Appendix B
Stage 1 Archaeological Assessment

ARCHAEOLOGY | HERITAGE | OUTREACH | CONSERVATION

DRAFT

Stage 1 Archaeological Assessment
Biosolids Composting Facility
Municipal Class Environmental Assessment Study
Town of Milton and Town of Oakville
Regional Municipality of Halton
Part of Lot 2, Concession 2 and
Part of Lots 27 and 29, Concession 2 North of Dundas Street
Geographic Township of Trafalgar
Former Halton County, Ontario

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Original Report

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EXECUTIVE SUMMARY

Under a contract awarded in June 2022, Archaeological Research Associates Ltd. carried out a Stage 1 assessment of lands with the potential to be impacted by a proposed biosolids composting facility in the Town of Milton and Town of Oakville, Regional Municipality of Halton, Ontario. The Halton Region Biosolids Master Plan issued in 2012 recommended that biosolids composting opportunities be investigated to enhance the Region's land application program, and a Feasibility Study completed in 2020 recommended that a Halton Region-owned biosolids composting facility be built. Several sites are being considered. The assessment is being carried out in accordance with Schedule B of the Municipal Engineers Association's Municipal Class Environmental Assessment (MCEA) Process (October 2000, as amended 2007, 2011, 2015 and 2023) which is an approved process under the *Ontario Environmental Assessment Act*. This report documents the background research and potential modelling involved in the investigation and presents conclusions and recommendations pertaining to archaeological concerns.

The Stage 1 assessment was conducted in November 2023 under Project Information Form #P007-1449-2023. The investigation encompassed the short-listed sites for the proposed facility. Nine parcels were evaluated, comprising the Halton Waste Management Site (HWMS) Southeast Expansion Area, Parcels 1–2, Parcels 4–5, the Parcel 5 access road area and Parcels 6–8. A third parcel (Parcel 3) was identified adjacent to Parcel 2, but this was eliminated from consideration early on in the MCEA study process. Therefore, it was not included in the scope of the Stage 1 assessment. A property inspection did not occur; accordingly, no permissions were required for property access. At the time of assessment, the study area consisted of former and active agricultural fields, wooded areas and part of the existing Halton Biosolids Management Centre.

The Stage 1 assessment determined that the sites comprise a mixture of areas of archaeological potential, areas of no archaeological potential and previously assessed lands of no further concern. It is recommended that all areas of archaeological potential that could be impacted by the project be subject to a Stage 2 property assessment in accordance with Section 2.1 of the 2011 *Standards and Guidelines for Consultant Archaeologists*. The identified areas of no archaeological potential and previously assessed lands of no further concern do not require any additional assessment. All of the short-listed sites contain one or more areas that would require Stage 2 assessment.

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ABBREVIATIONS

ARA – Archaeological Research Associates Ltd.
CHVI – Cultural Heritage Value or Interest
CIF – Contract Information Form
HWMS – Halton Waste Management Site
MCEA – Municipal Class Environmental Assessment
MCM – Ministry of Citizenship and Multiculturalism
NDS – North of Dundas Street
PIF – Project Information Form
S&Gs – Standards and Guidelines for Consultant Archaeologists
SD – Supplementary Documentation

PERSONNEL

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1.0 PROJECT CONTEXT

1.1 Development Context

Under a contract awarded in June 2022, Archaeological Research Associates Ltd. (ARA) carried out a Stage 1 assessment of lands with the potential to be impacted by a proposed biosolids composting facility in the Town of Milton and Town of Oakville, Regional Municipality of Halton, Ontario. The Halton Region Biosolids Master Plan issued in 2012 recommended that biosolids composting opportunities be investigated to enhance the Region's land application program, and a Feasibility Study completed in 2020 recommended that a Halton Region-owned biosolids composting facility be built. Several sites are being considered. The assessment is being carried out in accordance with Schedule B of the Municipal Engineers Association's Municipal Class Environmental Assessment (MCEA) Process (October 2000, as amended 2007, 2011, 2015 and 2023) which is an approved process under the *Ontario Environmental Assessment Act*. This report documents the background research and potential modelling involved in the investigation and presents conclusions and recommendations pertaining to archaeological concerns.

The study area consists of multiple parcels of land with a total area of 69.86 ha (Map 1). These parcels are generally bounded by a mixture of agricultural fields, overgrown areas, wooded areas, roadways and developed lands (e.g., the Halton Waste Management Site, Rattle Snake Point Golf Course and the Halton Biosolids Management Centre). In legal terms, the study area falls on part of Lot 2, Concession 2 and part of Lots 27 and 29, Concession 2 North of Dundas Street (NDS) in the Geographic Township of Trafalgar, formerly Halton County. The Crown obtained these lands from the Mississaugas as part of the Head of the Lake Purchase in 1806 (Treaty 14).

The Stage 1 assessment was conducted in November 2023 under Project Information Form (PIF) #P007-1449-2023. The investigation encompassed the short-listed sites for the proposed facility. Nine parcels were evaluated, comprising the Halton Waste Management Site (HWMS) Southeast Expansion Area, Parcels 1–2, Parcels 4–5, the Parcel 5 access road area and Parcels 6–8. A third parcel (Parcel 3) was identified adjacent to Parcel 2, but this was eliminated from consideration early on in the MCEA study process. Therefore, it was not included in the scope of the Stage 1 assessment. A property inspection did not occur; accordingly, no permissions were required for property access. As set out in Section 1.0 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (*S&G*s), the investigation was carried out to achieve the following objectives:

- Provide information about geography, history and current land conditions;
- Determine whether any previous archaeological fieldwork has been completed;
- Evaluate in detail the study area's archaeological potential; and
- Recommend appropriate strategies for a Stage 2 assessment, if necessary.

The Ministry of Citizenship and Multiculturalism (MCM) is asked to review the results and recommendations presented herein and enter the report into the Ontario Public Register of Archaeological Reports. A Record of Indigenous Engagement is included in the project report package in accordance with the requirements set out in Section 7.6.2 of the 2011 *S&Gs*. The additional directions provided in the 2018 *Mississaugas of the Credit First Nation Standards and Guidelines for Archaeology* were considered throughout the investigation.

1.2 Historical Context

After a century of archaeological work in southern Ontario, scholarly understanding of the historical usage of the area has become very well-developed. With occupation beginning in the Palaeo period approximately 11,000 years ago, the greater vicinity of the study area comprises a complex chronology of Indigenous and Euro-Canadian histories. Section 1.2.1 summarizes the region's settlement history, whereas Section 1.2.2 documents past and present land uses. Multiple previous archaeological reports containing relevant background information were obtained during the research component of the study. These reports are summarized in Section 1.3.3, and the references (including title, author and PIF number) appear in Section 6.0.

1.2.1 Settlement History

1.2.1.1 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	Saugeen tradition; Stamped ceramics appear; Saugeen points; Cobble spall scrapers; Seasonal settlements and resource utilization; Post holes, hearths, middens, cemeteries and rectangular structures identified
Middle/Late Woodland Transition	AD 600–900	Princess Point tradition; Cord roughening, impressed lines and punctate designs on pottery; Adoption of maize horticulture at the western end of Lake Ontario; Oval houses and 'incipient' longhouses; First palisades; Villages with 75 people

Sub-Period	Timeframe	Characteristics
Late Woodland	AD 900–1600	Area occupied by Algonquian-speaking Anishinaabeg and Iroquoian-speaking peoples such as the Pre-Contact Neutral; Early focus on the latter linguistic group identified Glen Meyer, Uren, Middleport and later traditions and tended to emphasize a linear 'Iroquoian' developmental sequence; There was likely a close interaction sphere between the two groups, which may have resulted in shared material culture traditions; Pre-Contact Neutral associated with large villages; Some up to 5 ha with 2,500 people; Extensive croplands; Also hamlets, cabins, camps and cemeteries; Fur trade begins ca. 1580; European trade goods appear

1.2.1.2 Post-Contact

The arrival of European explorers and traders at the beginning of the 17th 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; Warnock 1862; Coyne 1895; Lajeunesse 1960; Cumming 1971; Ellis and Ferris 1990; Surtees 1994; AO 2023)

Historical Event	Timeframe	Characteristics
Early Exploration	Early 17th 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
Increased Contact and Conflict	Mid- to late 17th century	Conflicts between various First Nations during the Beaver Wars result in numerous population shifts; 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	Early to mid-18th century	Growth and spread of the fur trade; 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
British Control	Mid-18th century	*Royal Proclamation* of 1763 recognizes the title of the First Nations to the land; 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) of 1781 included this area
Loyalist Influx	Late 18th century	United Empire Loyalist influx after the American Revolutionary War (1775–1783); British develop interior communication routes and acquire additional lands; Between the Lakes Purchase completed with the Mississaugas in 1784 and confirmed in 1792 (Treaty 3); *Constitutional Act* of 1791 creates Upper and Lower Canada
County Development	Late 18th to early 19th century	Area initially adjacent to York County's 'West Riding'; Brant Tract (Treaty 3 ¾) completed in 1795 and confirmed in 1797; Became part of York County's 'West Riding' in 1798; Remainder of southern portion acquired as part of the Head of the Lake Purchase (Treaty 14) in 1806; Halton County established in 1816; Northern portion acquired as part of the Ajetance Purchase (Treaty 19) in 1818; Independent after the abolition of the district system in 1849

Historical Event	Timeframe	Characteristics
Township Formation	Early 19th century	Concessions northwest and southeast of Dundas Street surveyed by S. Wilmot in 1806 (the 'Old Survey'); First settlers arrived in this area ca. 1807; Prominent early families in the south included the Albertsons, Biggars, Browns, Chalmers, Chisholms, Freemans, Hagars, Kattings, Kenneys, Mulhollands, Posts, Proudfoots, Sovereigns and Sproats; Population reached 548 by 1817, with 4 saw mills and 1 grist mill in operation; The 'New Survey' of the northwestern part of Trafalgar was conducted in 1819
Township Development	Mid-19th to early 20th century	By 1846, 28,375 ha had been taken up in Trafalgar, with 11,404 ha under cultivation; 23 saw mills and 7 grist mills in operation at that time; Population reached 4,513 by 1850; Traversed by the Hamilton & Toronto Branch of the Great Western Railway (1855), the Hamilton & North Western Railway (1877) and the Credit Valley Railway (1877); Communities at Auburn, Boyne, Drumquin, Hornby, Milton and Omagh in the north and Bronte, Munn's Corner, Oakville, Palermo, Sheridan and Trafalgar in the south

1.2.2 Past and Present Land Use

1.2.2.1 Overview

During Pre-Contact and Early Contact times, the vicinity of the study area would have comprised a mixture of coniferous trees, deciduous trees and open areas. Indigenous communities actively utilized the land and its resources well into Post-Contact times, and they would have managed the landscape to varying degrees (e.g., establishing clearings for campsites, plant cultivation, etc.). During the early 19th century, Euro-Canadian settlers arrived in the area and began to clear the forests for agricultural and settlement purposes. The study area was located northwest of the historical limits of Palermo. The land use at the time of assessment can be classified as a mixture of agricultural, infrastructural and green space.

