



ORIGINAL REPORT

Stage 2 Archaeological Assessment

*Proposed Residential Redevelopment, Fergus Golf Club,
8282 and 8243 Wellington Road 19,
Part of Lots 9, 10 and 11, Concession 3,
Former Geographic Township of Garafraxa,
now Township of Centre Wellington, Wellington County, Ontario*

Licensee: Lafe Meichenheimer, M.A.

PIF #: P457-0129-2022

Submitted to:

Fergus Development Inc.

3190 Steeles Avenue East, Suite 300

Markham, Ontario

L3R 1G9

Attention: Theyonas Manoharan

Submitted by:

WSP Canada Inc.

309 Exeter Road, Unit #1, London, Ontario, N6L 1C1, Canada

+1 519 652 0099

21456909-R02

May 15, 2023

Distribution List

1 PDF Copy - Fergus Development Inc.

1 PDF Copy - Ministry of Citizenship and Multiculturalism

1 PDF Copy - WSP Canada Inc.

Project Personnel

Project Director	Michael Teal, M.A. (P364), Archaeology Team Lead, Ontario, Earth & Environment
Project Manager	Lafe Meicenheimer, M.A. (P457), Senior Archaeologist
Archaeological Licensee	Lafe Meicenheimer, M.A. (P457)
Field Director	Dan Brisebois (R1284), Corbin Albani (R1239), Rebecca Parry (P1013), Lafe Meicenheimer, M.A. (P457)
Field Assistants	Jordan Aitken, Shawn Bayes, Nick Berry, Jessica Figura, Sabrina Furlano, Nicole Gavin, Renee Hendricks, Tatiana Istomina, Tina Kagi, Megan Kirkham, Graham Lantz, Mackenzie Litwin, Molly McMeekin, Sarah News, David Nguyen, Will Pettes, Charlotte Rahm, Craig Ramsoomair, Jessica Russell, Martha Tildesley, David Schmoll, James Steinberg, Victoria Tait, Alex Vasylenko, Christine Yellowlees
Report Production	Lafe Meicenheimer, M.A. Courtney Adey, Administrator
Senior Review	Michael Teal, M.A. (P364), Director, Archaeology and Heritage, Ontario

Acknowledgements

Proponent Contacts Jennifer Ormiston and Theyonas Manoharan, Fergus Development Inc.

Executive Summary

The Executive Summary highlights key points from the report only; for complete information and finding the reader should examine the complete report.

WSP Canada Inc. (WSP), was retained by Fergus Development Inc. (the Client) to conduct a Stage 2 Archaeological Assessment (AA) in support of the mixed-use residential redevelopment of a portion of the Fergus Golf Club property, located at 8282 and 8243 Wellington Road 19 in Fergus, Ontario (Map 1). The Study Area for the Stage 2 AA included approximately 30 hectares (ha) southeast of County Road 19 (the SE Site) and approximately 4.1 ha northwest of County Road 19 (the NW Site). The Study Area is located on part of Lots 9, 10, and 11, Concession 3, in the former geographic Township of Garafraxa, now Township of Centre Wellington, Wellington County, Ontario. Portions of the Fergus Golf Club not slated for redevelopment were not included in this Stage 2 AA (Map 2). The Stage 2 AA was undertaken to meet the requirements of the *Planning Act* R.S.O. 1990, c.P13 (Government of Ontario 1990a).

The Stage 2 AA followed the recommendations of the previous Stage 1 AA and consisted of test pit survey at 5 m and 10 m intervals (Maps 8). Test pit survey was conducted in both the SE Site and NW Site portions of the Study Area, which resulted in the identification of two archaeological locations in the SE Site portion of the Study Area and no sites in the NW Site portion.

The Stage 2 test pit survey of the SE Site identified relatively undisturbed natural stratigraphy across most of this portion of the Study Area. In the northern, northeastern, western, and southern portions of the SE Site, soils consisted of approximately 25 to 40 cm of medium brown clay loam over yellow-brown clay loam subsoil. Soils in the central portion of the SE Site consisted of 30 to 45 cm of dark grey clay loam over pale yellow-grey clay or grey sandy loam subsoil, which are consistent with wetland soils. Indeed, the wooded area in this portion of the SE Site is swampy with standing water on the surface, and the fairway running through this wooded area had approximately 25 to 35 cm of fill capping over 30 to 45 cm of dark grey clay loam over pale yellow-grey clay or grey sandy loam subsoil which filled with water during excavation. Additionally, two small portions of the eastern corner of the SE Site were found to be disturbed down to the light grey coarse sand B₂- or C-Horizon approximately 100 to 110 cm below the surface. Disturbed areas in the SE Site previously identified during the Stage 1 AA included tee-off areas, greens, manufactured terrain, bunkers, cart paths, as well as the house located at 8243 Wellington Road 19 and its associated driveway. Other disturbed areas within the SE Site not identified during the Stage 1 AA included the former Elora Branch of the Credit Valley Railway, which was removed between 1938 to 1942, and a concrete foundation of a former structure and its associated driveway in the southern end of the SE Site.

The Stage 2 test pit survey of the NW Site portion of the Study Area identified relatively undisturbed natural stratigraphy across most of this portion of the Study Area. The soils here primarily consisted of approximately 25 to 45 cm of medium brown silty loam over yellow-brown or pale yellow-grey silt loam subsoil. One area adjacent to a driveway and barn exhibited up to 30 cm of fill-capping over the natural soils. Additionally, several portions of the NW Site were found to be disturbed during the test pit survey, including areas related to irrigation and an engineered pond. Disturbed areas in the NW Site previously identified during the Stage 1 AA included tee-off areas, greens, and manufactured terrain, as well as a barn located on the southern end of the NW Site and its associated driveway.

The two archaeological sites identified during the Stage 2 test pit survey included Location 1 and Location 2. Location 1 was identified along the western edge of the SE Site portion of the Study Area through a single positive test pit bearing one biface thinning flake of Onondaga chert. Location 2 was identified in the southern end of the SE Site portion of the Study Area through a single positive test pit bearing one primary thinning flake of indeterminate cortex material. Although intensified survey was conducted at both locations, no additional archaeological material was recovered.

Based on the results of the Stage 2 AA, it was concluded that Location 1 and Location 2 do not have sufficient cultural heritage value or interest to require Stage 3 AA and they have been sufficiently assessed and documented.

The results of the Stage 2 AA of the Study Area, and the analysis and conclusions presented herein, provide the basis for the following recommendations:

- 1) Location 1 and Location 2 have been sufficiently assessed and documented, and no further archaeological assessment is recommended for these locations.
- 2) No further archaeological assessment is recommended for portions of the Study Area that were subject to Stage 2 AA and no archaeological sites or resources were identified (Maps 8A and 8B).

The Ontario Ministry of Citizenship and Multiculturalism is asked to review the results and recommendations presented herein, accept this report into the Provincial Register of archaeological reports and issue a standard letter of compliance with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licencing.

Table of Contents

EXECUTIVE SUMMARY	ii
1.0 PROJECT CONTEXT	1
1.1 Development Context.....	1
1.2 Historical Context.....	1
1.2.1 Paleo Period.....	2
1.2.2 Archaic Period.....	3
1.2.3 Woodland Period	4
1.2.4 Post-Contact Indigenous Period	7
1.2.5 Historical Euro-Canadian Period.....	8
1.2.5.1 Wellington County and Garafraxa Township	8
1.2.5.2 Study Area Specific Context	8
1.3 Archaeological Context	9
1.3.1 Study Area Overview	9
1.3.2 Previous Archaeological Work.....	10
2.0 FIELD METHODS	12
2.1 Stage 2 Archaeological Assessment	12
3.0 RECORD OF FINDS	14
3.1 Location 1.....	14
3.2 Location 2.....	14
4.0 ANALYSIS AND CONCLUSIONS.....	15
4.1 Stratigraphy.....	15
4.1.1 SE Site	15
4.1.2 NW Site.....	15
4.2 Location 1 and Location 2.....	15
5.0 RECOMMENDATIONS.....	17
6.0 ADVICE ON COMPLIANCE WITH LEGISLATION.....	18
7.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT	19

8.0 BIBLIOGRAPHY	20
9.0 IMAGES	24
10.0 MAPS	50
11.0 CLOSURE	60

TABLES

Table 1: Cultural Chronology for Southern Ontario	1
Table 2: Field Supervisors and Weather During the Stage 2 AA Fieldwork.....	12
Table 3: Inventory of Documentary Record.....	14

IMAGES

Image 1: Test pit survey at 5 m intervals; facing south, May 12, 2022.	24
Image 2: Test pit survey at 5 m intervals; facing west, May 17, 2022.....	24
Image 3: Test pit survey at 5 m intervals; facing southeast, May 2, 2022.	25
Image 4: Test pit survey at 5 m intervals; facing northwest, May 10, 2022.	25
Image 5: Test pit survey at 5 m intervals; facing southwest, May 19, 2022.....	26
Image 6: Test pit survey at 5 m intervals; facing northeast, June 13, 2022.	26
Image 7: Test pit survey at 5 m intervals; facing southwest, June 2, 2022.....	27
Image 8: Test pit survey at 5 m intervals; facing northwest, November 18, 2022. See Images 39 and 43 for soil conditions on this day.	27
Image 9: Test pit survey at 5 m intervals; facing northeast, December 1, 2022.	28
Image 10: Test pit survey at 5 m intervals; facing northwest, December 2, 2022.....	28
Image 11: Test unit excavation at Location 1; facing southwest, May 31, 2022.....	29
Image 12: Test unit excavation at Location 2; facing south, June 2, 2022.	29
Image 13: A representative example of a permanently wet area in the SE Site; facing southeast, June 3, 2022.....	30
Image 14: A representative example of a permanently wet area in the SE Site; facing northwest, May 5, 2022.....	30
Image 15: A representative example of a permanently wet area in the SE Site; facing northwest, May 5, 2022.....	31
Image 16: A representative example of a permanently wet area in the SE Site; facing east, June 13, 2022.	31
Image 17: Location 1, biface thinning flake.	32
Image 18: Location 2, primary thinning flake.....	32

