

# Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment

Enbridge Gas Panhandle Regional Expansion Project

Enbridge Gas Inc.

60665521

April 2022

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## Distribution List

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# 1. Introduction

## 1.1 Project Context

AECOM Canada Ltd. (AECOM) was contracted by Enbridge Gas Inc. (Enbridge Gas) to conduct a Cultural Heritage Assessment Report: Existing Conditions and Preliminary Impact Assessment (CHAR) as part of the Ontario Energy Board (OEB) Leave-to-Construct Application for the Panhandle Regional Expansion Project (the Project). The purpose of this expansion is to increase the capacity of the Panhandle Transmission System, which provides power generation for customers in Windsor, Chatham-Kent, and Essex County.

Enbridge Gas identified the need to consider heritage resources within the Study Area as defined by Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (hereafter OEB Environmental Guidelines, 2016). The OEB Environmental Guidelines were consulted to complete this CHAR and help determine whether this proposed pipeline may impact built heritage resources or cultural heritage landscapes.

This CHAR is based on the preferred routes for two proposed pipelines: The Panhandle Loop and the Leamington Interconnect for the Project. It constitutes a study to identify built heritage resources (BHRs) and cultural heritage landscapes (CHLs) within and adjacent to the preferred routes for the Panhandle Loop and the Leamington Interconnect.

## 1.2 Location and Physical Description of the Study Area

This CHAR identifies BHRs and CHLs within and adjacent to the Study Area. The Study Area comprises consists of two preferred pipeline routes: Panhandle Loop and Leamington Interconnect (**Figure 1, Figure 2**).

**Panhandle Loop - Preferred Route:** Approximately 19 kilometres in length, the preferred route for this proposed pipeline follows the existing 20-inch Panhandle Pipeline. The new pipeline will be 36 inches in diameter and extend south/southwest from the existing Enbridge Gas Dover Transmission Station in the Municipality of Chatham-Kent to Richardson Side Road in the Municipality of Lakeshore. This proposed pipeline extends through agricultural fields and trenchless crossing methods are proposed to occur to allow the pipeline to cross under multiple watercourses, Townline Road/Drain on south side of Townline Road, as well as Highway 401. Pit depths and entry points are anticipated to be approximately 2.3 metres in depth, whereas all other crossings are anticipated to be open cut.

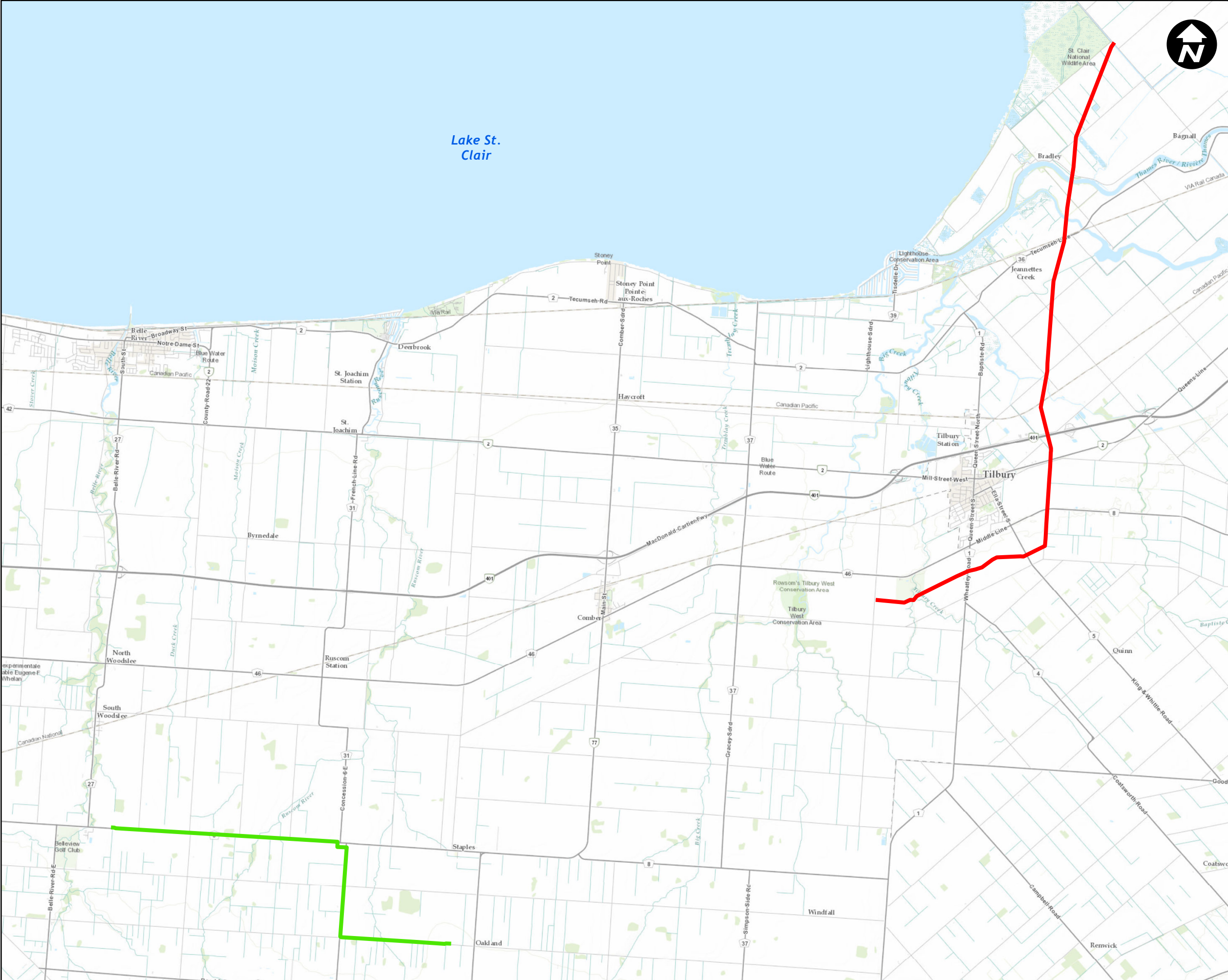
**Leamington Interconnect - Preliminary Preferred Route:** Approximately 12 kilometres in length and 16 inches in diameter, this proposed pipeline will connect the existing Leamington North Lines to both the Kingsville East Line and Leamington North Reinforcement Line. The preferred route is adjacent to or within an existing road allowance and extends across the Municipality of Lakeshore, Town of Kingsville, and the Municipality of Leamington. The route runs west and parallel to Mersea Road 10, then north alongside Albuna Townline until where it intersects with Essex County Road 8. From there, the proposed pipeline crosses Essex County Road 8 to the north side of the road and continues west adjacent to or within the road allowance to just beyond where two power transmission lines intersect.

For this CHAR, the Study Area includes properties that are within and adjacent to the proposed preferred routes. These properties may be subject to direct or indirect impacts from construction activities related to this Project.

## 1.3 Purpose of the CHAR

The purpose of this CHAR is to determine existing conditions within the Study Area (the preferred pipeline routes), present an inventory of municipally, provincially, and/or federally recognized BHRs and CHLs, as well as to identify potential BHRs and CHLs within and adjacent to the Study Area. The CHAR includes a preliminary assessment of impacts the Project will have on those CHLs and BHRs and propose appropriate mitigation measures. See **Section 2.4** for key tasks undertaken in this CHAR.





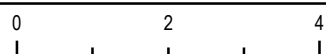
Map Location

**Legend**

- Panhandle Loop – Preliminary Preferred Route
- Leamington Interconnect – Preliminary Preferred Route

**Panhandle Regional Expansion Project**

Topographic Map



DATUM: NAD 1983 UTM Zone 17N

January 2022  
P#:60665521

1:100,000  
\* when printed 11"x17"  
V#:

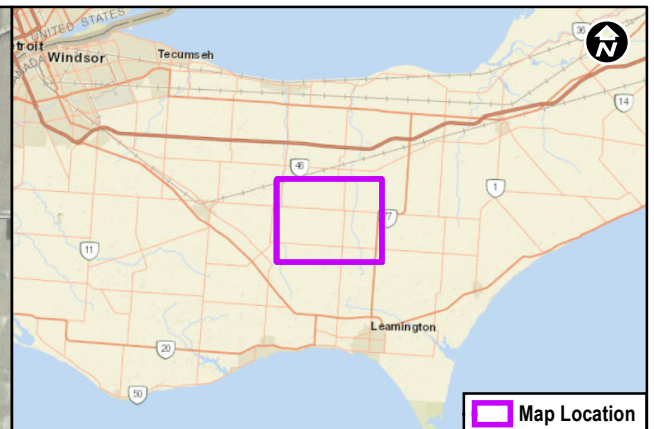
Source: MNRF 2020  
Image: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Figure 1

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Map location: \\na.aec.com\esri\workspace\AECOM\GIS\Projects\60665521\_Panhandle\Design\01\_Reports\CH Memo\MXD\_60665521\_L\_Fig1\_Topoc.mxd  
Date saved: 1/12/22 12:40:33 PM User Name: csaib

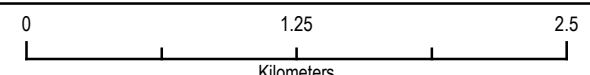


**Legend**

- ★ Cemetery
- Leamington Interconnect – Preliminary Preferred Route
- Municipal Boundary

**Panhandle Regional Expansion Project**

**Aerial Map**



January 2022	1:35,000 *when printed 11"x17"	Source: MNRF 2020 Image: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT
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**Figure 2-1**

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## 2. Methodology

### 2.1 Regulatory Requirements

### 2.2 Ontario Energy Board Environmental Guidelines

The OEB Environmental Guidelines make provisions for the consideration of heritage in the pipeline development planning stage and stipulate that pipeline proponents are responsible for demonstrating the appropriate level of due diligence regarding heritage resources. With regard to cultural heritage resources, pipeline proponents must self-assess and demonstrate appropriate due diligence by:

- (a) recognizing cultural heritage resources that may be affected by pipeline development, identifying significant cultural heritage resources and understanding their cultural heritage value or interest;
- (b) assessing the effects or impacts that could result from proposed pipeline development; and
- (c) protecting cultural heritage resources by appropriate conservation, avoidance, and mitigation.

(OEB 2016:31-32)

### 2.3 Planning Act and Provincial Policy Statement

The *Planning Act* (1990) and the associated Provincial Policy Statement (2020) provide a legislative framework for land use planning in Ontario. Both documents identify matters of provincial interest, which include the conservation of significant features of architectural, cultural, historical, archaeological, or scientific interest. The *Planning Act* requires that all decisions affecting land use planning matters “shall be consistent with” the Provincial Policy Statement. In general, the Provincial Policy Statement recognizes that Ontario’s long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral, cultural heritage, and archaeological resources for their economic, environmental, and social benefits.

Section 2 of the *Planning Act* makes a series of provisions regarding cultural heritage. Section 2 of the *Planning Act* identifies various provincial interests that must be considered by the relevant authorities during the planning process. Specific to cultural heritage, subsection 2(d) of the *Planning Act* states that, “The Minister, the council of a municipality, a local board, a planning board and the Municipal Board, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matter of provincial interest such as... the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest.”

As one of 18 interests to be considered, cultural heritage resources are to be considered within the framework of varying provincial interests throughout the land use planning process.

Pursuant to Section 3 of the *Planning Act* the Provincial Policy Statement 2020, Policy 2.6.1 states “Significant built heritage resources and significant cultural heritage landscapes shall be conserved.”