1.2.2.2 Mapping and Imagery Analysis

In order to gain a general understanding of the study area's past land uses, two historical settlement maps, two topographic maps and one aerial image were examined during the research component of the study. Specifically, the following resources were consulted:

- *Tremaine's Map of the County of Halton, Canada West* (1858) (OHCMP 2019);
- The *Illustrated Historical Atlas of the County of Halton, Ont.* (1877) (MU 2001);
- Topographic maps from 1909 and 1938 (OCUL 2023); and
- An aerial image from 1954 (U of T 2023).

The limits of the study area are shown on georeferenced versions of the consulted historical resources in Map 2–Map 5. The study area traversed parts of multiple properties. A summary of the identified historical occupants appears in Table 3.

Table 3: Occupation History

Lot	Concession	1858	1877
2	2	John Jarvis, Esq.	Estate of John Jarvis
27	2 NDS	L.P. Burtch	D. McGibbon, Esq., D. Burtch
29	2 NDS	James Bigger	James G. Bigger

Tremaine's Map of the County of Halton, Canada West (1858) does not depict any structures within or adjacent to the study area, though the early alignments of Regional Road 25, Lower Base Line and Henderson Road are shown (Map 2). This map does not contain any farmhouse locations, however, so the absence of buildings should not be taken as evidence that the parcels were unimproved. The *Illustrated Historical Atlas of the County of Halton, Ont.* (1877) indicates that one of the Jarvis farmsteads and its associated orchard were located within the HWMS Southeast Expansion Area along Regional Road 25 (Map 3). The farmhouses and orchards in the vicinity of the central and eastern parcels were all located well beyond the study area.

The topographic map from 1909 indicates that the study area consisted of cleared lands and wooded areas (Map 4). One stone or brick (red) structure is shown within the HWMS Southeast Expansion Area, which can likely be correlated with the Jarvis farmstead from the 1877 map. Parcel 8 was traversed by an unfenced road, an extension of which led to a ford over Sixteen Mile Creek. The topographic map from 1938 shows a house and a barn within the northwestern parcel, and the remainder of the study area comprised cleared and/or wooded lands. Regional Road 25 and part of Lower Base Line West were paved by that time, and the associated intersections had been improved. The aerial image from 1954 confirms this land use pattern (Map 5).

1.3 Archaeological Context

The Stage 1 assessment (desktop evaluation) was conducted in November 2023 under PIF #P007-1449-2023. The limits of the study area were confirmed using aerial imagery showing physical features in relation to the subject lands.

The archaeological context of any given study area must be informed by 1) the condition of the property as found (Section 1.3.1), 2) a summary of registered or known archaeological sites located within a minimum 1 km radius (Section 1.3.2) and 3) descriptions of previous archaeological fieldwork carried out within the limits of, or immediately adjacent to the property (Section 1.3.3).

1.3.1 Condition of the Property

The study area lies within the deciduous forest, which is the southernmost forest region in Ontario and is dominated by agricultural and urban areas. This region is characterized by scattered woodlots in areas unsuitable for agriculture, and the forest generally has the greatest diversity of tree species while at the same time having the lowest proportion of cover. It has most of the trees and shrubs found in the Great Lakes–St. Lawrence forest and also contains black walnut, butternut, tulip, magnolia, black gum, many types of oaks, hickories, sassafras and red bud (MNRF 2023).

In terms of local physiography, the northwestern part of the study area falls within the Peel Plain whereas the southeastern part traverses the South Slope. The former region consists of a level-to-undulating tract of clay soils that traverses parts of the City of Toronto and the Regional Municipalities of York, Peel and Halton. The plain has a gradual and relatively uniform slope toward Lake Ontario and contains deep valleys cut by the Credit, Humber, Don and Rouge Rivers (as well as smaller streams like Bronte, Oakville and Etobicoke Creeks). These drainage basins have prevented the formation of any large, undrained depressions, swamps or bogs within the area. The latter region includes lands along the southern slope of the Oak Ridges Moraine as well as lands south of the Peel Plain (including the Trafalgar Moraine and a strip of fluted till plain). West

of the Credit River, the Trafalgar Moraine provides subdued morainic topography, while a narrow belt above the Iroquois shorecliff is planed and fluted (Chapman and Putnam 1984:172–176).

According to the Ontario Soil Survey, the study area consists of three different soil types (Map 6). The northwestern parcel comprises a mixture of Chinguacousy clay loam, Jeddo clay loam and Oneida clay loam, whereas the central and eastern parcels contain Jeddo clay loam and/or Oneida clay loam. The characteristics of these soil types are summarized in Table 4 (Gillespie et al. 1971).

Table 4: Soil Types

Soil Type	Symbol	Great Group	Parent Material	Drainage
Chinguacousy clay loam	Ch	Grey Brown Luvisol	Clay loam till	Imperfectly drained
Jeddo clay loam	Jc	Humic Gleysol	Clay loam till	Poorly drained
Oneida clay loam	On	Grey Brown Luvisol	Clay loam till	Well drained

The subject lands fall within the Sixteen Mile Creek drainage basin, which is under the jurisdiction of Conservation Halton (CH 2023). Specifically, the study area is traversed by four tributaries of Sixteen Mile Creek and is located 100 m west of Sixteen Mile Creek itself. At the time of assessment, the study area consisted of former and active agricultural fields, wooded areas and part of the existing Halton Biosolids Management Centre. Soil conditions were not documented, as a property inspection did not occur.

1.3.2 Registered or Known Archaeological Sites

The Ontario Archaeological Sites Database and the Ontario Public Register of Archaeological Reports were consulted to determine whether any registered or known archaeological resources occur within a 1 km radius of the study area. The available search facility returned 134 registered sites located within at least a 1 km radius (the facility returns sites in a rectangular area, rather than a radius, potentially resulting in returns beyond the specified distance). Three other registered sites should have also been returned (AiGw-519, AiGw-520 and AiGw-521), but these are missing location information in the database and require correction. Eight unregistered sites were also identified within a 1 km radius of the study area. The sites are summarized in Appendix A.

None of these previously identified sites are located within or immediately adjacent to the subject lands; accordingly, they have no potential to traverse the study area. Eleven of the sites are between 50 m and 300 m away, however, and must be considered as relevant features of archaeological potential. The remaining sites represent more distant archaeological resources.

1.3.3 Previous Archaeological Work

A review of available archaeological management plans and/or other archaeological potential mapping was undertaken to inform the assessment process. Specifically, the Regional Municipality of Halton's *Archaeological Master Plan* was examined for information that could influence the choice of fieldwork techniques or recommendations. The associated mapping indicates that the majority of the study area has archaeological potential (Map 7).

Reports documenting assessments conducted within the subject lands and assessments that resulted in the discovery of sites within adjacent lands were also sought during the research component of the study. In order to ensure that all relevant past work was identified, an investigation was launched to identify reports involving assessments within 50 m of the study area. The investigation determined that there are multiple available reports documenting previous archaeological fieldwork within the specified distance. The relevant results and recommendations are summarized below as required by Section 7.5.8 Standards 4–5 of the 2011 *S&Gs* (Map 8).

1.3.3.1 Water & Wastewater Trunk Mains (Stage 1–3)

Stage 1, 2 and 3 assessments were carried out for the construction of water and wastewater trunk mains along Regional Road 25 and Derry Road between October and December 1999 under Contract Information Form (CIF) #1999-026-013 (HHI 2000). The assessed area traverses the northeastern edge of the HWMS Southeast Expansion Area. The investigation resulted in the discovery of multiple positive test pits and surface finds, none of which are within or adjacent to the study area. Only the Boyne site (AiGx-233) required Stage 4 mitigation (HHI 2000:24). Although the utilized field methods appear to largely meet current provincial standards, the area of overlap should be re-evaluated as part of a Stage 2 assessment to confirm the past results as the fieldwork predates the 2011 *S&Gs*.

1.3.3.2 Palermo Clean Energy Centre (Stage 1)

In 2006, a Stage 1 assessment was carried out for the Palermo Clean Energy Centre under CIF #P013-248-2006 (AAL 2006). The assessed area falls within 50 m of Parcel 2. The investigation identified multiple areas of archaeological potential, and it was recommended that a Stage 2 assessment be completed (AAL 2006:7).

1.3.3.3 Diocese of Hamilton Cemetery (Stage 1–2)

In May 2008, Stage 1 and 2 assessments were conducted for the Diocese of Hamilton Cemetery under CIF #P001-472-2008 (AI 2008). The assessed area abuts the southeastern edge of the northwestern parcel. The investigation resulted in the discovery of 10 locations of archaeological materials, none of which are within adjacent lands. All of the sites were found to be of no further cultural heritage value or interest (CHVI), and no further work was recommended (AI 2008:14).