Image 19: A representative example of test pit stratigraphy in the majority of the SE Site; facing southwest, May 25, 2022.....	33
Image 20: A representative example of test pit stratigraphy in the majority of the SE Site; facing east, April 27, 2022.	33
Image 21: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 9, 2022.	34
Image 22: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 19, 2022.	34
Image 23: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 18, 2022.	35
Image 24: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, June 1, 2022.	35
Image 25: A representative example of wetland test pit stratigraphy in the central portion of the SE Site; facing northeast, May 24, 2022.....	36
Image 26: A representative example of wetland test pit stratigraphy in the central portion of the SE Site; facing south, May 10, 2022.	36
Image 27: A representative example of fill-capped wetland test pit stratigraphy in the central portion of the SE Site; facing north, May 19, 2022.....	37
Image 28: A representative example of a disturbed test pit in the eastern corner of the SE Site; facing north, May 26, 2022.....	37
Image 29: A representative example of a tee-off area and cart path in the SE Site; facing south, May 17, 2022.....	38
Image 30: A representative example of a tee-off area and cart path in the SE Site; facing southwest, May 24, 2022.	38
Image 31: A representative example of a golf green and manufactured terrain in the SE Site; facing northeast, May 24, 2022.	39
Image 32: A representative example of a golf green and manufactured terrain in the SE Site; facing northeast, May 16, 2022.	39
Image 33: A representative example of a bunker in the SE Site; facing north, May 14, 2022.....	40
Image 34: A representative example of a cart path in the SE Site; facing west, May 11, 2022.....	40
Image 35: The house at 8243 Wellington Road 19 and its associated driveway; facing north, May 27, 2022.....	41
Image 36: The house at 8243 Wellington Road 19 and its associated driveway; facing east, May 27, 2022.	41
Image 37: The former Elora Branch of the Credit Valley Railway in the SE Site; facing northeast, May 5, 2022.....	42
Image 38: A concrete foundation and its associated driveway in the southern end of the SE Site; facing northeast, May 30, 2022.	42
Image 39: A representative example of test pit stratigraphy in the majority of the NW Site; facing south, November 18, 2022.....	43
Image 40: A representative example of test pit stratigraphy in the majority of the NW Site; facing southeast, December 1, 2022.....	43

Image 41: A representative example of test pit stratigraphy in the majority of the NW Site; facing north, December 8, 2022.....	44
Image 42: A representative example of test pit stratigraphy in the majority of the NW Site; facing north, December 8, 2022.....	44
Image 43: A representative example of fill-capped test pit stratigraphy in the NW Site; facing north, November 18, 2022.....	45
Image 44: Area disturbed by the installation of irrigation infrastructure in the NW Site (see Image 45); facing northeast, December 1, 2022.....	45
Image 45: Area disturbed by the installation of irrigation infrastructure in the NW Site; facing southwest, December 1, 2022.....	46
Image 46: A representative example of a disturbed test pit in the NW Site; facing northwest, December 1, 2022.....	46
Image 47: Engineered pond in the NW Site; facing north, December 2, 2022.	47
Image 48: A representative example of a tee-off area in the NW Site; facing northwest, December 2, 2022.	47
Image 49: A representative example of a golf green and manufactured terrain in the NW Site; facing southeast, December 1, 2022.	48
Image 50: A representative example of manufactured terrain in the NW Site; facing southeast, December 1, 2022.....	48
Image 51: A representative example of manufactured terrain in the NW Site; facing north, December 2, 2022.....	49

MAPS

Map 1: Location of Study Area.	51
Map 2: Detail of Study Area.....	52
Map 3: Pre-Contact Indigenous Culture History of Southern Ontario.	53
Map 4: A Portion of Leslie and Wheelock's 1861 Map of Wellington County.	54
Map 5: A Portion of the 1877 Historical Atlas of Wellington County.	55
Map 6: A Portion of the 1939 Topographic Map.....	56
Map 7: A Portion of the 1906 Historical Atlas of Wellington County.	57
Maps 8A and 8B: Stage 2 Methods and Results.....	58
Map 9: Intensified Survey Maps.	59

APPENDICES

APPENDIX A

Artifact Catalogues

1.0 PROJECT CONTEXT

1.1 Development Context

WSP Canada Inc. (WSP), was retained by Fergus Development Inc. (the Client) to conduct a Stage 2 Archaeological Assessment (AA) in support of the mixed-use residential redevelopment of a portion of the Fergus Golf Club property, located at 8282 and 8243 Wellington Road 19 in Fergus, Ontario (Map 1). The Study Area for the Stage 2 AA included approximately 30 hectares (ha) southeast of County Road 19 (the SE Site) and approximately 4.1 ha northwest of County Road 19 (the NW Site). The Study Area is located on part of Lots 9, 10, and 11, Concession 3, in the former geographic Township of Garafraxa, now Township of Centre Wellington, Wellington County, Ontario. Portions of the Fergus Golf Club not slated for redevelopment were not included in this Stage 2 AA (Map 2). The Stage 2 AA was undertaken to meet the requirements of the *Planning Act* R.S.O. 1990, c.P13 (Government of Ontario 1990a).

The Stage 2 AA was conducted under professional archaeological licence P457, issued to Lafe Meiczenheimer of WSP by the Ontario Ministry of Citizenship and Multiculturalism (MCM) (PIF# P457-0129-2022). Permission to enter the property to conduct all required archaeological fieldwork activities, including the recovery of artifacts, was granted by Fergus Development Inc.

1.2 Historical Context

Table 1 provides a general outline of the pre-contact culture history for southern Ontario, drawn from Ellis and Ferris (1990), while Map 3 displays the pre-contact Indigenous culture history of southern Ontario.

Table 1: Cultural Chronology for Southern Ontario

Period		Time Range (circa)	Characteristics
Paleo	Early	9000 - 8400 BC	Gainey, Barnes, and Crowfield traditions; small bands; mobile hunters and gatherers; utilization of seasonal resources and large territories; fluted projectiles
	Late	8400 - 8000 BC	Holcombe, Hi-Lo, and Lanceolate biface traditions; continuing mobility; campsite/way-station sites; smaller territories are utilized; non-fluted projectiles
Archaic	Early	8000 - 6000 BC	Side-notched, Corner-notched, and Bifurcate Base traditions; growing diversity of stone tool types; heavy woodworking tools appear (e.g., ground stone axes and chisels)
	Middle	6000 - 2500 BC	Stemmed (e.g., 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	2000 - 950 BC	Narrow Point, Broad Point, and Small Point traditions; less mobility; use of fish-weirs; more formal cemeteries appear; stone pipes emerge; long-distance trade (e.g., marine shells and galena)

Period		Time Range (circa)	Characteristics
Woodland	Early	950 - 400 BC	Meadowood tradition; cord-roughened ceramics emerge; Meadowood cache blades and side-notched points; bands of up to 35 people
	Middle	400 BC - AD 500	Saugeen tradition; stamped ceramics appear; Saugeen projectile points; cobble spall scrapers; seasonal settlements and resource utilization; post holes, hearths, middens, cemeteries, and rectangular structures identified
	Transitional	AD 550 - 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
	Early Late	AD 900 - 1300	Early - Glen Meyer tradition; settled village-life based on agriculture; small villages (0.4 ha) with 75–200 people and 4–5 longhouses; semi-permanent settlements
	Middle Late	AD 1300 - 1400	Middle - Uren and Middleport traditions; classic longhouses emerge; larger villages (1.2 ha) with up to 600 people; more permanent settlements (30 years)
	Late Late	AD 1400 - 1600	Late - Larger villages (1.7 ha); Examples up to 5 ha with 2,500 people; extensive croplands; also, hamlets, cabins, camps and cemeteries; potential tribal units; fur trade begins ca. 1580; European trade goods appear

1.2.1 Paleo Period

The first human occupation of southern Ontario, known as the Paleo Period, begins just after the end of the Wisconsin Glacial Period. During this time there was a complex series of ice retreats and advances that played a large role in shaping the local topography. Southern Ontario was finally ice free by about 12,500 years ago, but the first evidence of human settlement dates to about 11,000 years ago when this area was inhabited by Indigenous groups that had been living south of the Great Lakes.

Our current understanding of Early Paleo settlement patterns suggests that small bands consisting of up to 25 to 35 individuals followed a pattern of seasonal mobility extending over large territories (Ellis and Deller 1990). Sites from this time are exceedingly rare, in part because population densities are thought to have been very low, with all southern Ontario being occupied by perhaps only 100 to 200 people (Ellis and Deller 1990).

Many Early Paleo sites are located in elevated locations on well-drained loamy soils, and many have been found on former beach ridges associated with post-glacial Lake Algonquin that had previously occupied the Lake Huron/Georgian Bay basin. Given their placement in elevated locations, which were likely conducive to the interception of migratory mammals such as caribou, it has been suggested that these sites may represent communal hunting camps. Although most Early Paleo sites are relatively small, there are a few large sites, such as one located close to Parkhill, Ontario, which covered as much as 6 ha (Ellis and Deller 1990). However, it appears that these larger sites were formed when the same general locations were occupied for short periods of time over the course of many years.

There are also smaller Early Paleo camps scattered throughout the interior of southern Ontario, usually situated adjacent to wetlands. Research suggests that population densities were very low during the Early Paleo Period, with all of southern Ontario being occupied by perhaps only 100 to 200 people (Ellis and Deller 1990).

The Late Paleo Period (8400 - 8000 BC) has been less well researched than the Early Paleo, and as a result it is poorly understood. By this time, the environment of southern Ontario was coming to be dominated by closed coniferous forests with some minor deciduous elements. It seems that many of the large game species that had been hunted in the early part of the Paleo Period had either moved further north or became extinct.

During the Late Paleo Period people continued to cover large territories as they moved about in response to seasonal resource fluctuations. On a province-wide basis Late Paleo projectile points are far more common than Early Paleo materials, suggesting a relative increase in population.

The end of the Paleo Period was heralded by numerous technological and cultural innovations that appeared throughout the Archaic Period. These innovations may be best explained in relation to the dynamic nature of the post-glacial environment and region-wide population increases.

1.2.2 Archaic Period

During the Early Archaic Period (8000 - 6000 BC), the jack and red pine forests that characterized the Late Paleo environment were replaced by forests dominated by white pine with some associated deciduous trees (Ellis, Kenyon and Spence 1990). Notable technological changes during this period include the appearance of side- and corner-notched projectile points not found during the previous Paleo times, and the introduction of ground stone tools such as celts and axes, which suggest woodworking was increasing in importance. In addition to the introduction of new tools, there may have been some reduction in the degree of seasonal movement of groups, although it is still suspected that population densities were quite low, and band territories large.

During the Middle Archaic Period (6000 - 2500 BC) the trend towards more diverse toolkits continued, as the presence of net-sinkers and fish weirs suggest that fishing was becoming an important aspect of the subsistence economy. The preserved wooden fish weirs at the Mnjikaning Site located in the Atherley Narrows between Lake Simcoe and Lake Couchiching demonstrate the technological complexity utilized to harvest local resources (Needs-Howarth 2013). It was also at this time that "bannerstones" were first manufactured. Bannerstones are carefully crafted ground stone devices that may have served as a counterbalance for "atlatls" or spear-throwers.

