

Stage 1 Archaeological Assessment Centre Wellington Operations Centre 965 Gartshore Street Parts 1–2, Plan 61R-22127 Township of Centre Wellington Part of Lots 17–18, Concession 16 Geographic Township of Nichol Wellington County, Ontario

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Original Report

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 the development of a municipal operation centre and works yard at 965 Gartshore Street in the Township of Centre Wellington, Wellington County, Ontario. The assessment was carried out in support of Site Plan and Zoning By-law Amendment applications and was triggered by the requirements set out in Section 2.6 of the Provincial Policy Statement, 2020 issued under Section 3 of the *Planning 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 August 2022 under Project Information Form #P1020-0070-2022. The investigation encompassed the entire property. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owner. At the time of assessment, the study area consisted of a farmstead, various laneways, agricultural fields, grassed areas and wooded areas.

The Stage 1 assessment determined that the study area comprises a mixture of areas of archaeological potential and areas of no archaeological potential. It is recommended that the identified areas of archaeological potential 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 do not require any additional assessment. Given that there are still outstanding archaeological concerns within the property, no ground alterations or development of any kind may occur until the required investigation is complete, a recommendation that the lands require no further archaeological assessment is made, and the associated report is entered into the Ontario Public Register of Archaeological Reports.

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ABBREVIATIONS

ARA – Archaeological Research Associates Ltd.

MTCS – Ministry of Tourism, Culture and Sport

PIF – Project Information Form

S&Gs – Standards and Guidelines for Consultant Archaeologists

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Table 2: Post-Contact Settlement History

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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 the development of a municipal operation centre and works yard at 965 Gartshore Street in the Township of Centre Wellington, Ontario. The assessment was carried out in support of Site Plan and Zoning By-law Amendment applications and was triggered by the requirements set out in Section 2.6 of the Provincial Policy Statement, 2020 issued under Section 3 of the *Planning 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 a rectangular parcel of land with an area of 8.09 ha (Map 1). This parcel is generally bounded by agricultural lands in the northwest, Gartshore Street to the northeast, the Fergus water tower to the southeast and agricultural lands to the southwest. In legal terms, the study area comprises Parts 1–2, Plan 61R-22127, which fall on part of Lots 17–18, Concession 16 in the Geographic Township of Nichol, Wellington County. The Crown obtained these lands from the Mississaugas as part of a much larger purchase in 1784, but there were uncertainties relating to the area involved. The extent of the cession was clarified during the Between the Lakes Purchase (Treaty 3) in 1792. The Haldimand Proclamation of 1784 granted a tract of land along the Grand River to Six Nations, and the clarifying Simcoe Patent (Treaty 4) was issued in 1793.

The Stage 1 assessment was conducted in August 2022 under Project Information Form (PIF) #P1020-0070-2022. The investigation encompassed the entire property. Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was granted by the property owner. In compliance with the objectives set out in Section 1.0 of the 2011 Standards and Guidelines for Consultant Archaeologists (S&Gs), this investigation was carried out to:

- Provide information concerning the geography, history and current land condition of the study area;
- Determine the presence of known archaeological sites in the study area;
- Present strategies to mitigate project impacts to such sites, if they are located;
- Evaluate in detail the archaeological potential of the study area; and
- Recommend appropriate strategies for Stage 2 archaeological assessment, if some or all of the study area has archaeological potential.

The Ministry of Tourism, Culture and Sport (MTCS) is asked to review the results and recommendations presented herein and enter the report into the Ontario Public Register of Archaeological Reports. ARA was not directed to engage with any Indigenous communities over the course of the subject investigation. The Township of Centre Wellington plans to contact and engage with Indigenous communities in advance of commencing the Stage 2 archaeological assessment to discuss the scope of work and their involvement in site works.

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 the study area's past and present land uses. No previous archaeological reports containing relevant background information were identified during the research component of the study.