Further policy in Section 3, Policy 2.6.3 states “Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it had been demonstrated that the heritage attributes of the protected heritage property will be conserved.”

### 2.3.1 Ontario Heritage Act

The *Ontario Heritage Act* enables municipalities and the province to designate individual properties and/or districts as being of cultural heritage value or interest. The province or municipality may also “list” a property or include a property on a municipal register that has not been designated but is believed to be of cultural heritage value or interest. *Ontario Regulation 9/06, Criteria for Determining Cultural Heritage Value or Interest* (O. Reg. 9/06) under the *Ontario Heritage Act* provides criteria for determining cultural heritage value or interest. If a property meets one or more of the following criteria it may be designated under Section 29 of the *Ontario Heritage Act*.

### 2.3.2 Ontario Regulation 9/06

Ontario Regulation 9/06 provides the Criteria for Determining Cultural Heritage Value or Interest under the *Ontario Heritage Act*. This regulation was created to ensure a consistent approach to the designation of heritage properties under *Ontario Heritage Act*. All designations under the *Ontario Heritage Act* after 2006 must meet at least one of the criteria outlined in the regulation.

A property may be designated under Section 29 of the *Ontario Heritage Act* if it meets one or more of the following criteria for determining whether the property is of cultural heritage value or interest:

1. The property has design value or physical value because it,
  - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method;
  - ii. displays a high degree of craftsmanship or artistic merit;
  - iii. demonstrates a high degree of technical or scientific achievement.
2. The property has historical value or associative value because it,
  - i. has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community,
  - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture;
  - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
3. The property has contextual value because it,
  - i. is important in defining, maintaining or supporting the character of an area;
  - ii. is physically, functionally, visually, or historically linked to its surroundings, or
  - iii. is a landmark O. Reg. 9/06, s 1 (2)

## 2.4 Key Tasks

Following the process for the identification of above-ground cultural heritage resources outlined under the Ontario Heritage Act, which is administrated by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), and consultation with the OEB Environmental Guidelines, the following steps were taken:

- A review of the proposed preliminary routes overlaid on historical and topographic maps;
- A review of online municipal heritage registers including the Chatham-Kent Municipal Heritage Register (Updated 2021) and Leamington’s Register of Heritage Properties (Updated 2020);

- Consultation with the Municipality of Lakeshore (since a Municipal Heritage Register was not accessible online) to request an inventory of municipal heritage properties within and adjacent to the proposed routes;
- A review of online searchable databases including:
  - Ontario Heritage Trust Conservation Easements;
  - Ontario Heritage Trust's Places of Worship Inventory;
  - Ontario Heritage Trust's Provincial Plaque Program;
  - Ontario Heritage Trust's *Ontario Heritage Act* Register;
  - Ontario Historical Society's Ontario Heritage Directory and Map;
  - Ontario Genealogical Society's Cemetery Index;
  - Parks Canada's National Historic Sites;
  - Parks Canada's The Canadian Register of Historic Places on *Canada's Historic Places* website;
  - Parks Canada's Directory of Federal Heritage Designations;
  - Canadian Heritage River System website; and,
  - United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites.
- A field review to document the current character of the area and to identify potential BHRs and CHLs that may be still extant as pinpointed during the review of the historical and topographic maps, which were cross-referenced with Google Earth and Google Street View imagery.
- Completion of the OEB Environmental Guidelines Checklist (see **Appendix A**).
- Completion of a preliminary impact assessment to evaluate the impacts of the proposed undertaking on the above-ground cultural heritage resources identified in background research or during the background research.
- Recommendations on the next steps to ensure all BHRs and CHLs identified are properly mitigated.

This report was completed by a team of AECOM's Cultural Resource Management staff, including Jake Harper, MA (Heritage Historian), Tara Jenkins, MA, CAHP (Cultural Heritage Specialist, Lead), and Adria Grant, MA, CAHP (Associate Vice President, Impact Assessment and Permitting).

## 2.5 Determination of Cultural Heritage Interest and Value

Cultural heritage resources can be classified and defined as either built heritage resources or cultural heritage landscapes according to the following definitions provided within the Provincial Policy Statement (2020):

- **Built Heritage Resource (BHR)** – means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers.
- **Cultural Heritage Landscape (CHL)** – means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *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.

For the purpose of this CHAR, above-ground cultural heritage resources can be categorized as either:

- **Known BHR/CHL** – means built heritage resources or cultural heritage landscapes that have an existing level of municipal, provincial, or federal heritage protection, designation, or recognition.
- **Potential BHR/CHL** – means properties identified during the field review, which includes a building or structure that appears to be older than 40 years of age, that, informed by the OEB Environmental Guidelines Checklist and combined with professional judgement, has been determined in this study to have potential cultural heritage value or interest.

## 2.6 Stakeholder Consultation

As part of the consultation process for this report, AECOM consulted with staff at the Municipality of Lakeshore, the Ontario Heritage Trust, and the MHSTCI. The results of the consultation efforts are identified below in **Table 1**.

**Table 1: Agency Consultation**

Contact	Contact Information	Date	Comments
Krystal Kalbol, Director, Engineering and Infrastructure Services, Municipality of Lakeshore  Truper McBride, Chief Administrative Officer (CAO), Municipality of Lakeshore	kkalbol@lakeshore.ca  tmcbride@lakeshore.ca	December 15, 2021	Krystal Kalbol and Truper McBride were contacted about a Municipal Heritage Register for the Municipality of Lakeshore. Alternatively, if this was not available, the contact information for the Heritage Planner of the Municipality was also requested.  No response has been received at the time of the preparation of this CHAR.
Kevin DeMille, Ontario Heritage Trust, Natural Heritage Coordinator/Planner  Krystal Power, Ontario Heritage Trust, Natural Heritage Coordinator/Planner	Kevin.DeMille@heritagetrust.on.ca  Krystal.Power@heritagetrust.on.ca	December 15, 2021  December 16, 2021	Kevin DeMille was contacted to confirm that there are no properties of interest to the OHT adjacent to the Study Area.  Kevin DeMille replied and cc'd Krystal Power, indicating that they are now the primary contact for such inquiries moving forward.  No further response has been received at the time of the preparation of this CHAR.

Contact	Contact Information	Date	Comments
Karla Barboza, MHSTCI, Team Lead, Heritage	Karla.Barboza@ontario.ca	December 15, 2021	Karla Barboza was contacted to review and confirm if there are any known Provincial Heritage Properties, and/or Heritage Properties of Provincial Significance adjacent to the Study Area.
		December 31, 2021	Karla Barboza replied that no properties designated by the Minister, nor any provincial heritage properties, are within or adjacent to the Study Area.

### 3. Historical Context Overview

#### 3.1 Historical Background

This section provides a summary of the historic research and a description of the Study Area that may be affected by the Panhandle Regional Expansion Project. The preferred route for the Panhandle Loop is situated within the historical Townships of Dover and Tilbury East, in Kent County, now part of the Municipality of Chatham-Kent, and the Township of Tilbury West, in Essex County, now part of the Municipality of Lakeshore. The preferred route for Leamington Interconnect is situated within the historical Township of Mersea, in Essex County, now part of the Municipality of Leamington, and the Township of Rochester, in Essex County, now part of the Municipality of Lakeshore.

To understand the history of the Study Area, a review of both historical mapping and aerial photography were consulted to identify settlements, structures, and landscape features.

#### 3.2 Historical Context Overview

##### 3.2.1 Indigenous Land Use and Settlement

**Table 2** provides a general summary of the pre-contact Indigenous settlement in the vicinity of the Essex/Kent Counties area.<sup>1</sup>

<sup>1</sup> While many types of information can inform the precontact settlement of the counties, this summary table provides information drawn from archaeological research conducted in southern Ontario over the last century. As such, the terminology used in this review relates to archaeological terminology for the province rather than relating to specific historical events within the Study Area.



**Table 2: Cultural Chronology for Indigenous Settlement in Western Ontario**

Archaeological Period	Time Period	Characteristics
Early Paleo	9000-8400 BC	<ul style="list-style-type: none"> <li>• Fluted Points</li> <li>▪ Arctic tundra and spruce parkland, caribou hunters</li> </ul>
Late Paleo	8400-8000 BC	<ul style="list-style-type: none"> <li>• Holcombe, Hi-Lo and Lanceolate Points</li> <li>▪ Slight reduction in territory size</li> </ul>
Early Archaic	8000-6000 BC	<ul style="list-style-type: none"> <li>• Notched and Bifurcate base Points</li> <li>▪ Growing populations</li> </ul>
Middle Archaic	6000-2500 BC	<ul style="list-style-type: none"> <li>• Stemmed and Brewerton Points, Laurentian Development</li> <li>▪ Increasing regionalization</li> </ul>
Late Archaic	2000-1800 BC	<ul style="list-style-type: none"> <li>• Narrow Point</li> <li>▪ Environment similar to present</li> </ul>
	1800-1500 BC	<ul style="list-style-type: none"> <li>• Broad Point</li> <li>▪ Large lithic tools</li> </ul>
	1500-1100 BC	<ul style="list-style-type: none"> <li>• Small Point</li> <li>▪ Introduction of bow</li> </ul>
Terminal Archaic	1100-950 BC	<ul style="list-style-type: none"> <li>• Hind Points, Glacial Kame Complex</li> <li>▪ Earliest true cemeteries</li> </ul>
Early Woodland	950-400 BC	<ul style="list-style-type: none"> <li>• Meadowood Points</li> <li>▪ Introduction of pottery</li> </ul>
Middle Woodland	400 BC – AD 500	<ul style="list-style-type: none"> <li>• Dentate/Pseudo-scallop Ceramics</li> <li>▪ Increased sedentism</li> </ul>
	AD 550-900	<ul style="list-style-type: none"> <li>▪ Princess Point</li> <li>▪ Introduction of corn horticulture</li> </ul>
Late Woodland	AD 900-1300	<ul style="list-style-type: none"> <li>▪ Agricultural villages</li> </ul>
	AD 1300-1400	<ul style="list-style-type: none"> <li>▪ Increased longhouse sizes</li> </ul>
	AD 1400-1650	<ul style="list-style-type: none"> <li>▪ Warring nations and displacement</li> </ul>
Contact Period	AD 1600-1875	<ul style="list-style-type: none"> <li>▪ Early written records and treaties</li> </ul>
Historic	AD 1749-present	<ul style="list-style-type: none"> <li>▪ European settlement (French and English)</li> </ul>

### 3.2.2 Historical Land Use and Settlement

### 3.2.3 Essex County

In 1747, European settlement began on the Canadian side of the Detroit River on the land that would later become Essex County. Early settlers consisted primarily of French soldiers who became farmers, craftsmen, merchants, and fur traders (Essex County, 2019). Eventually in 1792, Sir John Graves Simcoe, the first Lieutenant-Governor of the new province of Upper Canada, divided the province into 19 counties. During the first session of the provincial government, Simcoe proclaimed Essex County as the 18th of the 19 counties that, along with Kent and Suffolk Counties, formed the Western District. The first communities that formed in Essex County—Amherstburg and Sandwich—were both established as Towns in 1796, when the British were forced to cede Detroit to the United States (Essex County, 2019). As time elapsed and the area was surveyed, Essex County came to comprise several townships, including Rochester, Mersea, and Tilbury West.

