownership of Samuel Neel [Neil] in 1877 (Figure 2 and Figure 3). A farmstead surrounded by an orchard is indicated in the approximate location of the extant residence in 1859 and 1877. The Town of Caledon Heritage Register notes that the “log dwelling with early tail addition” on the property was constructed c. 1845 (Town of Caledon, 2020). This dwelling has been dismantled and is in storage pending a decision to relocate elsewhere in Caledon or reconstruct within the subdivision. The property is currently an active construction site under development. Large equipment, trailers and building materials are visible throughout the property, with several areas of disturbed land. A review of satellite imagery taken in 2022 confirms that the residence, outbuildings, and other potential heritage attributes of the property have been removed, and that only the long driveway and some mature trees are extant.	 <p data-bbox="1923 1665 2825 1723">Looking north towards the property under development from Chinguacousy Road showing location and existing conditions of extant c. 1845 log house (circled) (ASI 2020).</p>

Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known/Potential CHVI	Photographs/ Digital Image
CHL 2	Farmstead	12306 Chinguacousy Road	Known CHL - Listed on Municipal Heritage Register	The property is located on the southwest side of Chinguacousy Road. 1859 mapping indicates the property was owned by Jas. [James] Graydon and then changed ownership to Jos [Joseph] Marshall in 1877 (Figure 2 and Figure 3). No structure is indicated on the property in mapping from either year. The Town of Caledon Heritage Register notes that the "Italianate style farmhouse" on the property was constructed between 1875-1899 (Town of Caledon, 2020). Potential attributes include the two-storey residence with vinyl siding and hipped roof, outbuildings, long driveway, vegetative windbreak along driveway, and agricultural fields.	 <p data-bbox="2013 973 2738 999">View along driveway of farmstead from Chinguacousy Road (ASI 2020).</p>
CHL 3	Farmstead	12472 Chinguacousy Road	Known CHL - Listed on Municipal Heritage Register	The property is located on the southwest side of Chinguacousy Road. 1859 and 1877 mapping indicates the property was owned by Jas. [James] Graham (Figure 2 and Figure 3). A farmstead is depicted in 1877 with two orchards and an additional structure. The Town of Caledon Heritage Register notes that the "gothic style farmhouse" on the property was constructed between 1875-1899 (Town of Caledon, 2020). Potential attributes include the one-and-a-half-storey residence with centre gable feature, vinyl siding and side gable roof, outbuildings, long driveway, vegetative windbreak along driveway and several mature trees near the residence, a creek, and agricultural fields.	 <p data-bbox="2013 1689 2722 1715">Detail of residence located at 12472 Chinguacousy Road (ASI 2020).</p>



Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known/Potential CHVI	Photographs/ Digital Image
CHL 4	Farmstead	12710 Chinguacousy Road	Known CHL - Listed on Municipal Heritage Register	<p>The property is located on the southwest side of Chinguacousy Road. 1859 mapping indicates the property was owned by Dav. [David] Hall and remained in the family under the ownership of Jas. [James] Hall in 1877 (Figure 2 and Figure 3). A structure is shown on the property in 1859, and an additional structure and orchards show an expansion of the farmstead in 1877. The Town of Caledon Heritage Register notes that the “Edwardian classical style farmhouse with a red brick exterior” on the property was constructed between 1900 and 1924 (Town of Caledon, 2020). Potential attributes include the two-and-a-half-storey red brick Edwardian Classical residence with hipped roof and centre dormer, outbuildings, long driveway, creeks, vegetative windbreak along driveway and surrounding the residence, and agricultural fields.</p>	 <p>Looking south towards the farmstead from Chinguacousy Road (ASI 2020).</p>
CHL 5	Farmstead	12846 Chinguacousy Road	Known CHL - Listed on Municipal Heritage Register	<p>The property is located on the southwest side of Chinguacousy Road. 1859 and 1877 mapping indicate the property was owned by John McCulloch (Figure 2 and Figure 3). A residence with orchard is indicated in the approximate location of the extant farmhouse in 1877. The Town of Caledon Heritage Register notes that the “Queen Anne style farmhouse with a red-and-buff brick exterior” on the property was constructed between 1875 and 1899 (Town of Caledon, 2020). Potential attributes include the two-and-a-half-storey Queen Anne residence with a combination hipped and gable roof and red brick exterior with buff brick details, outbuildings, long driveway, creeks, vegetative windbreak along driveway and surrounding the residence, and agricultural fields.</p>	 <p>Looking east towards the farmstead from Chinguacousy Road (ASI 2020).</p>