Another characteristic of the Middle Archaic is an increased reliance on local, often poor-quality chert resources for the manufacturing of projectile points. It seems that during earlier periods, when groups occupied large territories, it was possible for them to visit a primary outcrop of high-quality chert at least once during their seasonal round. However, during the Middle Archaic, groups inhabited smaller territories that often did not encompass a source of high-quality raw material. In these instances, it appears that lower quality materials which had been deposited by the glaciers in the local till and river gravels were utilized more regularly.

The apparent reduction in territory size may be linked to gradual region-wide population growth which led to the infilling of the landscape and a reorganization of subsistence practices as more people became more reliant on resources from smaller areas. It may also have been the impetus for the development of long-distance trading as shown by the increased presence of exotic materials and items during the later part of the Middle Archaic Period. For example, tools manufactured from natural sources of copper found in areas northwest of Lake Superior were being widely traded across the northeast (Ellis, Kenyon and Spence 1990).

During the Late Archaic (2500 - 950 BC) the trend towards decreased territory size and a broadening subsistence base continued. Late Archaic sites are far more numerous than either Early or Middle Archaic sites, and it seems that the local population had expanded. It is during the Late Archaic that more formal cemeteries appear. The appearance of cemeteries during the Late Archaic has been interpreted as a response to increased population densities and competition between local groups for access to resources. It is argued that cemeteries would have provided strong symbolic claims over a local territory and its resources. These cemeteries are often located on heights of well-drained sandy/gravel soils adjacent to major watercourses (Ellis, Kenyon and Spence 1990).

This suggestion of increased territoriality is also consistent with the regionalized variation present in Late Archaic projectile point styles. It was during the Late Archaic that distinct local styles of projectile points appear. Also, during the Late Archaic the trade networks which had been established during the Middle Archaic continued to flourish. Native copper from northern Ontario and marine shell artifacts from as far away as the Mid-Atlantic coast are frequently encountered as grave goods. Other artifacts such as polished stone pipes and banded slate gorgets also appear on Late Archaic sites. One of the more unusual and interesting of the Late Archaic artifacts is the "birdstone". Birdstones are small, bird-like effigies usually manufactured from green banded slate. While the function of these artifacts is presently poorly understood, they appear to be relatively common in the London area compared with the rest of the province (Ellis, Kenyon and Spence 1990).

1.2.3 Woodland Period

The Early Woodland Period (950 - 400 BC) is distinguished from the Late Archaic Period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples.

The first pots were thick walled and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence, Pihl and Murphy 1990). These vessels were not easily portable, and individual pots must not have sustained a long use life.

There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these early vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of ceramic technology, the life ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic Period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads. Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic Period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance (Spence, Pihl and Murphy 1990).

The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland Period. During the last 200 years of the Early Woodland Period, projectile points manufactured from high quality raw materials from the American Midwest begin to appear on sites in southwestern Ontario (Spence, Pihl and Murphy 1990).

In terms of settlement and subsistence patterns, the Middle Woodland (400 BC - AD 900) provides a major point of departure from the Archaic and Early Woodland Periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish became an even more important part of their diet (Spence, Pihl and Murphy 1990).

In addition, Middle Woodland peoples relied much more extensively on ceramic technology. Middle Woodland vessels are often garishly decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable (Spence, Pihl and Murphy 1990).

It is also at the beginning of the Middle Woodland Period that rich, densely occupied sites appear on the valley floor of major rivers. While the valley floors of floodplains had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was repeatedly occupied over several hundred years. Because this is the case, rich deposits of artifacts often accumulated (Spence, Pihl and Murphy 1990).

Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on over the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from at least Middle Archaic times and provides a prelude to the developments that follow during the Late Woodland Period (Spence, Pihl and Murphy 1990).

In much of southern Ontario, the Late Woodland Period began with a shift in settlement and subsistence patterns involving an increasing reliance on corn horticulture (Fox 1990; Smith 1990; Williamson 1990). Corn may have been introduced into southern Ontario from the American Midwest as early as AD 600. However, it did not become a dietary staple until at least three to four hundred years later.

The first agricultural villages in southern Ontario date to the 10th century AD. Unlike the riverine base camps of the Middle Woodland Period, these sites are located in the uplands, on well-drained sandy soils. Categorized as "Early Ontario Iroquoian"¹ (AD 900 - 1300), many archaeologists believe that it is possible to trace a direct line from the Iroquoian groups which inhabited southern Ontario at the time of first European contact, to these early villagers.

Village sites dating between AD 900 and 1300, share many attributes with the historically reported Iroquoian sites, including the presence of longhouses and sometimes palisades. However, these early longhouses were actually not all that large, averaging only 12.4 m in length (Dodd et al 1990; Williamson 1990). It is also quite common to find the outlines of overlapping house structures, suggesting that these villages were occupied long enough to necessitate re-building. The Jesuits reported that the Huron moved their villages once every 10 - 15 years, when the nearby soils had been depleted by farming and conveniently collected firewood grew scarce (Pearce 2010). It seems likely that Early Ontario Iroquoians occupied their villages for considerably longer, as they relied less heavily on corn than did later groups, and their villages were much smaller, placing less demand on nearby resources.

Judging by the presence of carbonized corn kernels and cob fragments recovered from sub-floor storage pits, agriculture was becoming a vital part of the Early Ontario Iroquoian economy. However, it had not reached the level of importance it would in the Middle and Late Ontario Iroquoian Periods. There is ample evidence to suggest that more traditional resources continued to be exploited and comprised a large part of the subsistence economy. Seasonally occupied special purpose sites relating to deer procurement, nut collection, and fishing activities, have all been identified. While beans are known to have been cultivated later in the Late Woodland Period, they have yet to be identified on Early Ontario Iroquoian sites.

¹ Ontario Iroquoian was historically used as a temporal period marker and is not meant to imply assumptions regarding ethnicity.

The Middle Ontario Iroquoian Period (AD 1300 - 1400) witnessed several interesting developments in terms of settlement patterns and artifact assemblages. Changes in ceramic styles have been carefully documented, allowing the placement of sites in the first or second half of this 100-year period. Moreover, villages, which averaged approximately 0.6 ha in extent during the Early Ontario Iroquoian Period, now consistently range between one and two hectares.

House lengths also change dramatically, more than doubling to an average of 30 m, while houses of up to 45 m have been documented. This radical increase in longhouse length has been variously interpreted. The simplest possibility is that increased house length is the result of a gradual, natural increase in population (Dodd et al 1990; Smith 1990). However, this does not account for the sudden shift in longhouse lengths around AD 1300. Other possible explanations involve changes in economic and socio-political organization (Dodd et al 1990). One suggestion is that during the Middle Ontario Iroquoian Period small villages were amalgamating to form larger communities for mutual defense (Dodd et al 1990). If this was the case, the more successful military leaders may have been able to absorb some of the smaller family groups into their households, thereby requiring longer structures.

This hypothesis draws support from the fact that some sites had up to seven rows of palisades, indicating at least an occasional need for strong defensive measures. There are, however, other Middle Ontario Iroquoian villages which had no palisades present (Dodd et al 1990). More research is required to evaluate these competing interpretations.

The lay-out of houses within villages also changes dramatically by AD 1300. During the Early Ontario Iroquoian Period, villages were haphazardly planned at best, with houses oriented in various directions. During the Middle Ontario Iroquoian Period villages are organized into two or more discrete groups of tightly spaced, parallel aligned, longhouses.

It has been suggested that this change in village organization may indicate the initial development of the clans which were a characteristic of the historically known Iroquoian peoples (Dodd et al 1990).

From approximately AD 1400 to 1600, Iroquoian-speaking communities and culture groups continued to expand. Prior to European contact, neighbouring Iroquois-speaking communities in southern and central united to form several confederacies known as the Huron (Huron-Wendat or Wyandot), Neutral (called Attiwandaron by the Huron-Wendat), Petun (Tionnontaté or Khionontateronon) in Ontario, and the Five Nations (later Six Nations) of the Iroquois (Haudenosaunee) of upper New York State (Birch 2010; Warrick 2008). Each group was distinct but shared a similar pattern of life already established by the 16th century (Trigger 1994).

The geographic distribution of pre-contact Ontario Iroquoian sites describes two major groups east and west of the Niagara Escarpment: the ancestral Attiwandaron to the west, and the ancestral Huron-Wendat to the east. Ancestral Huron-Wendat villages have been located as far east as the Trent River watershed, where concentrations of sites occur in the Humber River valley, the Rouge and Duffin Creek valleys, the lower Trent valley, Lake Scugog, the upper Trent River, and Simcoe County (Ramsden 1990).

Initially at least, the Late Ontario Iroquoian Period (AD 1400 - 1650) continues many of the trends which have been documented for the preceding century. For instance, between AD 1400 and 1450, house lengths continued to grow, reaching an average length of 62 m. One longhouse excavated on a site southwest of Kitchener stretched an incredible 123 m (Lennox and Fitzgerald 1990). After AD 1450, house lengths begin to decrease, with houses dating between AD 1500-1580 averaging only 30 m in length.

Why house lengths decrease after AD 1450 is poorly understood, although it is believed that the even shorter houses witnessed on historical period sites can be at least partially attributed to the population reductions associated with the introduction of European diseases such as smallpox (Lennox and Fitzgerald 1990).

Village size also continued to expand throughout the Late Ontario Iroquoian Period, with many of the larger villages showing signs of periodic expansions. The Late Middle Ontario Iroquoian Period and the first century of the Late Ontario Iroquoian Period was a time of village amalgamation. One large village situated just north of Toronto has been shown to have expanded on no fewer than five occasions. These large villages were often heavily defended with numerous rows of wooden palisades, suggesting that defence may have been one of the rationales for smaller groups banding together.

After AD 1525, communities of pre-contact Indigenous peoples of the Late Ontario Iroquoian Period who had formerly lived throughout southern Ontario as far west as the Chatham area moved further east to the Hamilton area. During the late 1600s and early 1700s, the French explorers and missionaries reported a large population of Iroquoian peoples clustered around the western end of Lake Ontario. They called these people the "Neutral" (the Attiwandaron) because they were not involved in the ongoing wars between the Huron and the League Iroquois located in upper New York State. It has been satisfactorily demonstrated that these Late Ontario Iroquoian communities, who lived in southern Ontario as far west as the Chatham area, were ancestral to at least some of the Attiwandaron groups (Lennox and Fitzgerald 1990; Smith 1990). For this reason, the Late Ontario Iroquoian groups which occupied southern Ontario prior to the arrival of the French are often identified as "Prehistorical Neutral."