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 subperiods 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
	9000–8400 BC	Gainey, Barnes and Crowfield traditions; Small bands; Mobile hunters and
Early Palaeo		gatherers; Utilization of seasonal resources and large territories; Fluted points
I . D.1	8400–7500 BC	Holcombe, Hi-Lo and Lanceolate biface traditions; Continuing mobility;
Late Palaeo		Campsite/Way-Station sites; Smaller territories are utilized; Non-fluted points
	7500–6000 BC	Side-Notched, Corner-Notched (Nettling, Thebes) and Bifurcate traditions;
Early Archaic		Growing diversity of stone tool types; Heavy woodworking tools appear
		(e.g., ground stone axes and chisels)
	6000–2500 BC	Stemmed (Kirk, Stanly/Neville), Brewerton Side- and Corner-Notched traditions;
Middle Archaic		Reliance on local resources; Populations increasing; More ritual activities; Fully
		ground and polished tools; Net-sinkers common; Earliest copper tools
	2500–900 BC	Narrow Point (Lamoka), Broad Point (Genesee) and Small Point
Late Archaic		(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
36'111 777 11 1	400 BC-AD 600	Saugeen tradition; Stamped ceramics appear; Saugeen projectile points; Cobble
Middle Woodland		spall scrapers; Seasonal settlements and resource utilization; Post holes, hearths,
		middens, cemeteries and rectangular structures identified
Middle/Late	AD 600–900	Princess Point tradition; Cord roughening, impressed lines and punctate designs
Woodland Transition		on pottery; Adoption of maize horticulture at the western end of Lake Ontario;
I -4- W/ 41 4		Oval houses and 'incipient' longhouses; First palisades; Villages with 75 people
Late Woodland (Early)	AD 900–1300	Glen Meyer tradition; Settled village-life based on agriculture; Small villages
Late Woodland		(0.4 ha) with 75–200 people and 4–5 longhouses; Semi-permanent settlements Uren and Middleport traditions; Classic longhouses emerge; Larger villages
(Middle)	AD 1300-1400	(1.2 ha) with up to 600 people; More permanent settlements (30 years)
(Middle)	odland AD 1400–1600	Pre-Contact Neutral tradition; Larger villages (1.7 ha); Examples up to 5 ha with
Late Woodland		2,500 people; Extensive croplands; Also hamlets, cabins, camps and cemeteries;
(Late)		Potential tribal units; Fur trade begins ca. 1580; European trade goods appear
		1 otential aroa antis, 1 ar and obegins ca. 1300, European and 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.

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; Coyne 1895; HAPC 1906; Lajeunesse 1960; Cumming 1972; Ellis and Ferris 1990; Surtees 1994: AO 2015)

Historical Event Early Exploration Early 17th century 17th c
Early Exploration Early 17 th century 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 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 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 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) in 1781 included this area
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1783); British develop interior communication routes and acquire additional
Loyalist Influx Late 18th century Late 18th century Late 18th century Late 18th century
confirmed in 1792 (Treaty 3); Haldimand Proclamation of 1784 grants land to
Six Nations (the Haldimand Tract), clarified by the Simcoe Patent (Treaty 4) in
1793; Constitutional Act of 1791 creates Upper and Lower Canada Became part of York County's 'West Riding' and the expansive Kent County in
1792; Additional land cessions included the Nottawasaga Purchase (Treaty 18)
County Late 18 th to early and Ajetance Purchase (Treaty 19) in 1818, the Huron Tract Purchase
Development 19 th century (Treaty 29) in 1827 and the Saugeen Tract Purchase (Treaty 45½) in 1836;
Wellington District and Waterloo County created in 1840; Wellington County
created after the abolition of the district system in 1849

Historical Event	Timeframe	Characteristics
Township Formation	Early 19 th century	Nichol was originally Block 4 of the Haldimand Tract; Named after Colonel Nichol from the War of 1812; Granted to Colonel Clarke for military service and patented to him in 1807; Southern half of Nichol sold to W. Gilkison in 1832; A. Fergus(s)on and J. Webster purchased 2,981 ha near Fergus in 1834; Earliest settlers included the Flewellings, Boys, Scotts, Dows, Cunninghams, Metcalfes, Elmslies and Mutries prior to 1830; The Wilsons, Beatties, Cattenachs and Beattys arrived from 1830–1833; G. Elmslie, A. Watt and other Scottish immigrants purchased properties ca. 1834; Population reached 134 in 1834
Township Development	Mid-19 th to early 20 th century	Population of Nichol reached 1,019 by 1842; Most settlers were from Scotland; 8,289 ha taken up by 1846, with 2,182 ha under cultivation; 2 grist mills and 4 saw mills in operation at that time; By 1871, the unincorporated parts of Nichol contained 499 dwellings, 509 families and 2,737 inhabitants; Traversed by the Wellington, Grey & Bruce Railway (1870/1872) and Credit Valley Railway Elora Branch (1879); Communities at Aboyne, Alma, Barnett (Ennotville), Cumnock, Elora, Fergus, Kinnettles and Salem