Figure 9: Key sheet for mapping showing locations of identified BHRs and CHLs

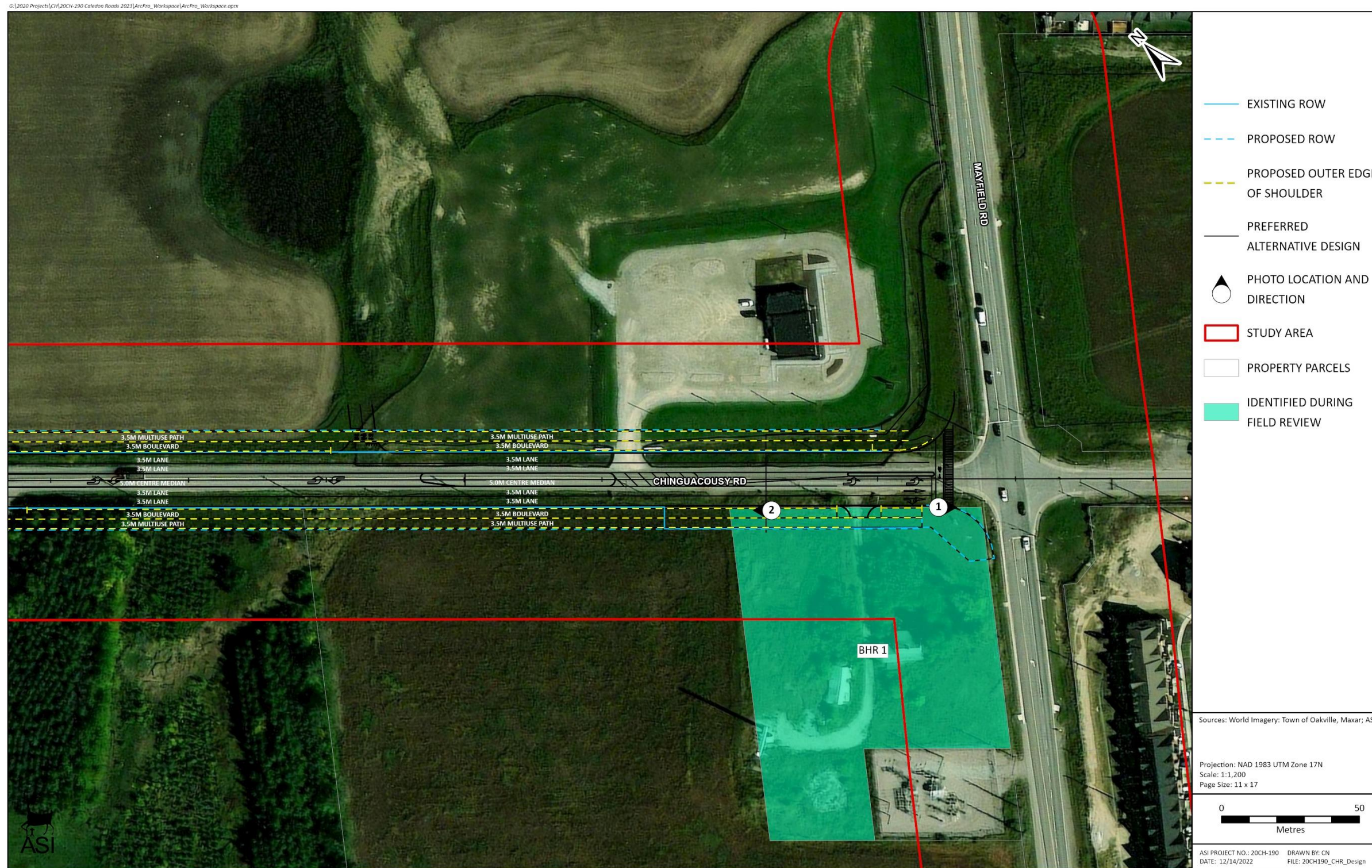


Figure 10: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 1)





Figure 11: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 2)



Figure 12: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 3)





Figure 13: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 4)