#### 3.2.3.1 Township of Rochester (now in the Municipality of Lakeshore)

In 1701, Antoine de la Mothe, Sieur de Cadillac, dispatched French soldiers from Fort Pontchartrain (now the City of Detroit) to explore the south shore of Lake St. Clair, which included the Township of Rochester. The group began their search in the Puce area and moved eastward towards the area described as Belle River, which became one of the oldest communities in the Township of Rochester. Indeed, the first European settler in the area was Jacques

Menard who occupied a homestead in Belle River by 1741. As early as 1806, there was an Inn in Belle River owned and operated by M. Labaline on the Stage Road, now Tecumseh Road: a significant transportation artery in the region (County of Essex, 1992).

The first survey of the lots fronting the major rivers in the Township of Rochester was conducted by Abraham Iredell between 1796 and 1798 (Clark, 2002). The early landscape consisted of densely forested areas, as well as extensive swamps and bogs (County of Essex, 1992). As alluded to above, Rochester Township was first settled by French immigrants from Detroit and Sandwich; however, further settlement occurred once Lieutenant-Colonel Mahlon Burwell completed his survey of Middle Road in 1823, which passed through the southern portion of Rochester Township. The remaining portions of the township were surveyed by 1824. Around this time, the lumber industry flourished, as vast expanses of forest were cut down and transported using water driven sawmills. As the land was cleared, a nascent agricultural industry began to take shape, and the area remains one of the most fertile areas for farming in southwestern Ontario (County of Essex, 1992).

Following the 1833 Slavery Abolition Act that abolished slavery in the British Empire, Rochester Township became one of several end points for the Underground Railroad (County of Essex, 1992). Indeed, the Refugee Home Society purchased scattered lots in and around Maidstone, Puce, and Belle River in 1851, which gave refugees escaping slavery a place to settle. Along with the significant establishment of black communities in the area, the growth of the township's population was also spurred when a line of the Great Western Railway was introduced in 1854, which connected Detroit with the east (County of Essex, 1992). Later in 1872, a line of the Canada Southern Railway was also laid through Rochester Township near the community of Comber (County of Essex, 2019). Ultimately, the Municipality of Lakeshore was incorporated in 1999 through the amalgamation of the Town of Belle River with the former Townships of Rochester, Maidstone, Tilbury North, and Tilbury West (Municipality of Lakeshore, 2021). Today, the former Township of Rochester remains predominantly rural thanks to the fertile agricultural lands surrounding the south shores of Lake St. Clair.

### **3.2.3.2 Township of Mersea (now Municipality of Leamington)**

Similar to Rochester Township, Mersea Township was originally surveyed in 1792 by Mahlon Burwell, who was commissioned by Colonel Thomas Talbot. Mersea Township was named after an island in a bay off the North Sea in Essex County, England (Municipality of Leamington, 2020). The earliest pioneers to Mersea Township settled along The Talbot Road, which remained the core settlement hub in the area for years to come (Belden, 1880-81). Eventually in 1835, three pioneers named Charles Stewart, Phillip Fox, and Thomas Whittle established a settlement on a ridge surrounded by dense forest along the Mersea-Gosfield Townline (Municipality of Leamington, 2020). Around this time, another settler named Alex Wilkinson built a farm on both sides of Mersea Sideroad (present-day Erie Street). In time, the first tavern was opened in the fledgling community, and grist and sawmills were also erected along Hillman Creek (Municipality of Leamington, 2020). In 1850, the first municipal council was elected for Mersea Township, and they constructed a brick town hall to house public meetings (Belden 1880-81; Municipality of Leamington, 2020). The most notable settlement in the township was initially known as "Wilkinson's Corners" though was eventually named "Leamington" in 1854 after a post office was established in the community (Municipality of Leamington, 2020).

By 1858, the population of Leamington had increased to a modest 75 denizens, though significant developments in the local lumber industry soon brought improvements to both transportation and infrastructure, including the establishment of a wharf—Scott's Dock—in 1869. Two other docks were to follow, and these were pivotal since they facilitated shipments of tobacco, lumber, and agricultural products. By 1874, Leamington's development had become so extensive that it was incorporated as a village, then as a town in 1890 (Municipality of Leamington, 2020). Ultimately, the Town of Leamington amalgamated with Mersea Township to form the Municipality of Leamington in 1999 (Municipality of Leamington, 2020). Today, Leamington is known for containing the highest concentration of greenhouses in North America and is renowned for its fertile agricultural lands (Municipality of Leamington, 2020).

### **3.2.3.3 Township of Tilbury West (now in the Municipality of Lakeshore)**

The Township of Tilbury West is located at the northeastern extent of Essex County and is bordered to the east by Tilbury East in the former County of Kent, by Mersea Township to the south, and Rochester Township to the west (Belden, 1880-81). Of note, the section of Middle Road that extends through Tilbury West was settled later than the surrounding townships to the east and west, since road remained uncleared through Tilbury West until after 1840 (Belden, 1880-81). The first notable village to be settled in the township was Comber, which was named by an early pioneer after his native shire in Scotland with the opening of its post office in 1843 (Belden, 1880-81). Over time, the village of Henderson also began to develop, which later became known as Tilbury (Belden, 1881). Its growth was fueled by the introduction of a line of the Canada Southern Railway in 1872 (Welch and Payne, 2012). By 1887, it was incorporated as the village of Tilbury Centre—named after a town in England but also since the village was located at the nexus of the townships of Tilbury West, Tilbury East, and Tilbury North (Welch and Payne, 2012). Ultimately, the establishment of the Municipality of Lakeshore in 1999 resulted in the incorporation of Tilbury West, among other townships in Essex County (Municipality of Lakeshore, 2021).

### **3.2.4 Kent County**

John Graves Simcoe created Kent County in 1792, named in honour of the County of Kent in South East England. Simcoe became the first Governor of the new Province of Upper Canada in 1791 and promoted European immigration into Kent County along the Thames River. Within the fledgling county, Chatham was founded in 1794, making it one of the oldest communities in western Ontario. It was originally planned to be a military settlement; however, these plans did not come to fruition, and Chatham's growth was slow until the 1830s (County of Kent, 1948). Early settlement in this area, like so many others, was greatly influenced by Colonel Thomas Talbot. For instance, Talbot allotted the settlement locations and supervised the tasks settlers were required to uphold, such as clearing land and constructing a road fronting their property (Belden, 1880-81). Logging emerged as the first industry in Kent County, and once the land was cleared, Chatham became a marketing centre for the fertile agricultural lands in the county. Eventually, Chatham was elevated to town status in 1855 but only became responsible for its own management in 1879, when it formally separated from Kent County (County of Kent, 1948). From there, Chatham was incorporated as a city in 1895, but over a century later in 1999, the City of Chatham amalgamated once more with Kent County, along with several other former municipalities, to form the Municipality of Chatham-Kent (Francis, 2012).

#### **3.2.4.1 Township of Tilbury East (now in the Municipality of Chatham-Kent)**

Tilbury East is situated south of the Thames River and is bordered to the west by Tilbury West, in Essex County. Initially, Tilbury East was slow to develop due to the quantity of low lying and wetlands that were unfit for agriculture, especially in the township's northern extent (Belden, 1880-81). Early communities in the township were established along Middle Road, including Valetta and Edgeworth, which were predominantly settled by Scottish farmers (Belden, 1880-81). Aside from the village of Tilbury, whose growth was spurred by its location as a railway hub, the Township of Tilbury East contained few sizeable communities and its growth remained static over time. Ultimately, Tilbury East was among the townships incorporated to form the Municipality of Chatham-Kent in 1999 (Francis, 2012). Today, the former Township of Tilbury East remains predominantly agrarian and has not experienced significant industrial development over time.

#### **3.2.4.2 Township of Dover (now in the Municipality of Chatham-Kent)**

The Township of Dover is located on the eastern bank of Lake St. Clair and its southern border is demarcated by the Thames River (Belden, 1880-81). As a result of the surrounding bodies of water, the Township of Dover was initially characterized by its low-lying swamp lands; however, the elevated areas of the township where drainage was feasible were fertile and conducive to agriculture (Belden, 1880-81). For instance, the community of Pain Court, which developed along a tributary of the Thames River known as Pain Court Creek, came to be known for

exceptional barley and cereal crops (Belden, 1880-81). Like the farmlands surrounding the Holland Marsh in King Township, the swampy conditions in the Township of Dover ended up being beneficial for nearby farms where the land was arable. However, flooding and consequently the loss of crops became a persistent problem for early pioneers, which is why no significant population centres emerged in the township. The first European settlers to the township were United Empire Loyalists who hailed from Pennsylvania, though Pain Court was later settled by French denizens from 1815 to 1820 (Belden, 1880-81). The name “Pain Court” was chosen to convey the poverty of its early residents, who were often short on essential supplies like bread. Ultimately, Dover was among the townships incorporated to form the Municipality of Chatham-Kent in 1999 (Francis, 2012). Notably, the Township of Dover contains the St. Clair National Wildlife Area: a marsh habitat that was recognized as a Wetland of International Significance under the Ramsar Convention (Government of Canada, 2021).

### 3.2.5 The Thames River Heritage River Designation

The Thames River was formally designated a Canadian Heritage River on August 14, 2000. The designation was announced by the Former Minister of Canadian Heritage, the Honourable Sheila Copps and Ontario’s Former Minister of Natural Resources, the Honourable John Snobelen. The Thames River was recognized as a heritage river for its outstanding contributions to the country’s cultural heritage, natural heritage, and recreational opportunities. The broad goal of managing the Thames as a Canadian Heritage river is: “To increase the appreciation, enjoyment and stewardship of the natural, and cultural heritage and recreational opportunities of the Thames River and its watershed through community cooperation and involvement” (Quinlan 2013:2). The preferred route for the Panhandle Loop currently crosses the Thames River.

### 3.2.6 Review of Historical Maps

The 1880-1881 *Illustrated Historical Atlas of the Counties of Essex and Kent* was reviewed to determine the potential for the presence of nineteenth century BHRs or CHLs within or adjacent to the Study Area (**Figure 3**). Topographic maps were also consulted, including the 1910 National Topographic System (NTS) map of Romney (**Figure 4-2**), the 1913 NTS map of Chatham (**Figure 4-3**), and the 1913 NTS map of Essex (**Figure 4-1**). The NTS maps show additional structures and reveal whether they were built of brick or wood. Modern parcel boundaries were also overlaid onto the topographic maps to illustrate property limits in relation to the Study Area. The map review includes properties that are intersected by the preliminary preferred routes as well as properties adjacent to these routes.

It should be noted that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference regarding the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. It should also be noted that the use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historical mapping. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

Details of 19<sup>th</sup> century property owners and historical features along the preliminary preferred routes for both the Panhandle Loop and the Leamington Interconnect are listed below in **Table 3** and **Table 4**, respectively. These tables are based on a review of the 1880-1881 *Illustrated Historical Atlas of the Counties of Essex and Kent*, which depicts property ownership and structures (**Figures 3-1, 3-2, and 3-3**).

### 3.2.7 Panhandle Loop- Historical Map Review

In 1880-1881, the Panhandle Loop transected Lots 2-5, Concession 3, of the Township of Dover and Lots 8, 14, 24, 26, SMR in the Township of Tilbury East, and Lot 20, Concession 9, of the Township of Tilbury West. The historical features documented in **Table 3** include parcels of land that are adjacent to and contain the preliminary preferred route for the Panhandle Loop. The proposed route of the Panhandle Loop directly overlaps with the illustration of the schoolhouse on the 1880-1881 map (**Figure 3-2**). The farmhouse in Lot 26, SMR is located on Gray Line, at the south end of the lot and not in the path of the Panhandle Loop. The Panhandle Loop also intersects Lot 20, SMR, in the Township of Tilbury West. A structure is illustrated on the lot; however, it is located at the south end of the lot on Desimpel Road, a significant distance from the proposed preliminary route (**Figure 3-2**). The remaining structures shown on the 1880-1881 map were depicted on parcels of land east of Davidson Road, where the proposed route is contained with the right-of-way.

