

## **Appendix C**

### **Cultural Heritage Assessment Report**

## **Cultural Heritage Assessment Report**

**Kingston Region Biosolids and Biogas Facility  
Municipal Class Environmental Assessment  
Request for Proposal Utilities Kingston 22-02  
City of Kingston  
Lots 23-24, Concession 3  
Geographic Township of Kingston  
Former Frontenac County, Ontario**

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## **EXECUTIVE SUMMARY**

Under a contract awarded in July 2022, Archaeological Research Associates Ltd. carried out a Cultural Heritage Assessment Report of lands with the potential to be impacted by the Kingston Regional Biosolids and Biogas Facility in the City of Kingston, Ontario. Utilities Kingston completed a Master Plan for Enhanced Biosolids Management and Biogas Utilization in 2020, and it was recommended that an integrated biosolids and source separated organics processing facility be developed at a greenfield site. The opportunity site for consideration was located within the property boundary of Knox Farm. The assessment was carried out as one of the baseline studies to evaluate the suitability of Knox Farm in advance of formally initiating the Schedule 'C' Municipal Class Environmental Assessment in accordance with the *Environmental Assessment Act*. This report documents the background research and modelling involved in the investigation and presents conclusions and recommendations pertaining to cultural heritage concerns.

The study area consists of an irregularly shaped parcel of land with a total area of approximately 74.37 ha. This parcel is generally bounded by natural areas to the north and west parts of the Lower Cataraqui Creek Conservation Area, Perth Road to the east and Highway 401 to the south. In legal terms, the study area comprises part of Lots 23–24, Concession 3 in the City of Kingston, part of the former Geographic Township of Kingston, former Frontenac County.

The Cultural Heritage Assessment Report approach included:

- Summary of the history of the study area including historical mapping, aerial photographs;
- Consultation with the City of Kingston regarding heritage matters in the study area;
- Identification of any designated or recognized properties within and adjacent to the study area;
- On-site inspection and creation of an inventory of all properties with potential Built Heritage Resources and Cultural Heritage Landscapes within and adjacent to the study area;
- A description of any affected resources and their potential heritage interest or value;
- Description of potential project impacts; and
- Recommendations.

As a result of consultation, research and the field survey, no cultural heritage resources were identified within or adjacent to the study area. To date, there appears to be no concerns with respect to built heritage resources and cultural heritage landscapes related to the potential Kingston Biosolids and Biogas Facility construction on the Knox Farm Property.

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## **ABBREVIATIONS**

ARA – Archaeological Research Associates Ltd.  
BHR – Built Heritage Resource  
CHAR – Cultural Heritage Assessment Report  
CHL – Cultural Heritage Landscape

CHVI – Cultural Heritage Value or Interest  
EA – Environmental Assessment  
HIA – Heritage Impact Assessment  
HSMBC – Historic Sites and Monuments Board of Canada  
LCCCA – Lower Cataraqui Creek Conservation Area  
MCEA – Municipal Class Environmental Assessment  
MCM – Ministry of Citizenship and Multiculturalism  
OHA – Ontario Heritage Act  
OHT – Ontario Heritage Trust  
O. Reg. – Ontario Regulation  
PPS – Provincial Policy Statement  
UK – Utilities Kingston  
BBF – Biowaste and Biogas Facility  
WWTP – Wastewater Treatment Plant

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Two-page Curriculum Vitae (CV) for key team members that demonstrate the qualifications and expertise necessary to perform cultural heritage work in Ontario are provided in Appendix B.

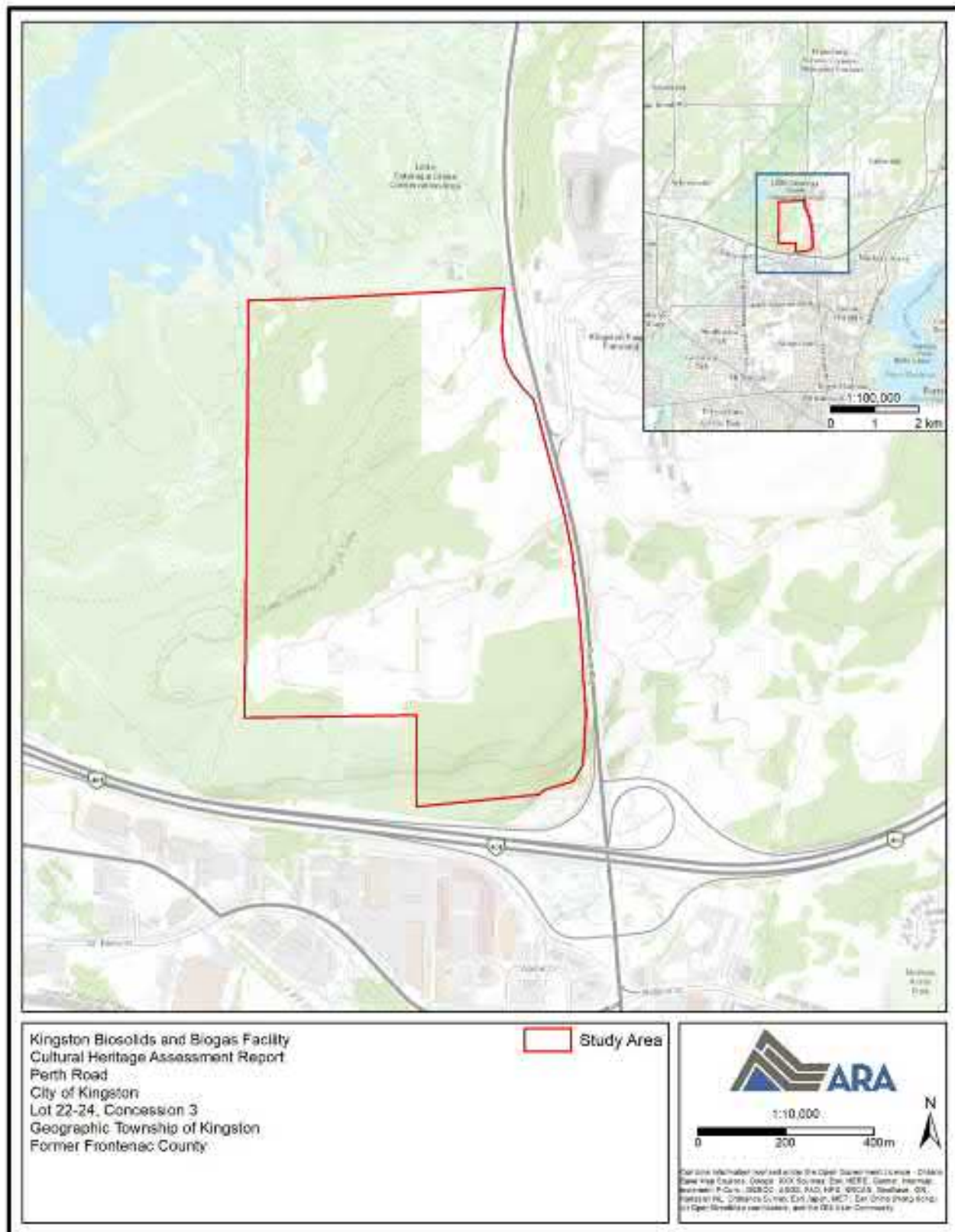
## **1.0 PROJECT CONTEXT**

Under a contract awarded in July 2022, Archaeological Research Associates Ltd. (ARA) carried out a Cultural Heritage Assessment Report (CHAR) of lands with the potential to be impacted by the Kingston Regional Biosolids and Biogas Facility in the City of Kingston, Ontario. Utilities Kingston (UK) completed a Master Plan for Enhanced Biosolids Management and Biogas Utilization in 2020, and it was recommended that an integrated biosolids and source separated organics processing facility be developed at a greenfield site. The opportunity site for consideration was located within the property boundary of Knox Farm. The assessment was carried out as one of the baseline studies to evaluate the suitability of Knox Farm in advance of formally initiating the Schedule 'C' Municipal Class Environmental Assessment in accordance with the *Environmental Assessment Act*. This report documents the background research and modelling involved in the investigation and presents conclusions and recommendations pertaining to cultural heritage concerns.

The Knox Farm Site is a City of Kingston owned property which once operated as a waste management facility and is currently partially occupied by a snow management facility. The study area (Knox Farm) consists of an irregularly shaped parcel of land with a total area of approximately 74.37 ha (see Map 1). This parcel is bounded by natural areas to the north and west parts of the Lower Cataraqui Creek Conservation Area (LCCCA), Perth Road to the east and Highway 401 to the south. In legal terms, the study area comprises part of Lots 23–24, Concession 3 in the City of Kingston, part of the Geographic Township of Kingston, former Frontenac County.

The purpose of this assessment is to identify and evaluate the cultural heritage resources within and adjacent to the study area that may be impacted by the proposed development. The cultural heritage assessment will be carried out in accordance with current best practices and requirements set out in the following legislation and guidelines: the *Ontario Heritage Act* (R.S.O. 1990); *Environmental Assessment Act*, R.S.O. 1990, *Provincial Policy Statement* (2020); Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010); *Standards & Guidelines for Conservation of Provincial Heritage Properties* (2010); the Ministry of Citizenship and Multiculturalism's (MCM) *Ontario Heritage Tool Kit Series* (2006); the *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992); and the *City of Kingston Official Plan* (2021).







## 2.0 LEGISLATION AND POLICY REVIEW

The framework for this assessment report is provided by federal guidelines, provincial environmental and planning legislation and policies as well as regional and local municipal Official Plans and guidelines.

### 2.1 Federal Guidelines

At the national level, *The Standards and Guidelines for Conservation of Historic Places in Canada* (Parks Canada 2010) provides guidance for the preservation, rehabilitation and restoration of historic places, including cultural heritage landscapes (CHLs) and built heritage resources (BHRs). Such guidance includes the planning and implementation of heritage conservation activities.

### 2.2 Provincial Policies and Guidelines

#### 2.2.1 *Environmental Assessment Act and Guideline*

An Environmental Assessment (EA) is a study that evaluates both the potential positive and/or negative effects of a project on the environment. Within the *Environmental Assessment Act*, the environment includes “any building, structure, machine or other device or thing made by humans.” (Government of Ontario 2010). This study is conducted as part of recommendations within a streamlined EA process known as a Municipal Class EA (MCEA), which applies to routine projects grouped into classes that range from A (minor undertakings) to C (construction of new large facilities). The MCEA applies to municipal infrastructure undertakings including roads, water and wastewater projects.

The *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* indicates a need to describe the “affected environment” that is “a spatially defined area within which land will be altered as a result of the proponent’s development” (MCM1992:3). As such, ARA completes in-depth research and evaluation of any potential cultural heritage resource within the project area. ARA’s business practice also considers the study area and any adjacent properties. This ensures that every Built Heritage Resource and Cultural Heritage Landscape that may be subject to potential indirect project impacts is identified.

#### 2.2.2 *Planning Act*

Section 2 of the Ontario *Planning Act* indicates that a council of a Municipality have regard for matters of provincial interest such as: “(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest” (Government of Ontario 2018). Section 3 of the *Planning Act* directs a municipal Council’s decision to be consistent with the *Provincial Policy Statement* (PPS 2020).

### 2.2.3 The Provincial Policy Statement (2020)

The *Provincial Policy Statement* (PPS 2020) contains a combined statement of the Province's land use planning policies. It provides the provincial government's policies on a range of land use planning issues including cultural heritage. As outlined in Section 2.0 on Wise Use of and Management of Resources: "Ontario's long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits" (MMAH 2020:24). The PPS 2020 (MMAH 2020:31) promotes the conservation of cultural heritage resources through detailed policies in Section 2.6, such as "2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved" and "2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved."

### 2.2.4 Ontario Heritage Act

The Ontario Heritage Act (OHA), R.S.O. 1990, c.018 is the guiding piece of provincial legislation for the conservation of significant cultural heritage resources in Ontario. The OHA gives provincial and municipal governments the authority and power to conserve Ontario's heritage. The Act has policies which address individual properties (Part IV), heritage districts (Part IV), and allows municipalities to create a register of non-designated properties which may have cultural heritage value or interest (Section 27).

Generally, potential cultural heritage resources are identified by applying a 40-year rolling timeline. This timeline is considered an industry best practice (i.e., MTO 2008). A date of 40 years does not automatically attribute CHVI to a resource; rather, that it should be flagged as a potential resource and evaluated for CHVI.