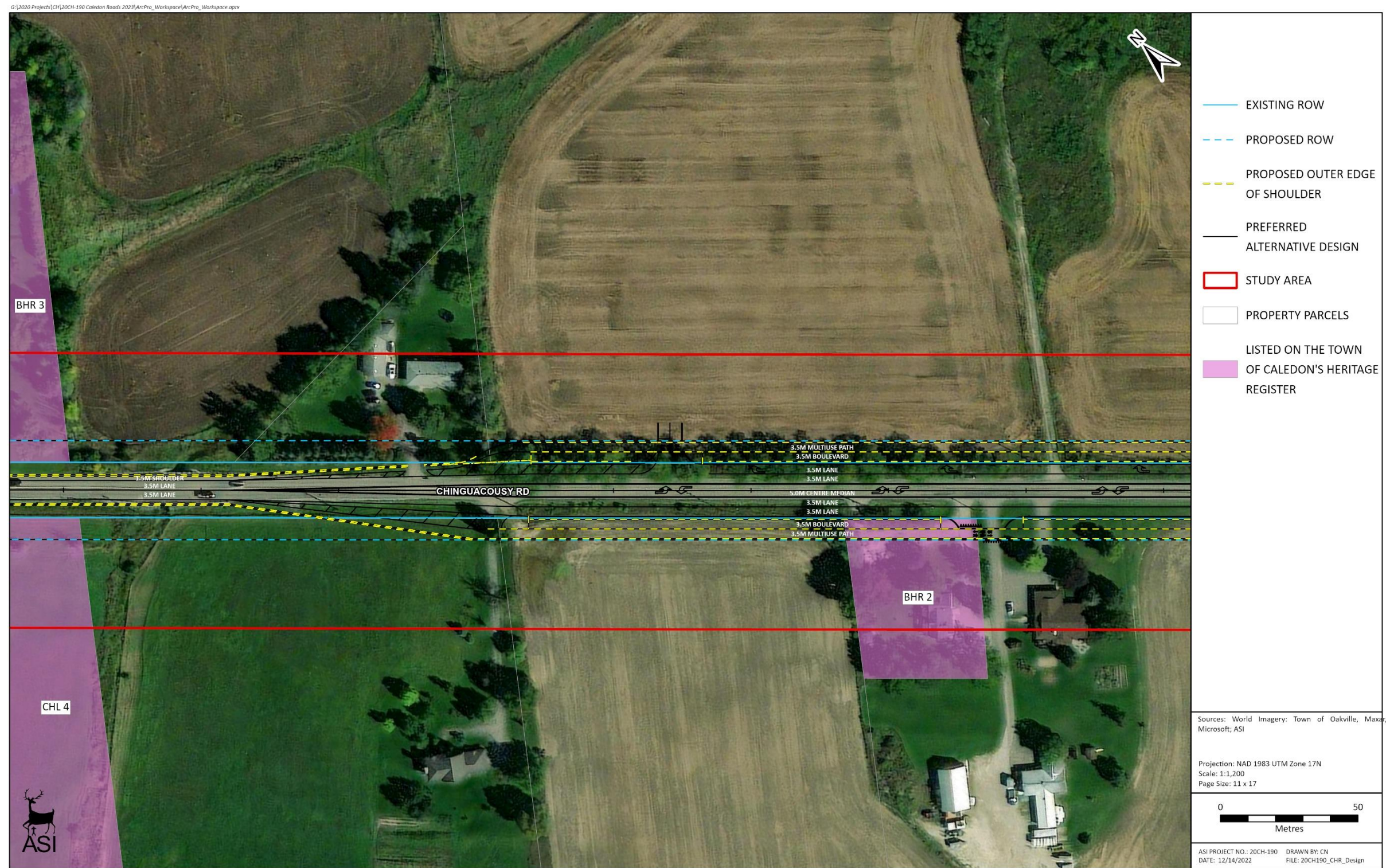


Figure 14: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 5)