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 would have managed the landscape to some degree. 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 community of Fergus. The land use at the time of assessment can be classified as agricultural.

1.2.2.2 Mapping and Imagery Analysis

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

- The Map of the County of Wellington, Canada West (1861) (OHCMP 2019);
- The Topographical and Historical Atlas of the County of Wellington, Ontario (1877) (MU 2001);
- The Historical Atlas of the County of Wellington, Ontario (1906) (HAPC 1906);
- A topographic map from 1935 (OCUL 2022); and
- An aerial image from 1954 (U of T 2022).

The limits of the study area are shown on georeferenced versions of the consulted historical resources in Map 2–Map 6.

The Map of the County of Wellington, Canada West (1861) identifies Edward Ford as the occupant of the subject lands, but no buildings are illustrated (Map 2). This map does not depict any private structures, however, so this should not be taken as evidence that the parcel was unimproved.

The *Topographical and Historical Atlas of the County of Wellington, Ontario* (1877) reveals that E. Ford continued to occupy the property, but the associated farmhouse is not illustrated (Map 3). The *Historical Atlas of the County of Wellington, Ontario* (1906) indicates that James and Emery Ford resided within the study area, and the Ford farmstead is shown in the southeast (Map 4).

The topographic map from 1935 depicts a house and a barn in the southeastern part of the study area and suggests that the remainder of the property comprised cleared lands (Map 5). The aerial image from 1954 confirms this land use pattern, although there appears to be a garden or orchard in the southeastern corner of the study area (Map 6).

1.3 Archaeological Context

The Stage 1 assessment (property inspection) was conducted on August 3, 2022 under PIF #P1020-0070-2022. ARA utilized an Apple iPhone 11 with a built-in GPS/GNSS receiver during the investigation (UTM17/NAD83). The limits of the study area were confirmed using project-specific GIS data translated into GPS points for reference in the field, in combination with 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 Great Lakes—St. Lawrence forest region, which is a transitional zone between the southern deciduous forest and the northern boreal forest. This forest extends along the St. Lawrence River across central Ontario to Lake Huron and west of Lake Superior along the border with Minnesota, and its southern portion extends into the more populated areas of Ontario. This forest is dominated by hardwoods, featuring species such as maple, oak, yellow birch, white and red pine. Coniferous trees such as white pine, red pine, hemlock and white cedar commonly mix with deciduous broad-leaved species, such as yellow birch, sugar and red maples, basswood and red oak (MNRF 2022).

In terms of local physiography, the subject lands fall within the Guelph Drumlin Field. This region is located northwest of the Paris Moraine and includes roughly 300 broad oval drumlins of various sizes. The drumlins themselves consist largely of loamy and calcareous till, and analyses have placed the average grain sizes in the neighbourhood of 50% sand, 35% silt and 15% clay. These drumlins are not closely grouped, and the intervening low ground supports mainly fluvial materials created by river action (Chapman and Putnam 1984:137–138). According to the Ontario Soil Survey, the study area consists entirely of Harriston loam. This Grey-Brown Podzolic developed on loam till and features good drainage (Hoffman et al. 1963).

The subject lands fall within the Irvine Creek drainage basin in the north and the Grand River – Central North drainage basin in the south, both of which are under the jurisdiction of the Grand River Conservation Authority (GRCA 2020). Specifically, the study area is located 18 m southwest of the Irvine Creek Wetland Complex, 554 southwest of an unnamed waterbody, 595 m southwest of Irvine Creek and 1.7 km northwest of Grand River.