In order to objectively identify cultural heritage resources, O. Reg. 9/06 made under the *OHA* sets out three principal criteria with nine sub-criteria for determining cultural heritage value or interest (CHVI) (MCM 2006b:20–27). The criteria set out in the regulation were developed to identify and evaluate properties for designation under the *OHA*. Best practices in evaluating properties that are not yet protected employ O. Reg. 9/06 to determine if they have CHVI. In the absence of specific CHL evaluation criteria, potential CHLs O. Reg 9/06 is also applied to consider the built and natural features and the property as a whole. The O. Reg. 9/06 criteria include: design or physical value, historical or associative value and contextual value.

1. The property has design value or physical value because it,
  - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,
  - ii. displays a high degree of craftsmanship or artistic merit, or
  - iii. demonstrates a high degree of technical or scientific achievement.



2. The property has historical value or associative value because it,
  - i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,
  - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or
  - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
3. The property has contextual value because it,
  - i. is important in defining, maintaining or supporting the character of an area,
  - ii. is physically, functionally, visually or historically linked to its surroundings, or
  - iii. is a landmark. O. Reg. 9/06, s. 1 (2).

The *OHA* provides three key tools for the conservation of built heritage resources (BHRs) and cultural heritage landscapes (CHLs). It allows for protection as:

1. A single property (i.e., farmstead, park, garden, estate, cemetery), a municipality can designate BHRs and CHLs as individual properties under Part IV of the *OHA*.
2. Multiple properties or a specific grouping of properties may be considered a CHL, as such, a municipality can designate the area as a Heritage Conservation District (HCD) under Part V of the *OHA*.
3. Lastly, a municipality has the authority to add an individual or grouping of non-*OHA* designated property(ies) of heritage value or interest on their Municipal Heritage Register.

An *OHA* designation provides the strongest heritage protection available for conserving cultural heritage resources.

## 2.3 Municipal Policies

### 2.3.1 Official Plan for the City of Kingston

One of the guiding goals of the Official Plan is the “protection of natural and cultural heritage” (2019:4). There is an understanding that the enhancement of cultural heritage resources and landscapes assists in strengthening tourism in the region (City of Kingston 2021:1). Section 7 of the Official Plan contains policies specifically focused on cultural heritage resources. Section 7 acknowledges that the City of Kingston is: “well known for its *cultural heritage resources*, which play a key role in the City’s identity, and contribute to its economic prosperity as well as to the cultural enrichment of its residents and visitors.” (City of Kingston 2021: 335).

With respect to conservation of cultural heritage resources throughout the City of Kingston, Section 7 states: “It is intended that the City’s *cultural heritage resources* will be protected and managed in accordance with the recommendations and policies of this Plan” (City of Kingston 2021: 335).

Section 7.1 within the Official Plan provides policies on built heritage resources, with the stated goal to: “conserve and enhance *built heritage resources* within the City so that they may be



accessed, experienced and appreciated by all residents and visitors, and retained in an appropriate manner and setting, as a valued public trust held for future generations.” (2021: 336);

Section 7.1.1 lays out evaluation criteria for the assessment of CHVI of built heritage resources, stating the following:

*The Evaluation Criteria for assessing the cultural heritage value or interest of built heritage resources has been established by the Province of Ontario under Ontario Regulation 9/06. The identification and evaluation of built heritage resources must be based on the following core values:*

- a. design value or physical value;*
  - b. historical value or associative value; or,*
  - c. contextual value.*
- (City of Kingston 2021: 336)

As part of the City of Kingston’s heritage protection and designation, subsection 7.1.10 Conservation of Built Heritage Resources in Section 7, the following is stated:

*Conserving built heritage resources forms an integral part of the City’s planning and decision-making. The City uses the power and tools provided by legislation, policies and programs, particularly the Ontario Heritage Act, the Planning Act, the Environmental Assessment Act and the Municipal Act in implementing and enforcing the policies of this Section. This may include the following:*

- a. designating real property under Part IV, or V of the Ontario Heritage Act, or encouraging the Province to designate real property under Part VI of the Ontario Heritage Act;*
- b. requiring, as a condition of any approval, the retention of any built heritage resources found within a plan of subdivision, a plan of condominium, or on any parcel created by consent, or other land division approval;*
- c. using zoning by-law provisions as appropriate, to conserve identified built heritage resources;*
- d. using the provisions of Section 37 of the Planning Act in order to maintain the integrity of identified built heritage resources;*
- e. using site plan control provisions of Section 41 of the Planning Act to ensure that new development on adjacent properties is compatible with the adjacent identified built heritage resources;*
- f. using design guidelines to provide for sympathetic development of adjacent lands that are not designated, but which could impact the site of the built heritage resource;*
- g. ensuring that archaeological resources are evaluated and conserved prior to any ground disturbance, in accordance with the City’s Archaeological Master Plan and provincial regulations;*
- h. in partnership with Kingston’s Indigenous Peoples of Canada community, a Protocol outlining the working relationship with them and the City will be designed, approved and implemented; and*

- i. *using heritage easements as a means to protect significant built heritage resources, where appropriate.*  
(City of Kingston 2021: 338-339)

Additionally, Section 7.3 addresses cultural heritage landscapes, stating that:

*A cultural heritage landscape usually involves a geographically defined grouping of features that are both human-made and natural. These geographical areas have been modified and characterized by human activity and collectively create a unique cultural heritage. They are valued not only for their historical, architectural or contextual significance, but also for their contribution to the understanding of the social, economic, political and environmental influences that have shaped the community.*

*Cultural heritage landscapes may include such features as heritage conservation districts designated under the Ontario Heritage Act, villages, parks, gardens, cemeteries, lakes, rivers, main streets, neighbourhoods, Indigenous Peoples of Canada communities, shorelines, vegetation, and scenic vistas.*  
(City of Kingston 2021: 342).

### **2.3.2 Summary of Municipal Policies**

Official Plan policies call for a careful analysis of the CHVI and attributes of identified resources and landscapes, coupled with an analysis of project impacts and an outline of potential mitigation measures to support the preservation, restoration and utilization of heritage resources.

## **2.4 Legislation Summary**

Through careful analysis of the heritage values and attributes of an identified resource, coupled with an analysis of project impacts and an outline of potential mitigation measures, the aims of the *Standards and Guidelines for the Conservation of Historic Places in Canada*, the provincial policies and guides as well as the Municipal Official Plan can be met.



### 3.0 HISTORICAL CONTEXT

The history of the study area was constructed using background information obtained from aerial photographs, historical maps (i.e., illustrated atlases) and published secondary sources (online and print). Given the limited time frame for the production of this report, and limited scope, there is always the possibility that additional historical information exists but may not have been identified or accessible for review.

The City of Kingston has a long history of settlement including Pre-Contact and Post-Contact Indigenous campsites and villages due to its productive waterfront lands, as well as favourable farmland. The study area has strong associations with Indigenous communities, and the heritage resources considered in this report can be associated with both Pre-Contact and Post-Contact cultural developments. Accordingly, this historical context section spans the Pre-Contact Indigenous occupation history through Euro-Canadian settlement history to present. The early history of the study area can be effectively discussed in terms of major historical events.

#### 3.1 Pre-Contact

The Pre-Contact history of the region is lengthy and rich, and a variety of Indigenous groups inhabited the landscape. Archaeologists generally divide this vibrant history into three main periods: Palaeo, Archaic and Woodland. Each of these periods comprise a range of discrete sub-periods characterized by identifiable trends in material culture and settlement patterns, which are used to interpret past lifeways. The principal characteristics of these sub-periods are summarized in Table 1.

**Table 1: Pre-Contact Settlement History**  
(Wright 1972; Ellis and Ferris 1990; Warrick 2000; Munson and Jamieson 2013)

| Sub-Period                      | Timeframe     | Characteristics   |
|---------------------------------|---------------|---|
| Early Palaeo                    | 9000–8400 BC  | Gainey, Barnes and Crowfield traditions; Small bands; Mobile hunters and gatherers; Utilization of seasonal resources and large territories; Fluted points  |
| Late Palaeo                     | 8400–7500 BC  | Holcombe, Hi-Lo and Lanceolate biface traditions; Continuing mobility; Campsite/Way-Station sites; Smaller territories are utilized; Non-fluted points  |
| Early Archaic                   | 7500–6000 BC  | Side-notched, Corner-notched (Nettling, Thebes) and Bifurcate traditions; Growing diversity of stone tool types; Heavy woodworking tools appear (e.g., ground stone axes and chisels)   |
| Middle Archaic                  | 6000–2500 BC  | Stemmed (Kirk, Stanly/Neville), Brewerton Side- and Corner-notched traditions; Reliance on local resources; Populations increasing; More ritual activities; Fully ground and polished tools; Net-sinkers common; Earliest copper tools  |
| Late Archaic                    | 2500–900 BC   | Narrow Point (Lamoka), Broad Point (Genesee) and Small Point (Crawford Knoll) traditions; Less mobility; Use of fish-weirs; True cemeteries appear; Stone pipes emerge; Long-distance trade (marine shells and galena)                  |
| Early Woodland                  | 900–400 BC    | Meadowood tradition; Crude cord-roughened ceramics emerge; Meadowood cache blades and side-notched points; Bands of up to 35 people   |
| Middle Woodland                 | 400 BC–AD 600 | Point Peninsula tradition; Vinette 2 ceramics appear; Small camp sites and seasonal village sites; Influences from northern Ontario and Hopewell area to the south; Hopewellian influence can be seen in continued use of burial mounds |
| Middle/Late Woodland Transition | AD 600–900    | Gradual transition between Point Peninsula and later traditions; Princess Point tradition emerges elsewhere (i.e., in the vicinity of the Grand and Credit Rivers)  |
| Late Woodland (Early)           | AD 900–1300   | Glen Meyer tradition; Settled village-life based on agriculture; Small villages (0.4 ha) with 75–200 people and 4–5 longhouses; Semi-permanent settlements  |



| Sub-Period             | Timeframe    | Characteristics  |
|------------------------|--------------|--|
| Late Woodland (Middle) | AD 1300–1400 | Uren and Middleport traditions; Classic longhouses emerge; Larger villages (1.2 ha) with up to 600 people; More permanent settlements (30 years)   |
| Late Woodland (Late)   | AD 1400–1600 | Huron-Petun tradition; Globular-shaped ceramic vessels, ceramic pipes, bone/antler awls and beads, ground stone celts and adzes, chipped stone tools, and even rare copper objects; Large villages (often with palisades), temporary hunting and fishing camps, cabin sites and small hamlets; Territorial contraction in early 16 <sup>th</sup> century; Fur trade begins ca. 1580; European trade goods appear |

Although Iroquoian-speaking populations tended to leave a much more obvious mark on the archaeological record and are therefore emphasized in the Late Woodland entries above, it must be understood that Algonquian-speaking populations also represented a significant presence in southern Ontario. Due to the sustainability of their lifeways, archaeological evidence directly associated with the Anishinaabeg remains elusive, particularly when compared to sites associated with the more sedentary agriculturalists. Many artifact scatters in southern Ontario were likely camps, chipping stations or processing areas associated with the more mobile Anishinaabeg, utilized during their travels along the local drainage basins while making use of seasonal resources. This part of southern Ontario represents the ancestral territory of various Indigenous groups, each with their own land use and settlement pattern tendencies.

### 3.2 Post-Contact

The arrival of European explorers and traders at the beginning of the 17<sup>th</sup> century triggered widespread shifts in Indigenous lifeways and set the stage for the ensuing Euro-Canadian settlement process. Documentation for this period is abundant, ranging from the first sketches of Upper Canada and the written accounts of early explorers to detailed township maps and lengthy histories. The Post-Contact period can be effectively discussed in terms of major historical events, and the principal characteristics associated with these events are summarized in Table 2.