1.3.3.4 Boyne Trunk Sewer (Stage 1–2)

In May 2009, a Stage 1 assessment was conducted for the Boyne Trunk Sewer under PIF #P057-523-2009 (ASI 2009). The assessed area traverses the northeastern edge of the HWMS Southeast Expansion Area as well as the northern half of Parcel 1, but the associated mapping is quite schematic. The investigation identified a mixture of areas of archaeological potential, areas of no archaeological potential and previously assessed lands. It was recommended that all areas of archaeological potential be subject to a Stage 2 assessment (ASI 2009:10). The overlapping area within the northwestern parcel reportedly comprised lands that were previously assessed under CIF #1999-026-013 (HHI 2000). As noted above, this area of overlap should be re-evaluated as part of a Stage 2 assessment to confirm the past results. The majority of the overlapping area within Parcel 1 was determined to have archaeological potential.

In April and October 2011, a Stage 2 assessment of 27 borehole locations and 2 stream crossings required for the project was carried out under PIF #P347-017-2011 (ASI 2011). Three of the borehole locations traverse Parcel 1 (TEL-01 through TEL-03). The investigation did not result in the discovery of any locations of archaeological materials, and no further assessment was recommended (ASI 2011:5–6).

1.3.3.5 Halton Biosolids Management Centre Improvements (Stage 2)

In August and September 2017, a Stage 2 assessment was conducted for improvements to the Halton Biosolids Management Centre under PIF #P1066-0054-2017 (ASI 2017). The assessed area traverses parts of Parcels 1 and 4 in the centre and parts of the Parcel 5 access road area and Parcel 6 in the east. The investigation did not result in the identification of any archaeological resources, and it was recommended that no further assessment be required (ASI 2017:5). The overlapping areas are therefore of no further archaeological concern.

1.3.3.6 Waterdown to Finch Pipeline Project (Stage 1–2)

In November 2017, a Stage 1 assessment was conducted for the Waterdown to Finch Pipeline Project under PIF #P336-0194-2017 (PRASI 2019). The assessed area traverses parts of Parcels 1 and 4. Background research determined that there were several known sites that could be affected by the project, none of which are within adjacent lands. The investigation identified a mixture of areas of archaeological potential, areas of no archaeological potential and previously assessed lands of no further concern. It was recommended that all areas of archaeological potential be subject to a Stage 2 assessment and that specific assessment or avoidance strategies be developed for AkGv-8 and AiGx-3 (PRASI 2019:41–42). The majority of the overlapping area was recommended for a Stage 2 assessment (PRASI 2019:Map 12).

Between August 2018 and November 2019, a Stage 2 assessment for the Town of Oakville portion of the project (Operation 4) was conducted under PIF #P336-0242-2018 (PRASI 2020). The assessed area generally followed the earlier alignment, although the corridor was much narrower. The investigation resulted in the identification of six archaeological sites, none of which are within or adjacent to the study area. AiGw-1005 and AiGw-1007 were found to be of further CHVI and were avoided, and it was recommended that the sites be subject to a Stage 3 assessment if they could not be avoided by future projects. The remaining sites and assessed lands were not recommended for further work, although it was noted that several unassessed or partially assessed areas still required Stage 2 surveys (PRASI 2020:63–67). The overlapping area consisted of previously assessed lands and lands requiring a Stage 2 assessment (PRASI 2020:Map 3–Map 4).

The Stage 2 assessment of additional lands within Operation 4 was conducted between May and September 2020 under PIF #P324-0505-2020 (TMHC 2020). The assessed area largely followed the one from the earlier Stage 2 assessment. The investigation resulted in the discovery of five new locations of archaeological materials, none of which are within or adjacent to the study area. None of the sites were found to be of further CHVI, and no additional work was recommended. Although AiGw-1007 was removed from the project, it was recommended that an avoidance and protection strategy be implemented and that a Stage 3 assessment occur if future impacts became a concern (TMHC 2020:25–27). The overlapping area of previous assessment was fully addressed and is therefore of no further concern (TMHC 2020:Map 17).

2.0 STAGE 1 BACKGROUND STUDY

2.1 Background

The Stage 1 assessment involved background research to document the geography, history, previous archaeological fieldwork and current land condition of the study area. This desktop examination included research from archival sources, archaeological publications and online databases. It also included the analysis of a variety of historical maps and aerial imagery. The results of the research conducted for the background study are summarized below.

With occupation beginning approximately 11,000 years ago, the greater vicinity of the study area comprises a complex chronology of Pre-Contact and Post-Contact histories (Section 1.2.1). Artifacts associated with Palaeo, Archaic, Woodland and Early Contact traditions are well-attested in the Regional Municipality of Halton, and Euro-Canadian archaeological sites dating to pre-1900 and post-1900 contexts are likewise common. The presence of 145 previously identified sites in the surrounding area demonstrates the desirability of this locality for early settlement (Section 1.3.2). The investigation confirmed that none of these sites fall within the subject lands. Background research identified multiple areas of previous assessment within the study area (Section 1.3.3).

The natural environment of the study area would have been attractive to both Indigenous and Euro-Canadian populations as a result of proximity to Sixteen Mile Creek and its tributaries. The areas of Chinguacousy clay loam and Oneida clay loam would have been ideal for agriculture, and the diverse local vegetation would have encouraged settlement throughout Ontario's lengthy history. Euro-Canadian populations would have been particularly drawn to Regional Road 25, which was a historical thoroughfare.

In summary, the background study included an up-to-date listing of sites from the Ontario Archaeological Sites Database (within at least a 1 km radius), the consideration of previous local archaeological fieldwork (within at least a 50 m radius), the analysis of historical maps (at the most detailed scale available) and the study of aerial imagery. A review of an archaeological management plan was also carried out. ARA therefore confirms that the standards for background research set out in Section 1.1 of the 2011 *S&Gs* were met.

2.2 Field Methods (Property Inspection)

The study area was not subject to a property inspection, as the corpus of available imagery, topographic mapping and digital environmental data provided abundant information concerning current land conditions. This information was of a scale and detail that allowed for the accurate evaluation of the presence and character of features of potential, and no greater level of detail was needed to make appropriate Stage 2 recommendations. The results of ARA's archaeological potential modelling are discussed below.

2.3 Analysis and Conclusions

In addition to relevant historical sources and the results of past archaeological assessments, the archaeological potential of a property can be assessed using its soils, hydrology and landforms as considerations. Section 1.3.1 of the 2011 *S&Gs* recognizes the following features or characteristics as indicators of archaeological potential: previously identified sites, water sources (past and present), elevated topography, pockets of well-drained sandy soil, distinctive land formations, resource areas, areas of Euro-Canadian settlement, early transportation routes, listed or designated properties, historic landmarks or sites, and areas that local histories or informants have identified with possible sites, events, activities or occupations.

The Stage 1 assessment resulted in the identification of several features of archaeological potential in the vicinity of the study area (Map 9; SD Map 1). The closest and most relevant indicators of archaeological potential (i.e., those that would affect survey interval requirements) include eleven previously identified sites (e.g., AiGw-184 and AiGw-520), multiple primary water sources (e.g., Sixteen Mile Creek and its tributaries), one physiographic landform (a minor moraine), one historical roadway (Regional Road 25) and eight historical structure localities (late 19th-century houses). Background research did not identify any features indicating that the study area has potential for deeply buried archaeological resources.

Although proximity to a feature of archaeological potential is a significant factor in the potential modelling process, current land conditions must also be considered. Section 1.3.2 of the 2011 *S&Gs* emphasizes that 1) quarrying, 2) major landscaping involving grading below topsoil, 3) building footprints and 4) sewage/infrastructure development can result in the removal of archaeological potential, and Section 2.1 states that 1) permanently wet areas, 2) exposed bedrock and 3) steep slopes (> 20°) in areas unlikely to contain pictographs or petroglyphs can also be evaluated as having no or low archaeological potential. Areas previously assessed and not recommended for further work also require no further assessment.

The Regional Municipality of Halton's *Archaeological Master Plan* indicates that the majority of the study area has archaeological potential (Map 7). However, this modelling was not the result of a property-specific assessment and therefore does not fully account for land-use history and current conditions. Several previously assessed areas of no further concern were identified within the study area, none of which warrant additional assessment. The overlapping areas that were assessed under CIF #1999-026-013 and PIF #P057-523-2009 should be re-evaluated as part of a Stage 2 assessment to confirm the past results, save for the portions of Parcel 1 that were cleared of concerns under PIF #P1066-0054-2017, #P336-0242-2018 and #P324-0505-2020.

ARA's desktop evaluation, coupled with the analysis of historical sources and digital environmental data, resulted in the identification of one area of no archaeological potential. Specifically, deep land alterations have resulted in the removal of archaeological potential from the former lagoon located east of the Halton Biosolids Management Centre that was used to store biosolids (Appendix B). This area has clearly been impacted by past earth-moving/construction activities, resulting in the disturbance of the original soils to a significant depth and severe damage to the integrity of any archaeological resources.

The remaining lands have potential for Indigenous and Euro-Canadian archaeological materials or require test pit survey to confirm that they have no archaeological potential. The areas of archaeological potential include the former and active agricultural fields as well as a variety of grassed, overgrown and treed areas. It seems likely that the new roadway within the northwestern parcel and some of the areas adjacent to the Halton Biosolids Management Centre in the southeast were previously impacted, but this could not be verified based on the desktop evaluation alone. Similarly, the two marshy areas within the northwestern parcel could be permanently wet. These lands have been categorized as areas of archaeological potential and must be empirically tested to confirm that they have no archaeological potential.

In summary, the Stage 1 assessment determined that the study area comprises a mixture of areas of archaeological potential, areas of no archaeological potential and previously assessed lands of no further concern. The potential modelling results are presented in Map 10. The study area limits are depicted as a layer in this map. All of the short-listed sites contain one or more areas that would require Stage 2 assessment.