**Table 3: Nineteenth Century Property Owners and Historical Features – Panhandle Loop**

H. Belden & Co., <i>Illustrated Historical Atlas of the Counties of Essex &amp; Kent, 1880-1881</i>			
Lot(s)	Concession	Property Owner(s)	Historical Feature(s)
<b>Township of Dover (West), Kent County</b>			
2-5	3	John Northwood	None illustrated
<b>Township of Tilbury East, Kent County</b>			
8	2	None illustrated	Great Western Railway
14	5	None illustrated	Schoolhouse
24	North of Middle Road (NMR)	And. [Andrew] Wilson (50 acres)	Farmhouse
24	South of Middle Road (SMR)	R.H. Waddell	Farmhouse
24	South of Middle Road (SMR)	Hy [Henry] Magee	Farmhouse
26	South of Middle Road (SMR)	Arnold Wilson	Farmhouse
<b>Township of Tilbury West, Kent County</b>			
20	South of Middle Road (SMR)	J.B. Lupuis (40 acres)	None illustrated
20	South of Middle Road (SMR)	Antoine Thibert	Farmhouse

The 1913 NTS map of Chatham does not specifically depict the schoolhouse as illustrated on the 1880-1881 map in Lot 15, Concession 5, in the Township of Tilbury East (**Figure 4-3**). Instead, the property includes a brick structure on Wheeler Line, as well as a wood structure located where Wheeler Line once extended to connect with Coutts Line prior to the construction of Highway 401. Overall, this topographic map reveals that the Panhandle Loop intersects several parcels of land that contained a number of wood frame and brick structures; however, many

of these are not close to the proposed pipeline route. Most structures in proximity to the Panhandle Loop route are depicted along the Coutts, Pollard, and Middle Lines.

Also noteworthy is that the route for the Panhandle Loop crosses a parcel of land containing a pioneer cemetery as illustrated on the 1910 NTS map of Romney where it is depicted in an agricultural field situated between Middle Road (now County Road 46) and Gray Line (**Figure 4-2**). The Panhandle Loop is just north of the cemetery. There are also three wood frame structures illustrated on the north side of the preliminary preferred route.

In summary, a review of the historical maps reveal that the Panhandle Loop Study Area and surrounding lands were within a rural context in the late 19<sup>th</sup> and early 20<sup>th</sup> century, as the landscape included farmhouses and active agricultural fields. Based on current aerial photograph (**Figure 2**), the lands surrounding the Panhandle Loop Study Area have not undergone significant development. Today, the Study Area remains a rural context consisting of agricultural fields and farm complexes.

### 3.2.8 Leamington Interconnect- Historical Map Review

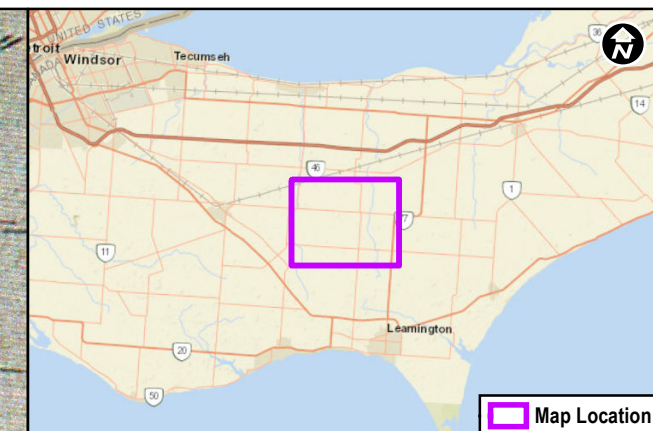
In 1880-1881, the Leamington Interconnect was located within the rights-of-way of the concession roads in the Township of Mersea, in Essex County, and the Township of Rochester, in Essex County. The 1880-1881 map only illustrates two historic structures in parcels that are adjacent to Leamington Interconnect (**Figure 3-1; Table 4**).

**Table 4: Nineteenth Century Property Owners and Historical Features – Leamington Interconnect**

H. Belden & Co., <i>Illustrated Historical Atlas of the Counties of Essex &amp; Kent, 1880-1881</i>			
Lot(s)	Concession	Property Owner(s)	Historical Feature(s)
<b>Township of Rochester, Essex County</b>			
30	1	George Jariett	House, Belle River
<b>Township of Mersea, Essex County</b>			
5	9	D.W. Reid	Farmhouse

The 1913 NTS map of Essex shows that Leamington Interconnect is adjacent to three brick structures: two depicted along Mersea Road 10, and one along County Road 31. A cemetery is also depicted just north of the intersection of County Road 27 and Essex County Road 8, although it is a considerable distance northwest of the end of the preliminary preferred route for the Leamington Interconnect.

In summary, a review of the historical maps reveals that the Leamington Interconnect and surrounding lands were within a rural context in the late nineteenth century and early twentieth century, as the landscape included farmhouses and active agricultural fields. Since the early twentieth century the lands surrounding the Study Area have not undergone significant development. Today, as shown in the current aerial photograph (**Figure 2**), the Study Area and adjacent lands remain predominantly rural and consist of agricultural fields and farm complexes.

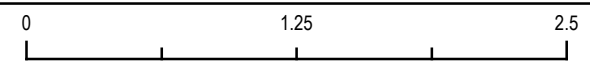


**Legend**

- Leamington Interconnect – Preliminary Preferred Route

**Panhandle Regional Expansion Project**

H. Belden & Co. 1880-1881, Illustrated Historical Atlas of the Counties of Essex and Kent



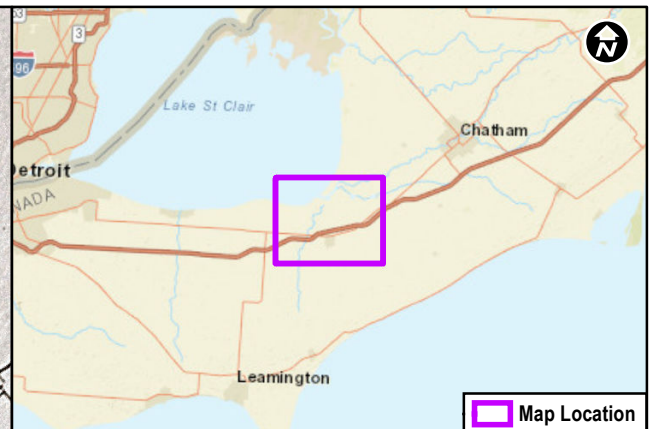
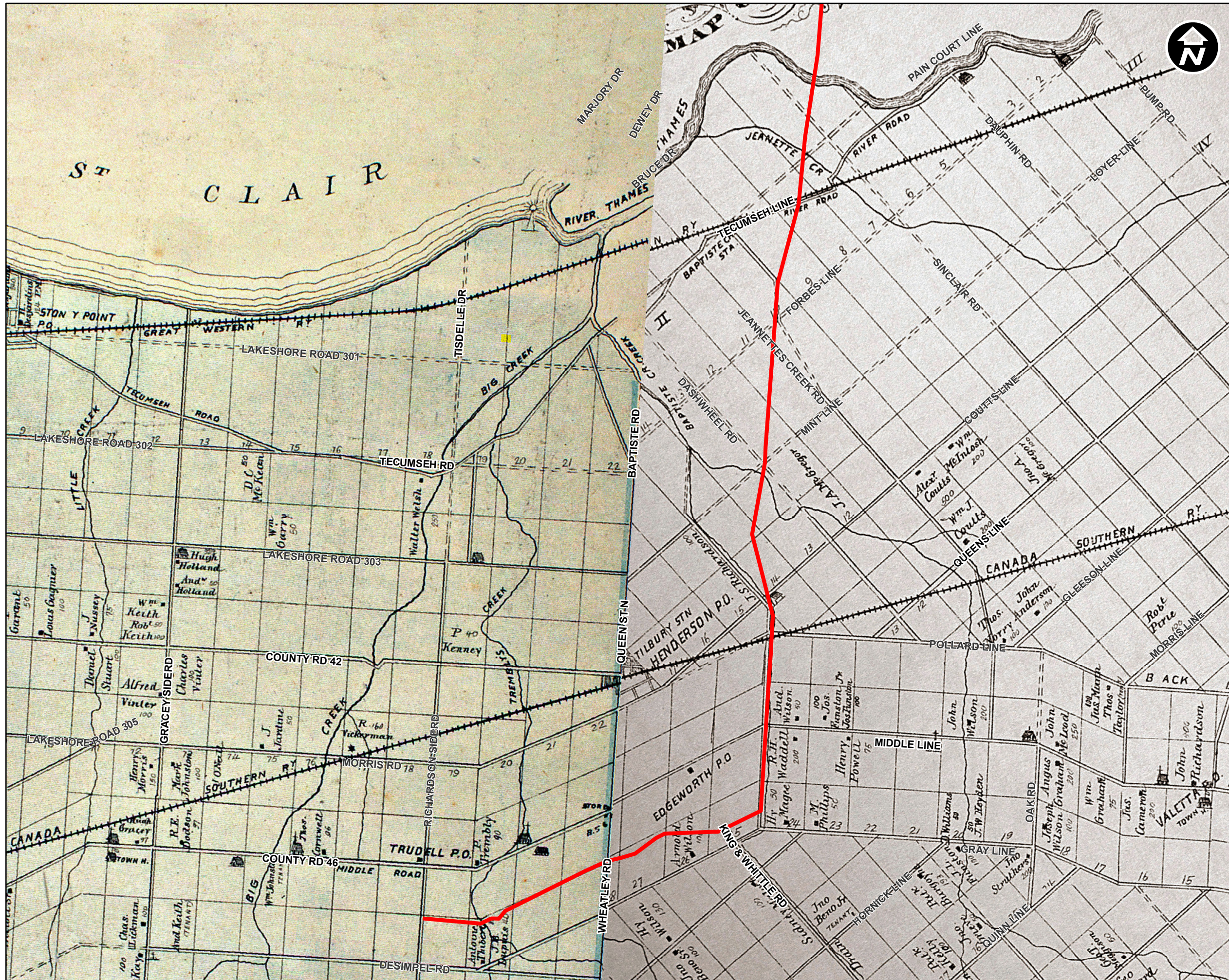
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<b>AECOM</b>	<b>Figure 3-1</b>
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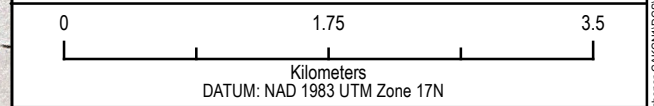


**Legend**

- Panhandle Loop – Preliminary Preferred Route

**Panhandle Regional Expansion Project**

H. Belden & Co. 1880-1881, Illustrated Historical Atlas of the Counties of Essex and Kent



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<b>AECOM</b>	<b>Figure 3-2</b>
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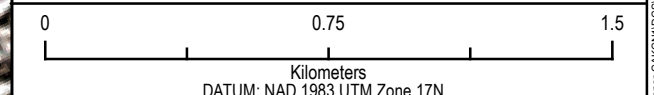