**Table 2: Post-Contact Settlement History**  
(Smith 1846; Coyne 1895; Preston 1959; Lajeunesse 1960; Rollason 1982; Mika and Mika 1981, 1989; Ellis and Ferris 1990; Surtees 1994; AO 2015)

| Historical Event               | Timeframe   | Characteristics  |
|--------------------------------|---|--|
| Early Contact                  | Early 17 <sup>th</sup> century                        | Brûlé explores southern Ontario in 1610/11; Champlain travels through in 1613 and 1615/1616, making contact with a number of Indigenous groups (including the Algonquin, Huron-Wendat and other First Nations); European trade goods become increasingly common and begin to put pressure on traditional industries; Names of bands suggest that Algonquin territorial organization was based on watersheds; Nipissings and Algonquins were involved in inter-tribal trade |
| Increased Contact and Conflict | Mid- to late 17 <sup>th</sup> century                 | Conflicts between various First Nations during the Beaver Wars result in numerous population shifts; Nipissings and Algonquins tended to avoid the lower Ottawa in the summer due to Iroquois attacks; European explorers continue to document the area, and many Indigenous groups trade directly with the French and English; 'The Great Peace of Montreal' treaty established between roughly 39 different First Nations and New France in 1701                         |
| Fur Trade Development          | Late 17 <sup>th</sup> to mid-18 <sup>th</sup> century | Growth and spread of the fur trade; Bands of the Algonquin Nation occupied the Ottawa Valley; Many spent their summers at mission villages; Fort Frontenac established in 1673 by Comte de Frontenac; Cataragui becomes a major French transshipment location; Peace between the French and English with the Treaty of Utrecht in 1713; Ethnogenesis of the Métis; Hostilities between French and British lead to the Seven Years' War in 1754; French surrender in 1760   |



| Historical Event     | Timeframe   | Characteristics  |
|----------------------|---|--|
| British Control      | Mid-18 <sup>th</sup> century                            | General Amherst advances on Montreal from Oswego; Fort Frontenac area reported as being essentially uninhabited (1760); British control subsequently established; Cataraqui area develops as a major trade and military hub; <i>Royal Proclamation</i> of 1763 recognizes the title of the First Nations to the land; Algonquins and Nipissings attended the Niagara Treaty Council; Numerous treaties subsequently arranged by the Crown; First land cession under the new protocols is the Seneca surrender of the west side of the Niagara River in 1764; The Niagara Purchase (Treaty 381) in 1781 included this area  |
| Loyalist Influx      | Late 18 <sup>th</sup> century                           | United Empire Loyalist influx after the American Revolutionary War (1775–1783); Carleton Island ceded to the United States; Guy Carleton writes to General Haldimand recommending Fort Frontenac for Loyalist settlement; General Major Holland has Cataraqui and site of old Fort Frontenac surveyed (1783); British develop interior communication routes and acquire additional lands; Crawford's Purchases completed in 1783; The Michi Saagiig negotiated with the British for these lands, which allowed for European Loyalist settlement and for the Mohawk Loyalists who were given lands in the Bay of Quinte area; The Michi Saagiig people living there were forced to move to Alderville; <i>Constitutional Act</i> of 1791 creates Upper and Lower Canada   |
| County Development   | Late 18 <sup>th</sup> to early 19 <sup>th</sup> century | Became part of Frontenac County and the Midland District in 1792; Northern boundaries redefined as lands beyond the waterfront were laid out; Midland District included Hastings, Lennox, Addington and Frontenac in 1798; Townships of Kennebec, Olden and Oso added in 1821, Barrie, Clarendon and Palmerston in 1845 and Miller, North Canoto and South Canoto in 1860; United Counties of Frontenac, Lennox and Addington established after the abolition of the district system in 1849; Independent in 1865; Population and industry focused in the south around Kingston; Northern areas remain largely rural, with mica, feldspar, limestone and apatite quarrying and timber processing becoming key industries   |
| Township Formation   | Late 18 <sup>th</sup> to early 19 <sup>th</sup> century | General Haldimand mandates that townships be surveyed and marked out; Settlement focuses along Lake Ontario, by 1784 ~200 settlers in "King's Town" (Kingston); Areas around Point Frederick and Point Henry targeted for expanding development; The immigration of Europeans and United Empire Loyalists in the late 18 <sup>th</sup> and early 19 <sup>th</sup> centuries resulted in a considerable population increase; In 1792 Kingston becomes the seat of government for Upper Canada; In 1801 there were ~500 inhabitants in Kingston, which becomes the seat of the Court of Quarter Sessions; Fort Henry constructed during War of 1812; Settlement outside of Kingston remains largely rural  |
| Township Development | 19 <sup>th</sup> to early 20 <sup>th</sup> century      | 47,649 acres taken up, of which 16,218 under cultivation by 1846, with Kingston and surrounding areas having a population of 6,289; Numerous industrial operations develop: grist mills, saw mills, shipyards and a saleratus factory, as well as 10 churches, 5 newspapers, 1 saloon, 1 bath house, 1 brewery and 1 distillery; Kingston is the District Town of the Midland District; Infrastructural developments include a marine railway (1827), a bridge across the Cataraqui River (1829) and the Rideau Canal connecting Kingston and Bytown (Ottawa) (1832); Kingston Penitentiary opens in 1835; Kingston incorporated as a town, with Thomas Kirkpatrick as first Mayor (1838); Kingston serves as the capital of the United Canadas (1841–1844) before being incorporated as a city in 1846; Royal Charter to establish a university (1846); Grand Trunk Railway connects Kingston to Montreal and Toronto (1856); Kingston & Pembroke Railway develops (1871); Royal Military College is established (1874–1878); Shipbuilding, shipping, quarrying, lumber, industrial operations and trade remain key industries; Communities at: Ballynahinch, Elginburg, Kingston, Portsmouth, Waterloo and Westbrook |

### 3.3 Traditional Knowledge

The study area occupies lands that fall within the treaty, traditional and/or ancestral territories of numerous First Nations. Indeed, this area was used and shared by many Indigenous groups over



the millennia; each with their own traditions as to how they arrived, how they lived and the major events that punctuated their time there. Amongst the engaged groups, the Chippewas of Rama First Nation, Curve Lake First Nation and Huron-Wendat Nation were able to provide traditional knowledge for inclusion in the archaeological report. This information is reproduced in this report as best practice to inform the CHAR. These contributions are reproduced in Table 3–Table 5 (ordered alphabetically). It is hoped that other such accounts can be incorporated into studies like this as they become available. It should be noted that one group's traditional knowledge does not necessarily reflect the views of other groups, or the heritage professional.

**Table 3: Chippewas of Rama First Nation Oral History**  
(Provided by Chippewas of Rama First Nation)

| Rama First Nation History  |
|--|
| <p>The Chippewas of Rama First Nation are an Anishinaabe (Ojibway) community located at Rama First Nation, ON. Our history began with a great migration from the East Coast of Canada into the Great Lakes region. Throughout a period of several hundred years, our direct ancestors again migrated to the north and eastern shores of Lake Huron and Georgian Bay. Our Elders say that we made room in our territory for our allies, the Huron-Wendat Nation, during their times of war with the Haudenosaunee. Following the dispersal of the Huron-Wendat Nation from the region in the mid-1600s, our stories say that we again migrated to our territories in what today is known as Muskoka and Simcoe County. Several major battles with the Haudenosaunee culminated in peace being agreed between the Anishinaabe and the Haudenosaunee, after which the Haudenosaunee agreed to leave the region and remain in southern Ontario. Thus, since the early 18th century, much of central Ontario into the lower parts of northern Ontario has been Anishinaabe territory.</p> <p>The more recent history of Rama First Nation begins with the creation of the "Coldwater Narrows" reserve, one of the first reserves in Canada. The Crown intended to relocate our ancestors to the Coldwater reserve and ultimately assimilate our ancestors into Euro-Canadian culture. Underlying the attempts to assimilate our ancestors were the plans to take possession of our vast hunting and harvesting territories. Feeling the impacts of increasingly widespread settlement, many of our ancestors moved to the Coldwater reserve in the early 1830s. Our ancestors built homes, mills, and farmsteads along the old portage route which ran through the reserve, connecting Lake Simcoe to Georgian Bay (this route is now called "Highway 12"). After a short period of approximately six years, the Crown had a change of plans. Frustrated at our ancestors continued exploiting of hunting territories (spanning roughly from Newmarket to the south, Kawartha Lakes to the east, Meaford to the west, and Lake Nipissing to the north), as well as unsuccessful assimilation attempts, the Crown reneged on the promise of reserve land. Three of our Chiefs, including Chief Yellowhead, went to York under the impression they were signing documents affirming their ownership of land and buildings. The Chiefs were misled, and inadvertently allegedly surrendered the Coldwater reserve back to the Crown.</p> <p>Our ancestors, then known as the Chippewas of Lakes Simcoe and Huron, were left landless. Earlier treaties, such as Treaty 16 and Treaty 18, had already resulted in nearly 2,000,000 acres being allegedly surrendered to the Crown. The Chippewas made the decision to split into three groups. The first followed Chief Snake to Snake Island and Georgina Island (today known as the Chippewas of Georgina Island). The second group followed Chief Aissance to Beausoleil Island, and later to Christian Island (Beausoleil First Nation). The third group, led by Chief Yellowhead, moved to the Narrows between Lakes Simcoe and Couchiching and eventually, Rama (Chippewas of Rama First Nation).</p> <p>A series of purchases, using Rama's own funds, resulted in Yellowhead purchasing approximately 1,600 acres of abandoned farmland in Rama Township. This land makes up the core of the Rama Reserve today, and we have called it home since the early 1840's. Our ancestors began developing our community, clearing fields for farming and building homes. They continued to hunt and harvest in their traditional territories, especially within the Muskoka region, up until the early 1920's. In 1923, the Williams Treaties were signed, surrendering 12,000,000 acres of previously unceded land to the Crown. Once again, our ancestors were misled, and they were informed that in surrendering the land, they gave up their right to access their seasonal traditional hunting and harvesting territories.</p> <p>With accessing territories difficult, our ancestors turned to other ways to survive. Many men guided tourists around their former family hunting territories in Muskoka, showing them places to fish and hunt. Others worked in lumber camps and mills. Our grandmothers made crafts such as porcupine quill baskets and black ash baskets, and sold them to tourists visiting Simcoe and Muskoka. The children were forced into Indian Day School, and some were taken away to Residential Schools. Church on the reserve began to indoctrinate our ancestors. Our community, along with every other First Nation in Canada, entered a dark period of attempted genocide at the hands of Canada and the Crown. Somehow, our ancestors persevered, and they kept our culture, language, and community alive.</p> |



| Rama First Nation History  |
|--|
| Today, our community has grown into a bustling place, and is home to approximately 1,100 people. We are a proud and progressive First Nations community. |

**Table 4: Curve Lake First Nation Oral History**  
(Provided by Curve Lake First Nation)

| Michi Saagiig Historical/Background context  |
|--|
| <p>The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as “the people of the big river mouths” and were also known as the “Salmon People” who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.</p> <p>The Michi Saagiig were a highly mobile people, travelling vast distances to procure subsistence for their people. They were also known as the “Peacekeepers” among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.</p> <p>Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the “Old Ones” who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5th transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. They are the original inhabitants of southern Ontario, and they are still here today.</p> <p>The traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.</p> <p>Michi Saagiig oral histories also speak to the occurrence of people coming into their territories sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed annually (see Gitiga Migizi and Kapyrka 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig.</p> <p>The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.</p> <p>Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian speaking peoples in Ontario were decimated.</p> <p>The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact upon the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian speaking peoples. The Michi Saagiig were largely able to avoid the</p> |



| <b>Michi Saagiig Historical/Background context</b>   |
|--|
| <p>devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear.</p> <p>Michi Saagiig Elder Gitiga Migizi (2017) recounts:</p> <p><i>"We weren't affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story."</i></p> <p><i>There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history that needs to be corrected. We are the traditional people, we are the ones that signed treaties with the Crown. We are recognized as the ones who signed these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.</i></p> <p><i>We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.</i></p> <p><i>Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn't mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis."</i></p> <p>Often times, southern Ontario is described as being "vacant" after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation.</p> <p>The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into small family groups around the present day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation.</p> <p>The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day.</p> <p><b>**This historical context was prepared by Gitiga Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation.**</b></p> <p>Publication reference:</p> <p>Gitiga Migizi and Julie Kapyrka<br/>2015 Before, During, and After: Mississauga Presence in the Kawartha. In Peterborough Archaeology. Dirk Verhulst, editor, pp.127-136. Peterborough, Ontario: Peterborough Chapter of the Ontario Archaeological Society.</p> |