3.0 RECOMMENDATIONS

The Stage 1 assessment determined that the sites comprise a mixture of areas of archaeological potential, areas of no archaeological potential and previously assessed lands of no further concern. It is recommended that all areas of archaeological potential that could be impacted by the project be subject to a Stage 2 property assessment in accordance with Section 2.1 of the 2011 *S&G*s. The identified areas of no archaeological potential and previously assessed lands of no further concern do not require any additional assessment. All of the short-listed sites contain one or more areas that would require Stage 2 assessment. The recommendations are summarized in Table 5.

Table 5: Recommendations

Parcel	Recommendation	Field Method(s)
HWMS Southeast Expansion Area	Stage 2 assessment	Pedestrian survey, test pit survey and combination survey
Parcel 1	Stage 2 assessment	Pedestrian survey and test pit survey
Parcel 2	Stage 2 assessment	Pedestrian survey and test pit survey
Parcel 4	Stage 2 assessment	Pedestrian survey and test pit survey
Parcel 5	Stage 2 assessment	Pedestrian survey and test pit survey
Parcel 5 access road area	Stage 2 assessment	Test pit survey and combination survey
Parcel 6	Stage 2 assessment	Combination survey
Parcel 7	Stage 2 assessment	Combination survey
Parcel 8	Stage 2 assessment	Pedestrian survey and test pit survey

The former and active agricultural fields must be assessed using the pedestrian survey method at an interval of 5 m. All ground surfaces must be recently ploughed (typically within the month prior to assessment), weathered by one heavy rainfall or several light rains, and provide at least 80% visibility. If archaeological materials are encountered, the transect interval must be decreased to at least 1 m and a close inspection of the ground must be conducted over a minimum of a 20 m radius around the find. This interval must be continued until the full extent of the scatter has been defined. The large soil stockpiles within the northwestern parcel must be removed prior to the survey.

The grassed, overgrown and treed areas must be assessed using the test pit survey method. A survey interval of 5 m will be required due to the proximity of the lands to the identified features of archaeological potential. Given the likelihood that the new roadway within the northwestern parcel and some of the areas adjacent to the Halton Biosolids Management Centre in the southeast were previously impacted, a combination of visual inspection and test pit survey should be utilized to confirm the extent of disturbance in accordance with Section 2.1.8 of the 2011 *S&Gs*. This will allow for the empirical evaluation of the integrity of the soils and the depth of any impacts. Judgemental test pit survey should similarly be carried out within the possible permanently wet areas in the northwestern parcel. If these areas are determined to have archaeological potential, then a test pit survey interval of 5 m must be maintained.

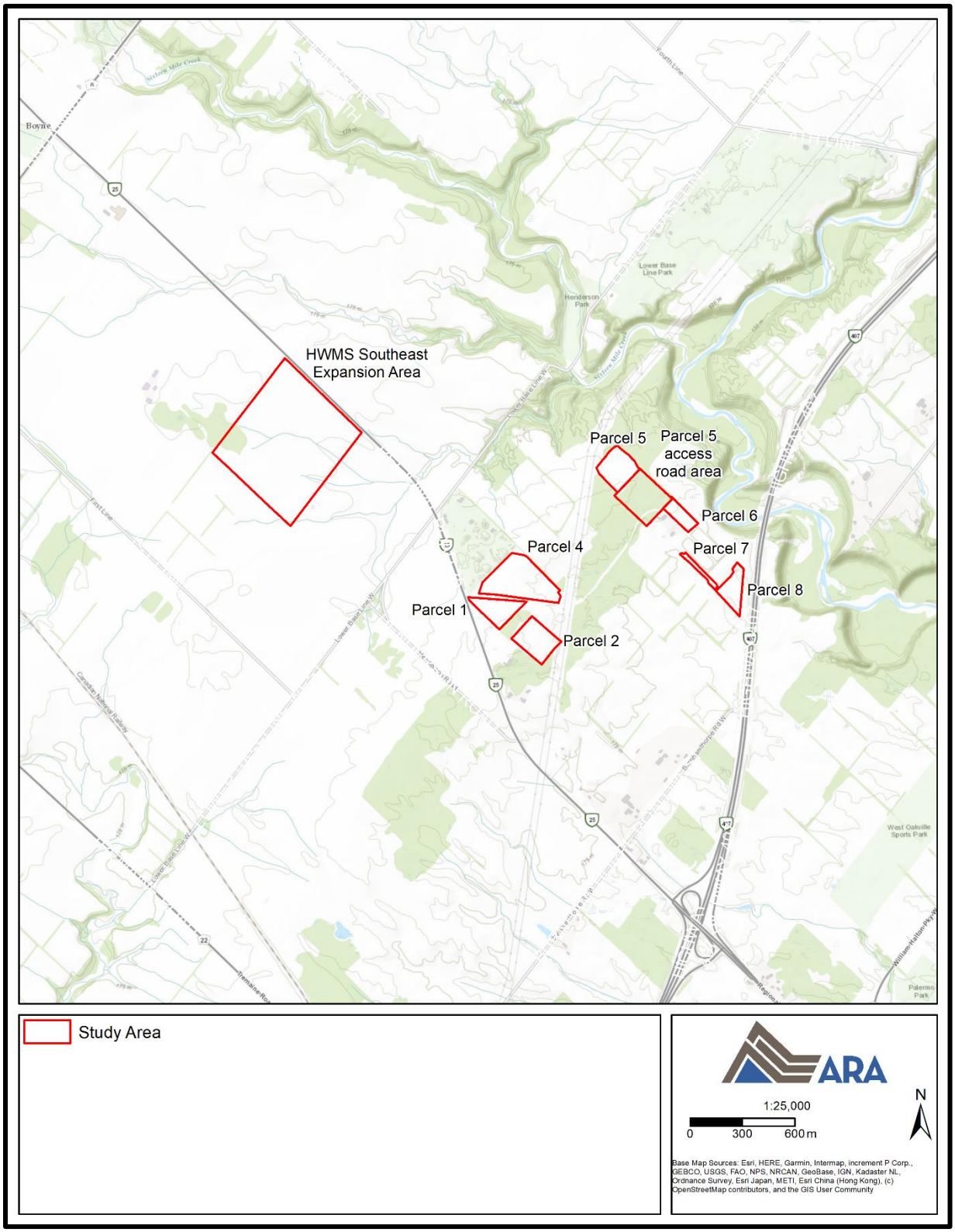
Each test pit must be excavated into at least the first 5 cm of subsoil, and the resultant pits must be examined for stratigraphy, potential features and/or evidence of fill. The soil from each test pit must be screened through mesh with an aperture of no greater than 6 mm and examined for archaeological materials. If archaeological materials are encountered, all positive test pits must be documented, and intensification may be required.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

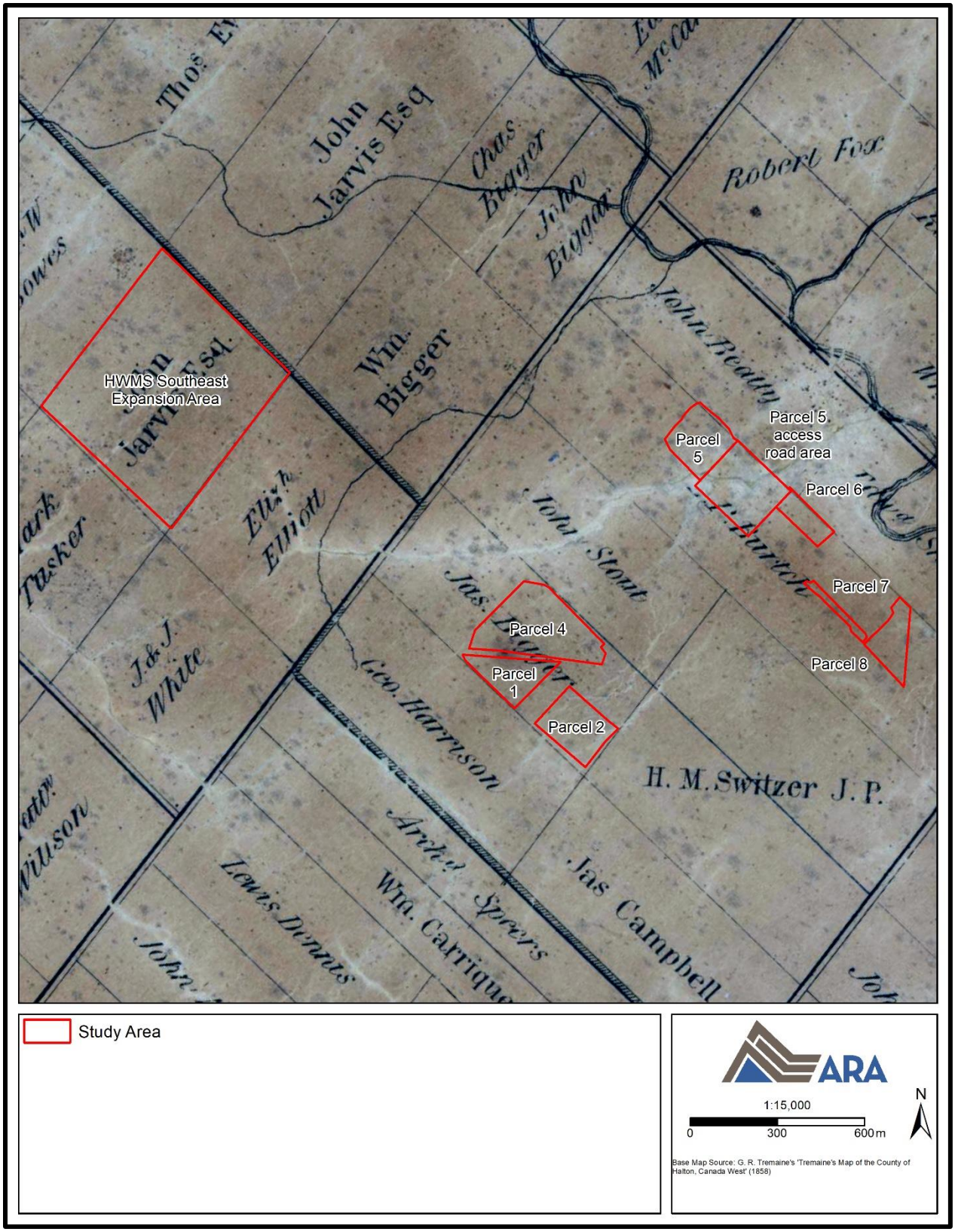
Section 7.5.9 of the 2011 *S&Gs* requires that the following information be provided for the benefit of the proponent and approval authority in the land use planning and development process:

- This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the MCM, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may indicate a new archaeological site and therefore would be subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar at the Ministry of Public and Business Service Delivery.