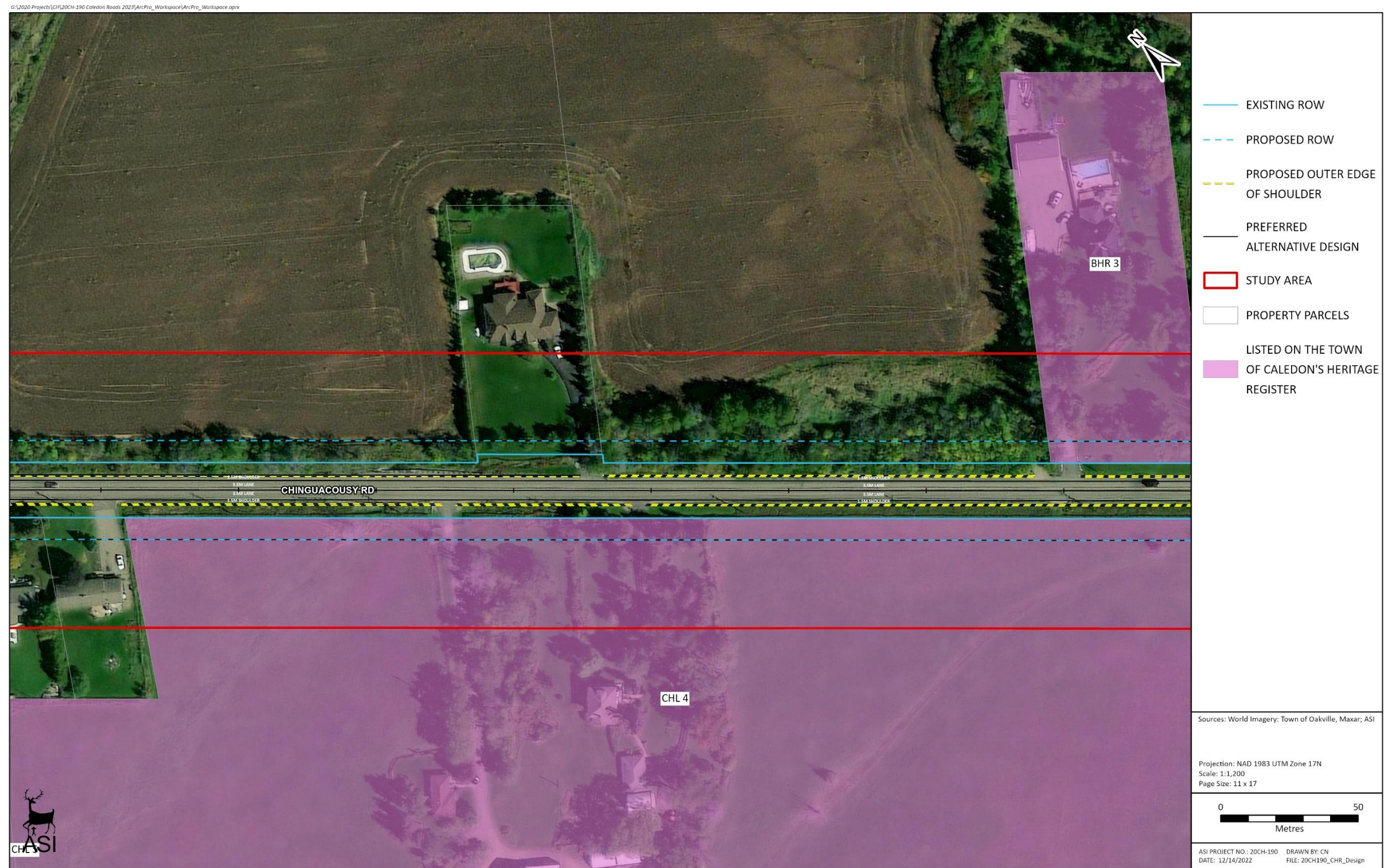


Figure 15: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 6)





Figure 16: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 7)