1.2.4 Post-Contact Indigenous Period

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking peoples, such as the Huron and closely related Petun, by the New York State Iroquois and the subsequent return of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Schmalz 1991).

The nature of Indigenous settlement size, population distribution, and material culture shifted as settlers began to colonize the land. Despite this shift, "written accounts of material life and livelihood, the correlation of historically recovered villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought" (Ferris 2009:114). As a result, Indigenous peoples of southern Ontario have left behind archaeologically significant resources that show continuity with past peoples, even if this connection has not been recorded in historical Euro-Canadian documentation.

Portions of southern Ontario were also occupied by Algonkian-speaking groups both before and after European contact. Generally, the pre-contact Indigenous presence in much of southern Ontario reflects occupation by northern Iroquoian speakers. During and following the Iroquois Wars of the mid-17th century and the dispersal of the Iroquoian-speaking Huron-Petun and Neutral, a considerable reduction in the extent of territory occupied by Algonkian speakers occurred in southern Ontario. Beginning about 1690, northern Algonkian speakers from northern Ontario began to move southwards and southern Iroquoian speakers began to push southern Algonkian-speakers further west (Ferris 2009; Schmalz 1991).

Dominance of southern Iroquois-speaking peoples in the southern Ontario began to wane at the end of the 17th century, and Algonkian-speaking peoples returned to many parts of southern Ontario throughout the 18th and 19th centuries (Schmalz 1991).

1.2.5 Historical Euro-Canadian Period

Following the Toronto Purchase of 1787, today's southern Ontario was within the old Province of Quebec and divided into four political districts: Lunenburg, Mechlenburg, Nassau, and Hesse. These became part of the Province of Upper Canada in 1791, and renamed the Eastern, Midland, Home, and Western Districts, respectively. These Districts were further subdivided as time went on, with the Study Area being located in the former Gore District, which was created from portions of the Home and Niagara Districts in 1816.

The Study Area is within lands that first enter the historical Euro-Canadian record as part of Treaty Number 19, or the "Ajetance Purchase", between Anishinaabe peoples and the Crown in 1818:

"[Treaty 19] was made by the Honourable William Claus, Deput-Superintendent-General of Indian Affairs on behalf of His Majesty, and the Principal Men of the Mississauga Nation of Indians, inhabiting the River Credit, Twelve and Sixteen Mile Creeks on the north shore of Lake Ontario, within the Home District, whereas the said Indians were to receive 522 pounds and ten shillings, yearly for the said tract, described as follows: 'A tract of land in the Home District called the Mississague Tract, bounded southerly by the purchase made in 1806; on the east by the Townships of Etobicoke, Vaughn and King; on the south west by the Indian Purchase, extending from the outlet of Burlington Bay, north forty-five degrees west, fifty miles; and from thence north seventy-four degrees east or thereabouts, to.'"

(Morris 1943: 24)

1.2.5.1 Wellington County and Garafraxa Township

The Wellington District, which was named Waterloo County for electoral purposes, was formed from parts of the Gore, Home, and London Districts in 1838, and named after the Duke of Wellington, Arthur Wellesley. In 1852, following the abolition of the districts in 1849, Waterloo County became the United Counties of Waterloo, Wellington, and Grey. A couple of years later in 1854, Wellington County became its own entity, including Garafraxa Township (Wellington County 2023). Garafraxa Township was surveyed in 1821 and 1837, and subsequently divided into East and West Garafraxa in 1869, with the Study Area being in West Garafraxa in Wellington County (Menary 2008). Fergus, the closest settlement to the Study Area, traces its roots back to African American United Empire Loyalist Richard Pierpoint establishing Pierpoint Settlement in 1821. Ten years later, Adam Fergusson and James Webster purchased 2,956 ha of land adjacent to the Pierpoint Settlement and established the townsite that would become Fergus. Originally called Little Falls, the name was changed to Fergus in 1836 when the post office opened. Fergus was incorporated as a village in 1858 and a town in 1952 before being incorporated along with the town of Elora and Nichol, Pilkington, and West Garafraxa Townships into the Township of Centre Wellington in 1999 (Welch and Payne 2020).

1.2.5.2 Study Area Specific Context

The Study Area is located on part of Lots 9, 10, and 11, Concession 3 in the Township of Garafraxa, Wellington County, including a portion of the southwestern half of Lot 9, a portion of the southwestern half of Lot 10, most of the northeastern half of Lot 10, and the entire northeastern half of Lot 11.

According to Abstract Indices digitized by the Ontario Land Registry Access (ONLand; Land Registry Office 61 (Wellington), Book 67: Concession 3), the patents for the southwestern 100 acres of Lot 9 and the southwestern 100 acres of Lot 10 were issued to Rebecca Hosteller on March 8, 1825. The patent for the northeastern 100 acres of Lot 10 was issued to Hiram McCeany on May 12, 1840, while the patent for all 200 acres of Lot 11 was issued to the Canada Company on October 12, 1841.

The next available historical map is the *Map of the County of Wellington, Canada West* published by Guy Leslie and Charles J. Wheelock in 1861 (Map 4). This map shows William Mitchell as the owner of the southwestern half of Lots 9 and 10, James Black as the owner of the northeastern half of Lot 10, and Harvy Cull as the owner of the northeastern half of Lot 11. There are not structures depicted on any of these lots, however a road somewhat matching the layout of what is now Wellington County Road 19 crosses diagonally through Lot 10. Wellington County Road 19 separates the SE Site from the NW Site in the Study Area.

The map of Garafraxa Township included in the 1877 *Illustrated Historical Atlas of Wellington County* shows L. Mitchell as the owner of the southwestern half of Lot 9, R. Mitchell as the owner of the southwestern half of Lot 10, J. Black as the owner of the northeastern half of Lot 10, and H. Cull as the owner of the northeastern half of Lot 11 (Map 5). Several structures are depicted on this map, including those of J. Black and H. Cull in the Study Area. What is now Wellington County Road 19 is still depicted on this map, and there is now the addition of the Credit Valley Railway (CVR) which passes through the southwestern half of Lots 9 and 10 as well the northeastern half of Lot 10, through the SE Site portion of the Study Area. The CVR was incorporated in 1871 to construct a rail line between Toronto and Orangeville via Streetsville and the Credit River Valley. The CVR became operational in 1879, with the branch servicing Elora via Fergus passing through the Study Area opening in December of that year. In 1883, the CVR became part of the Ontario and Quebec Railway holdings along with the Toronto, Grey and Bruce Railway, all three of which were leased to, then amalgamated into the Canadian Pacific Railway in 1884 (Boles 2022). The Elora Branch was the least profitable component of the CVR, although it remained open for over a century, being rerouted out of the Study Area as a result of the construction of the Shand Dam and subsequent creation of Belwood Lake from 1938 to 1942 (Map 6) (Baine 2009). The Elora branch of the CVR was ultimately being abandoned in 1987 (Boles 2022). The Grand River and Credit Valley Conservation Authorities acquired the right-of-way in 1993 and converted the former rail line into the Elora Cataract Trailway (Elora Cataract Trailway 2023).

The Map of West Garafraxa Township from the 1906 *Historical Atlas of the County of Wellington, Ontario* indicates that, at this time, Robert Black owns the southwestern half of Lot 9 as well as the entirety of Lot 10, while William A. Dix owns the northeastern half of Lot 11 (Map 7). Several structures are depicted within the Study Area along County Road 19. The layout of County Road 19 matches the current layout, and the Canadian Pacific Railway, formerly the CVR, still runs through the SE Site portion of the Study Area.

The Study Area remained agricultural land until the construction of the golf courses in the latter half of the 20th century and early 21st century. The Fairview Golf Club, a nine-hole golf course now called Fergus South, was built in 1977, while the Lake Belwood Golf Club, two nine-hole golf courses now called Fergus East and West, was built in 2000. The Fergus Golf Club was created in 2010 with the merger of the Fairview and Lake Belwood Golf Clubs (GolfNorth 2023). Fergus South makes up the majority of the SE Site portion of the Study Area, while the NW Site portion of the Study Area occupies a portion of Fergus East and West as well as a portion of the Fergus Golf Club driving range.

1.3 Archaeological Context

1.3.1 Study Area Overview

The Study Area is approximately 34.1 ha combined of land situated within the Guelph Drumlin Field physiographic region. The Guelph Drumlin Field is described as follows:

“The drumlins of this field are not so closely grouped as those of some other areas and there is more intervening low ground, which is largely occupied by fluvial materials. The till in these drumlins is loamy and calcareous and was derived mostly from dolostone of the Amabel Formation so strategically

exposed along the Niagara Cuesta...The till throughout is rather stony, with large surface boulders being more numerous in some localities than others...The ice which moulded this drumlin field advanced from the southeast and the front of the melting receding glacier was at right angles to this, that is, down slope of the plain. The drainage of the ice front was consequently able to find progressively lower and lower outlets, so that the drumlin field is furrowed by more or less parallel valleys running almost at right angles to the trend of the drumlins themselves. There are also numerous interconnecting cross valleys which occupy deeper depressions between drumlins. Along the sides of these valleys there are broad sand and gravel terraces, while the bottoms are often swampy...Incidental to this pattern are the several gravel ridges or eskers which cross the plain in the same general direction as the drumlins."

(Chapman and Putnam 1984:137-138)

Localized topography of the Study Area is generally flat, sitting around 250 m above sea level. The soils of the Study Area have been mapped as mainly Burford Loam and Perth Loam with a small portion of London Loam in the NW Site, while the SE Site contains Burford Loam, Listowel Loam, Parkhill Loam, Hillsburg Fine Sandy Loam, and Harriston Loam (Hoffman et al 1963). The bedrock deposits in the vicinity date to the Middle and Lower Silurian Periods and consist of the Guelph Formation (Hewitt 1972).

The closest potable water source is a tributary of Irvine Creek, which originates in the NW Site portion of the Study Area. Although Belwood Lake is approximately 140 m northeast of the Study Area, the lake was created as a result of the construction of the Shand Dam across the Grand River from 1938 to 1942.

The Study Area lies within the Mixed-wood Plains ecozone of Ontario (Ecological Framework of Canada n.d.). Although largely altered by recent human activity, this ecozone once supported a wide variety of deciduous trees, such as various species of ash, birch, chestnut, hickory, oak, and walnut, as well as a variety of birds and small to large land mammals, such as raccoon, red fox, white tailed deer, and black bear.

Currently, the Study Area consists of the Fergus Golf Club, which is comprised of fairways, tee-off areas, golf greens, bunkers, and paved cart paths, as well as wooded areas, overgrown grassy areas, and club facilities and their associated driveways and parking areas. Additionally, the Study Area includes a residential property located at 8243 Wellington Road 19, which includes a residential structure and its associated driveway, as well as manicured lawn.