5.0 MAPS

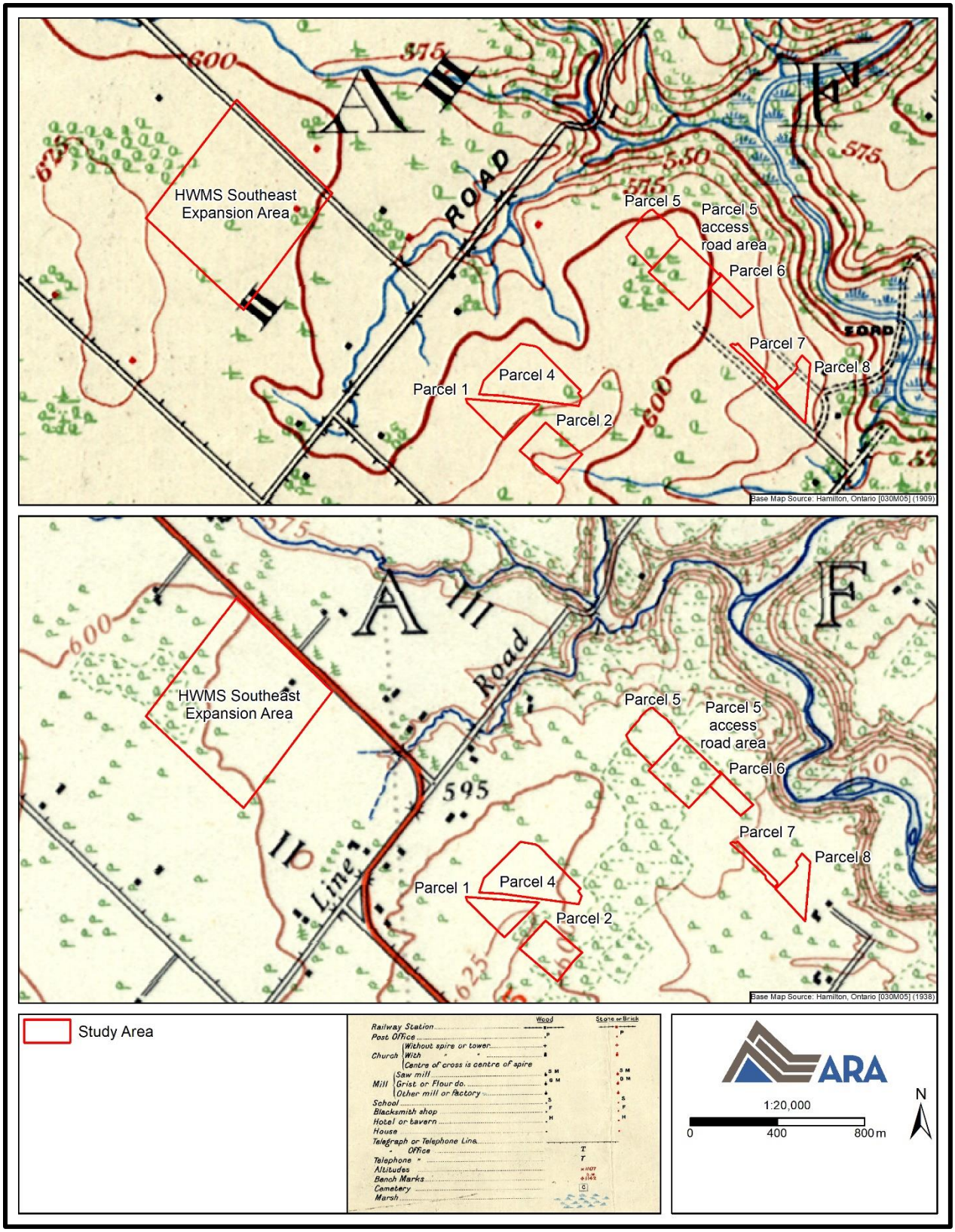


Map 1: Location of the Study Area
(Produced under licence using ArcGIS® software by Esri, © Esri)

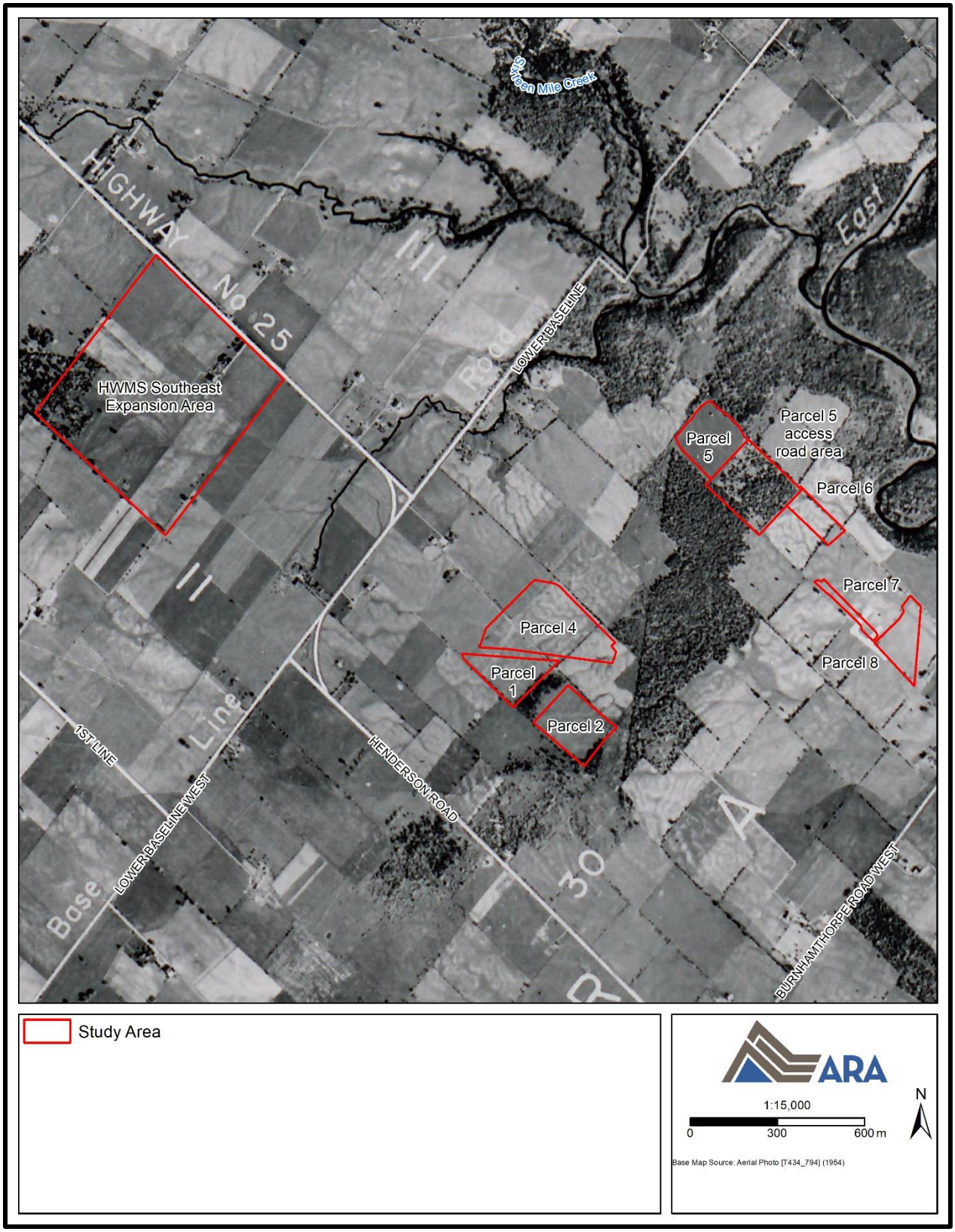


Map 2: *Tremaine's Map of the County of Halton, Canada West* (1858)
(Produced under licence using ArcGIS® software by Esri, © Esri; OHCMP 2019)