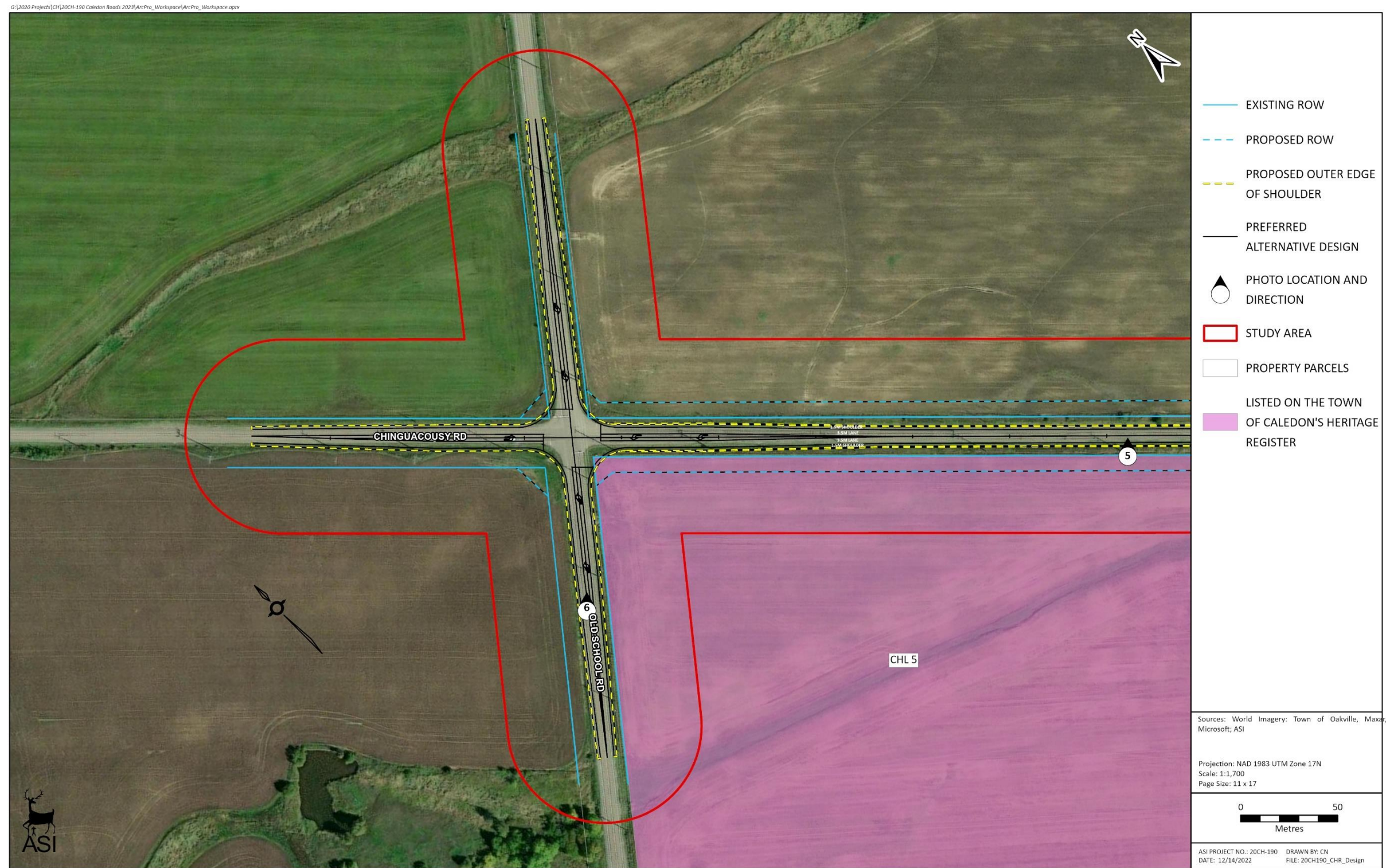


Figure 17: Map showing proposed work and locations of identified BHRs and CHLs (Sheet 8)



5.0 PRELIMINARY IMPACT ASSESSMENT

5.1 Description of Proposed Undertaking

The proposed undertaking for the Growth-Related Roads Detailed Design 2023 Municipal Class Environmental Assessment Chinguacousy Road from Old School Road to Mayfield Road (Segments 1789 and 1134) study area includes widening Chinguacousy Road to four lanes with a centre median, the addition of 3.5 metre boulevard and a 3.5 metre multiuse path on both sides from Mayfield Road north to approximately halfway to Old School Road, and a slight widening to accommodate a bicycle-accessible shoulder and road reconstruction on Chinguacousy Road north to Old School Road. The proposed work also includes widening at the intersections of Chinguacousy Road and Mayfield Road, Tim Manley Road, and Old School Road to accommodate the addition of turning lanes. Mapping depicting the proposed project works and the location of all identified BHRs and CHLs is included in Figure 9 to Figure 17.

5.2 Analysis of Potential Impacts

Table 2 outlines the potential impacts on all identified BHRs and CHLs within the study area.