At the time of assessment, the study area consisted of a farmstead, various laneways, agricultural fields, grassed areas and wooded areas. Soil conditions were ideal for the activities conducted. No unusual physical features were encountered that affected the results of the Stage 1 assessment.

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 did not return any 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). No unregistered sites were identified within a 1 km radius of the study area.

1.3.3 Previous Archaeological Work

Reports documenting assessments conducted within the subject lands and assessments that resulted in the discovery of sites within adjacent lands were 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 no available reports documenting previous archaeological fieldwork within the specified distance.

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 Wellington County, and Euro-Canadian archaeological sites dating to pre-1900 and post-1900 contexts are likewise common. The absence of documented sites in the surrounding area is likely related to the lack of local archaeological exploration and should not be taken as an indicator that the area was unattractive or undesirable for occupation (Section 1.3.2). Background research did not identify any 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 several water sources. The soils would have been ideal for agriculture, and the diverse local vegetation would also have encouraged settlement throughout Ontario's lengthy history. Euro-Canadian populations would have been particularly drawn to the adjacent historical thoroughfare (originally part of Jones Baseline).

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. 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)

In order to gain first-hand knowledge of the geography, topography and current condition of the study area, a property inspection was conducted on August 3, 2022. Environmental conditions were ideal during the inspection, with overcast skies, diffuse lighting and a temperature of 30 °C. ARA therefore confirms that fieldwork was carried out under weather and lighting conditions that met the requirements set out in Section 1.2 Standard 2 of the 2011 *S&Gs*.

The study area was subject to random spot-checking. The inspection confirmed that all surficial features of archaeological potential were present where they were previously identified and did not result in the identification of any additional features of archaeological potential not visible on mapping (e.g., relic water channels, patches of well-drained soils, etc.).

The inspection determined that parts of the study area were disturbed by past construction activities. No natural features (e.g., permanently wet areas, sloped lands, overgrown vegetation, heavier soils than expected, etc.) or significant built features (e.g., heritage structures, landscapes, plaques, monuments, cemeteries, etc.) that would affect assessment strategies were identified.

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 7). The closest and most relevant indicators of archaeological potential (i.e., those that would directly affect survey interval requirements) include three secondary water sources (the Irvine Creek Wetland Complex and two unnamed wetlands), several historical roadways (Gartshore Street/Jones Baseline, Sideroad 10 and Gordon Street) and one historical structure locality (a late 19th-century house). 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.

Background research did not identify any previously assessed areas of no further concern within the study area. ARA's visual inspection, coupled with the analysis of historical sources and digital environmental data, resulted in the identification of several areas of no archaeological potential. Specifically, deep land alterations have resulted in the removal of archaeological potential from various building footprints (i.e., the house, barns, sheds and Quonset huts), the laneways extending southwest from Gartshore Street and running between the buildings, an artificial pond, a berm, a barn ramp and several parking/working pads (Image 1–Image 4). These areas have 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 remainder of the study area has potential for Indigenous and Euro-Canadian archaeological materials or requires test pit survey to confirm disturbance (Image 5–Image 10). The areas of archaeological potential include the agricultural fields as well as several grassed and wooded areas in the southeast. It seems likely that the southwestern laneway, the area around the two aluminum

silos and the northeastern edge of the property along Gartshore Street were previously impacted, but the extent of disturbance could not be verified based on the inspection alone. Accordingly, these lands have been categorized as areas of archaeological potential and must be empirically tested to confirm that archaeological potential has been removed.

In summary, the Stage 1 assessment determined that the study area comprises a mixture of areas of archaeological potential and areas of no archaeological potential. The potential modelling results are presented in Map 8–Map 9. The study area is depicted as a layer in these maps.

3.0 **RECOMMENDATIONS**

The Stage 1 assessment determined that the study area comprises a mixture of areas of archaeological potential and areas of no archaeological potential. It is recommended that the identified areas of archaeological potential be subject to a Stage 2 property assessment in accordance with Section 2.1 of the 2011 S&Gs.