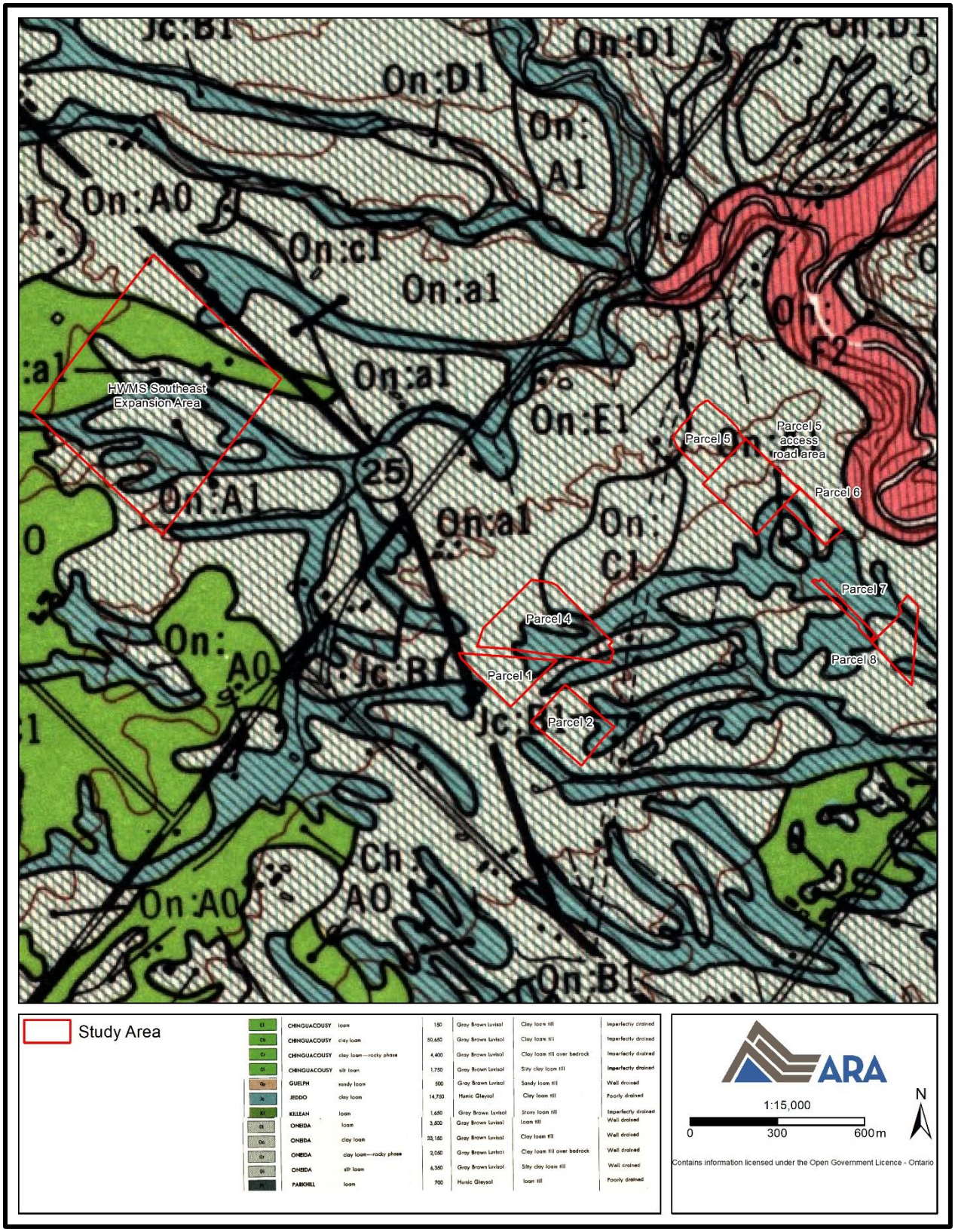
Map 3: *Illustrated Historical Atlas of the County of Halton, Ont.* (1877)
(Produced under licence using ArcGIS® software by Esri, © Esri; MU 2001)



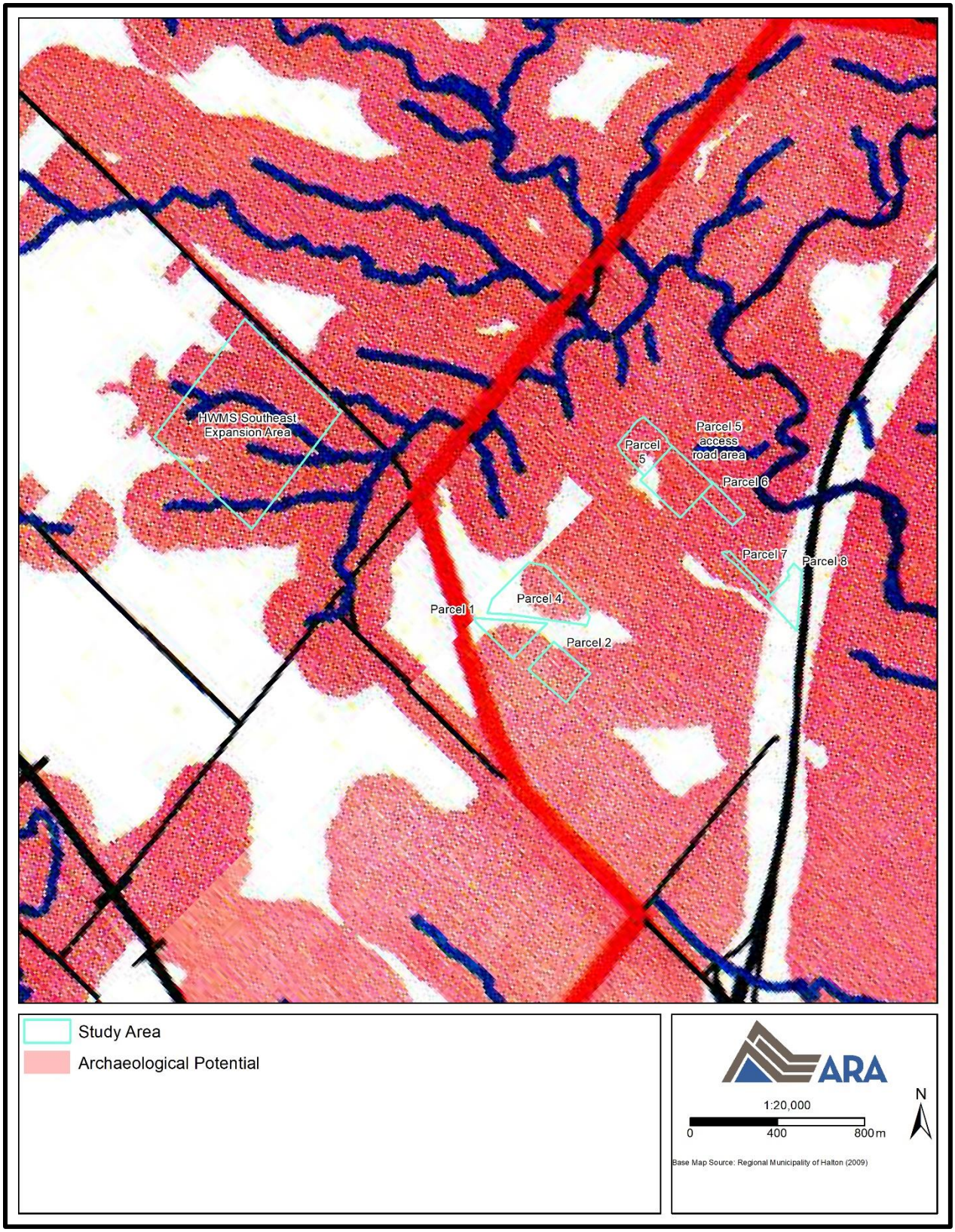
Map 4: Topographic Maps (1909 and 1938)
(Produced under licence using ArcGIS® software by Esri, © Esri; OCUL 2023)



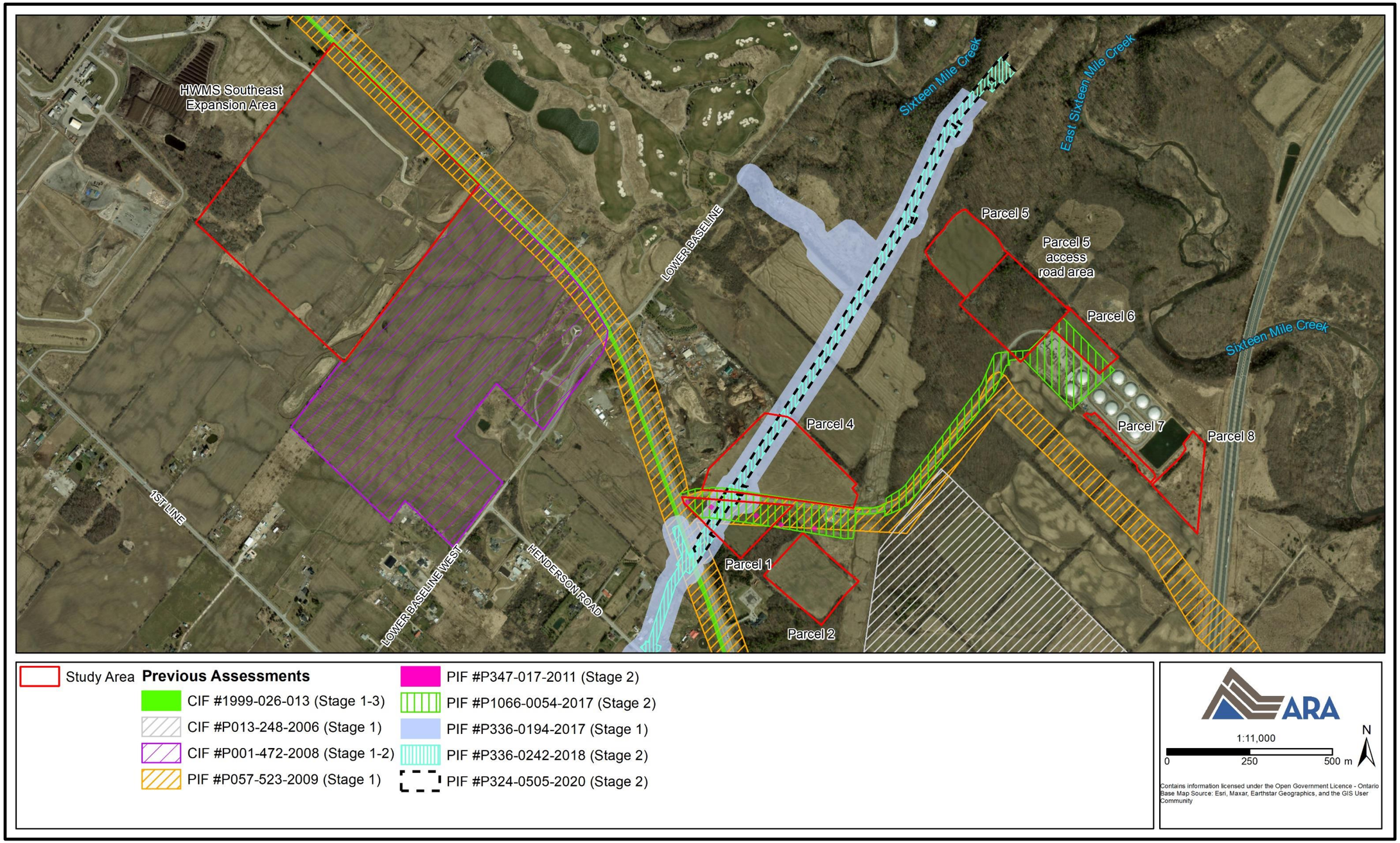
Map 5: Aerial Image (1954)
(Produced under licence using ArcGIS® software by Esri, © Esri; U of T 2023)