Table 2: Preliminary Impact Assessment and Recommended Mitigation Measures

Feature ID	Address or Location	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
BHR 1	12016 Chinguacousy Road Known BHR– Included in the Built Heritage Resource Inventory	<p>Direct adverse impacts to BHR 1 are anticipated to include significant property acquisition, approximately 7 metres encroachment onto the northeastern and east corner of the property, the installation of a boulevard and multi-use path, and the removal of trees. Potential heritage attributes of the property that may be directly impacted include mature trees and the entrance drive, however, impacts to the entrance drive are anticipated to be minor and confined to the new Chinguacousy Road ROW.</p> <p>Indirect adverse impacts due to construction related vibration are possible as the structure sits within 50 metres of the proposed work. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to BHR 1. Removal of mature trees and vegetation on the subject property should also be limited to the extent feasible.</p> <p>As BHR 1 is Included in the Built Heritage Resource Inventory a resource-specific HIA should be completed as per clause 3.3.3.1.5 of the <i>Town of Caledon’s Official Plan</i>. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible.</p> <p>Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p> <p>To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.</p>
BHR 2	12540 Chinguacousy Road Known BHR - Listed on Municipal Heritage Register	<p>Minor direct impacts to BHR 2 are anticipated to include property acquisition, however these are not considered to be significantly adverse as there will be no direct negative impacts to the residence or to any potential heritage attribute on the property.</p> <p>No indirect adverse impacts due to construction related vibration are anticipated as the structure sits outside the 50-metre vibration radius from the proposed work. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to BHR 2.</p> <p>As BHR 2 is listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the <i>Town of Caledon’s Official Plan</i>. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the property, heritage planning staff at the Town of Caledon should consider waiving the requirement for a HIA in this case in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIA for BHR 2 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).</p> <p>Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p>
BHR 3	12669 Chinguacousy Road Known BHR - Listed on Municipal Heritage Register	<p>Minor direct impacts to BHR 3 are anticipated to include property acquisition, however these are not considered to be significantly adverse as there will be no direct negative impacts to the residence or to any potential heritage attribute on the property.</p> <p>No Indirect adverse impacts due to construction related vibration are anticipated as the structure sits outside the 50-metre vibration radius from the proposed work. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to BHR 3.</p> <p>As BHR 3 is listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the <i>Town of Caledon’s Official Plan</i>. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the property, heritage planning staff at the Town of Caledon should consider waiving the requirement for a HIA in this case in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIA for BHR 3 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).</p> <p>Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p>

Feature ID	Address or Location	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
CHL 1	12259 Chinguacousy Road Known CHL - Listed on Municipal Heritage Register	<p>Direct impacts to CHL 1 are anticipated to include property acquisition, approximately 7 metres encroachment onto the southwestern portion of the property, the installation of a boulevard and multi-use path, and the removal of mature trees adjacent to the property in the Chinguacousy Road ROW.</p> <p>As the property at 12259 Chinguacousy Road has been significantly altered through the demolition of the residence and outbuildings, mature tree clearing, grading, and residential subdivision construction, the minor grading and encroachment of the Chinguacousy Road ROW onto the subject property is not considered to be a significantly adverse impact. No impacts to potential heritage attributes were identified.</p> <p>No indirect adverse impacts due to construction related vibration are anticipated as the structures are no longer extant. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to CHL 1. Removal of mature trees and vegetation adjacent to the subject property should also be limited to the extent feasible.</p> <p>As CHL 1 is listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the <i>Town of Caledon's Official Plan</i>. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the property, heritage planning staff at the Town of Caledon should consider waiving the requirement for a HIA in this case in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIA for CHL 1 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).</p> <p>Suitable mitigation measures may include implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p>
CHL 2	12306 Chinguacousy Road Known CHL - Listed on Municipal Heritage Register	<p>Direct adverse impacts to CHL 2 are anticipated to include property acquisition, approximately 7-8 metres encroachment onto the southwestern portion of the property, the installation of a boulevard and multi-use path, realignment of the driveway with the addition of a pedestrian crosswalk, and the removal of trees within the new road ROW. Potential heritage attributes of the property that may be directly impacted include the long entrance drive and mature trees, however, impacts to the entrance drive are anticipated to be minor and confined to the new Chinguacousy Road ROW.</p> <p>No direct adverse impacts to the residence or any outbuildings are anticipated.</p> <p>Indirect adverse impacts due to construction related vibration are possible as the structure is within 50 metres of the proposed work. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to CHL 2. Removal of mature trees and vegetation on the subject property should also be limited to the extent feasible.</p> <p>As CHL 2 is listed on the Municipal Heritage Register a resource-specific HIA should be completed as per clause 3.3.3.1.5 of the <i>Town of Caledon's Official Plan</i>. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible.</p> <p>Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid heritage attributes on the CHL, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p> <p>To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.</p>
CHL 3	12472 Chinguacousy Road Known CHL - Listed on Municipal Heritage Register	<p>Direct adverse impacts to CHL 3 are anticipated to include property acquisition, approximately 7 metres encroachment onto the northeastern portion of the property, the installation of a boulevard and multi-use path, and the removal of trees. Potential heritage attributes of the property that may be directly impacted include the long entrance drive and mature trees, however, impacts to the entrance drive are anticipated to be minor and confined to the new Chinguacousy Road ROW.</p> <p>No direct adverse impacts are anticipated to the residence or any structure on the property.</p> <p>Indirect adverse impacts due to construction related vibration are possible as the structure sits within 50 metres of the proposed work. No other adverse indirect impacts were identified.</p>	<p>Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to CHL 3. Removal of mature trees and vegetation on the subject property should also be limited to the extent feasible.</p> <p>As CHL 3 is listed on the Municipal Heritage Register a resource-specific HIA should be completed as per clause 3.3.3.1.5 of the <i>Town of Caledon's Official Plan</i>. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible.</p> <p>Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.</p> <p>To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.</p>