The 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 grassed and wooded 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 southwestern laneway, the area around the two aluminum silos and the northeastern edge of the property along Gartshore Street 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. 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.

The identified areas of no archaeological potential do not require any additional assessment. Given that there are still outstanding archaeological concerns within the property, no ground alterations or development of any kind may occur until the required investigation is complete, a recommendation that the lands require no further archaeological assessment is made, and the associated report is entered into the Ontario Public Register of Archaeological Reports.

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 Tourism, Culture and Sport 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 MTCS, 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 be a new archaeological site and therefore 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 IMAGES



Image 1: Disturbed Lands (August 3, 2022; Facing Northwest)



Image 2: Disturbed Lands (August 3, 2022; Facing Southwest)



Image 3: Disturbed Lands (August 3, 2022; Facing Northeast)



Image 4: Disturbed Lands (August 3, 2022; Facing Southwest)



Image 5: Area of Potential (August 3, 2022; Facing Southwest)



Image 6: Area of Potential (August 3, 2022; Facing West)



Image 7: Area of Potential (August 3, 2022; Facing Southeast)



Image 8: Area of Potential (August 3, 2022; Facing East)

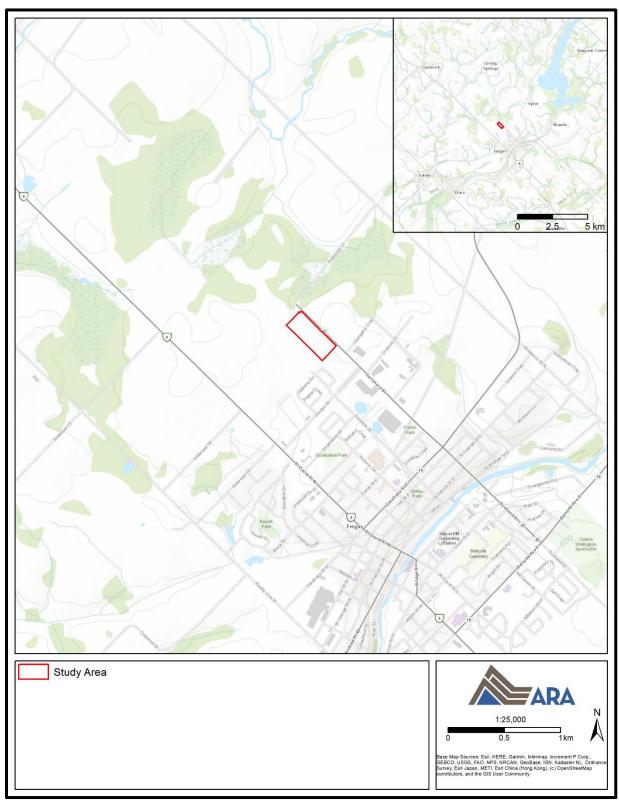


Image 9: Area of Potential (August 3, 2022; Facing East)