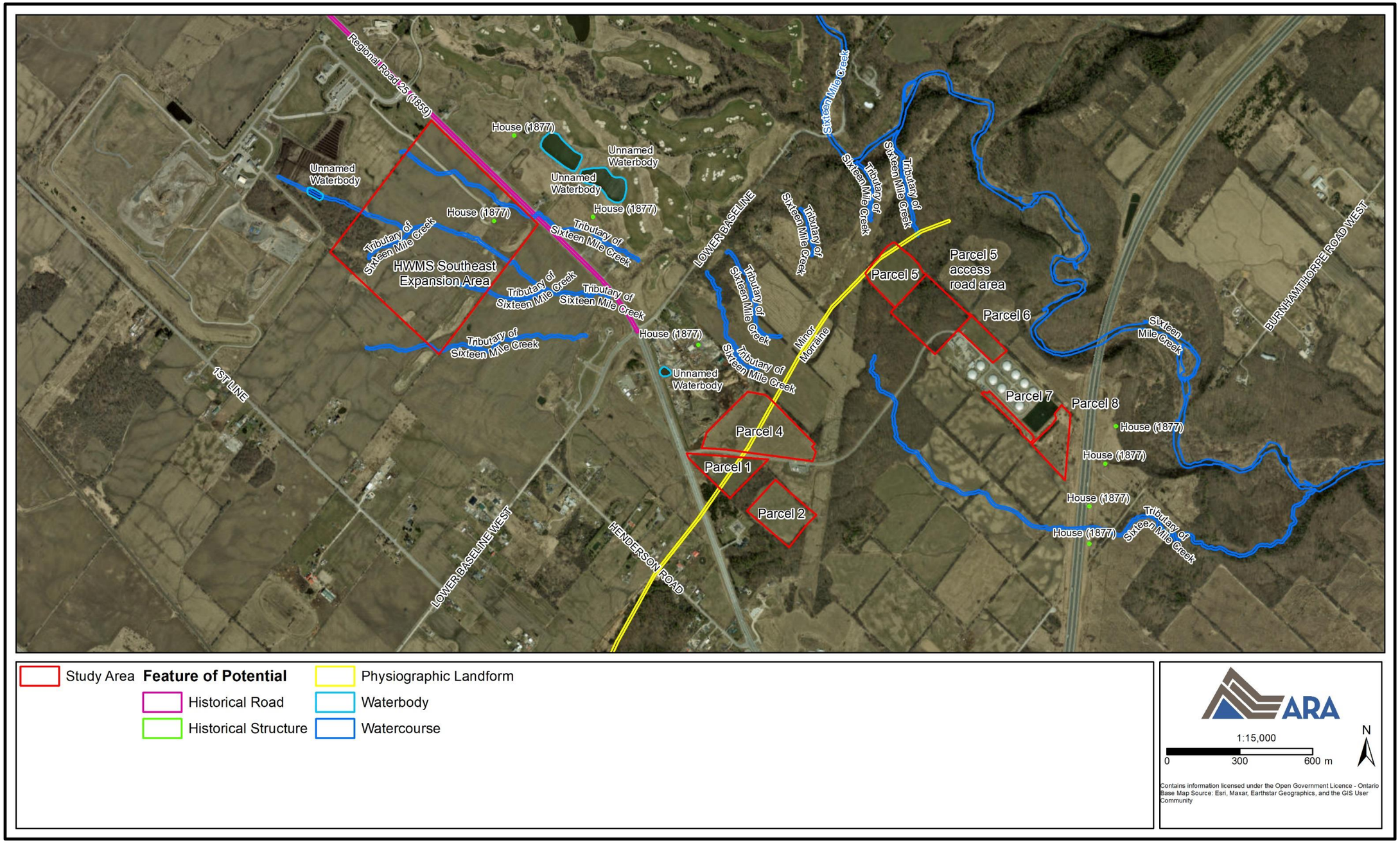
Map 6: Soil Map
(Produced under licence using ArcGIS® software by Esri, © Esri; Gillespie et al. 1971)



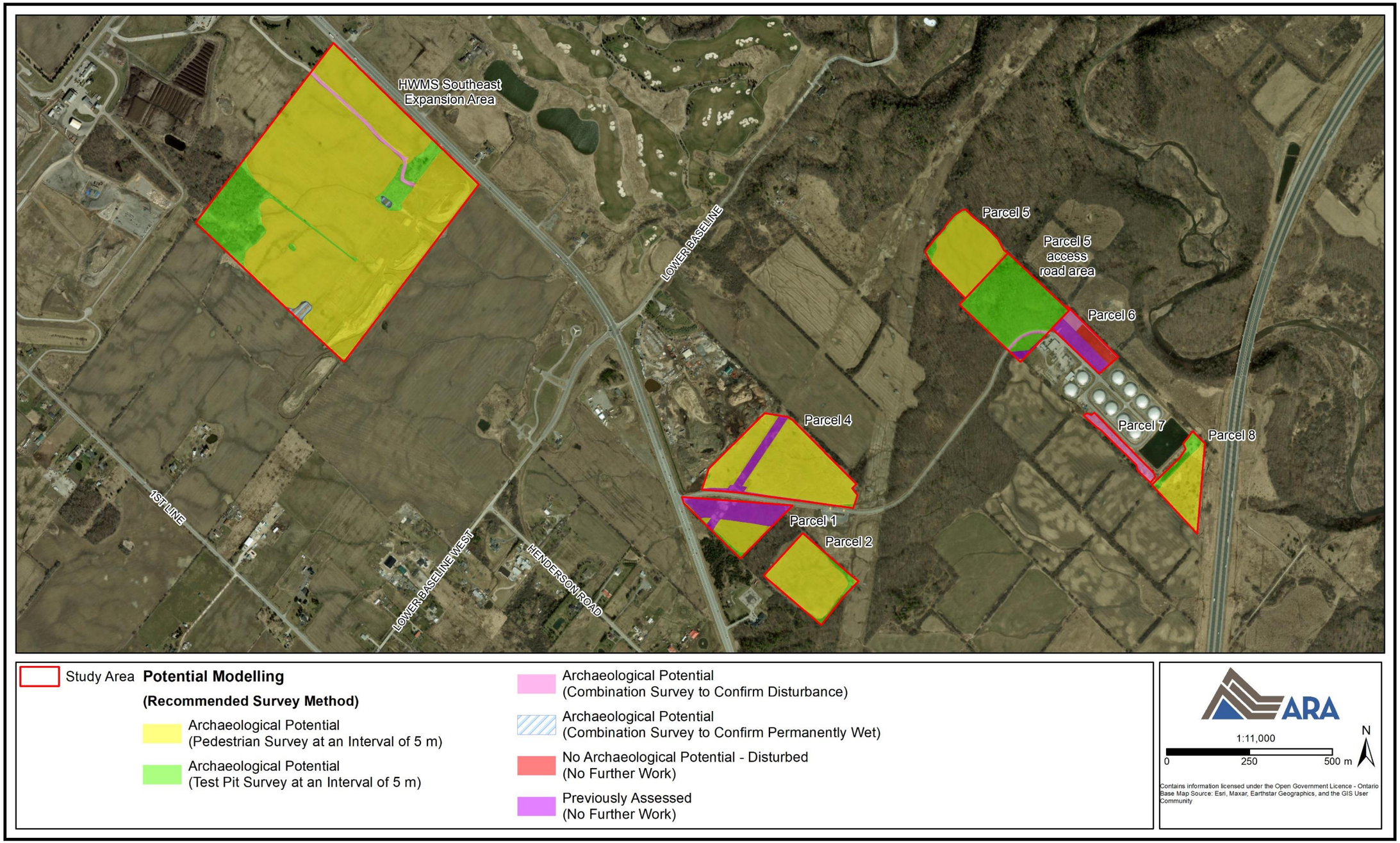
Map 7: Regional Municipality of Halton's *Archaeological Master Plan*
(Produced under licence using ArcGIS® software by Esri, © Esri; Courtesy of Halton)



Map 8: Previous Assessments
(Produced under licence using ArcGIS® software by Esri, © Esri)



Map 9: Features of Potential
(Produced under licence using ArcGIS® software by Esri, © Esri)



Map 10: Potential Modelling and Recommendations
(Produced under licence using ArcGIS® software by Esri, © Esri)