**Legend**

— Panhandle Loop – Preliminary Preferred Route

Panhandle Regional Expansion Project

H. Belden & Co. 1880-1881, Illustrated Historical Atlas of the Counties of Essex and Kent

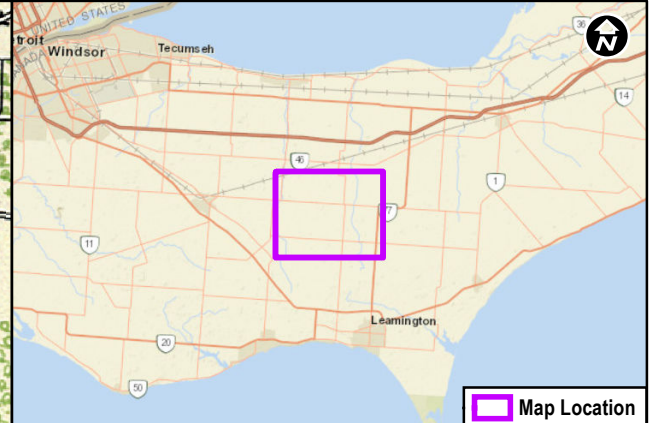
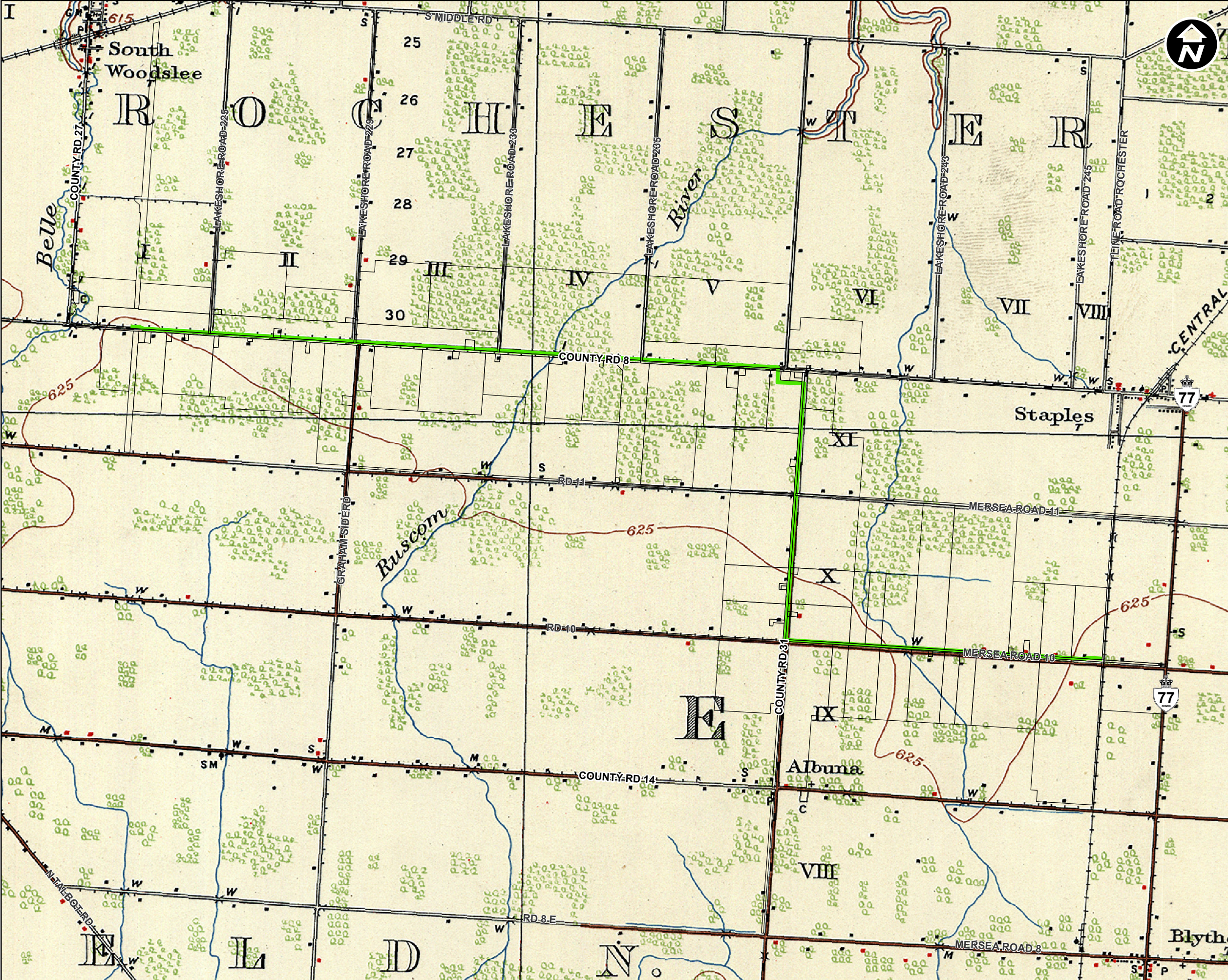


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**AECOM** Figure 3-3

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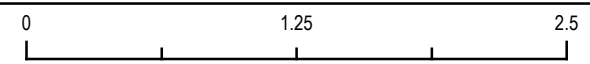
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- Legend**
- Leamington Interconnect – Preliminary Preferred Route
  - Parcel Boundary

Panhandle Regional Expansion Project

1913 Topographic Map  
Essex, Ontario



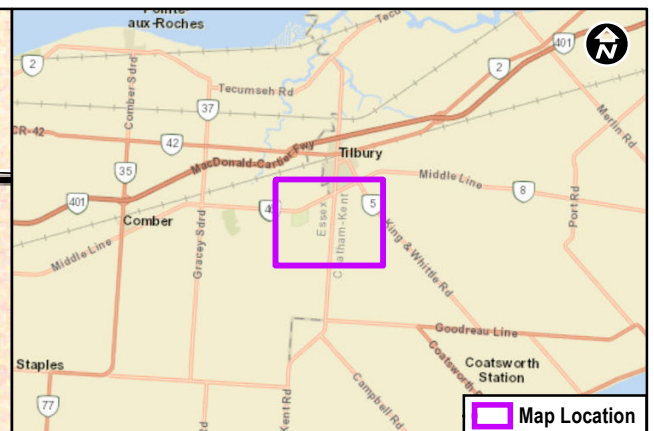
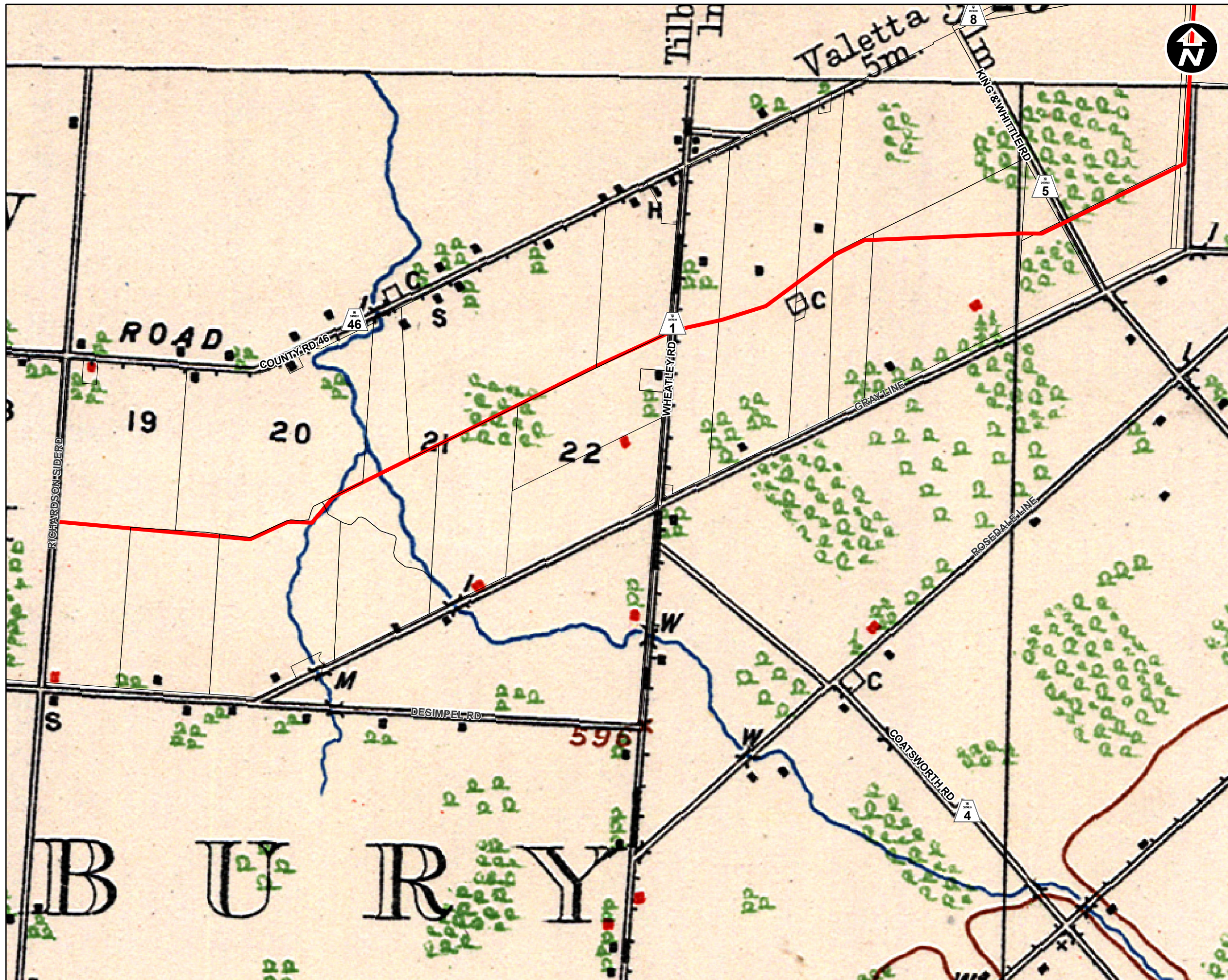
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<b>AECOM</b>	<b>Figure 4-1</b>
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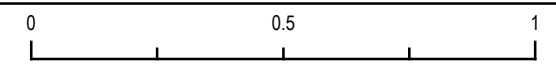