1.3.2 Previous Archaeological Work

A search of the Ontario Archaeological Sites Database (OASD) indicated that there are no registered archaeological sites located within a 1 km radius of the Study Area (MCM 2022).

In 2021, Golder Associates Ltd., a member of WSP, conducted a Stage 1 AA for the Fergus Golf Club property, which included the current Study Area. This Stage 1 AA included a property inspection and concluded that the current use of the study area as a golf course indicates the property has been subjected to some level of subsurface disturbance, though it is not possible through visual assessment to determine to what extent the development of the golf course impacted subsurface cultural remains that may be present. As a result, Stage 2 AA was recommended for the study area, including test pit survey at 10 m intervals for portions of the study area identified during the Stage 1 property inspection as likely disturbed due to the construction of the golf courses, but the level of disturbance was not able to be visually confirmed, and test pit survey at 5 m intervals for portions of the study area that appeared relatively undisturbed (Golder 2022).

To the best of our knowledge, no additional archaeological assessments have been conducted within 50 m of the current Study Area.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information Act*. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. For this reason, maps and data that provide information on archaeological site locations are provided as supplementary documentation and do not form part of this public report.

The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

2.0 FIELD METHODS

2.1 Stage 2 Archaeological Assessment

The Stage 2 AA was conducted over the course of 33 days between April 25, 2022, and December 8, 2022, under archaeological consulting license P457, issued to Lafe Meicenheimer by the MCM (PIF# P457-0129-2022). Aside from the licensee, Dan Brisebois (R1284), Corbin Albani (R1239), and Rebecca Parry (P1013), delegated licensed field supervisors for WSP, assumed partial responsibility of undertaking the archaeological fieldwork as per Section 12 of the MCM's 2013 *Terms and Conditions for Archaeological Licences*, issued in accordance with clause 48(4)(d) of the *Ontario Heritage Act* (Government of Ontario 1990b). The field supervisor and weather for each day of the assessment may be found Table 2. On November 18 and December 1, 2022, there were several centimetres of snow on the ground, however the ground was not frozen, and the soils were dry. Similarly, despite cold temperatures on December 2, 2022, the ground was not frozen, and the soils were dry. At no time were the conditions detrimental to the observation or recovery of archaeological material.

Table 2: Field Supervisors and Weather During the Stage 2 AA Fieldwork

Date	Supervisor(s)	Max Temperature	Comments
April 25, 2022	Daniel Brisebois	15°C	Overcast
April 26, 2022	Daniel Brisebois	6°C	Overcast
April 27, 2022	Daniel Brisebois	0°C	Overcast
April 28, 2022	Daniel Brisebois	10°C	Sunny
May 2, 2022	Daniel Brisebois	10°C	Overcast
May 3, 2022	Daniel Brisebois	10°C	Overcast
May 4, 2022	Daniel Brisebois	15°C	Partly Cloudy
May 5, 2022	Daniel Brisebois	16°C	Sunny
May 6, 2022	Daniel Brisebois	16°C	Overcast
May 9, 2022	Daniel Brisebois	18°C	Sunny
May 10, 2022	Daniel Brisebois	21°C	Sunny
May 11, 2022	Daniel Brisebois	28°C	Sunny
May 12, 2022	Daniel Brisebois	28°C	Sunny
May 13, 2022	Daniel Brisebois	28°C	Sunny
May 16, 2022	Daniel Brisebois	16°C	Overcast
May 17, 2022	Daniel Brisebois	12°C	Overcast
May 18, 2022	Daniel Brisebois	15°C	Partly Cloudy
May 19, 2022	Corbin Albani, Daniel Brisebois	18°C	Partly Cloudy
May 20, 2022	Corbin Albani, Daniel Brisebois	20°C	Partly Cloudy
May 24, 2022	Daniel Brisebois	19°C	Sunny
May 25, 2022	Daniel Brisebois	18°C	Partly Cloudy
May 26, 2022	Daniel Brisebois	22°C	Partly Cloudy
May 27, 2022	Daniel Brisebois	20°C	Overcast
May 30, 2022	Daniel Brisebois	28°C	Sunny
May 31, 2022	Daniel Brisebois	28°C	Sunny
June 1, 2022	Daniel Brisebois	22°C	Partly Cloudy

Date	Supervisor(s)	Max Temperature	Comments
June 2, 2022	Daniel Brisebois	18°C	Partly Cloudy
June 3, 2022	Rebecca Parry	22°C	Sunny
June 13, 2022	Daniel Brisebois	22°C	Sunny
November 18, 2022	Lafe Meicenheimer	-3°C	Overcast, Flurries; Snow cover on ground but ground was not frozen.
December 1, 2022	Rebecca Parry	0°C	Overcast; Snow cover on ground but ground was not frozen.
December 2, 2022	Daniel Brisebois	-10°C	Overcast; Cold air temperature but ground was not frozen.
December 8, 2022	Daniel Brisebois	3°C	Overcast

Photo locations are illustrated on Maps 8A and 8B. All activities undertaken during the assessment were in compliance with the *Ontario Heritage Act* (Government of Ontario 1990b) and the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Field data was recorded using the ESRI ArcGIS Field Maps program on a Samsung Tab Active3 tablet connected via Bluetooth to a Garmin GLO2 device, achieving an average GPS accuracy of 3 m.

The Stage 2 AA followed the recommendations of the previous Stage 1 AA (see Section 1.3.2 above). Portions of the Study Area that were identified during the Stage 1 AA as likely disturbed due to the construction of the golf courses, but the level of disturbance was not able to be visually confirmed were subject to test pit survey at 10 m intervals, while portions of the study area that appeared relatively undisturbed were subject to test pit survey at 5 m intervals (Image 1 to Image 10; Maps 8A and 8B). When it was identified that the natural stratigraphy was relatively undisturbed in portions of the Study Area that had been identified as likely disturbed by the construction of the golf courses, the test pit survey was conducted at 5 m intervals.

Test pits were at least 30 cm in diameter and excavated by hand to a minimum of 5 cm into natural subsoil. All natural soil was screened through 6 mm hardware cloth to facilitate the recovery of cultural material that may be present. Each test pit was examined for stratigraphy, cultural features, and fill. Test pits were excavated to within 1 m of built structures or until test pits showed evidence of recent ground disturbance or poor drainage. All test pits were back filled upon completion.

When an artifact-yielding test pit was encountered, test pit excavations continued on the survey grid to determine the extent of additional positive test pits in the area. When this process yielded insufficient archaeological resources to meet the criteria for recommending a Stage 3 AA, such as occurred at Locations 1 and 2, intensified survey coverage was performed, according to Section 2.1.3 Standards 1 and 2b, of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). At each location, eight additional test pits were excavated at 2.5 m intervals around the positive test pit, followed by the excavation of a 1 m² test unit over the positive test pit (Image 11 and Image 12; Map 9).

Approximately 2.63 ha of the Study Area was identified as permanently wet and as such were not surveyed (Image 13 to Image 16; Map 9).

Relevant UTM coordinates for all locations are presented in the Supplementary Documentation, separate from this report. The Supplementary Documentation also contains a Tile showing the specific site locations.

3.0 RECORD OF FINDS

The Stage 2 AA was conducted employing the methods described in Section 2.0. Maps 8A and 8B illustrate the areas assessed and the methods employed, while Image 1 to Image 16, as well as Image 19 to Image 51 illustrate the survey conditions.

Table 3 provides an inventory of the documentary record generated in the field, while the artifact catalogue for Location 1 and Location 2 may be found in Appendix A.

Table 3: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	WSP Office in London	69 pages in the original field book and stored digitally in project file.
Digital Maps	WSP Office in London	Stored digitally in project ArcGIS Online file.
Digital Photographs	WSP Office in London	260 digital photos stored digitally in project ArcGIS Online file.

Two archaeological locations were identified during the Stage 2 AA, each of which is discussed below.

3.1 Location 1

Location 1 was identified along the western edge of the SE Site portion of the Study Area through a single positive test pit bearing one biface thinning flake of Onondaga chert (Image 17). Although intensified survey was conducted using the methodology described above in Section 2.1, no additional archaeological material was recovered.

3.2 Location 2

Location 2 was identified in the southern end of the SE Site portion of the Study Area through a single positive test pit bearing one primary thinning flake of indeterminate cortex material (Image 18). Although intensified survey was conducted using the methodology described above in Section 2.1, no additional archaeological material was recovered.

4.0 ANALYSIS AND CONCLUSIONS

The Stage 2 AA followed the recommendations of the previous Stage 1 AA (see Section 1.3.2 above) and consisted of test pit survey at 5 m and 10 m intervals (Maps 8). Test pit survey was conducted in both the SE Site and NW Site portions of the Study Area, which resulted in the identification of two archaeological locations in the SE Site portion of the Study Area. The stratigraphy of each area, as well as the archaeological locations, are discussed below.

4.1 Stratigraphy

The Stage 2 test pit survey identified a variety of natural and disturbed soil profiles across both portions of the Study Area.

4.1.1 SE Site

The Stage 2 test pit survey of the SE Site identified relatively undisturbed natural stratigraphy across most of this portion of the Study Area. In the northern, northeastern, western, and southern portions of the SE Site, soils consisted of approximately 25 to 40 cm of medium brown clay loam over yellow-brown clay loam subsoil. The (Image 19 to Image 24). Soils in the central portion of the SE Site consisted of 30 to 45 cm of dark grey clay loam over pale yellow-grey clay or grey sandy loam subsoil, which are consistent with wetland soils (Image 25 and Image 26). Indeed, the wooded area in this portion of the SE Site is swampy with standing water on the surface (see Image 15), and the fairway running through this wooded area had approximately 25 to 35 cm of fill capping over 30 to 45 cm of dark grey clay loam over pale yellow-grey clay or grey sandy loam subsoil which filled with water during excavation (Image 27). Additionally, two small portions of the eastern corner of the SE Site were found to be disturbed down to the light grey coarse sand B₂- or C-Horizon approximately 100 to 110 cm below the surface (Image 28). Disturbed areas in the SE Site previously identified during the Stage 1 AA included tee-off areas, greens, manufactured terrain, bunkers, cart paths, (Image 29 to Image 34), as well as the house located at 8243 Wellington Road 19 and its associated driveway (Image 35 and Image 36). Other disturbed areas within the SE Site not identified during the Stage 1 AA included the former Elora Branch of the Credit Valley Railway, which was removed between 1938 to 1942 (Image 37), and a concrete foundation of a former structure and its associated driveway in the southern end of the SE Site (Image 38).