Feature ID	Address or Location	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
CHL 4	12710 Chinguacousy Road Known CHL - Listed on Municipal Heritage Register	Minor direct impacts to CHL 4 are anticipated to include property acquisition. However, these impacts are not considered to be adverse as no structure or potential heritage attribute is anticipated to be impacted. No Indirect adverse impacts due to construction related vibration are anticipated as the structure sits outside the 50-metre vibration radius from the proposed work. No other adverse indirect impacts were identified.	Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to CHL 4. As CHL 4 is listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the <i>Town of Caledon's Official Plan</i> . However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the property, heritage planning staff at the Town of Caledon should consider waiving the requirement for a HIA in this case in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIA for CHL 4 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A). Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the CHL, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.
CHL 5	12846 Chinguacousy Road Known CHL - Listed on Municipal Heritage Register	Minor direct impacts to CHL 5 are anticipated to include property acquisition. However, these impacts are not considered to be adverse as no structure or potential heritage attribute is anticipated to be impacted. No Indirect adverse impacts due to construction related vibration are anticipated as the structure sits outside the 50-metre vibration radius from the proposed work. No other adverse indirect impacts were identified.	Where feasible, the proposed alignment should be designed in a manner that avoids all impacts to CHL 5. As CHL 5 is Listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the <i>Town of Caledon's Official Plan</i> . However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the property, heritage planning staff at the Town of Caledon should consider waiving the requirement for a HIA in this case in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIA for CHL 5 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A). Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the CHL, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.

Where feasible, the proposed work should be designed to avoid direct and indirect impacts to these BHRs and CHLs. To ensure the structures on these properties are not adversely impacted, construction and staging should be suitably planned to avoid all impacts to these properties. Suitable mitigation measures could include the establishment of no-go zones with fencing and issuing instructions to construction crews to avoid the BHRs and CHLs.

Direct adverse impacts from property acquisition, encroachment of the Chinguacousy Road right of way, construction of a boulevard and multiuse path, and the removal of trees is anticipated for BHR 1 (12016 Chinguacousy Road), CHL 2 (12306 Chinguacousy Road), and CHL 3 (12472 Chinguacousy Road). As BHR 1 is included in the Built Heritage Register and CHL 2 and 3 are listed in the Municipal Heritage Register, a resource-specific HIA should be completed as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible.

Minor direct impacts from property acquisition and the encroachment of the Chinguacousy Road right-of-way are expected for BHR 2 (12540 Chinguacousy Road), BHR 3 (12669 Chinguacousy Road), CHL 1 (12259 Chinguacousy Road), CHL 4 (12710 Chinguacousy Road), and CHL 5 (12846 Chinguacousy Road). However, these impacts are not considered to be adverse as no structure or potential heritage attribute is anticipated to be impacted in the proposed work. As BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 are Listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the properties, heritage planning staff at the Town of Caledon should consider waiving the requirement for HIAs in these cases in favour of suitable avoidance and mitigation measures. The Town of Caledon confirmed that the HIAs for BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).

Suitable mitigation measures may include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the heritage attributes on the BHR or CHL, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required.

Indirect impacts from property acquisition and encroachment of the Chinguacousy Road right of way are expected for all identified BHRs and CHLs.

Indirect impacts from vibration to BHR 1, CHL 2 and CHL 3 may occur as a result of their location within 50 metres of the proposed work. To ensure the structures on the properties at BHR 1 (12016 Chinguacousy Road), CHL 2 (12306 Chinguacousy Road), and CHL 3 (12472 Chinguacousy Road) are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the any structures will be subject to vibrations, a vibration monitoring plan should be prepared and implemented as part of the detailed design phase of the project to lessen vibration impacts related to construction.

6.0 RESULTS AND MITIGATION RECOMMENDATIONS

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the early nineteenth



century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are eight previously identified properties of cultural heritage value within the Chinguacousy Road study area.

6.1 Key Findings

- A total of three BHRs and five CHLs were identified within the study area.
- Of the eight identified BHRs and CHLs, seven are listed on the Municipal Heritage Register (CHLs 1-5 and BHRs 2-3) and one is included in the Built Heritage Resource Inventory (BHR 1).
- Identified cultural heritage resources are historically, architecturally, and contextually associated with land use and settlement patterns in the Town of Caledon and more specifically representative of agricultural land use along Chinguacousy Road.