**Table 5: Huron-Wendat Nation History  
(Provided by Huron-Wendat Nation)**

| <b>History of the Nation Huronne-Wendat</b>  |
|--|
| <p>As an ancient people, traditionally, the Huron-Wendat, a great Iroquoian civilization of farmers and fishermen-hunter-gatherers and also the masters of trade and diplomacy, represented several thousand individuals. They lived in a territory stretching from the Gaspé Peninsula in the Gulf of Saint Lawrence and up along the Saint Lawrence Valley on both sides of the Saint Lawrence River all the way to the Great Lakes. Huronia, included in Wendake South, represents a part of the ancestral territory of the Huron-Wendat Nation in Ontario. It extends from Lake Nipissing in the North to Lake Ontario in the South and Île Perrot in the East to around Owen Sound in the West. This territory is today marked by several hundred archaeological sites, listed to date, testifying to this strong occupation of the territory by the Nation. It is an invaluable heritage for the Huron-Wendat Nation and the largest archaeological heritage related to a First Nation in Canada.</p> <p>According to our own traditions and customs, the Huron-Wendat are intimately linked to the Saint Lawrence River and its estuary, which is the main route of its activities and way of life. The Huron-Wendat formed alliances and traded goods with other First Nations among the networks that stretched across the continent.</p> |

| History of the Nation Huronne-Wendat  |
|---|
| Today, the population of the Huron-Wendat Nation is composed of more than 4000 members distributed on-reserve and off-reserve.  |
| The Huron-Wendat Nation band council (CNHW) is headquartered in Wendake, the oldest First Nations community in Canada, located on the outskirts of Quebec City (20 km north of the city) on the banks of the Saint Charles River. There is only one Huron-Wendat community, whose ancestral territory is called the Nionwentsfo, which translates to "our beautiful land" in the Wendat language. |
| The Huron-Wendat Nation is also the only authority that have the authority and rights to protect and take care of her ancestral sites in Wendake South.   |

### 3.4 Little Cataraqui Creek Conservation Area

The LCCCA lies to the north and west of the study area, extending along the Little Cataraqui Creek watershed. Connecting trails associated with the LCCCA also run through the study area as part of an informal agreement between the Cataraqui Region Conservation Authority (CRCA) and the City of Kingston (CRCA 2012:20).

The LCCCA was first formed from lands acquired as part of a development plan for a reservoir along Little Cataraqui Creek in 1967. This reservoir was part of a plan to prevent flooding, improve flow and provide new habitat for wildlife (CRCA 2012: 11). In 1971, this planned reservoir was created through the construction of a dam on Little Cataraqui Creek, which created the current reservoir on Little Cataraqui Creek (CRCA 2012).

To the north of the study area lies the main facility operated by the CRCA at the LCCCA. Much of the current infrastructure located within the LCCCA was constructed in the 1980s/1990s (CRCA 2012).

### 3.5 Study Area

For this assessment, ARA examined two historical maps that documented past residents, structures (i.e., homes, businesses and public buildings) and features between the mid-19<sup>th</sup> and early 20<sup>th</sup> centuries, two topographic maps and six aerial images were examined during the research component of the study. Specifically, the following resources were consulted:

- H.F. Walling's *Map of the United Counties of Frontenac, Lennox and Addington, Canada West* (1860) (University of Toronto 2019);
- J.H. Meacham's *Historical Atlas of Frontenac, Lennox and Addington, Ontario*. (1878) (McGill University 2001);
- Topographic maps from 1916 and 1940 (OCUL 2020);
- An aerial image from 1953, 1970, 1978, 1998 (City of Kingston 2022); and
- An aerial image from 2011 and 2021 (Google Earth 2022)

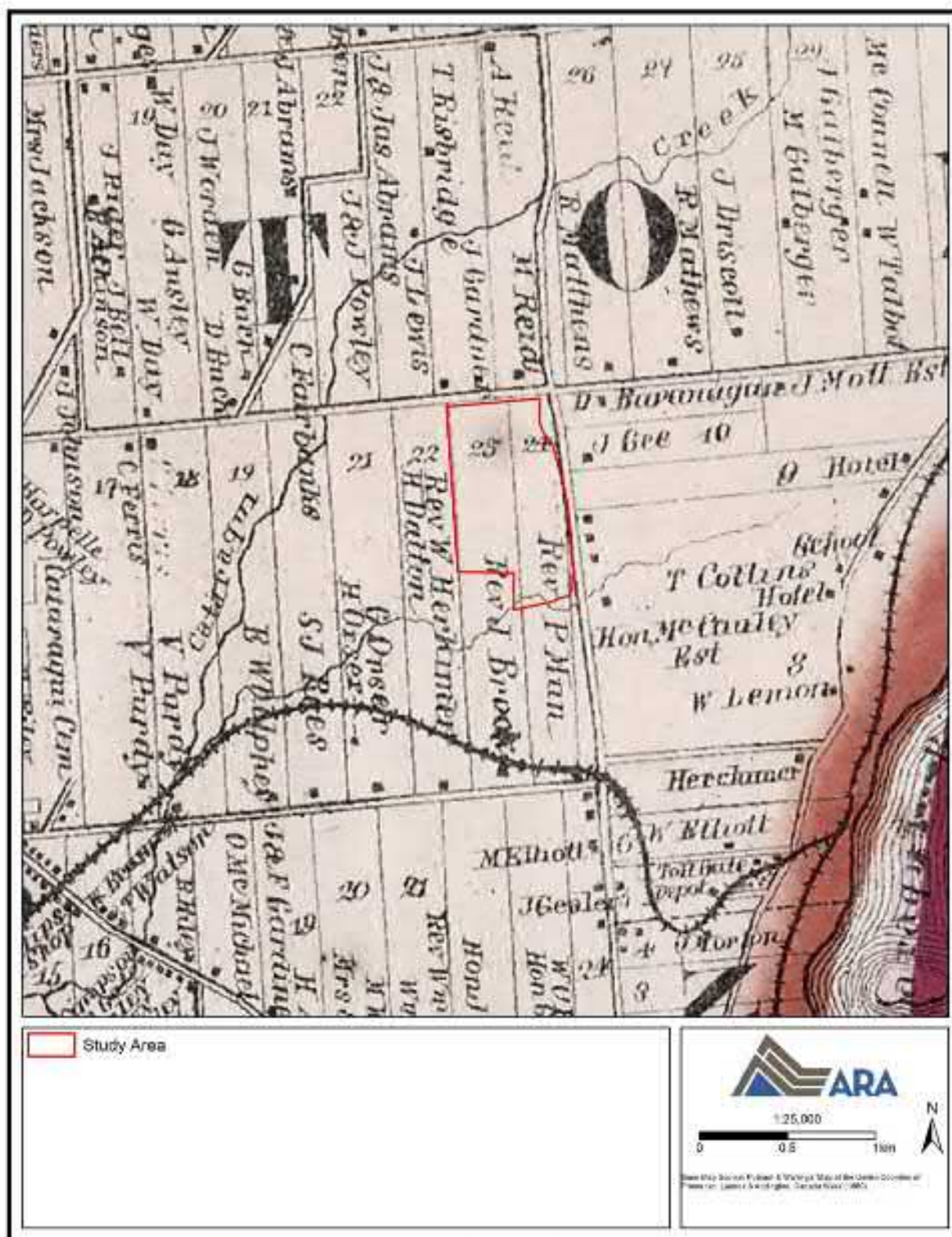
The *Map of the United Counties of Frontenac, Lennox & Addington County, Canada West* (1860) and *Historical Atlas of Frontenac, Lennox & Addington Counties, Ontario*. (1878) identify Reverend J. Brock occupying lot 23 and Reverend P. Muir occupying lot 24 (see Map 2 and Map 3). Two structures are identified on the southern border of both lots on the 1860 atlas, well outside



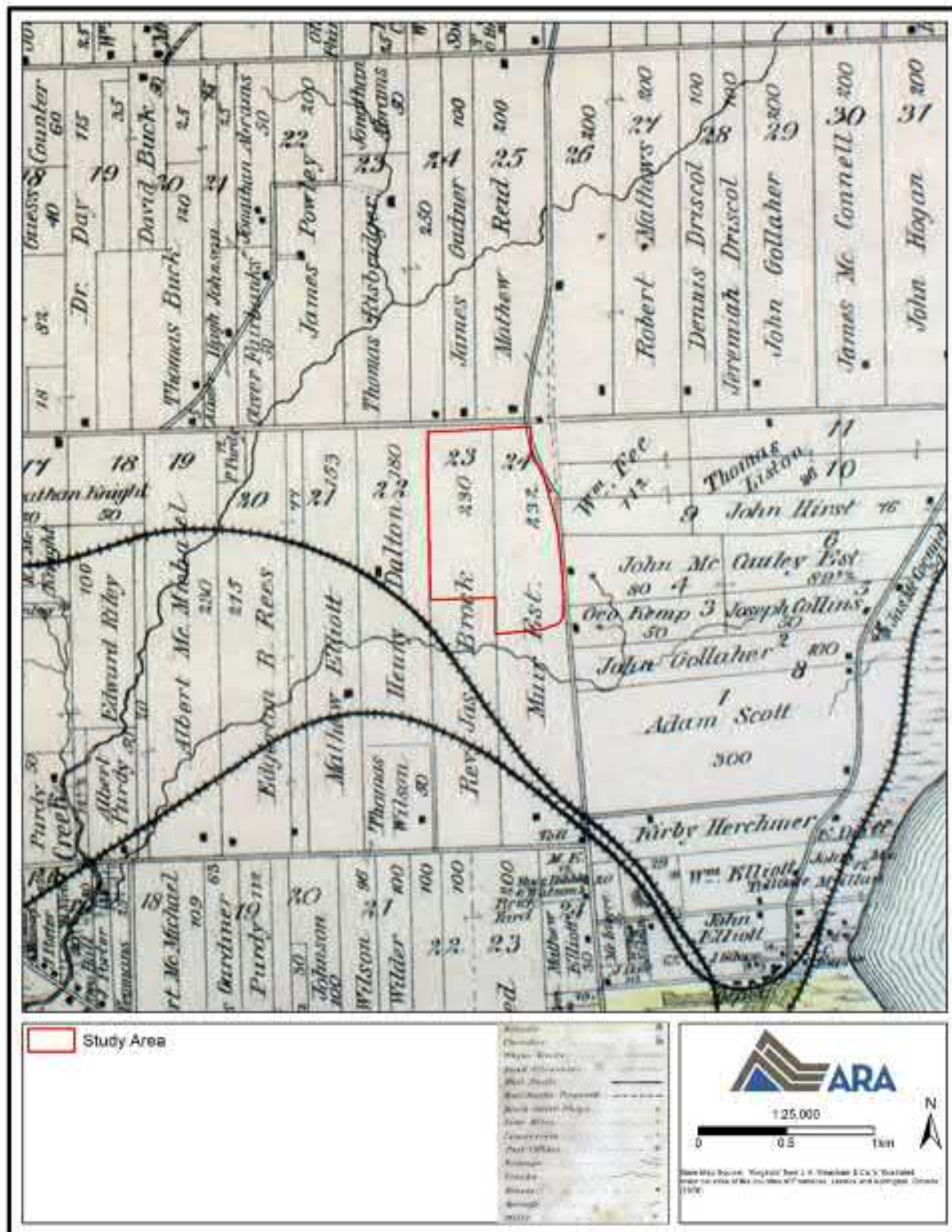
the study area and south of the railway line. The 1878 atlas does not identify any structures on lot 23 and identifies two structures on lot 24, one of which aligns with the structure identified on the 1860 atlas while the other is identified as a toll gate. A second railway line is also shown running through the southern half of the two lots. The road alignment remains the same to the north and south across both maps, though the eastern road alignment changes between 1860 and 1878, with the eastern road curving to the west. Little Cataraqui Creek and its tributaries are identified on the map, with one tributary running through the central portion of both lots.

The early to mid-20<sup>th</sup> century topographic maps indicate the study area was situated within a mix of cleared and forested lands (Map 4 and Map 5). A single structure is identified within the study area on both the 1916 and 1940 topographic maps, located near the eastern road (identified as Perth Road). The 1954 aerial image illustrates the study area as a mix of agricultural lands and forested area (Map 6). The structure identified on the 1916 and 1940 topographic maps is clarified as a farmstead on the aerial image, with a series of structures attached to a private driveway off Perth Road.