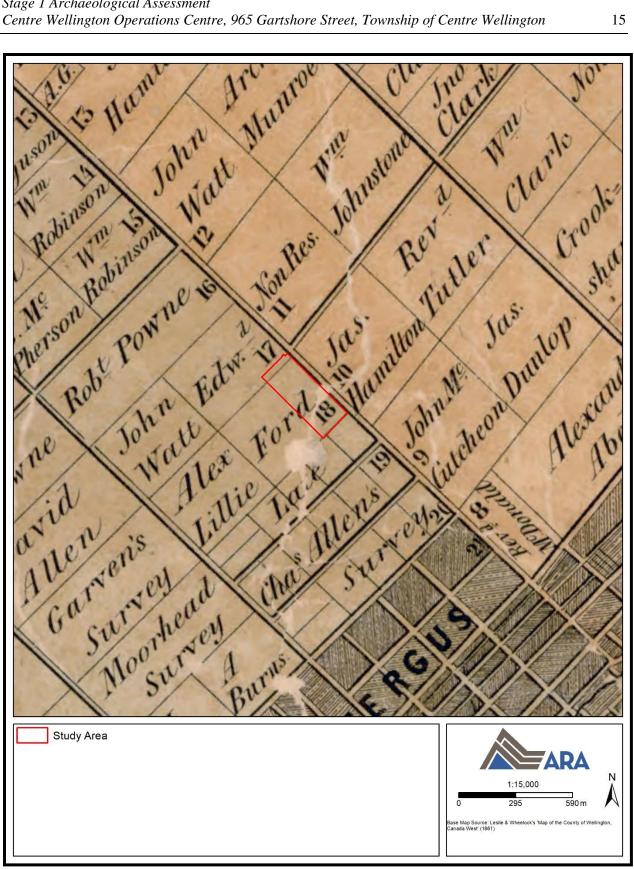


Image 10: Area of Potential (August 3, 2022; Facing Southwest)

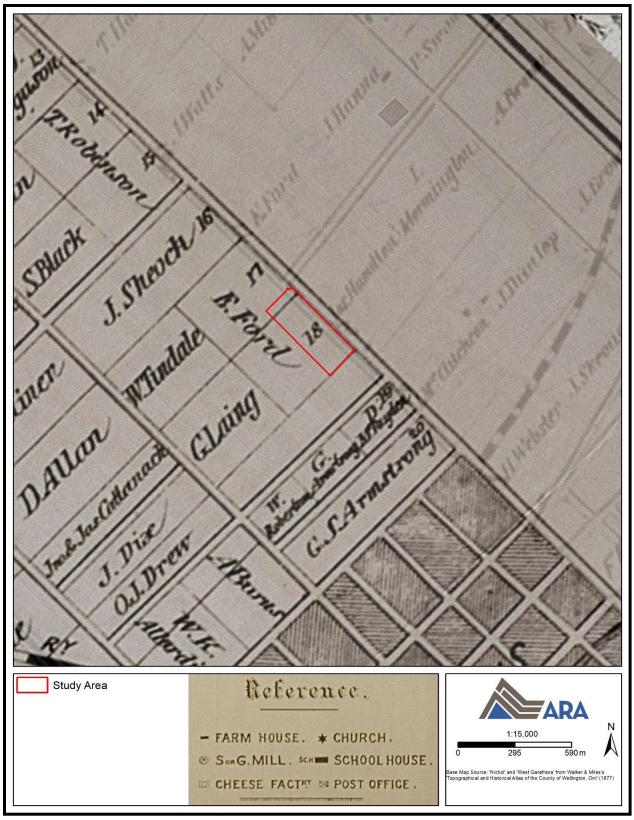
6.0 MAPS



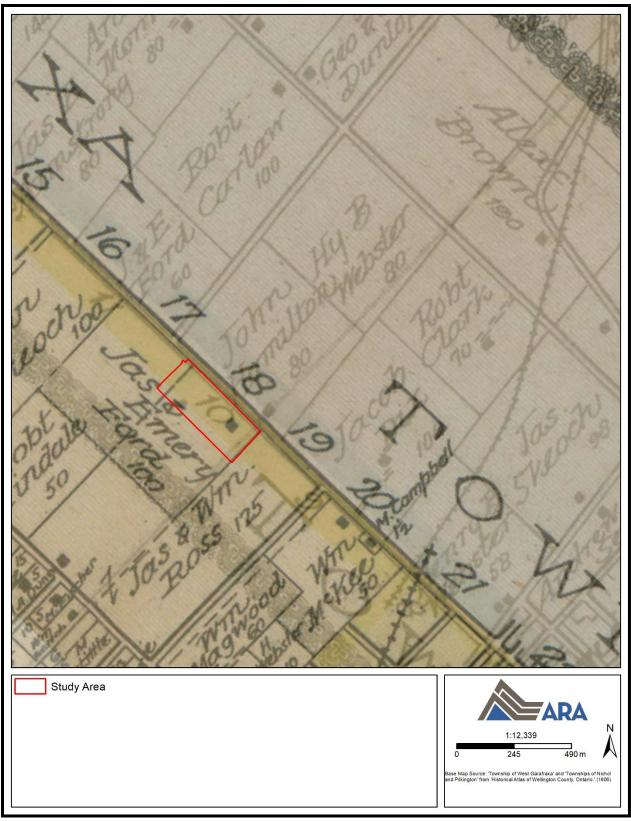
Map 1: Location of the Study Area (Produced under licence using ArcGIS® software by Esri, © Esri)