**Legend**

- Panhandle Loop – Preliminary Preferred Route
- Parcel Boundary

**Panhandle Regional Expansion Project**

1910 Topographic Map  
Romney, Ontario



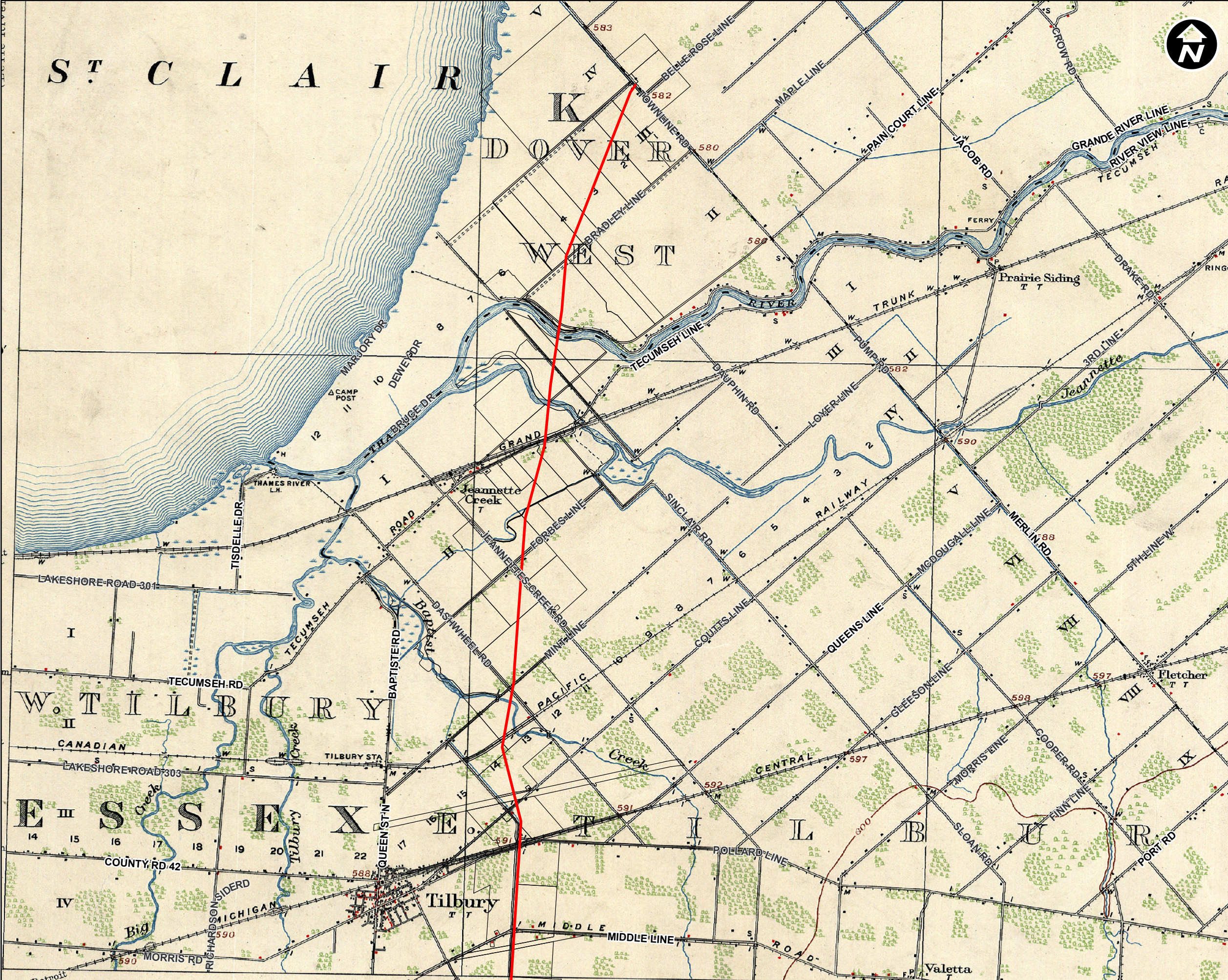
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<b>AECOM</b>	<b>Figure 4-2</b>
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Map location: \\na.aecom.com\BAM\AECOM\Koblenzer-COKON\GIS\Projects\60665521\_Embargo\_Panhandle\Design\01\_Report\CH Memo\MXD\_60665521\_Fig-2\_HistoricPanhandle.mxd  
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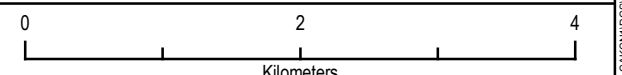
Map Location

**Legend**

- Panhandle Loop – Preliminary Preferred Route
- Parcel Boundary

**Panhandle Regional Expansion Project**

1913 Topographic Map  
Chatham, Ontario



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P#:60665521	V#:	

**AECOM** **Figure 4-3**

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Map Location: \\na.aecocom.com\AMER\KBR\Brenner-CARON\GIS\Projects\60665521\_Embargo\_Panhandle\Design\01\_Reports\CH Memo\MXD\_60665521\_LFig-3\_HistoricPanhandle.mxd  
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## 4. Identification of Cultural Heritage Resources

### 4.1 Study Area Context – Existing Conditions

A field review was conducted from publicly accessible land on February 4, 2022 by Jake Harper, Heritage Historian, to record the existing conditions of the Study Area. The purpose of the field review was to document the current character of the area and to identify potential BHRs and CHLs that may be still extant as pinpointed during the review of the historical maps. Where identified, properties were photographically documented from the public right-of-way. The existing conditions with select photographs are summarized in **Section 4.1.1** below (**Photographs 1-15**). Photographic locations and orientations have been included on **Figure 5**. A summary of potential heritage resources is presented in **Section 4.2**.

**Panhandle Loop -Preferred Route:** The preferred route for this proposed pipeline follows an existing pipeline. The field review was conducted from the starting point of this route at the Dover Transmission Station, located in the Municipality of Chatham-Kent. From there, the route crosses south through agricultural fields though eventually runs parallel to Davidson Road from south of Highway 401 to north of Gray Line. The route does not extend to the end of Davidson Road, but instead crosses west through further agricultural fields in between Gray and Middle Lines, until the route's end at Richardson Side Road, situated in the Municipality of Lakeshore. The field review was limited to publicly accessible land, therefore, when the route crosses agricultural fields the aim was to follow roads that the preferred route intersects, where winter access was feasible. The context of the Panhandle Loop route is predominantly rural, though south of where it crosses Highway 401 the outskirts of Tilbury are visible.

**Leamington Interconnect – Preferred Route:** The preferred route for this proposed pipeline is adjacent to or within an existing road allowance. The field review was conducted from the starting point of this route along Mersea Road 10. This area contains several farm complexes and commercial greenhouses, which dominate the viewshed. Following the route, the field review continued west and parallel to Mersea Road 10, then north along Albuna Townline until where the route intersects with Essex County Road 8. The proposed pipeline crosses to the north side of Essex County Road 8 and continues west in the road allowance to just beyond where two power transmission lines intersect, which was the ending point of the field review.

#### 4.1.1 Panhandle Loop- Existing Conditions

The preferred route for the Panhandle Loop extends from the Dover Transmission Station, located in the Municipality of Chatham-Kent, to Richardson Side Road, situated in the Municipality of Lakeshore. It crosses through agricultural fields and under multiple watercourses, Townline Road/Drain on south side of Townline Road, as well as Highway 401.

The lands within and adjacent to the Panhandle Loop is within a rural context consisting of active agricultural fields, rural residential properties, and farm complexes, which illustrates that there has been little change in context since the late nineteenth century. However, the 19<sup>th</sup> century schoolhouse is no longer extant, and its former location is now an agricultural field. **Photograph 1** shows the Dover Transmission Station, which was the starting point for the field review of the preferred route for the Panhandle Loop. **Photographs 2-4** depict this two-and-a-half storey brick structure at 23696 Dashwheel Road, which despite being located approximately 300 metres east of the preferred route for the Panhandle Loop, is within the same parcel of land as the Panhandle Loop. The brick structure at 23696 Dashwheel Road, built in 1905, is the only remaining historical structure from those illustrated on the early 20<sup>th</sup> century maps within the same parcel of land as the Study Area.

Continuing along the preferred route for the Panhandle Loop, **Photograph 5** shows Davidson Road south of Highway 401, where the Panhandle Loop runs parallel to Davidson Road in the road allowance. **Photograph 6**

highlights where the existing pipeline (that the preferred route of the Panhandle Loop is proposed to follow) crosses Davidson Road into an agricultural field. From there, the preferred route for the Panhandle Loop continues through agricultural land approximately 100 metres north of Malott Cemetery—a pioneer cemetery within an agricultural field inaccessible by road. The cemetery is licensed to the Municipality of Chatham-Kent by the Bereavement Authority of Ontario. **Photographs 7-8** show the sign for Malott Cemetery at 3049 Gray Line, along the roadside and approximately 500 metres south of the cemetery. **Photograph 9** shows Malott Cemetery in its current, snow-covered state, although beneath the snow is a concrete pad embedded with gravestones (see **Table 5** for an image). The legal cemetery limits comprise a wider area around the concrete pad, and have been marked by surveyor's stakes, one of which visible in **Photograph 10**. It should be noted that the preferred route for the Panhandle Loop does not encroach into the legal cemetery limits but extends through the surrounding agricultural parcel of land.

A wood frame structure shown on the 1910 NTS map of Romney appears to have been present at 19800 Desimpel Road based on Google Earth imagery until ca. 2014, after which it was demolished (**Figure 4-2**). **Photographs 11-12** corroborate this and show that of the previously extant farmstead structures, only a barn remains on the property. While 19800 Desimpel Road is situated within the same parcel of land as the preferred route for the Panhandle Loop, the former structure was situated over 600 metres south of the proposed route.

Lastly, **Photograph 13** shows the existing pipeline at the end of the preferred route for the Panhandle Loop along Richardson Side Road.

#### 4.1.2 Leamington Interconnect- Existing Conditions

The preferred route for the Leamington Interconnect is within the road allowance and extends across the Municipality of Leamington, Town of Kingsville, and the Municipality of Lakeshore. The route runs west and parallel to Mersea Road 10, then north alongside Albuna Townline until where it intersects with Essex County Road 8. From there, the proposed pipeline crosses to the north side of Essex County Road 8 and continues west adjacent to or within the road allowance to just beyond where two power transmission lines intersect.

**Photographs 14-15** depict Mersea Road 10 looking east and west, where the preferred route for the Leamington Interconnect is contained within the road allowance. **Photographs 16-17** show Essex County Road 8, including the existing natural gas pipeline and the end of the preferred route for the Leamington Interconnect. None of the wood frame or brick structures illustrated on the historical maps along the Leamington Interconnect route remain extant. The South Woodslee United Church Cemetery, a cemetery identified on the 1913 NTS map of Essex, is located just north of the intersection of Belle River Road (County Road 27) and Essex County Road 8 in the Municipality of Lakeshore (**Figure 4-1**). This active cemetery is situated within the same historical lot and concession (Lot 30, Concession 1) as part of the preferred route for the Leamington Interconnect. However, the legal cemetery limits are situated over 500 metres northwest of the preferred route for the Leamington Interconnect.