The latter half of the 20<sup>th</sup> century aerial images capture the more recent changes to the study area. In the mid-1960s the CRCA purchased a series of properties with the intention of creating a reservoir and conservation area (CRCA 2012). The 1970 aerial image depicts the removal of much of the farmstead, with only remnants of the driveway visible (Map 7). In 1971, a dam was constructed on Little Cataraqui Creek, creating a reservoir and moderating the flow of Little Cataraqui Creek to assist in flooding (CRCA 2012). The 1978 aerial photograph captures the significant changes to the adjacent lands, showing the flooding and creation of the LCCCA (Map 7). The 1998 aerial image depicts the study area in much the same state with agricultural lands largely occupying the area and the farmstead having been completely erased (Map 7). The 2021 Google Earth image captures the study area's current configuration, with the construction of the 'Knox Farm' facility having occurred at some point between the 1998 aerial image and 2021 Google Earth image (Map 8). The Knox Farm site currently consists of a snow management facility, a dewatering facility and storage area for the former Cataraqui River dredged material (Utilities Kingston 2021).

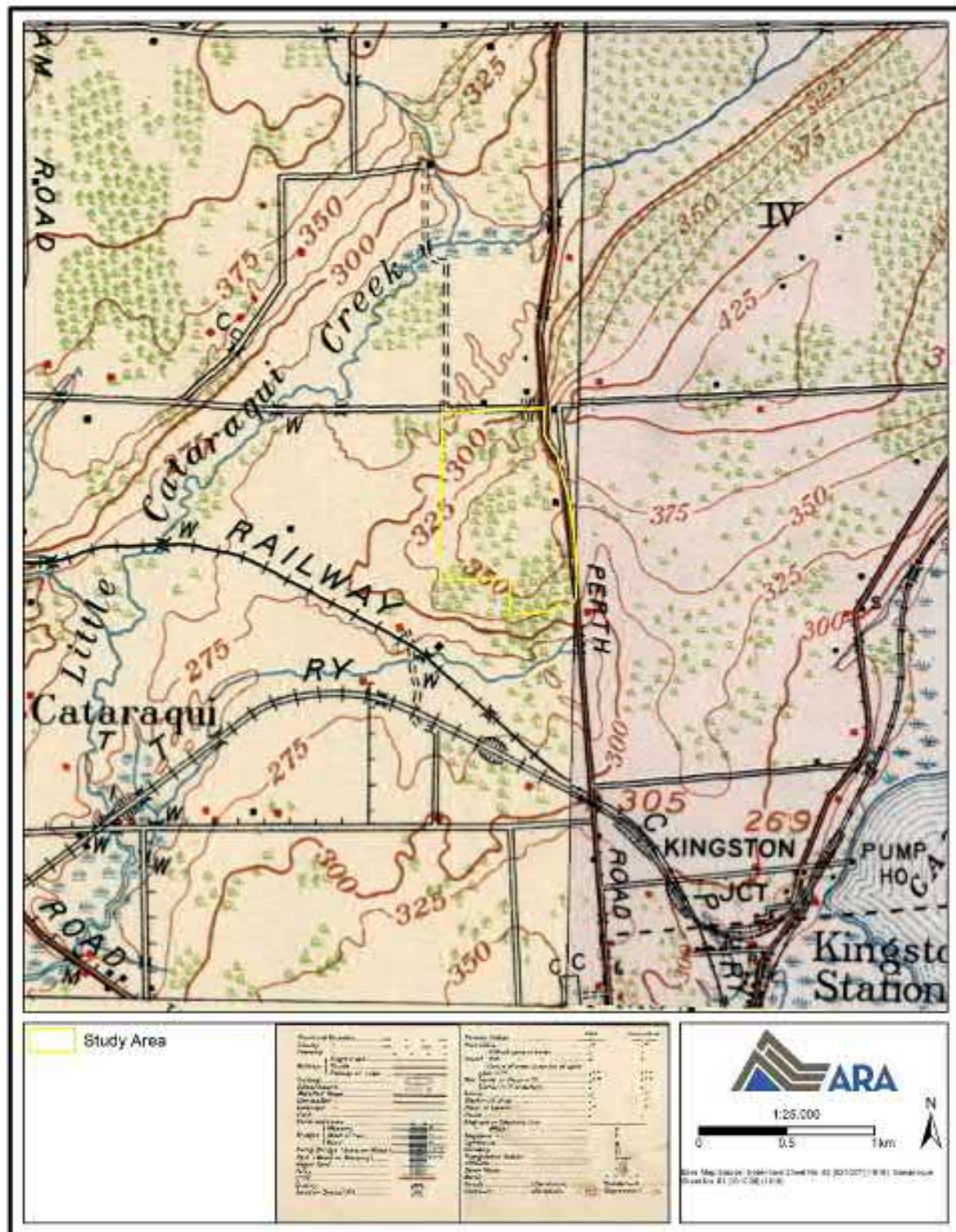




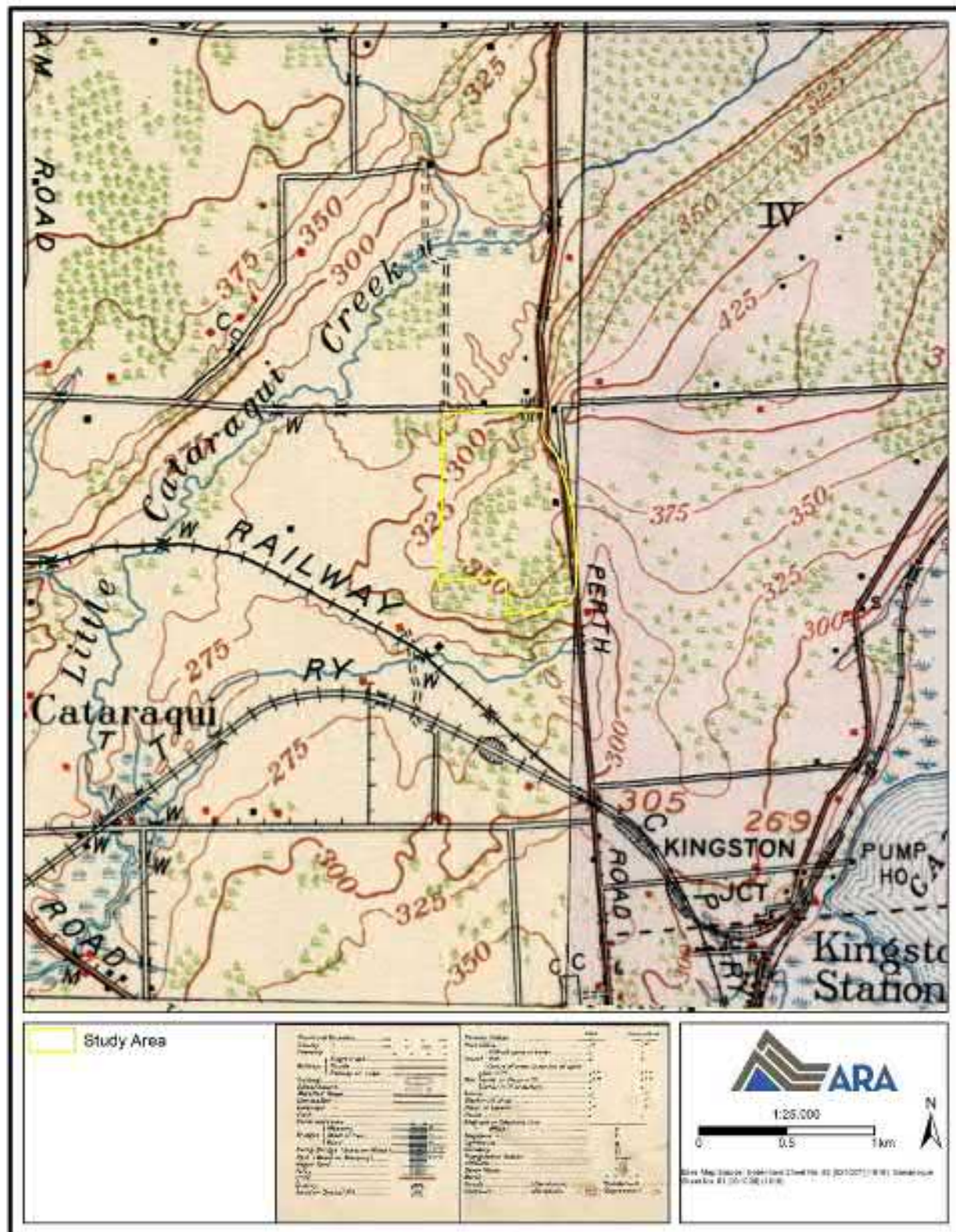


**Map 3: Map of Frontenac, Lennox and Addington Counties. (1878)**  
 (Produced under licence using ArcGIS® software by Esri, © Esri; McGill University 2001)