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APPENDICES

Appendix A: Registered or Known Archaeological Sites

Borden No. / ID No.	Site Name / Identifier	Time Period	Affinity	Site Type	Distance from Study Area
AiGw-65	North Tremaine	Woodland	Indigenous	Unspecified	> 1 km
AiGw-101	Howard Gowland	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-102	Everett II Archaic	Archaic	Indigenous	Unspecified	> 1 km
AiGw-103	Everett 3	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-104	Proud	Archaic	Indigenous	Camp / campsite	> 1 km
AiGw-105	Marshall	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-106	Death	Pre-Contact	Indigenous	Camp / campsite	300 m–1 km
AiGw-122	Garden Area	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-127	80-403-6	Pre-Contact	Indigenous	Unspecified	300 m–1 km
AiGw-128	80-403-7	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-129	80-403-8	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-130	80-403-9	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-131	80-403-10	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-137	81-403-9	Archaic	Indigenous	Findspot	> 1 km
AiGw-138	81-403-10	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-139	81-403-11	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-140	81-403-12	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-141	81-403-13	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-142	81-403-14	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-143	81-403-15	Pre-Contact	Indigenous	Tool manufacturing	> 1 km
AiGw-144	81-403-16	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-145	81-403-5	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-146	81-403-18	Pre-Contact	Indigenous	Findspot	300 m–1 km
AiGw-147	81-403-19	Pre-Contact	Indigenous	Findspot	300 m–1 km
AiGw-148	81-403-19	Pre-Contact	Indigenous	Findspot	300 m–1 km
AiGw-156	81-403-28	Paleo-Indian	Indigenous	Findspot	300 m–1 km
AiGw-157	81-403-29	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-158	81-403-30	Woodland, Middle	Indigenous	Camp / campsite	300 m–1 km
AiGw-159	81-403-31	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-160	81-403-32	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-161	81-403-33	Pre-Contact	Indigenous	Unspecified	> 1 km
AiGw-162	81-403-34	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-163	81-403-34	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-164	81-403-35	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-165	81-403-36	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-183	-	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-184	-	Woodland, Late	Iroquoian	Findspot	50 m–300 m
AiGw-185	-	Unspecified	Unspecified	Unspecified	300 m–1 km
AiGw-186	-	Unspecified	Unspecified	Unspecified	300 m–1 km
AiGw-188	-	Archaic, Late	Indigenous	Findspot	> 1 km
AiGw-189	-	Unspecified	Unspecified	Unspecified	300 m–1 km
AiGw-190	-	Archaic, Late	Indigenous	Camp / campsite	50 m–300 m
AiGw-204	-	Woodland, Early	Indigenous	Unspecified	50 m–300 m
AiGw-233	-	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-290	-	Archaic, Early, Archaic, Middle	Indigenous	Scatter	> 1 km
AiGw-291	-	Woodland	Indigenous	Scatter	> 1 km
AiGw-292	-	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-293	-	Pre-Contact	Indigenous	Scatter	> 1 km
AiGw-295	-	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-296	-	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-297	Laughing Trees	Woodland, Early	Indigenous	Unspecified	300 m–1 km
AiGw-298	-	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-299	Little Snake	Pre-Contact	Indigenous	Unspecified	300 m–1 km
AiGw-300	-	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-304	Corfu	Archaic, Late	Indigenous	Camp / campsite	> 1 km
AiGw-305	Doug	Archaic, Early, Archaic, Middle	Indigenous	Camp / campsite	300 m–1 km
AiGw-320	-	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-321	Sanford	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-322	Job	Pre-Contact	Indigenous	Scatter	300 m–1 km
AiGw-323	-	Archaic, Late	Indigenous	Findspot	> 1 km
AiGw-368	-	Unspecified	Unspecified	Unspecified	300 m–1 km
AiGw-379	Richview II	Pre-Contact	Indigenous	Scatter	> 1 km
AiGw-381	Pineberry Site	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-382	Pineberry II	Archaic, Early	Indigenous	Scatter	> 1 km
AiGw-386	Tremaine	Archaic, Late	Indigenous	Findspot	> 1 km
AiGw-391	Umiak #4	Archaic, Late	Indigenous	Camp / campsite	> 1 km
AiGw-392	Umiak #5	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-394	Umiak #7	Pre-Contact	Indigenous	Scatter	> 1 km

Borden No. / ID No.	Site Name / Identifier	Time Period	Affinity	Site Type	Distance from Study Area
AiGw-425	Oakville Assembly II	Pre-Contact	Indigenous	Unspecified	> 1 km
AiGw-472	-	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-473	-	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-477	Evergreen VI	Unspecified	Unspecified	Unspecified	> 1 km
AiGw-519	Location 4	Pre-Contact	Indigenous	Findspot	300 m–1 km
AiGw-520	Location 6	Pre-Contact	Indigenous	Scatter	50 m–300 m
AiGw-521	Location 10	Archaic, Late	Indigenous	Findspot	300 m–1 km
AiGw-525	AiGw-526	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-526	P2	Archaic, Late, Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-527	P3	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-528	P4	Archaic, Early, Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-529	P5	Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-530	H1	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-531	H3	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-532	McMichael	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-537	-	Archaic, Late, Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-538	-	Archaic, Middle, Pre-Contact	Indigenous	Findspot	> 1 km
AiGw-539	Location 11	Post-Contact	Euro-Canadian	House	300 m–1 km
AiGw-546	RR25H1	Post-Contact	Euro-Canadian	Unspecified	300 m–1 km
AiGw-547	RR25H2	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-553	Burnhamthorpe H2	Post-Contact	Euro-Canadian	Barn, stable, outbuilding	> 1 km
AiGw-565	Boyne H2 site	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-567	FS 1	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-570	Teetzel	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-982	Location 2	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-983	Location 3	Post-Contact	Euro-Canadian	Farmstead, homestead	> 1 km
AiGw-984	Onhwa'ti'	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-985	-	Woodland, Late	Indigenous	Camp / campsite	> 1 km
AiGw-988	Vale	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-994	-	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-1004	OP 3 FS 2	Post-Contact	Euro-Canadian	Farmstead	> 1 km
AiGw-1005	OP 4 FS 2a	Pre-Contact	Indigenous	Unspecified	300 m–1 km
AiGw-1006	OP 4 FS 2b	Pre-Contact, Post-Contact	Indigenous, Euro-Canadian	Refuse	300 m–1 km
AiGw-1007	OP 4 FS 2c	Pre-Contact	Indigenous	Camp / campsite	300 m–1 km
AiGw-1008	OP 4 FS 3	Post-Contact	Euro-Canadian	Possible Orange Lodge	> 1 km
AiGw-1009	-	Pre-Contact	Indigenous	Camp / campsite	> 1 km
AiGw-1010	-	Pre-Contact, Post-Contact	Indigenous, Euro-Canadian	Refuse, camp / campsite	> 1 km
AiGw-1011	-	Unspecified	Unspecified	Unspecified	300 m–1 km
AiGw-1013	-	Pre-Contact, Post-Contact	Indigenous, Euro-Canadian	Refuse, findspot	> 1 km
AiGw-1016	-	Pre-Contact	Indigenous	Unspecified	> 1 km
AiGw-1017	-	Woodland, Early	Indigenous	Hunting loss	> 1 km
AiGw-1019	WTFN1045 Location 1	Woodland, Early	Indigenous	Findspot	> 1 km
AiGw-1020	-	Pre-Contact	Indigenous	Cache, biface	50 m–300 m
AiGw-1038	H1	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-1039	Proud Site	Post-Contact	Euro-Canadian	farmstead	> 1 km
AiGw-1040	-	Pre-Contact	Indigenous	Scatter	> 1 km
AiGw-1041	Jockey	Post-Contact	Euro-Canadian	Dump	> 1 km
AiGw-1042	-	Woodland	Indigenous	Unspecified	> 1 km
AiGw-1043	-	Pre-Contact	Indigenous	Scatter	> 1 km
AiGw-1044	-	Pre-Contact	Indigenous	Unknown	> 1 km
AiGw-1045	-	Archaic, Early	Indigenous	Findspot	> 1 km
AiGw-1046	Aries	Pre-Contact	Indigenous	Unspecified	> 1 km
AiGw-1047	-	Archaic, Middle	Indigenous	Findspot	> 1 km
AiGw-1048	Capra	Post-Contact	Euro-Canadian	Unspecified	300 m–1 km
AiGw-1049	-	Pre-Contact	Indigenous	Scatter	> 1 km
AiGw-1050	-	Archaic, Middle	Indigenous	Findspot	> 1 km
AiGw-1051	-	Archaic, Middle	Indigenous	Unspecified	> 1 km
AiGw-1052	-	Archaic, Late	Indigenous	Findspot	> 1 km
AiGw-1053	-	Woodland, Early	Indigenous	Findspot	> 1 km
AiGw-1054	-	Archaic, Late	Indigenous	Findspot	> 1 km
AiGw-1055	-	Post-Contact	Euro-Canadian	Homestead	> 1 km
AiGw-1056	-	Post-Contact	Euro-Canadian	Dump	> 1 km
AiGx-41	Harold Gowland	Archaic	Indigenous	Scatter	> 1 km
AiGx-42	Everett IIb	Woodland	Indigenous	Findspot	> 1 km
AiGx-100	-	Archaic, Late	Indigenous	Findspot	300 m–1 km
AiGx-233	Boyne	Post-Contact	Unspecified	Domestic site, food preparation, storage and service	> 1 km
AiGx-410	-	Pre-Contact, Post-Contact	Indigenous, Euro-Canadian	Scatter	> 1 km
AiGx-412	-	Pre-Contact	Indigenous	Unspecified	> 1 km

Borden No. / ID No.	Site Name / Identifier	Time Period	Affinity	Site Type	Distance from Study Area
AiGx-414	-	Pre-Contact, Post-Contact	Indigenous, Euro-Canadian	Findspot	> 1 km
Unregistered	WTFN1042-1	Pre-Contact	Indigenous	Scatter	50 m–300 m
Unregistered	WTFN1043-1	Pre-Contact	Indigenous	Findspot	50 m–300 m
Unregistered	Location 1	Pre-Contact	Indigenous	Findspot	300 m–1 km
Unregistered	Location 3	Pre-Contact	Indigenous	Findspot	300 m–1 km
Unregistered	Location 5	Pre-Contact	Indigenous	Scatter	50 m–300 m
Unregistered	Location 7	Pre-Contact	Indigenous	Findspot	50 m–300 m
Unregistered	Location 8	Pre-Contact	Indigenous	Findspot	50 m–300 m
Unregistered	Location 9	Pre-Contact	Indigenous	Findspot	50 m–300 m

Appendix B: Former Lagoon