4.1.2 NW Site

The Stage 2 test pit survey of the NW Site portion of the Study Area identified relatively undisturbed natural stratigraphy across most of this portion of the Study Area. The soils here primarily consisted of approximately 25 to 45 cm of medium brown silty loam over yellow-brown or pale yellow-grey silt loam subsoil (Image 39 to Image 42). One area adjacent to a driveway and barn having up to 30 cm of fill-capping over the natural soils (Image 43). Additionally, several portions of the NW Site were found during the test pit survey to be disturbed, including areas related to irrigation (Image 44 to Image 46) and an engineered pond (Image 47). Disturbed areas in the NW Site previously identified during the Stage 1 AA included tee-off areas, greens, and manufactured terrain (Image 48 to Image 51), as well as a barn located on the southern end of the NW Site and its associated driveway.

4.2 Location 1 and Location 2

Locations 1 and 2 are each represented by a single piece of lithic debitage. Despite intensified survey at each location, no additional archaeological material was recovered.

Lithic debitage is not typically diagnostic, therefore the age or cultural affiliation of Locations 1 and 2 could not be determined. The isolated nature of these artifacts suggests they are related to transient use of the area by Indigenous peoples that occurred during an unknown time period.

Given the isolated and non-diagnostic nature of the finds, Locations 1 and 2 are concluded to have no further cultural heritage value or interest as the sites do not meet the criteria identified in Section 2.2, Standard 1a of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) for determining the need for Stage 3 site-specific assessment.

5.0 RECOMMENDATIONS

The results of the Stage 2 AA of the Study Area, and the analysis and conclusions presented herein, provide the basis for the following recommendations:

- 1) Location 1 and Location 2 have been sufficiently assessed and documented, and no further archaeological assessment is recommended for these locations.
- 2) No further archaeological assessment is recommended for portions of the Study Area that were subject to Stage 2 AA and no archaeological sites or resources were identified (Maps 8A and 8B).

The Ontario Ministry of Citizenship and Multiculturalism is asked to review the results and recommendations presented herein, accept this report into the Provincial Register of archaeological reports and issue a standard letter of compliance with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licencing.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ministry of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act* (Government of Ontario 1990b). The report is prepared 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 Ministry of Citizenship and Multiculturalism, a letter will be issued by the Ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.

It is an offence under Section 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alterations 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 Archaeological reports referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990b).

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* (Government of Ontario 1990b).

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner (Government of Ontario 2002). It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.

7.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

WSP has prepared this report in a manner consistent with the level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to WSP by the Client. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without WSP's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, WSP may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to WSP. The report, all plans, data, drawings and other documents as well as electronic media prepared by WSP are considered its professional work product and shall remain the copyright property of WSP, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of WSP. The Client acknowledges that electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of WSP's report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Citizenship and Multiculturalism's *Standards and Guidelines for Consultants Archaeologists* (Government of Ontario 2011).

8.0 BIBLIOGRAPHY

Baine, Janet

2009 "Shand Dam a First for Canada." *Grand Actions, The Grand Strategy Newsletter* Volume 14, Number 2, March/April 2022.

Birch, Jennifer

2010 *Coalescent Communities in Iroquoian Ontario*. Ph.D. thesis, McMaster University.

Boles, Derek

2022 "Credit Valley Railway." Electronic resource: <https://www.trha.ca/trha/history/railways/credit-valley-railway/>. Last accessed January 16, 2023.

Chapman, Lyman John and Donald F. Putnam

1984 *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Department of National Defence.

1939 *Guelph, Ontario, Sheet 40P/9*. Department of National Defence.

Dodd, Christine F., Dana R. Poulton, Paul A. Lennox, David G. Smith and Gary A. Warrick

1990 "The Middle Ontario Iroquoian Stage." In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 321-360.

Ecological Framework of Canada

n.d. "Mixedwood Plains Ecozone." Electronic document: <http://ecozones.ca/english/index.html>. Last accessed: January 5, 2022.

Eley, Betty E. and Peter H. von Bitter

1989 *Cherts of Southern Ontario*. Royal Ontario Museum, Toronto.

Ellis, Chris J. and D. Brian Deller

1990 Paleo-Indians. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 37-64.

Ellis, Chris J., Ian T. Kenyon and Michael W. Spence

1990 The Archaic. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 65-124.

Ellis, Chris J. and Neal Ferris (editors)

1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Elora Cataract Trailway

2023 "History of the Trailway." Electronic resource: <http://trailway.org/about-us/history-of-the-trailway/>. Last accessed January 16, 2023.

Ferris, Neal

2009 *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. University of Arizona Press, Tucson.

Fox, William A.

1990 The Middle Woodland to Late Woodland Transition. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 171-188.

Golder Associated Ltd., A Member of WSP

2022 *Proposed Residential Redevelopment, Fergus Golf Club, 8282 and 8243 Wellington Road 19, Part of Lots 9, 10 and 11, Concession 3, Geographic Township of Garafraxa, now Township of Centre Wellington, County of Wellington, Ontario*. Report on file with the Ministry of Citizenship and Multiculturalism, Toronto.

GolfNorth Properties

n.d. "Fergus Golf Club." Electronic resource: <https://golfnorth.ca/fergus/>. Last accessed January 16, 2023.

Government of Ontario

1990a *The Planning Act*. Electronic document: <https://www.ontario.ca/laws/statute/90p13>.

1990b *The Ontario Heritage Act*. Electronic document: <https://www.ontario.ca/laws/statute/90o18>.

2002 *Funeral, Burial and Cremation Services Act*. Electronic document: <https://www.ontario.ca/laws/statute/02f33>.

2011 *Standards and Guidelines for Consultant Archaeologists*. Ontario Ministry of Tourism, Culture and Sport, Toronto.

Hewitt, D.F.

1972 *Paleozoic Geology of Southern Ontario*. Geological Report No. 105, Ontario Division of Mines, Toronto.

Historical Atlas Publishing Company

1906 *Historical Atlas of the County of Wellington, Ontario*. Historical Atlas Publishing Company.

Hoffman DW, Matthews B.C, and Wicklund R.E.

1963 *The Soil Survey of Wellington County, Report No. 35 of the Ontario Soil Survey*. Soil Research Institute, Guelph

Lennox, Paul A. and William R. Fitzgerald

1990 The Culture History and Archaeology of the Neutral Iroquoians. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 405-456.

Leslie, Guy and Wheelock, Charles J.

1861 *Map of the County of Wellington, Canada West*. W.C. Chewett and Company, Toronto.

Menary, Amy

2008 "Dufferin County, East Garafraxa Township." Electronic resource:
<https://sites.rootsweb.com/~onduffer/townships/fraxa.html>. Last accessed January 25, 2023.

Ministry of Citizenship and Multiculturalism (MCM)

2022 Sites within a 1 km Radius of the Study Area Accessed from the Ontario Archaeological Sites Database, November 4, 2022.

Morris, J.L.

1943 *Indians of Ontario*. 1964 reprint. Department of Lands and Forests, Government of Ontario.

Needs-Howarth, Suzanne

2013 "Animals and Archaeologists." In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 112-123. McGill-Queen's University Press, Montreal and Kingston.

Pearce, Robert J.

2010 *Southwestern Ontario: The First 12,000 Years*. Web site developed by Museum of Ontario Archaeology, London with funding from Department of Canadian Heritage. Electronic document:
<http://www.diggingontario.uwo.ca>.

Ramsden, Peter G.

1990 "The Hurons: Archaeology and Culture History." In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 361-384.

Schmalz, Peter S.

1991 *The Ojibwa of Southern Ontario*. University of Toronto Press, Toronto.

Smith, David G.

1990 Iroquoian Societies in Southern Ontario: Introduction and Historic Overview. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 279-290.

Spence, Michael W., Robert H. Pihl and Carl Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 15-170.

Trigger, B.G.

1994 "The Original Iroquoians: Huron, Petun and Neutral." In Rogers, E.S. (Ed.), *Aboriginal Ontario: Historical Perspectives on the First Nations*. Dundurn Press Limited, Toronto.

Walker and Miles

1877 *Illustrated Historical Atlas of Wellington County*. Richardson, Bond, and Wright Ltd., Owen Sound.

Warrick G.A.

2008 *A Population History of the Huron-Petun, A.D. 500-1650*. New York: Cambridge University Press.

Welch, Deborah and Payne, Michael

2020 "Fergus" Electronic resource: <https://www.thecanadianencyclopedia.ca/en/article/Fergus>. Last accessed January 25, 2023.

Wellington County

2023 "Local History." Electronic resource:
<https://www.wellington.ca/en/discover/localhistory.aspx#:~:text=Wellington%20County%20was%20named%20after,Wellington%20and%20Grey%20were%20formed>. Last accessed January 25, 2023.

Williamson, Ronald F.

1990 The Early Iroquoian Period of Southern Ontario. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5: 291-320.

9.0 IMAGES



Image 1: Test pit survey at 5 m intervals; facing south, May 12, 2022.



Image 2: Test pit survey at 5 m intervals; facing west, May 17, 2022.



Image 3: Test pit survey at 5 m intervals; facing southeast, May 2, 2022.



Image 4: Test pit survey at 5 m intervals; facing northwest, May 10, 2022.



Image 5: Test pit survey at 5 m intervals; facing southwest, May 19, 2022.



Image 6: Test pit survey at 5 m intervals; facing northeast, June 13, 2022.



Image 7: Test pit survey at 5 m intervals; facing southwest, June 2, 2022.



Image 8: Test pit survey at 5 m intervals; facing northwest, November 18, 2022. See Images 39 and 43 for soil conditions on this day.



Image 9: Test pit survey at 5 m intervals; facing northeast, December 1, 2022.



Image 10: Test pit survey at 5 m intervals; facing northwest, December 2, 2022.



Image 11: Test unit excavation at Location 1; facing southwest, May 31, 2022.



Image 12: Test unit excavation at Location 2; facing south, June 2, 2022.



Image 13: A representative example of a permanently wet area in the SE Site; facing southeast, June 3, 2022.



Image 14: A representative example of a permanently wet area in the SE Site; facing northwest, May 5, 2022.



Image 15: A representative example of a permanently wet area in the SE Site; facing northwest, May 5, 2022.



Image 16: A representative example of a permanently wet area in the SE Site; facing east, June 13, 2022.



Image 17: Location 1, biface thinning flake.



Image 18: Location 2, primary thinning flake.



Image 19: A representative example of test pit stratigraphy in the majority of the SE Site; facing southwest, May 25, 2022.



Image 20: A representative example of test pit stratigraphy in the majority of the SE Site; facing east, April 27, 2022.



Image 21: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 9, 2022.



Image 22: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 19, 2022.



Image 23: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, May 18, 2022.