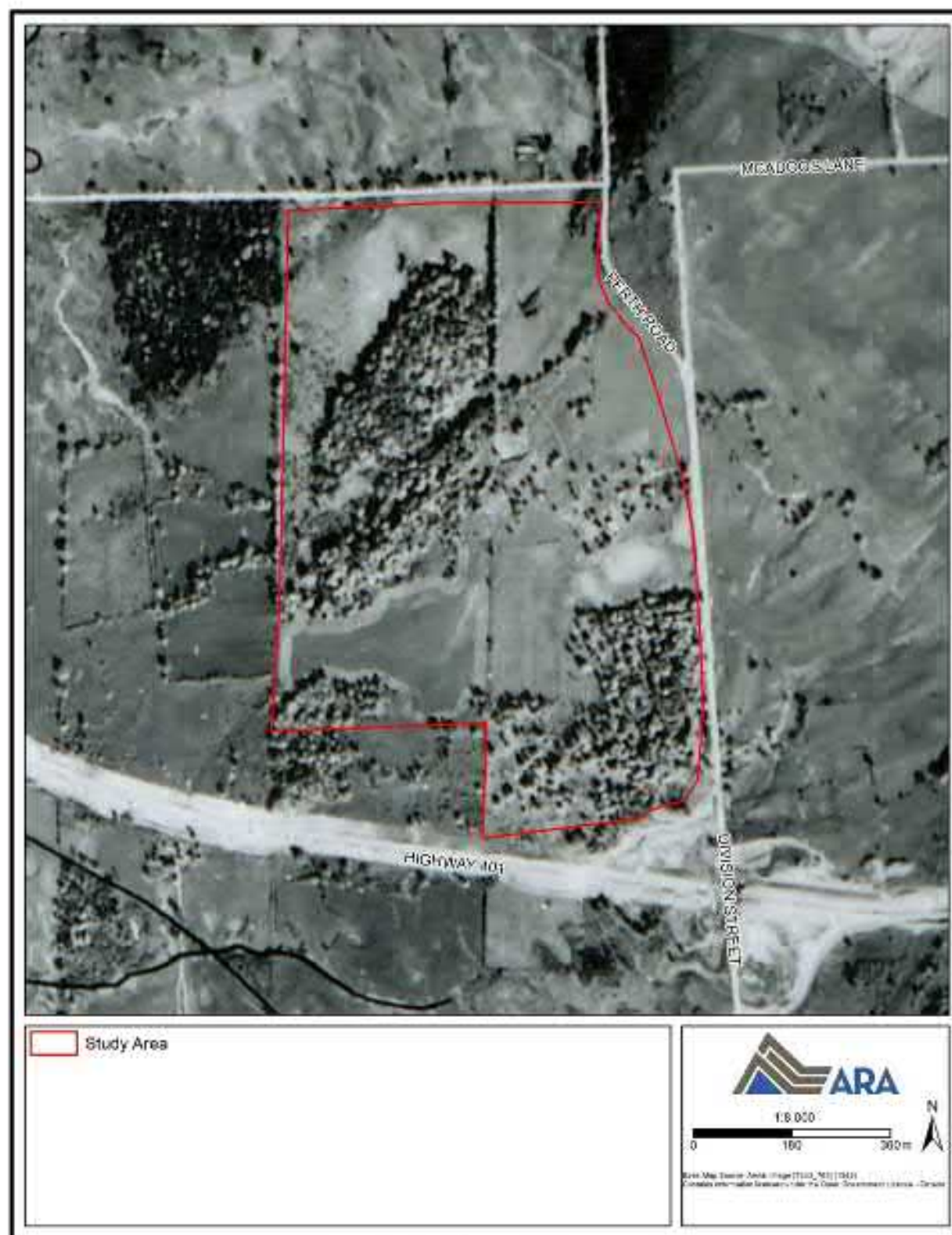






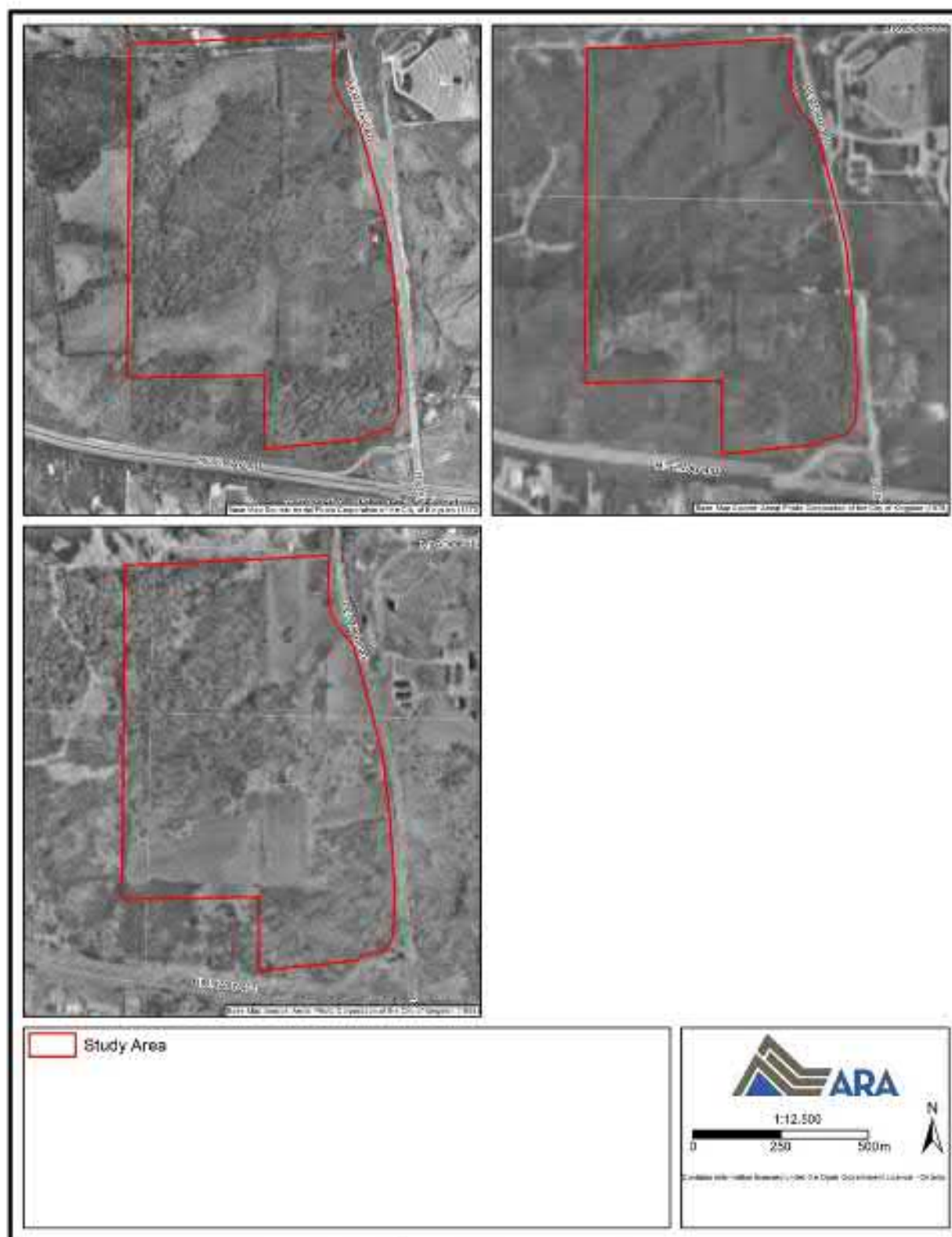






**Map 6: Aerial Image (1954)**  
(Produced under licence using ArcGIS® software by Esri, © Esri; City of Kingston 2022)





**Map 7: Aerial Image (1970, 1978, 1998)**  
(Produced under licence using ArcGIS® software by Esri, © Esri; City of Kingston 2022)



**Map 8: Satellite Image (2021)**  
(Produced under licence using ArcGIS® software by Esri, © Esri; Google Earth 2022)



## 4.0 CONSULTATION AND HERITAGE CONTEXT

BHRs and CHLs are broadly referred to as cultural heritage resources. A variety of types of recognition exist to commemorate and/or protect cultural heritage resources in Ontario.

### 4.1 Federal

The Minister of the Environment and Climate Change, on the advice of the Historic Sites and Monuments Board of Canada (HSMBC), makes recommendations to declare a site, event or person of national significance. The National Historic Sites program commemorates important sites that had a nationally significant effect on, or illustrates a nationally important aspect of, the history of Canada. A National Historic Event is a recognized event that evokes a moment, episode, movement or experience in the history of Canada. National Historic People are people who are recognized as those who through their words or actions, have made a unique and enduring contribution to the history of Canada. There exists Parks Canada's online *Federal Canadian Heritage Database* which captures these national commemorations. This directory also lists Heritage Railway Stations, Federal Heritage Buildings and Heritage Lighthouses. The *Federal Canadian Heritage Database* was searched, and no plaques or properties were noted within or adjacent to the study area (Parks Canada 2022).

The Canadian Heritage River system Program recognizes and conserve 40 of Canada's river which have been recognized for natural, cultural, and recreational heritage. There are no Canadian Rivers located within or adjacent to the study area. It is important to note that these federal commemoration programs do not offer protection from alteration or destruction.

### 4.2 Provincial

The Ontario Heritage Trust (OHT) operates the Provincial Plaque Program that has over 1,250 provincial plaques recognizing key people, places and events that shaped the province. Additionally, properties owned by the province may be recognized as a "provincial heritage property" (MCM 2010). The OHT plaque database were searched and none of the properties within or adjacent to the study area are commemorated with an OHT plaque (OHT 2021).

MCM's current list of Heritage Conservation Districts was consulted. No designated districts were identified in or adjacent to the study area (MCM 2019). The list of properties designated by the MCM under Section 34.5 of the OHA was consulted. No properties in or adjacent to the study area are listed.

### 4.3 Municipal

Many municipal heritage committees and historical societies provide plaques for local places of interest. "One role of municipal heritage groups (i.e., municipal heritage committees, historical societies) is to educate and inform the community on local heritage and several ways this could occur could include: producing descriptive guides and newsletters or by installing commemorative plaques" (MCM 2007:8). There is signage within the LCCCA put up by the CRCA regarding the natural heritage and wildlife associated with the LCCCA. No municipal signage relaying heritage information was located within or adjacent to the study area.

The City of Kingston's Municipal Heritage Register was consulted (City of Kingston 2020). No designated properties were identified in or adjacent to the study area. Dillon Consulting staff contacted the City of Kingston on November 17, 2022 and shared relevant information and several questions concerning heritage interests. The City of Kingston heritage staff were asked about: 1) protected properties within or adjacent to the study area, 2) properties on the municipal heritage register or part of a HCD or with Notice of Intention to designate in or adjacent to the study area, 3) any properties within or adjacent to the study area with a municipal easement or other types of heritage recognition and 4) other heritage concerns regarding the study area properties.

A City of Kingston heritage planner responded on November 17, 2022 with information about two listed heritage properties to the north of the study area at 1736 and 1756 Perth Road. Neither property is adjacent to the study area, lying to the north of the LCCCA. The heritage planner noted little information was available on the Knox Farm site, that it was not designated under Part IV or Part V of the Ontario Heritage Act. It was noted that the property did possess composite archaeological potential through Kingston's Archaeological Master Plan. A Stage 2 archaeological assessment has been conducted on 1533 McAdoos Lane, located northeast of the study area, on which no significant features or materials were found. ARA is conducting an archaeological assessment to address the archaeological requirements.



## **5.0 FIELD SURVEY**

The field survey component of an assessment involves the collection of primary data through systematic photographic documentation of all potential cultural heritage resources within the study area, as identified through historical research and consultation. Generally, potential cultural heritage resources are identified by applying a 40-year rolling timeline. This timeline is considered an industry best practice (i.e., MTO 2008). A date of 40 years does not automatically attribute CHVI to a resource; rather, that it should be flagged as a potential resource and evaluated for CHVI.

Additional cultural heritage resources may also be identified during the survey itself. Photographs capturing all properties with potential BHRs and CHLs are taken, as are general views of the surrounding landscape. The field survey also assists in confirming the location of each potential cultural heritage resource and helps to determine the relationship between resources.

A field survey was conducted on October 12 and 13, 2022 in order to photograph and document the study area, and to record any local features that could enhance ARA's understanding of their setting in the landscape and contribute to the cultural heritage evaluation process. The field survey was conducted within the study area property with permission to enter from UK. The adjacent properties were viewed from publicly accessible, non-private lands.

## **6.0 STUDY AREA DESCRIPTION**

The study area is approximately 74.37 ha in size and is located on parts of Lots 23–24, Concession 3 in the Geographic Township of Kingston, former Frontenac County (Map 1). The study area consists of the existing Knox Farm Site located north of the 401 and west of Perth Road. The site is accessed through a gravel laneway off Perth Road.

The Knox Farm Site is operated by UK and is currently used by UK as a snow dumping site. The snow dumping area is a cleared parcel of land surrounded by a gravel roundabout accessed by a gravel laneway (Image 1–Image 4). Smaller cleared areas paved with gravel extend off this laneway, possibly for parking or secondary dump sites. The remainder of the study area consists of former agricultural lands (Image 5) and forested areas (Image 6 and Image 7) including a rough path which connects the north section of the LCCCA to the west section (Image 8). No standing structures were identified within the study area during the field survey. No elements that would suggest the property is a cultural heritage landscape were observed.



## **7.0 HERITAGE ASSESSMENT**

The study area and adjacent property were assessed for potential CHVI to determine if there were any BHRs or CHLs. Based on historical research, engagement and the field survey, no BHRs or CHLs were located within or adjacent to the study area. All properties assessed are displayed as the “heritage assessed area” on Map 9.

## 8.0 DEVELOPMENT PLAN

This CHAR was carried out as one of the baseline studies to evaluate the suitability of Knox Farm in advance of formally initiating the Schedule 'C' Municipal Class Environmental Assessment in accordance with the *Environmental Assessment Act*. According to the RFP the proposed project is as follows:

*The purpose of this assignment is to review the environmental, technical, and financial feasibility (through the development of conceptual design options) of constructing an integrated biosolids and source separated organics processing facility (the Kingston Regional Biosolids and Biogas Facility) at a greenfield development site, currently targeting the property boundary of Knox Farm. The final deliverable will be an Environmental Study Report (ESR) that meets the requirements of a Schedule C Municipal Class Environmental Assessment (Class EA) in compliance with the Ontario Environmental Assessment Act and provides the necessary background to support project decision making and related environmental approvals.*

*Future phases beyond the scope of this assignment, including preliminary design, detailed design, and construction, may be subject to Utilities Kingston (UK) undertaking additional Requests for Proposal. (UK 2022:2)*



## **9.0 SUMMARY**

The study area (Knox Farm) consists of an irregularly shaped parcel of land with a total area of approximately 74.37 ha. The area assessed as part of this CHAR includes the study area in addition to the adjacent properties. After conducting historical research, consultation and field survey, no cultural heritage resources were identified within the assessed area. To date, there are no concerns with respect to built heritage resources and cultural heritage landscapes related to the potential Kingston Biosolids and Biogas Facility construction on the Knox Farm Property.