Results of Preliminary Impact Assessment

- The preferred alternative is anticipated to result in direct adverse impacts to BHR 1, CHL 2 and CHL 3 and some of their identified heritage attributes, due to encroachment, property acquisition, and construction of a boulevard and multiuse path. Additional impacts to CHL 2 are anticipated from the realignment of the driveway and addition of a pedestrian crosswalk.
- Indirect adverse impacts from vibration are possible to BHR 1, CHL 2, and CHL 3.

6.2 Recommendations

Based on the results of the assessment, the following recommendations have been developed:

1. Impacts and mitigation measures need to be considered as early in the design process as possible to allow for appropriate and innovative mitigation. Mitigation measures may include, but are not limited to, completing a property-specific heritage impact assessment or documentation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate. In this regard, provincial guidelines should be consulted for advice and further heritage assessment work should be undertaken as necessary.
2. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified BHRs and CHLs. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified cultural heritage resources, etc.
3. Direct adverse impacts to BHR 1 (12016 Chinguacousy Road), CHL 2 (12306 Chinguacousy Road), and CHL 3 (12472 Chinguacousy Road) are anticipated in the proposed undertaking. As BHR 1 is Included in the Built Heritage Resource Inventory, and CHL 2 and CHL 3 are listed on the Municipal Heritage Register, a resource-specific HIA should be completed for these



properties as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. The HIA should be completed by a qualified heritage professional with recent and relevant experience as early in detailed design as possible. Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR and CHLs, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required. To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.

4. Minor direct impacts to BHR 2 (12540 Chinguacousy Road), BHR 3 (12669 Chinguacousy Road), CHL 1 (12259 Chinguacousy Road), CHL 4 (12710 Chinguacousy Road), and CHL 5 (12846 Chinguacousy Road) are anticipated to include property acquisition. Further, indirect impacts are anticipated through encroachment of the Chinguacousy Road ROW. However, these impacts are not considered to be adverse as no structure or potential heritage attribute is anticipated to be impacted in the proposed work. As BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 are Listed on the Municipal Heritage Register a resource-specific HIA may be required as per clause 3.3.3.1.5 of the *Town of Caledon's Official Plan*. However, as the impacts are considered to be minor and are not anticipated to directly impact any potential heritage attribute on the properties, heritage planning staff at the Town of Caledon should consider waiving the requirement for HIAs in these cases in favour of suitable avoidance and mitigation measures. Suitable mitigation measures may also include establishing no-go zones with fencing, issuing instructions to construction crews to avoid the BHR, and implementing post construction rehabilitation with sympathetic plantings where tree removals are required. The Town of Caledon confirmed that the HIAs for BHR 2, BHR 3, CHL 1, CHL 4, and CHL 5 could be waived in favour of suitable mitigation measures on 3 March 2023 (Appendix A).
5. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.
6. This report should be submitted to the Town of Caledon and the Ministry of Citizenship and Multiculturalism for review and comment, and any other local heritage stakeholders that may have an interest in this project. The final report should be submitted to the Town of Caledon for their records.



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APPENDIX A: MEMORANDUM FROM HERITAGE PLANNING AT THE TOWN OF CALEDON



Memo

Date: March 3, 2023

To: Imran Salam, Transportation Engineer

From: Sally Drummond, Senior Heritage Planner

Subject: Growth-Related Roads Detailed Design 2023
Segments 1789 and 1134, Chinguacousy Road (Old School Road to Mayfield Road)
Municipal Class Environmental Assessment 20-98
Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment

Further to review of the revised *Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment* prepared by ASI Inc. and dated March 2021 (revised June 2022, December 2022), I am writing to confirm Heritage staff acceptance of the finalized report and concurrence with its recommended mitigation strategies for the eight heritage properties that will be directly impacted by the project work.

As noted, a Heritage Impact Assessment will be required for the following three properties in anticipation of significant adverse direct impacts:

- 12016 Chinguacousy Road
- 12306 Chinguacousy Road
- 12472 Chinguacousy Road

Heritage staff agree with the recommendation that the requirement for a Heritage Impact Assessment for the following five properties be waived in light of the minor nature of the anticipated direct impacts:

- 12259 Chinguacousy Road
- 12540 Chinguacousy Road
- 12669 Chinguacousy Road
- 12710 Chinguacousy Road
- 12846 Chinguacousy Road



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Regards,



Sally Drummond
Senior Heritage Planner
Strategic Policy Planning



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