Image 24: A representative example of test pit stratigraphy in the majority of the SE Site; facing north, June 1, 2022.



Image 25: A representative example of wetland test pit stratigraphy in the central portion of the SE Site; facing northeast, May 24, 2022.



Image 26: A representative example of wetland test pit stratigraphy in the central portion of the SE Site; facing south, May 10, 2022.



Image 27: A representative example of fill-capped wetland test pit stratigraphy in the central portion of the SE Site; facing north, May 19, 2022.



Image 28: A representative example of a disturbed test pit in the eastern corner of the SE Site; facing north, May 26, 2022.



Image 29: A representative example of a tee-off area and cart path in the SE Site; facing south, May 17, 2022.



Image 30: A representative example of a tee-off area and cart path in the SE Site; facing southwest, May 24, 2022.



Image 31: A representative example of a golf green and manufactured terrain in the SE Site; facing northeast, May 24, 2022.



Image 32: A representative example of a golf green and manufactured terrain in the SE Site; facing northeast, May 16, 2022.



Image 33: A representative example of a bunker in the SE Site; facing north, May 14, 2022.



Image 34: A representative example of a cart path in the SE Site; facing west, May 11, 2022.



Image 35: The house at 8243 Wellington Road 19 and its associated driveway; facing north, May 27, 2022.



Image 36: The house at 8243 Wellington Road 19 and its associated driveway; facing east, May 27, 2022.



Image 37: The former Elora Branch of the Credit Valley Railway in the SE Site; facing northeast, May 5, 2022.



Image 38: A concrete foundation and its associated driveway in the southern end of the SE Site; facing northeast, May 30, 2022.



Image 39: A representative example of test pit stratigraphy in the majority of the NW Site; facing south, November 18, 2022.



Image 40: A representative example of test pit stratigraphy in the majority of the NW Site; facing southeast, December 1, 2022.



Image 41: A representative example of test pit stratigraphy in the majority of the NW Site; facing north, December 8, 2022.



Image 42: A representative example of test pit stratigraphy in the majority of the NW Site; facing north, December 8, 2022.



Image 43: A representative example of fill-capped test pit stratigraphy in the NW Site; facing north, November 18, 2022.



Image 44: Area disturbed by the installation of irrigation infrastructure in the NW Site (see Image 45); facing northeast, December 1, 2022.



Image 45: Area disturbed by the installation of irrigation infrastructure in the NW Site; facing southwest, December 1, 2022.



Image 46: A representative example of a disturbed test pit in the NW Site; facing northwest, December 1, 2022.



Image 47: Engineered pond in the NW Site; facing north, December 2, 2022.



Image 48: A representative example of a tee-off area in the NW Site; facing northwest, December 2, 2022.



Image 49: A representative example of a golf green and manufactured terrain in the NW Site; facing southeast, December 1, 2022.



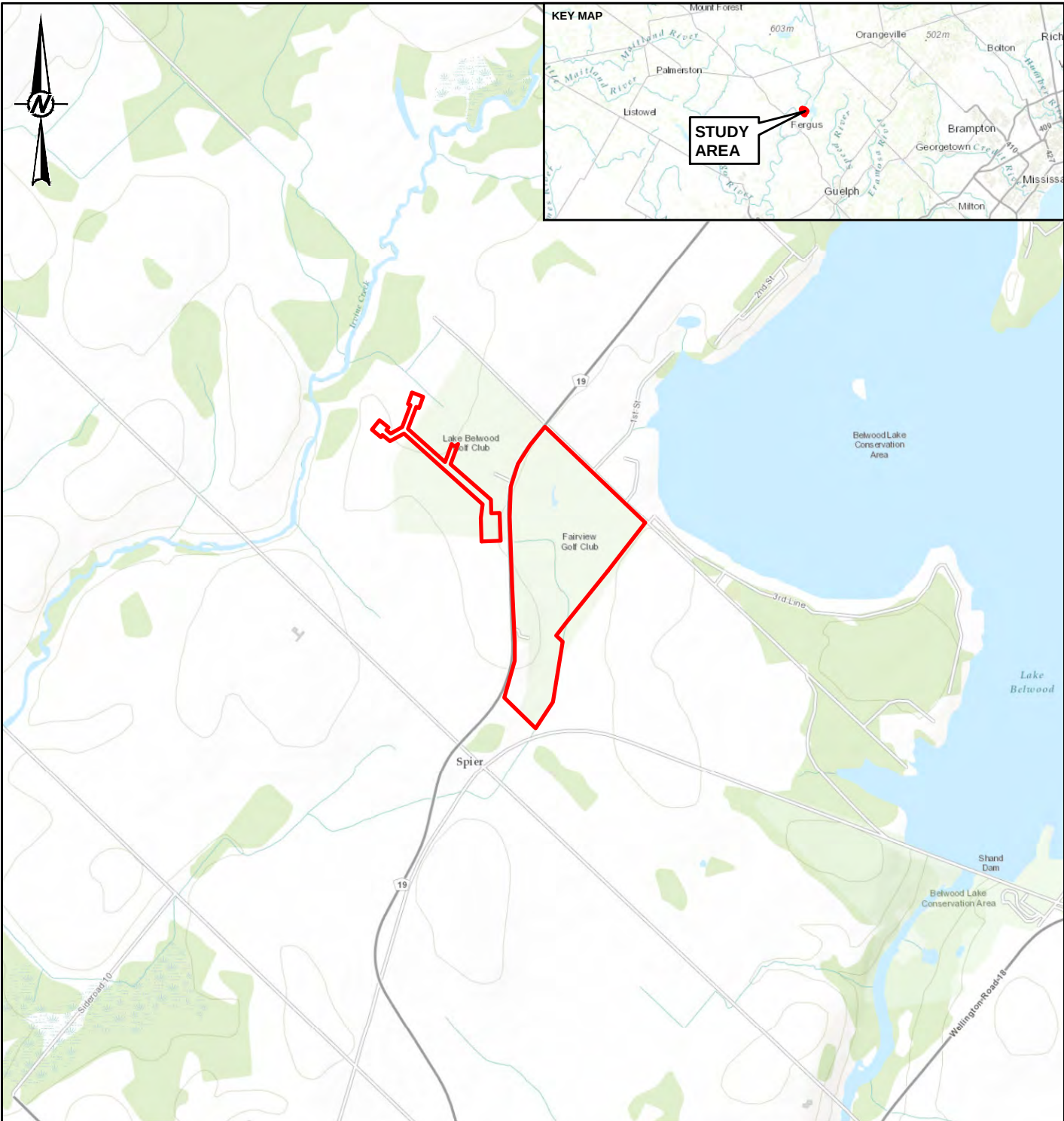
Image 50: A representative example of manufactured terrain in the NW Site; facing southeast, December 1, 2022.



Image 51: A representative example of manufactured terrain in the NW Site; facing north, December 2, 2022.

10.0 MAPS

All maps follow on the succeeding pages.



LEGEND

 STUDY AREA



NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT

FERGUS DEVELOPMENT INC.

PROJECT

STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE

LOCATION OF STUDY AREA

CONSULTANT



YYYY-MM-DD 2023-05-15

DESIGNED LCM

PREPARED BR

REVIEWED LCM

APPROVED MT

PROJECT NO.

21456909

CONTROL

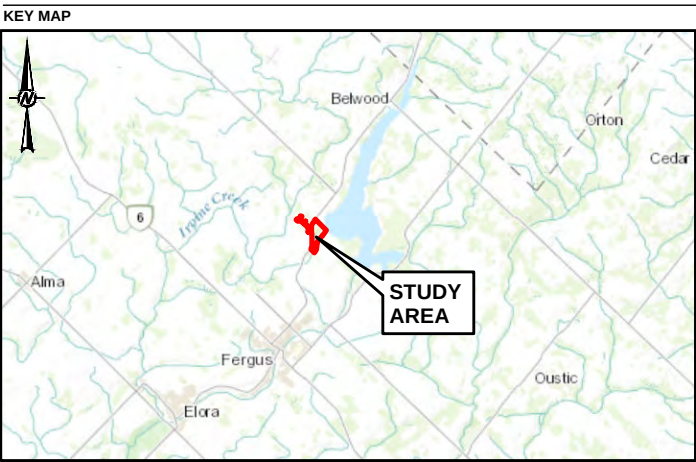
0016

REV.

0

MAP

1



- LEGEND**
- STUDY AREA
 - ROADWAY
 - TOPOGRAPHIC CONTOUR, metres
 - WATERCOURSE
 - UNEVALUATED WETLAND
 - PROVINCIALY SIGNIFICANT WETLAND (PSW)
 - TOWNSHIP, CONCESSION AND LOT

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT

FERGUS DEVELOPMENT INC.