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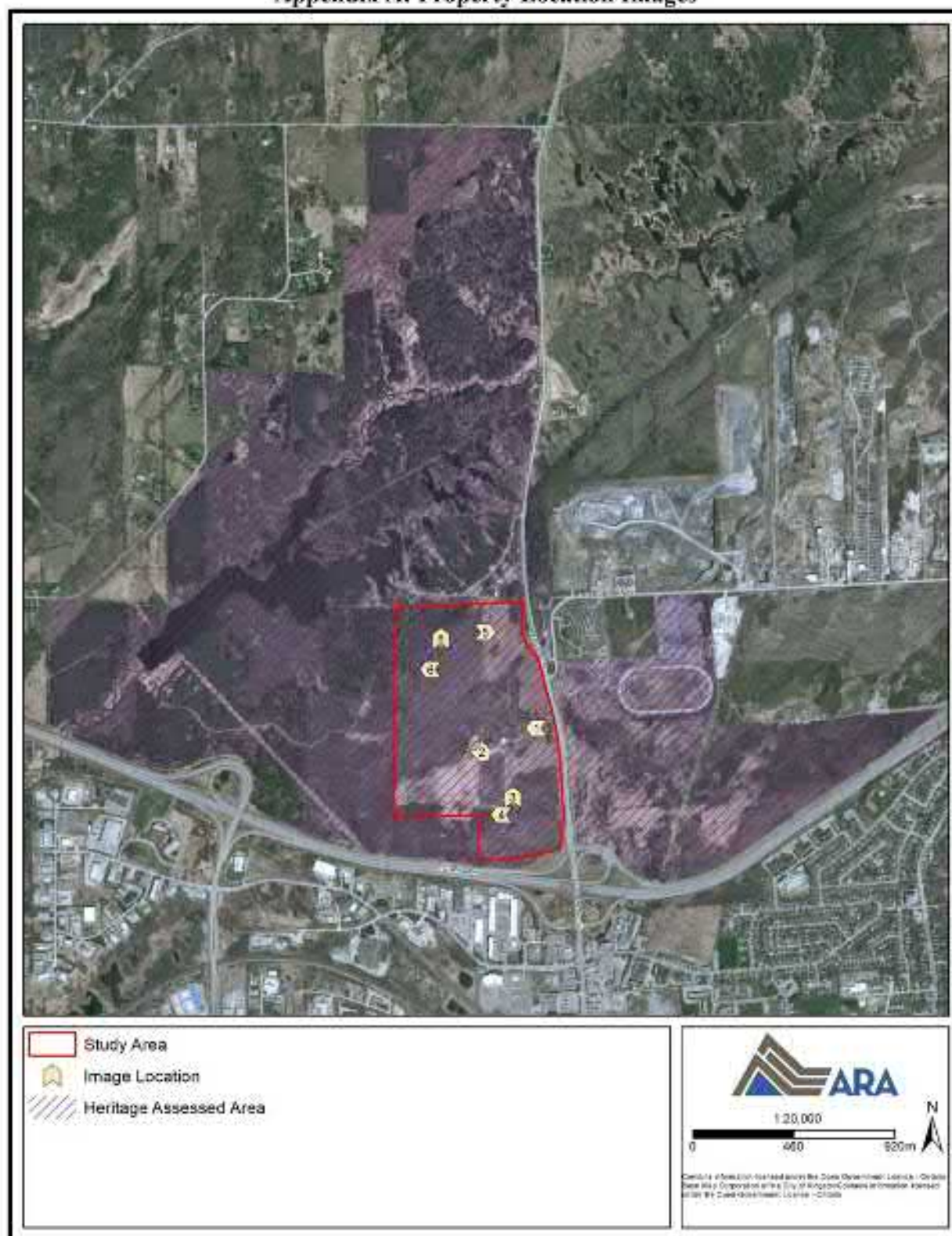
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## Appendix A: Property Location Images



**Map 9: Photo Location Map**  
(Produced by ARA under licence using ArcGIS® software by Esri, © Esri)





**Image 1: Study Area – Laneway off Perth Road**  
(Photo taken October 20, 2022; Facing Southwest)



**Image 2: Study Area – Gravel Area North of Roundabout**  
(Photo taken October 20, 2022; Facing Southeast)



**Image 3: Study Area – Gravel Roundabout with Snow Dump to Left**  
(Photo taken October 20, 2022; Facing North)



**Image 4: Study Area – Gravel Roundabout with Snow Dump to Right**  
(Photo taken October 20, 2022; Facing West)





**Image 5: Study Area – Former Farmland**  
(Photo taken October 20, 2022; Facing East)



**Image 6: Study Area – Forested Area**  
(Photo taken October 20, 2022; Facing West)





**Image 7: Study Area – Forested Area**  
(Photo taken October 20, 2022; Facing Northwest)



**Image 8: Study Area – LCCCA Pathway Through Study Area**  
(Photo taken October 20, 2022; Facing North)



**Appendix B: Team Member Curriculum Vitae**

Kayla Jonas Galvin, MA, RPP, MCIP, CAHP  
Heritage Operations Manager

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**Biography**

Kayla Jonas Galvin, Archaeological Research Associates Ltd.'s Heritage Operations Manager, has extensive experience evaluating cultural heritage resources and landscapes for private and public-sector clients to fulfil the requirements of provincial and municipal legislation such as the *Environmental Assessment Act*, the *Standards & Guidelines for the Conservation of Provincial Heritage Properties* and municipal Official Plans. She served as Team Lead on the Ministry of Tourism, Culture and Sport Historic Places Initiative, which drafted over 850 Statements of Significance and for *Heritage Districts Work!*, a study of 64 heritage conservation districts in Ontario. Kayla was an editor of *Arch, Truss and Beam: The Grand River Watershed Heritage Bridge Inventory* and has worked on Municipal Heritage Registers in several municipalities. Kayla has drafted over 150 designation reports and by-laws for the City of Kingston, the City of Burlington, the Town of Newmarket, Municipality of Chatham-Kent, City of Brampton and the Township of Whitchurch-Stouffville. Kayla is the Heritage Team Lead for ARA's roster assignments for Infrastructure Ontario and oversees evaluation of properties according to *Standards & Guidelines for the Conservation of Provincial Heritage Properties*. Kayla is a Registered Professional Planner (RPP), a Member of the Canadian Institute of Planners (MCIP), is a professional member of the Canadian Association of Heritage Professionals (CAHP) and sits on the board of the Ontario Association of Heritage Professionals.

**Education**

|           |  |
|-----------|--|
| 2016      | MA in Planning, University of Waterloo. Thesis Topic: <i>Goderich – A Case Study of Conserving Cultural Heritage Resources in a Disaster</i> |
| 2003-2008 | Honours BES University of Waterloo, Waterloo, Ontario<br>Joint Major: Environment and Resource Studies and Anthropology                      |

**Professional Memberships and Accreditations**

|         |   |
|---------|---|
| Current | Registered Professional Planner (RPP)<br>Member of the Canadian Institute of Planners (MCIP)<br>Professional Member, Canadian Association of Heritage Professionals (CAHP)<br>Board Member, Ontario Association of Heritage Professionals |
|---------|---|

**Work Experience**

|         |   |
|---------|---|
| Current | <b>Heritage Operations Manager, Archaeological Research Associates Ltd.</b><br>Oversees business development for the Heritage Department, coordinates completion of designation by-laws, Heritage Impact Assessments, Built Heritage and Cultural Heritage Landscape Assessments, and Cultural Heritage Resource Evaluations. |
|---------|---|

- 2009-2013 **Heritage Planner, Heritage Resources Centre, University of Waterloo**  
Coordinated the completion of various contracts associated with built heritage including responding to grants, RFPs and initiating service proposals.
- 2008-2009, 2012 **Project Coordinator–Heritage Conservation District Study, ACO**  
Coordinated the field research and authored reports for the study of 32 Heritage Conservation Districts in Ontario. Managed the efforts of over 84 volunteers, four staff and municipal planners from 23 communities.
- 2007-2008 **Team Lead, Historic Place Initiative, Ministry of Culture**  
Liaised with Ministry of Culture Staff, Centre’s Director and municipal heritage staff to draft over 850 Statements of Significance for properties to be nominated to the Canadian Register of Historic Places. Managed a team of four people.

### Selected Professional Development

- 2019 OPPI and WeirFoulds Client Seminar: Bill 108 – More Homes, More Choice, 2019
- 2019 Annual attendance at Ontario Heritage Conference, Goderich, ON (Two-days)
- 2019 Information Session: Proposed Amendments to the OHA, by Ministry of Tourism, Culture and Sport
- 2018 Indigenous Canada Course, University of Alberta
- 2018 Volunteer Dig, Mohawk Institute
- 2018 Indigenizing Planning, three webinar series, Canadian Institute of Planners
- 2018 Cultural Heritage, Archaeology and Planning Symposium
- 2018 Transforming Public Apathy to Revitalize Engagement, Webinar, MetorQuest
- 2018 How to Plan for Communities: Listen to the Them, Webinar, CIP
- 2017 Empowering Indigenous Voices in Impact Assessments, Webinar, International Association for Impact Assessments
- 2017 Cultural Heritage, Archaeology and Planning Symposium
- 2017 Capitalizing on Heritage, National Trust Conference, Ottawa, ON.
- 2016 Cultural Heritage, Archaeology and Planning Symposium
- 2016 Heritage Rising, National Trust Conference, Hamilton
- 2016 Ontario Heritage Conference St. Marys and Stratford, ON.
- 2016 Heritage Inventories Workshop, City of Hamilton & ERA Architects
- 2015 Cultural Heritage, Archaeology and Planning Symposium
- 2015 City of Hamilton: Review of Existing Heritage Permit and Heritage Designation Process Workshop.
- 2015 Leadership Training for Managers Course, Dale Carnegie Training

### Selected Publications

- 2018 “Conserving Cultural Heritage Landscapes in Waterloo: An Innovative Approach.” *Ontario Association of Heritage Professionals Newsletter*, Winter 2018.
- 2018 “Restoring Pioneer Cemeteries” *Ontario Association of Heritage Professionals Newsletter*. Spring 2018. *In print*.
- 2015 “Written in Stone: Cemeteries as Heritage Resources.” *Municipal World*, Sept. 2015.
- 2015 “Bringing History to Life.” *Municipal World*, February 2015, pages 11-12.
- 2014 “Inventorying our History.” *Ontario Planning Journal*, January/February 2015.
- 2014 “Assessing the success of Heritage Conservation Districts: Insights from Ontario Canada.” with R. Shipley and J. Kovacs. *Cities*.



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### Biography

Sarah Clarke is Archaeological Research Associates Ltd.'s Heritage Research Manager. Sarah has over 12 years of experience in Ontario archaeology and 10 years of experience with background research. Her experience includes conducting archival research (both local and remote), artifact cataloguing and processing, and fieldwork at various stages in both the consulting and research-based realms. As Team Lead of Research, Sarah is responsible for conducting archival research in advance of ARA's archaeological and heritage assessments. In this capacity, she performs Stage 1 archaeological assessment field surveys, conducts preliminary built heritage and cultural heritage landscape investigations and liaises with heritage resource offices and local community resources in order to obtain and process data. Sarah has in-depth experience in conducting historic research following the *Ontario Heritage Toolkit* series, and the *Standards and Guidelines for Provincial Heritage Properties*. Sarah holds an Honours B.A. in North American Archaeology, with a Historical/Industrial Option from Wilfrid Laurier University and is currently enrolled in Western University's Intensive Applied Archaeology MA program. She is a member of the Ontario Archaeological Society (OAS), the Society for Industrial Archaeology, the Ontario Genealogical Society (OGS), the Canadian Archaeological Association, and is a Council-appointed citizen volunteer on the Brantford Municipal Heritage Committee. Sarah holds an R-level archaeological license with the MTCS (#R446).