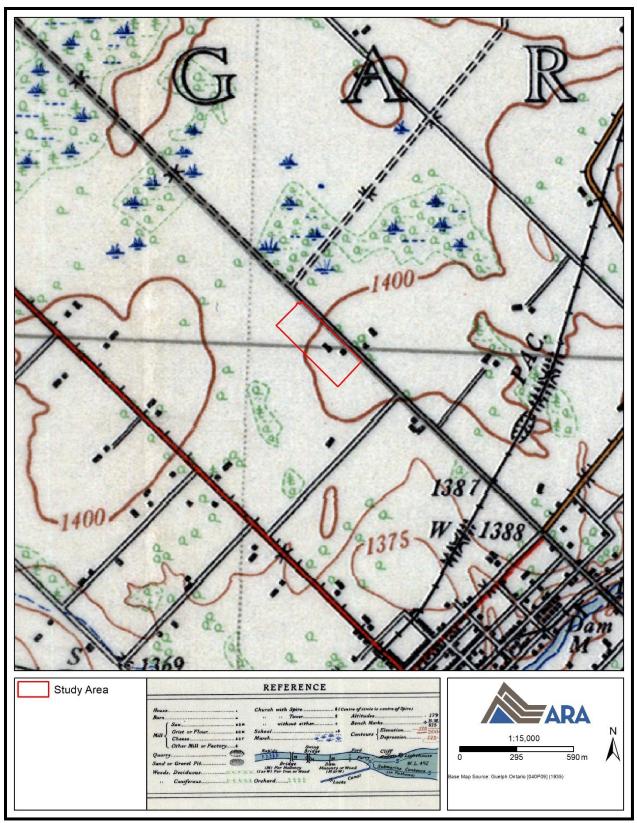
Map 2: Map of the County of Wellington, Canada West (1861) (Produced under licence using ArcGIS® software by Esri, © Esri; OHCMP 2019)



Map 3: Topographical and Historical Atlas of the County of Wellington, Ontario (1877) (Produced under licence using ArcGIS® software by Esri, © Esri; MU 2001)



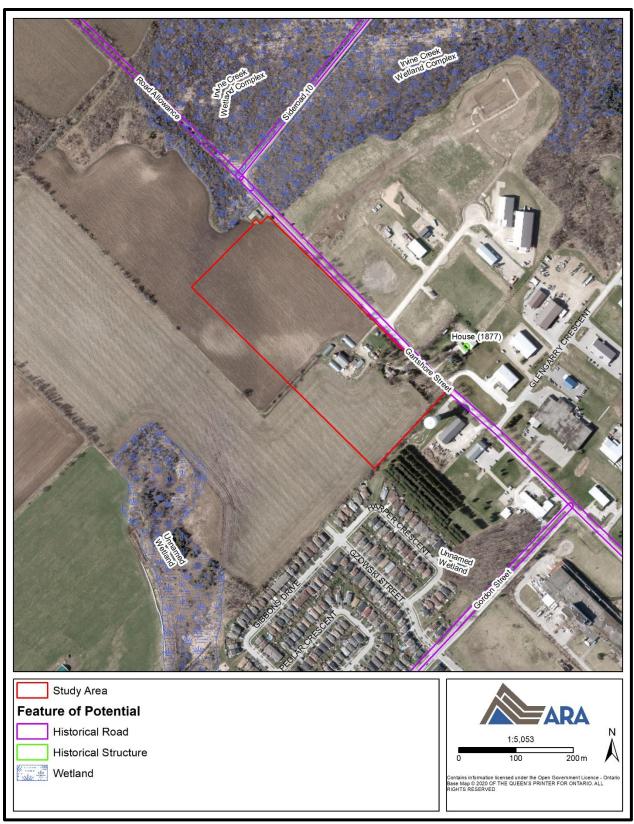
Map 4: Historical Atlas of the County of Wellington, Ontario (1906) (Produced under licence using ArcGIS® software by Esri, © Esri; HAPC 1906)