**Photograph 1:**

Start of the Panhandle Loop at the Dover Transmission Station located on Town Line Road (AECOM 2022)



**Photograph 2:**

23696 Dashwheel Road (AECOM 2022)



**Photograph 3:**  
23696 Dashwheel Road showing brick structure and one-storey addition (AECOM 2022)



**Photograph 4:**  
Close-up of 23696 Dashwheel Road showing brick voussoirs and circle details (AECOM 2022)





**Photograph 5:**

View of Davidson Road south of Highway 401 where the Panhandle Loop runs parallel in the road allowance (AECOM 2022)



**Photograph 6:**

View of where existing pipeline (that the preferred route of the Panhandle Loop is proposed to follow) crosses Davidson Road into agricultural field (AECOM 2022)



**Photograph 7:**  
Malott Cemetery sign at 3049 Gray Line (AECOM 2022)



**Photograph 8:**  
Chatham-Kent municipal notice affixed to the post of the cemetery sign (AECOM 2022)



**Photograph 9:**

View of Malott Cemetery with the flattened gravestones enclosed in concrete, covered by snow (AECOM 2022)



**Photograph 10:**

View of stake denoting the legal cemetery limits of Malott Cemetery (AECOM 2022)



**Photograph 11:**  
19800 Desimpel Road showing that previously extant structures are now no longer present except for a barn  
(AECOM 2022)



**Photograph 12:**  
Close-up of remaining barn at 19800 Desimpel Road (AECOM 2022)



**Photograph 13:**  
View of existing pipeline at the end of the proposed route for the Panhandle Loop, Richardson Side Road (AECOM 2022)



**Photograph 14:**  
Mersea Road 10 looking east, with the proposed route for the Leamington Interconnect adjacent to or within the road allowance (AECOM 2022)



**Photograph 15:**

Mersea Road 10 looking west, with the proposed route for the Leamington Interconnect adjacent to or within the road allowance (AECOM 2022)



**Photograph 16:**

Essex County Road 8 looking east, with the proposed route for the Leamington Interconnect adjacent to or within the road allowance and existing pipeline marker visible (AECOM 2022)



**Photograph 17:**

View of existing pipeline at the end of the proposed route for the Leamington Interconnect, Essex County Road 8 (AECOM 2022)



## 4.2 Identified Built Heritage Resources and Cultural Heritage Landscapes

Based the field review, resources representing three of the indicators of Cultural Heritage Value or Interest (CHVI) according to Section 4.3.4 of the OEB Environmental Guidelines were identified (**Appendix A**). Therefore, three resources with cultural heritage value or interest were identified adjacent to Panhandle Loop: one potential BHR and two potential CHLs:

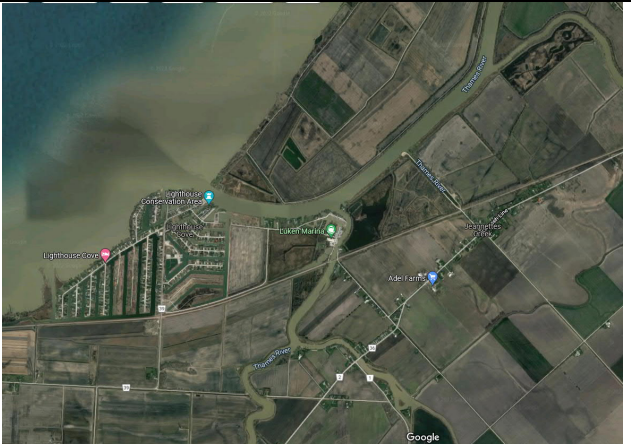
- BHR 1: 23696 Dashwheel Road, a farmhouse
- CHL 1: Malott Cemetery, maintained by the Municipality of Chatham-Kent (3049 Gray Line)
- CHL 2: Thames River, Canadian Heritage River

**Table 5** provides a brief description of BHR 1, CHL 1, and CHL 2 and includes a photograph.

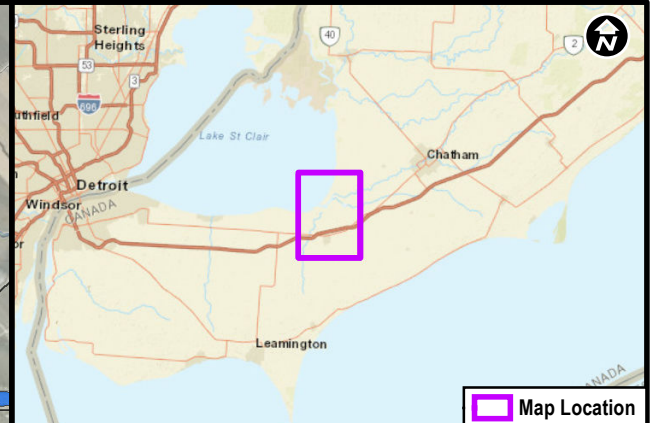
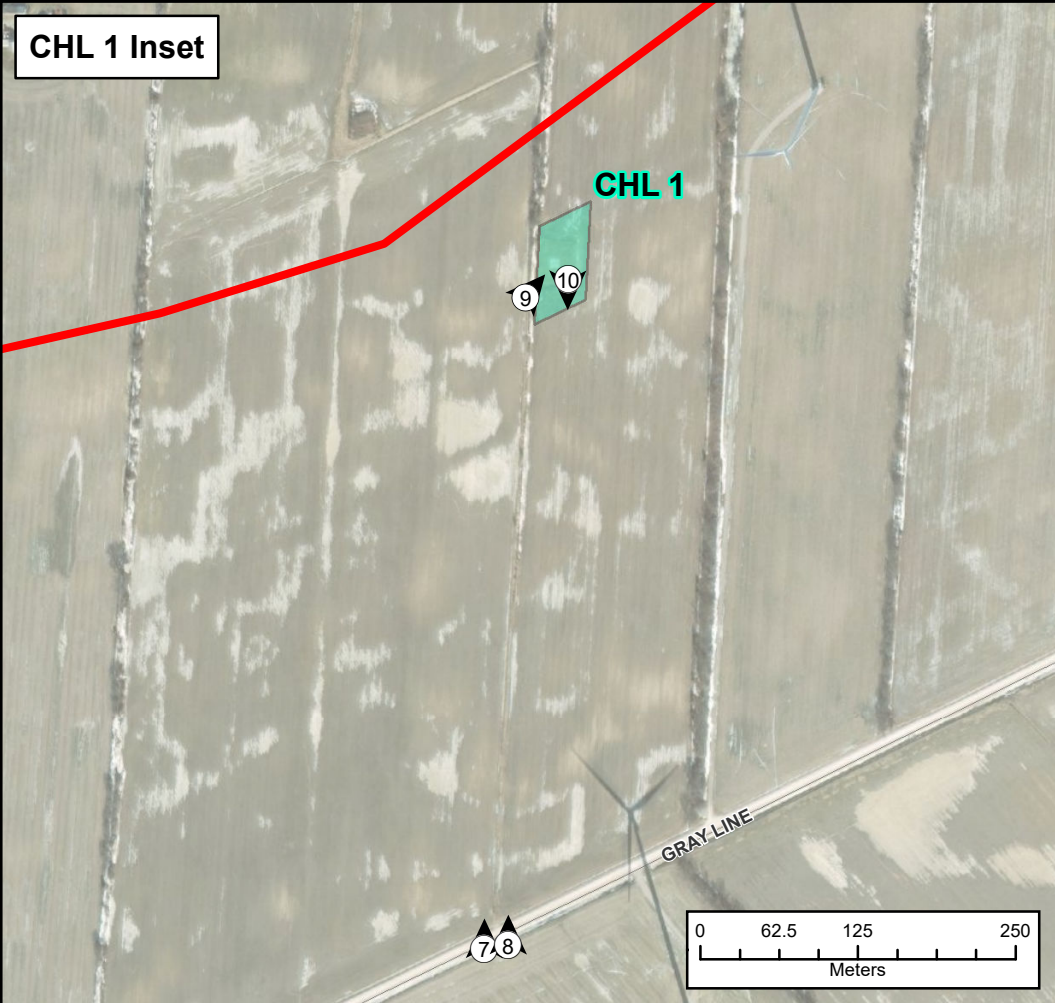
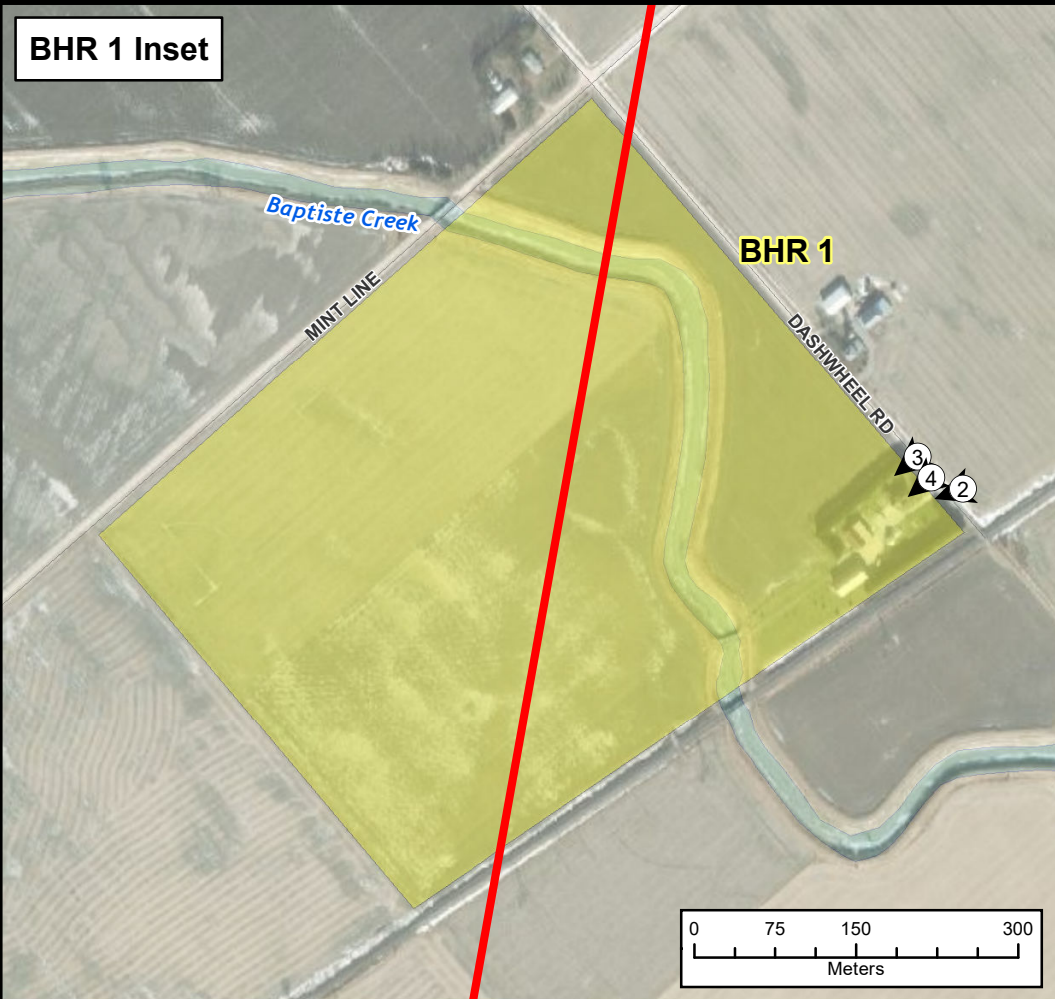
**Table 5: Summary of Built Heritage Resources in Proximity to the Study Area**

Feature IDs	Location/Address	Resource Type/Name	Heritage Recognition	Description	Photograph
BHR 1	23696 Dashwheel Road	Residential	None	<p><b>Historical Value:</b>                      The structure within BHR 1 was constructed in 1905 based on the date stone located in between the two second-storey windows on the structure.</p> <p><b>Design/Physical Value:</b>                      The structure within BHR 1 is a two-and-a-half storey brick residence built on a parged concrete foundation with an L-shaped plan and a gabled roof. It features segmentally arched windows with brick voussoirs, concrete sills, and a decorative brick oculus in the apex of the gables. There is a date stone below the brick oculus with a construction date of 1905.</p> <p><b>Contextual Value:</b>                      The property is in a rural context that remains relatively unchanged since the 19<sup>th</sup> century.</p>	 <p>(AECOM, 2022)</p>
CHL 1	3049 Gray Line	Malott Cemetery	Unknown	<p><b>Historical Description:</b>                      Malott Cemetery is a pioneer cemetery that was likely discovered when grave markers were unearthed in the surrounding agricultural field. The inscriptions on the gravestones contained within Malott cemetery date from the late 19<sup>th</sup> to early 20<sup>th</sup> century. The cemetery is depicted on a 1910 topographic map of Romney.</p> <p><b>Design and Physical Description:</b>                      The cemetery is located approximately 500 metres north of Gray Line in an agricultural field with no road access. It features several recovered gravestones enclosed in a concrete pad. The legal cemetery limits comprise a wider area surrounding the concrete pad and are marked by surveyor's stakes.</p> <p><b>Contextual Description:</b>                      The cemetery is in an agrarian context within an agricultural field.</p>	 <p>View of Malott Cemetery (Findagrave.com, 2017)</p>