### Education

|           |   |
|-----------|---|
| Current   | MA Intensive Applied Archaeology, Western University, London, ON. Proposed thesis topic: Archaeological Management at the Mohawk Village. |
| 1999–2010 | Honours BA, Wilfrid Laurier University, Waterloo, Ontario<br>Major: North American Archaeology, Historical/Industrial Option              |

### Professional Memberships and Accreditations

|         |   |
|---------|---|
| Current | Member of the Ontario Archaeological Society      |
| Current | Member of the Society for Industrial Archaeology  |
| Current | Member of the Brant Historical Society            |
| Current | Member of the Ontario Genealogical Society        |
| Current | Member of the Canadian Archaeological Association |
| Current | Member of the Archives Association of Ontario     |

### Work Experience

|         |   |
|---------|---|
| Current | <b>Team Lead – Research; Team Lead – Archaeology, Archaeological Research Associates Ltd.</b><br>Manage and plan the research needs for archaeological and heritage projects.<br>Research at offsite locations including land registry offices, local libraries and local |
|---------|---|

|           |   |
|-----------|---|
|           | and provincial archives. Historic analysis for archaeological and heritage projects. Field Director conducting Stage 1 assessments.   |
| 2013-2015 | <b>Heritage Research Manager; Archaeological Monitoring Coordinator, Archaeological Research Associates Ltd.</b><br>Stage 1 archaeological field assessments, research at local and distant archives at both the municipal and provincial levels, coordination of construction monitors for archaeological project locations.                         |
| 2010-2013 | <b>Historic Researcher, Timmins Martelle Heritage Consultants Inc.</b><br>Report preparation, local and offsite research (libraries, archives); correspondence with the Ministry of Tourism, Culture, and Sport; report submission to the MTCS and clients; and administrative duties (PIF and Borden form completion and submission, data requests). |
| 2008-2009 | <b>Field Technician, Archaeological Assessments Ltd.</b><br>Participated in field excavation and artifact processing.   |
| 2008-2009 | <b>Teaching Assistant, Wilfrid Laurier University.</b><br>Responsible for teaching and evaluating first year student lab work.  |
| 2007-2008 | <b>Field and Lab Technician, Historic Horizons.</b><br>Participated in excavations at Dundurn Castle and Auchmar in Hamilton, Ontario. Catalogued artifacts from excavations at Auchmar.  |
| 2006-2010 | <b>Archaeological Field Technician/Supervisor, Wilfrid Laurier University.</b><br>Field school student in 2006, returned as a field school teaching assistant in 2008 and 2010.   |

### Professional Development

|      |   |
|------|---|
| 2019 | Annual attendance at Ontario Heritage Conference, Goderich, ON  |
| 2018 | Cultural Heritage, Archaeology and Planning Symposium   |
| 2018 | Grand River Watershed 21 <sup>st</sup> Annual Heritage Day Workshop & Celebration   |
| 2018 | Mississaugas of the New Credit First Nation Historical Gathering and Conference   |
| 2017 | Ontario Genealogical Society Conference   |
| 2016 | Ontario Archaeological Society Symposium  |
| 2015 | Introduction to Blacksmithing Workshop, Milton Historical Society   |
| 2015 | Applied Research License Workshop, MTCS   |
| 2014 | Applied Research License Workshop, MTCS   |
| 2014 | Heritage Preservation and Structural Recording in Historical and Industrial Archaeology. Four-month course taken at Wilfrid Laurier University, Waterloo, ON. Professor: Meagan Brooks. |

### Presentations

|      |  |
|------|--|
| 2018 | <i>The Early Black History of Brantford.</i> Brant Historical Society, City of Brantford.  |
| 2017 | <i>Mush Hole Archaeology.</i> Ontario Archaeological Society Symposium, Brantford.   |
| 2017 | <i>Urban Historical Archaeology: Exploring the Black Community in St. Catharines, Ontario.</i> Canadian Archaeological Association Conference, Gatineau, QC. |

### Volunteer Experience

|         |   |
|---------|---|
| Current | Council-appointed citizen volunteer for the Brantford Municipal Heritage Committee. |
|---------|---|



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### **Biography**

Jacqueline recently finished a 6-month contract with MTO as the Heritage Specialist for Central Region, returning to her permanent position at ARA in the Fall 2018 where she had been the acting Heritage Team Lead for the year previous. As the lead, she directed the preparation and oversaw the submission of deliverables to clients. Currently, she is the Heritage Team Technical Writer and Researcher, where she continues to research and evaluate the significance of cultural heritage resources using *Ontario Regulation 9/06* and *10/06*, most recently completing designation reports for the City of Burlington, City of Kingston and Town of Newmarket and the Town of Whitchurch-Stouffville. Further, Jacqueline has overseen the completion of many Built Heritage and Cultural Heritage Landscape Studies as well as Heritage Impact Assessments including reports for a proposed aggregate pit, road widening, the LRT in the Region of Waterloo and a National Historic Site in St. Catharines. As well as being a proficient technical writer, Jacqueline is skilled at writing in approachable language demonstrated by my crafting of 30 properties stories and 35 thematic stories for Heritage Burlington's website. She holds an Honours Bachelor of Arts in Near Eastern Archaeology from Wilfrid Laurier University. In addition to heritage experience, Jacqueline also has archaeological experience working as field crew, as an Assistant Lab Technician and archaeological technical writer.

### **Education**

2000-2007 Honours B.A., Wilfrid Laurier University, Waterloo, Ontario  
Major: Near Eastern Archaeology

### **Work Experience**

2015-Present **Technical Writer and Researcher – Heritage, Archaeological Research Associates Ltd., Kitchener, ON**

Research and draft designation by-laws, heritage inventories, Heritage Impact Assessments, Built Heritage and Cultural Heritage Landscape Assessments, and Cultural Heritage Resource Evaluations using Ontario Regulation 9/06, 10/06 and the Ontario Heritage Bridge Guidelines.

2018 **Environmental Planner – Heritage Ministry of Transportation, Central Region – Six-month contract.**

Responsibilities included: project management and coordination of MTO heritage program, managed multiple consultants, conducted and coordinated field assessments and surveys, estimated budgets including \$750,000 retainer contracts. Provided advice on heritage-related MTO policy to Environmental Policy Office (EPO) and the bridge office.

|           |  |
|-----------|--|
| 2017-2018 | <b>Acting Heritage Team Lead – Heritage Archaeological Research Associates Ltd., Kitchener, ON</b><br>Managed a team of Heritage Specialists, oversaw the procurement of projects, retainers; managed all Heritage projects, ensured quality of all outgoing products.                           |
| 2014-2015 | <b>Technical Writer – Archaeology, Archaeological Research Associates Ltd., Kitchener, ON</b><br>Report preparation; correspondence with the Ministry of Tourism, Culture, and Sport; report submission to the Ministry and clients; and administrative duties (PIF and Borden form completion). |
| 2012-2013 | <b>Lab Assistant, Archaeological Research Associates Ltd., Kitchener, ON</b><br>Receive, process and register artifacts.   |
| 2011-2012 | <b>Field Technician, Archaeological Research Associates Ltd., Kitchener, ON</b><br>Participated in field excavation and artifact processing.   |
| 2005-2009 | <b>Teaching Assistant, Wilfrid Laurier University, Waterloo, ON</b><br>Responsible for teaching and evaluating first, second, third- and fourth-year student lab work, papers and exams.   |
| 2005-2007 | <b>Lab Assistant, Wilfrid Laurier University – Near Eastern Lab, Waterloo, ON</b><br>Clean, Process, Draw and Research artifacts from various sites in Jordan.   |

#### **Selected Professional Development**

|      |   |
|------|---|
| 2019 | OPPI and WeirFoulds Client Seminar: Bill 108 – More Homes, More Choice  |
| 2019 | Annual attendance at Ontario Heritage Conference, Goderich, ON (Two-days)                                     |
| 2019 | Information Session: Proposed Amendments to the OHA, MTCS   |
| 2018 | Indigenizing Planning, three webinar series, Canadian Institute of Planners                                   |
| 2018 | Cultural Heritage, Archaeology and Planning Symposium   |
| 2018 | Transforming Public Apathy to Revitalize Engagement, Webinar, MetorQuest                                      |
| 2018 | How to Plan for Communities: Listen to the Them, Webinar, CIP   |
| 2017 | Empowering Indigenous Voices in Impact Assessments, Webinar, International Association for Impact Assessments |
| 2015 | Introduction to Blacksmithing (One day)   |
| 2015 | Leadership Training for Managers Course, Dale Carnegie  |



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### Biography

Christopher Thorne, ARA's Cultural Heritage Technician has two years of experience in evaluating cultural heritage resources and ten years of experience in conducting historical research and conducting archaeological assessments. He holds an Honours BA in Anthropology and History from the University of Toronto. Chris began working in cultural resource management in 2011, obtaining an applied research licence from the Ministry of Heritage, Sport, Tourism and Culture Industries in 2017. Building on this experience, Chris received a graduate Diploma in Heritage Conservation from the Willowbank School of Restoration Arts. Chris has gained substantial experience in provincial and municipal legislation and guidelines, including the Ontario Heritage Act, Official Plans, the Standards and Guidelines for the Conservation of Historic Places, the Standards and Guidelines for Consultant Archaeologists and the Ontario Heritage Toolkit. Chris has completed numerous projects throughout Ontario conducting heritage assessments and archaeological work in urban and rural areas.

### Education

|           |  |
|-----------|--|
| 2019-2022 | Post-Graduate Diploma in Heritage Conservation, Willowbank School of Restoration Arts, Queenston, ON |
| 2016      | Post-Graduate Certificate in Occupational Safety & Health, Algonquin College, Ottawa, ON             |
| 2010-2014 | Honours BA, University of Toronto, Toronto, ON<br>Anthropology/History                               |

### Professional Memberships and Accreditations

|         |  |
|---------|--|
| Current | Member, Ontario Historical Society.<br>Member, Council for Northeast Historical Archaeology<br>Member, Association for Preservation Technology<br>Ministry of Tourism, Culture and Sport Applied Research Licence (#R1156) |
|---------|--|

### Work Experience

|           |   |
|-----------|---|
| Current   | <b>Cultural Heritage Technician, Archaeological Research Associates Ltd.</b><br>Produce deliverables for ARA's heritage team, including historic research, heritage assessment and evaluation for designation by-laws, Heritage Impact Assessments, Built Heritage and Cultural Heritage Landscape Assessments, and Cultural Heritage Resource Evaluations. |
| 2021-2022 | <b>President, Atelier Heritage Restoration</b><br>Coordinated and carried out the complete restoration of heritage windows on various heritage properties throughout the Niagara Region. Duties included the repair of wooden/metal sash windows, sourcing of heritage-appropriate glass, painting and installation of wooden/metal sash windows.           |

- 2020-2021 **Project Manager, The Brown Homestead**  
Supervised the restoration of multiple historic structures associated with the Brown Homestead property in St. Catharines. Authored documentation of the restoration process.
- 2021 **Cultural Heritage Intern, Timmins Martelle Heritage Consultants Inc.**  
Conducted and authored various heritage documents, including cultural heritage assessments/evaluations and heritage context statements.
- 2020 **Heritage Carpenter, Willowbank School of Restoration Arts**  
Carried out restoration of wooden doors and windows on Willowbank National Historic Site in Queenston. Authored documentation of the restoration process.
- 2019 **Archaeological Field Liason, Environmental Resource Management**  
Provided coordination and communication between various stakeholders for pipeline corridor project. Duties included providing daily progress reports, coordinating archaeological fieldwork and ensuring communication between stakeholders.
- 2017-2019 **Senior Associate, CRM Lab Archaeological Services**  
Coordinated and authored various archaeological projects. Duties included project quotation, client communication, artifact analysis, report preparation and site excavation/direction.
- 2011-2015 **Field Archaeologist, ASI Heritage**  
Conducted field excavations and artifact analysis on archaeological sites throughout Ontario, with a focus on urban/brownfield archaeological sites.

### Professional Development

- 2022 "Janie Cooper-Wilson's 'How Do You Want Your Ancestors to be Remembered?'" Webinar. Presented by the Friends of South Grey Museum.
- 2021 "Climate Change in Heritage Places." Webinar. Presented by the National Trust for Canada.  
"From Trowel to Table: Ceramic Sherds Inform History Detectives at James Madison's Montpelier." Web lecture by Leslie Lambour Bouterie. Presented by Transferware Collectors Club and James Madison's Montpelier.
- 2020 "Freedom-Seekers of St. Catherine in the Archaeological Record with Sarah Clarke". Web lecture. Presented by the Ontario Archaeological Society.  
"Historic places and the charitable sector". Webinar. Presented by the National Trust for Canada.  
"The 'Heritage Industry'". Webinar. Presented by the National Trust for Canada.  
"Preserving Hamilton's Built Heritage." Lecture by Alan Stacey. Hamilton Municipal Heritage Committee, Hamilton, ON.
- 2018 "Connections and Pathways through the Past". Ontario Archaeological Society Annual Symposium, Chatham-Kent, ON.  
"Using Archival Records in Archaeological and Family History Research", Lecture by Guylaine Pétrin. Presented by the Ontario Ministry of Tourism, Culture and Sport, Chatham, ON.
- 2017 "Pills and Potions at the Niagara Apothecary". Lecture, Ontario Archaeological Society, Toronto, ON.