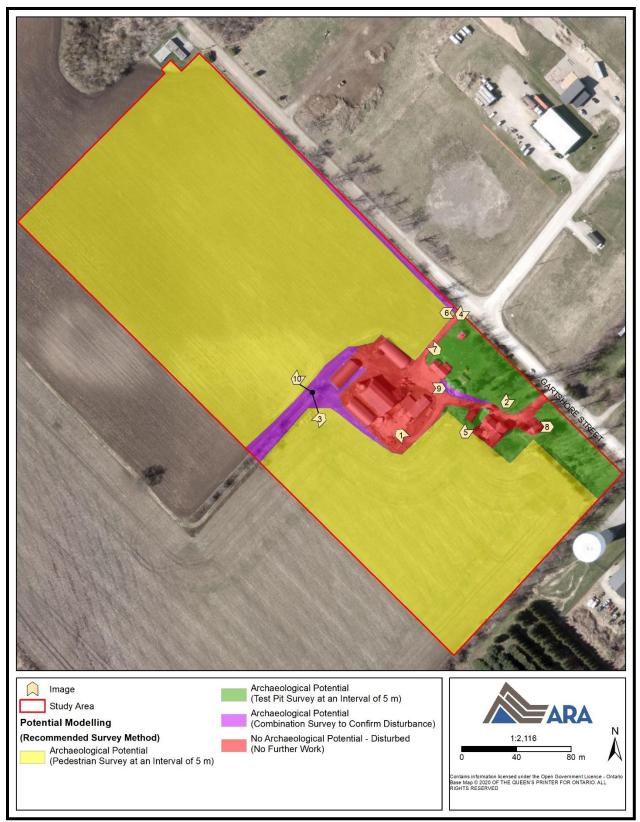
Map 5: Topographic Map (1935) (Produced under licence using ArcGIS® software by Esri, © Esri; OCUL 2022)



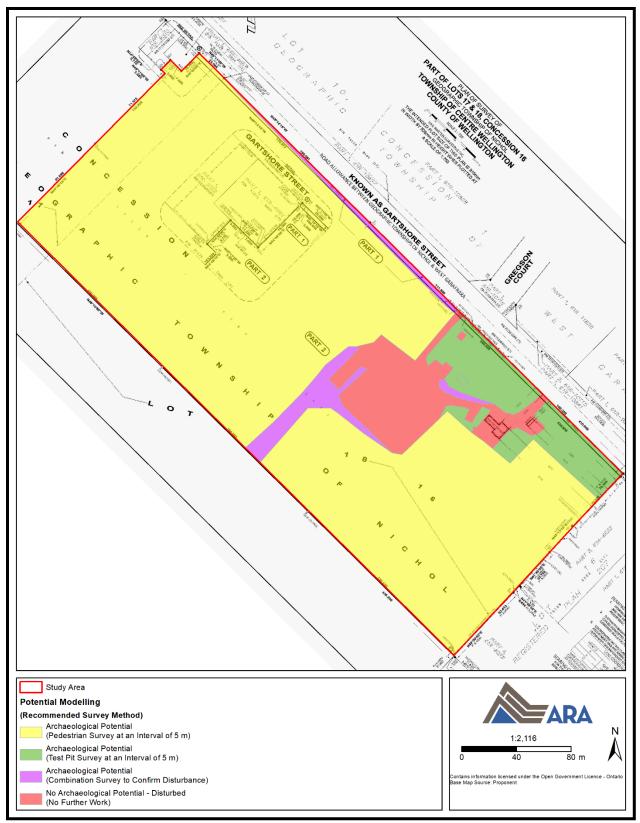
Map 6: Aerial Image (1954) (Produced under licence using ArcGIS® software by Esri, © Esri; U of T 2022)



Map 7: Features of Potential (Produced under licence using ArcGIS® software by Esri, © Esri)



Map 8: Potential Modelling and Recommendations (Aerial Image) (Produced under licence using ArcGIS® software by Esri, © Esri)



Map 9: Potential Modelling and Recommendations (Survey Plan) (Produced under licence using ArcGIS® software by Esri, © Esri)

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