Feature IDs	Location/Address	Resource Type/Name	Heritage Recognition	Description	Photograph
CHL 2	Thames River	Watercourse	Canadian Heritage River	<p><b>Historical Value:</b>                      Includes more than 11,000 years of continuous occupancy by Canada's Indigenous Peoples and a rich history of European exploration and settlement.                      - Played an important role in the War of 1812 where the Shawnee Chief Tecumseh died at the Battle of Moraviantown. A peace treaty later defined the Canadian-American border in what is now southwestern Ontario.                      - Was the terminus for the Underground Railway for fugitive American slaves prior to the American Civil War.                      - Recognized as the birthplace for Canadian agriculture, it remains the agricultural heartland of eastern Canada to this day.</p> <p><b>Contextual Value:</b>                      - The Thames rises at three distinct points near Mitchell (North Thames), Hickson (Middle Thames) and Tavistock (South Thames). The Middle and South Thames join east of London and the North and South branches meet at the Forks in London, the city's most important historical landmark. From there, the river flows southwest before it empties into Lake St. Clair at Lighthouse Cove.                      - The river corridor remains largely unchanged and appears much as it did 300 years ago.                      (<a href="https://chrs.ca/en/rivers/thames-river">https://chrs.ca/en/rivers/thames-river</a>)</p>	 <p>Google Satellite view of the Thames River, 2021</p>

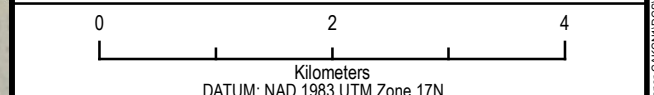




- ### Legend
- Photo Location and Direction
  - Panhandle Loop – Preliminary Preferred Route
  - Built Heritage Resource
  - Cultural Heritage Landscape
  - Canadian Heritage River
  - Municipal Boundary

Panhandle Regional Expansion Project

Cultural Heritage Resources



February 2022	1:65,000 *when printed 11"x17"	Source: MNRF 2020 Image: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
P#:60665521	V#:	Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT

<b>AECOM</b>	<b>Figure 5-2</b>
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## 5. Proposed Undertaking and Impacts

### 5.1 Description of Undertaking

The pipeline construction process includes various activities as described below:

1. Site Preparation
  - a. Survey and staking crews will delineate project boundaries and install safety fencing, where required.
  - b. The construction team will clear brush and other vegetation to permit construction.
  - c. A grading crew prepares the construction area for access by construction equipment.
2. Installing the new pipeline
  - a. Once the area has been prepped, a hydraulic how will excavate the trench, which will then be prepared for the installation of the new pipeline.
  - b. The stringing crew lays pipe on wooden skids or boxes adjacent to the trench area.
  - c. The pipe is prepped, welded into continuous lengths and inspected before the pipeline is lowered into the trench. Crews also install pipes under obstacles such as roads or watercourses by directional drilling.
3. Finishing construction
  - a. The pipeline is tested hydrostatically with water from a suitable local source and is disposed of appropriately. Upon completion, the pipeline is dried, purged of air and prepared for delivery of the product.
  - b. The construction crew backfills the originally excavated subsoil over the pipe in the trench. Any surplus backfill material will be removed from the construction area.
  - c. A clean-up crew is responsible for the restoration of the land. In natural area, restoration includes re-seeding and removing erosion and sediment controls. In developed areas, the clean-up crew undertakes landscaping plans developed for site restoration.

### 5.2 Assessment of Impacts

#### 5.2.1 Screening for Potential Impacts

Guided by the MHSTCI' Ontario Heritage Tool Kit (InfoSheet #5; 2006), and according to the OEB Environmental Guidelines, possible effects or impacts resulting from pipeline development that could affect cultural heritage resources include:

- a) Destruction or removal of any – or any part of – significant heritage attributes or features;
- b) Alteration that is not sympathetic, or is not compatible, with heritage character or appearance;
- c) Isolation of heritage attributes or features from their surrounding environment, context or a significant relationship;
- d) Visual intrusions, direct or indirect obstruction of significant views or vistas from, within, or to a built or natural feature;
- e) Shadows created by new development that alter the appearance or character of a heritage resource;
- f) A change in physical character, such as when development fills in formerly open spaces, or when significant vegetation is removed; and
- g) Ground disturbances or land alterations, such as a change in grade, alteration of soil composition or drainage patterns that could adversely affect a cultural heritage resource.

(OEB 2016:33)

## 5.3 Potential Impacts of Proposed Work on Cultural Heritage Resources

### 5.3.1 Panhandle Loop- Potential Impacts

This section provides an assessment of the potential adverse effects to the identified cultural heritage resources as a result of the Project. This preliminary impact assessment is based on the impacts presented in the *OEB Environmental Guidelines (Section 5.2)*. Cultural heritage resources may experience displacement, or direct impacts, i.e., removal, if they are located within the right-of-way of the undertaking. They may also experience disruption, or indirect impacts, by the introduction of physical, visual, audible, or atmospheric elements that are not in keeping with the character and/or setting.

**Table 6** considers the impacts of the preferred route of the Panhandle Loop on the potential cultural heritage resources, both adjacent to the Study Area.

**Table 6: Impacts to Identified Cultural Heritage Resources and Recommended Mitigation Strategies - Panhandle Loop**

Feature ID	Location/ Address	Heritage Recognition	Type and Description of Potential/Anticipated Impact	Mitigation Measures
BHR 1	23696 Dashwheel Road	Potential Cultural Heritage Resource	The two-and-a-half storey brick structure at 23696 Dashwheel Road within BHR 1, is approximately 300 metres east of the preliminary preferred route for the Panhandle Loop at its closest point, despite being within the same parcel of land as the proposed pipeline. As such, BHR 1 is not anticipated to be adversely impacted by the construction of the pipeline.	No further cultural heritage work required for this proposed undertaking.  Following disturbance to the agricultural land within this property, the impacted lands must be restored to pre-construction conditions.
CHL 1	3049 Gray Line (Malott Cemetery)	Pioneer Cemetery	A pioneer cemetery known as Malott Cemetery was identified approximately 100 metres south of the preliminary preferred route for the Panhandle Loop. The route is within the surrounding agricultural field and does not encroach into the legal cemetery limits. As such, CHL 1 is not anticipated to be adversely impacted by the project.	No further cultural heritage work required for this proposed undertaking.  If any land disturbance is to occur within 10 metres of the legal cemetery limits, then the following is recommended: <ul style="list-style-type: none"> <li>o The MHSTCI and Bereavement Authority of Ontario (BAO) should be consulted, and an archaeological assessment would be required under the <i>Standards and Guidelines for Consultant Archaeologists (2011)</i>.</li> </ul>
CHL 2	Thames River	Canadian Heritage River	The proposed pipeline crosses CHL 2, the Thames River.  Trenchless crossing methods are proposed to occur to allow the pipeline to cross under the Thames River. The preliminary preferred route for this proposed pipeline follows the existing 20-inch Panhandle Pipeline. As such, no adverse impacts are anticipated to the Thames River.	No further cultural heritage work required for this proposed undertaking.

### 5.3.2 Leamington Interconnect - Potential Impacts

There were no BHRs or CHLs identified within or adjacent to the Leamington Interconnect. Therefore, a preliminary impact assessment for Leamington Interconnect was not undertaken for this CHAR.

## 6. Conclusion and Recommendations

### 6.1 Conclusions

Based on the preferred routes of the Panhandle Loop and Leamington Interconnect, there are no BHRs or CHLs anticipated to be directly (physically) impacted by the Panhandle Loop or the Leamington Interconnect. The proposed pipeline for the Panhandle Loop may transect parcels of land that contain a potential BHR or CHL; however, the installation of the pipeline will not require the removal or relocation of any structures, commemorative markers, or monuments, since none were identified in the path of the preferred route. Given that the infrastructure will be underground, impacts to the agricultural lands are anticipated to be minimal.

#### Key Findings

- A total of one (1) potential BHR and two (2) potential CHLs were identified during background research and the field review of the Panhandle Loop:
  - BHR 1 (23696 Dashwheel Rd), is not listed or designated, and is not included the Chatham-Kent Municipal Heritage Register
  - CHL 1 (Malott Cemetery, 3049 Gray Line) is a pioneer cemetery maintained by the Municipality of Chatham-Kent
  - CHL 2 is the Thames River, a Canadian Heritage River
- No known or potential BHRs or CHLs were identified within or adjacent Leamington Interconnect

### 6.2 Recommendations

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

1. Where temporary landscape disturbance may occur due to the installation of the pipelines, ensure that the any landscape disturbance is restored to pre-construction conditions in the impacted lands outside the existing road allowances (i.e., restore to an active agricultural field).
2. Should limits of the Study Area documented in this CHAR change, then further mitigation will be required. Mitigation measures may include, but are not limited to, completing a cultural heritage evaluation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate.
3. If construction components and/or activities occur within 10 metres of the legal cemetery limits for Malott Cemetery (CHL 1), an archaeological investigation is required by licensed archaeologist. Consult with the MHSTCI to determine if any archaeological assessments or approval is required in relation to this Project.

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# Appendix A: Indicators of CHVI from Section 4.3.4 of the OEB Environmental Guidelines

# Indicators of CHVI from Section 4.3.4 of the OEB Environmental Guidelines

Indicators of Cultural Heritage Value or Interest	Identified within the Study Area
Property designated under Part IV of the Ontario Heritage Act	Not identified
A bridge on Ontario Heritage Bridge List	Not identified
Property within a Heritage Conservation District designated under Part V of the Ontario Heritage Act	Not identified
Property with an Ontario Heritage Trust or municipal heritage conservation easement	Not identified
Property with a provincial or federal plaque	Not identified
A National Historic Site	Not identified
Property containing a registered archaeological site	Not Applicable*
Property with archaeological potential	Not Applicable*
Property listed on a municipal heritage register or the provincial register	Not Identified (Municipality of Leamington) Not Identified (Municipality of Chatham-Kent) No Response Received (Municipality of Lakeshore)
Property adjacent to an identified heritage property <sup>1</sup>	Not identified
Property that has buildings or structures over 40 years old	Identified
Property within a Canadian Heritage River watershed	Identified
Property associated with a renowned architect or builder	Not identified
Property containing or adjacent to a burial site or cemetery	Identified
Parkland	Not identified
Land with distinctive landforms or geographic features	Not identified
Historic transportation corridors (such as navigational canals, rail lines or trails, traditional Métis portage routes etc.)	Not Identified
Sites of Indigenous cultural significance	Not Identified
Other human-made alterations to natural landscapes (such as earthworks, plantings, etc.)	Not Identified

\* Assessing archaeological potential is outside of the scope of this cultural heritage assessment.

<sup>1</sup> “Adjacent” includes not only immediately adjoining property, but also the landscape or topography visible from an identified heritage property and the viewsheds that frame the heritage property.

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