PROJECT

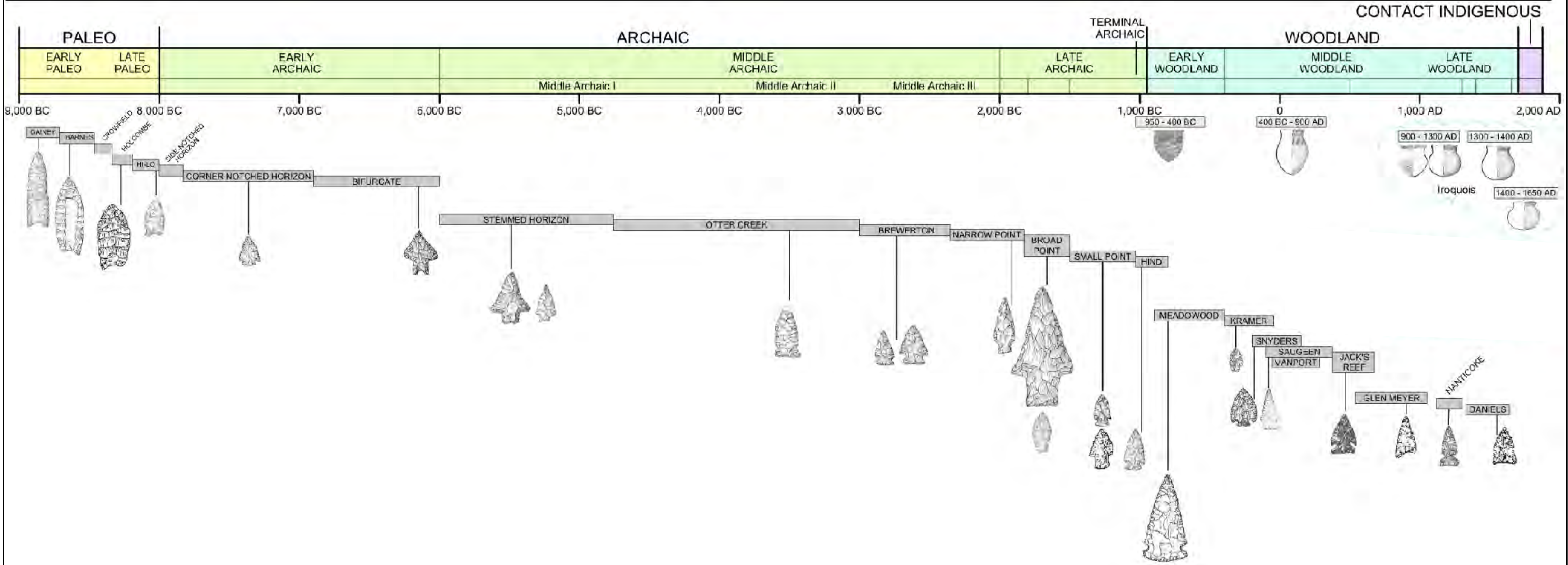
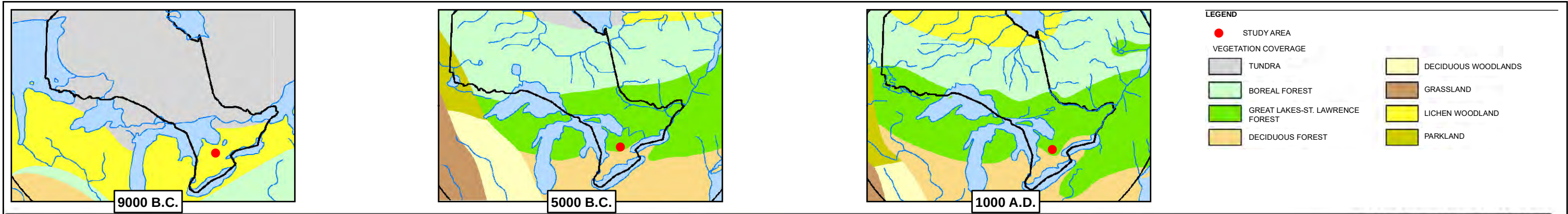
STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE

DETAIL OF STUDY AREA

CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO. 21456909 CONTROL 0016 REV. 0 MAP 2



NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

- ENVIRONMENTAL CHANGE AFTER 900 BC, AUTHORS: J.H. MCANDREWS, K.B. LIU, G. C. MANVILLE (PALAEOBOTANY); V.K. PREST, J.S. VINCENT (GLACIAL GEOLOGY), PLATE 4, UNIVERSITY OF TORONTO PRESS, HISTORICAL ATLAS OF CANADA, 1987.

- ELLIS, CHRIS J. AND NEAL FERRIS (EDITORS) 1990 - THE ARCHAEOLOGY OF SOUTHERN ONTARIO TO A.O. 1650. OCCASIONAL PUBLICATION OF THE LONDON CHAPTER, ONTARIO ARCHAEOLOGICAL SOCIETY, NUMBER 5.

- ADAMS, NICK, IAN KENYON, DENA DOROSZENKO 1994 - FIELD MANUAL FOR AVOCATIONAL ARCHAEOLOGISTS IN ONTARIO. ONTARIO ARCHAEOLOGICAL SOCIETY INC., ARCHAEOLOGICAL STEWARDSHIP PROJECT.

- KENYON, I. -1980 MEADOWWOOD POINTS. KEWA 80-5.

- MURPHY, C. -1988 SNYDERS POINTS. KEWA 88-3.

- KENYON, I. -1979 SAUGEEN POINTS. KEWA 79-9.

- RITCHIE, WM. 1971. A TYPOLOGY AND NOMENCLATURE FOR NEW YORK PROJECTILE POINTS. ALBANY, NEW YORK: THE UNIVERSITY OF THE STATE OF NEW YORK, THE STATE EDUCATION DEPARTMENT.

- FOX, W.A. -1982 GLEN MEYER TANGED-TRIANGULAR. KEWA 82-1.

- FOX, W.A. -1981 NANTICOKE NOTCHED POINTS. KEWA 81-3.

- FOX, W.A. -1981 DANIELS TRIANGULAR POINTS. KEWA 81-1.

CLIENT

FERGUS DEVELOPMENT INC.

PROJECT

STAGE 2 ARCHAEOLOGICAL ASSESSMENT

FERGUS GOLF CLUB

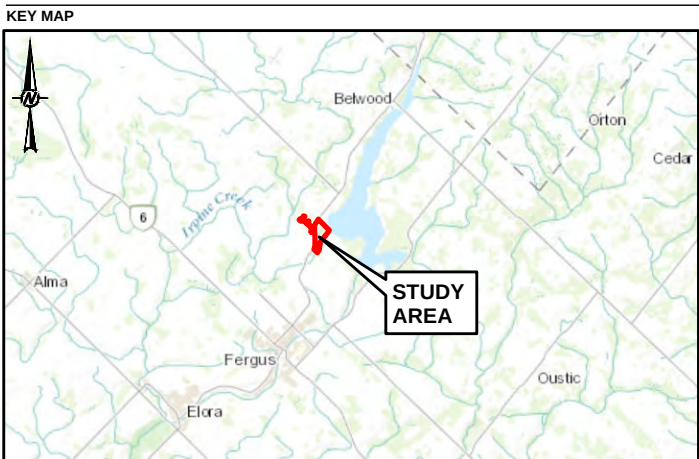
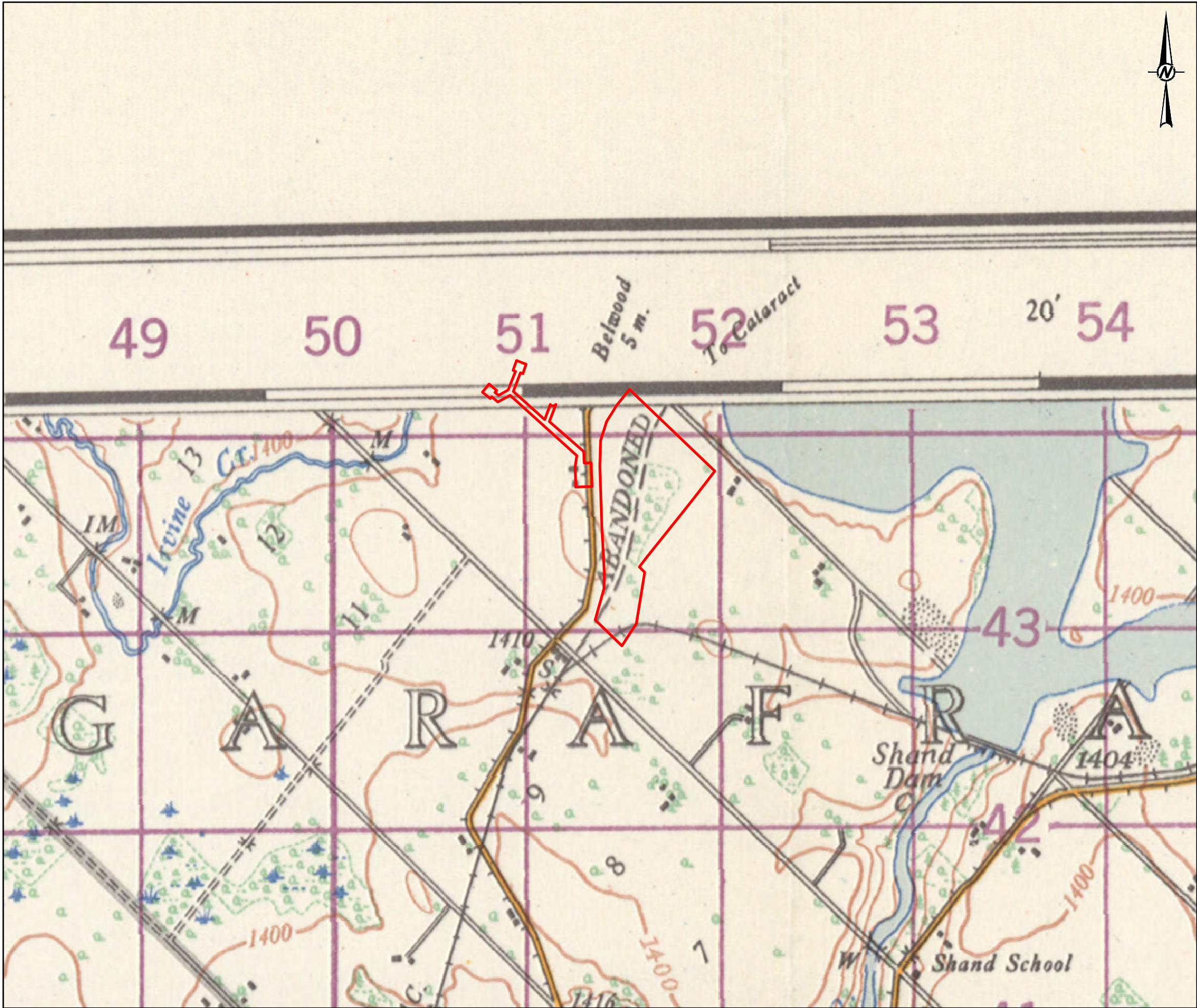
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE

PRE-CONTACT INDIGENOUS CULTURE HISTORY OF SOUTHERN ONTARIO

CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO. 21456909 CONTROL 0016 REV. 0 MAP 3



LEGEND

STUDY AREA



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. GUELPH, ONTARIO. 1:63,360. MAP SHEET 040P09, [ED. 2], GRIDDED, V.2, 1939, DEPARTMENT OF NATIONAL DEFENCE.
2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

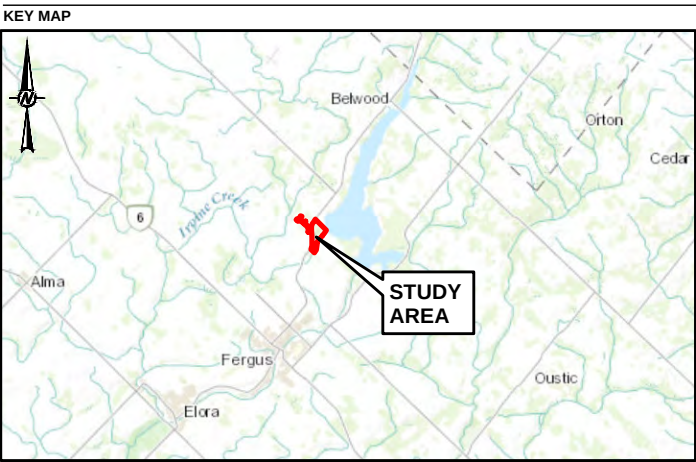
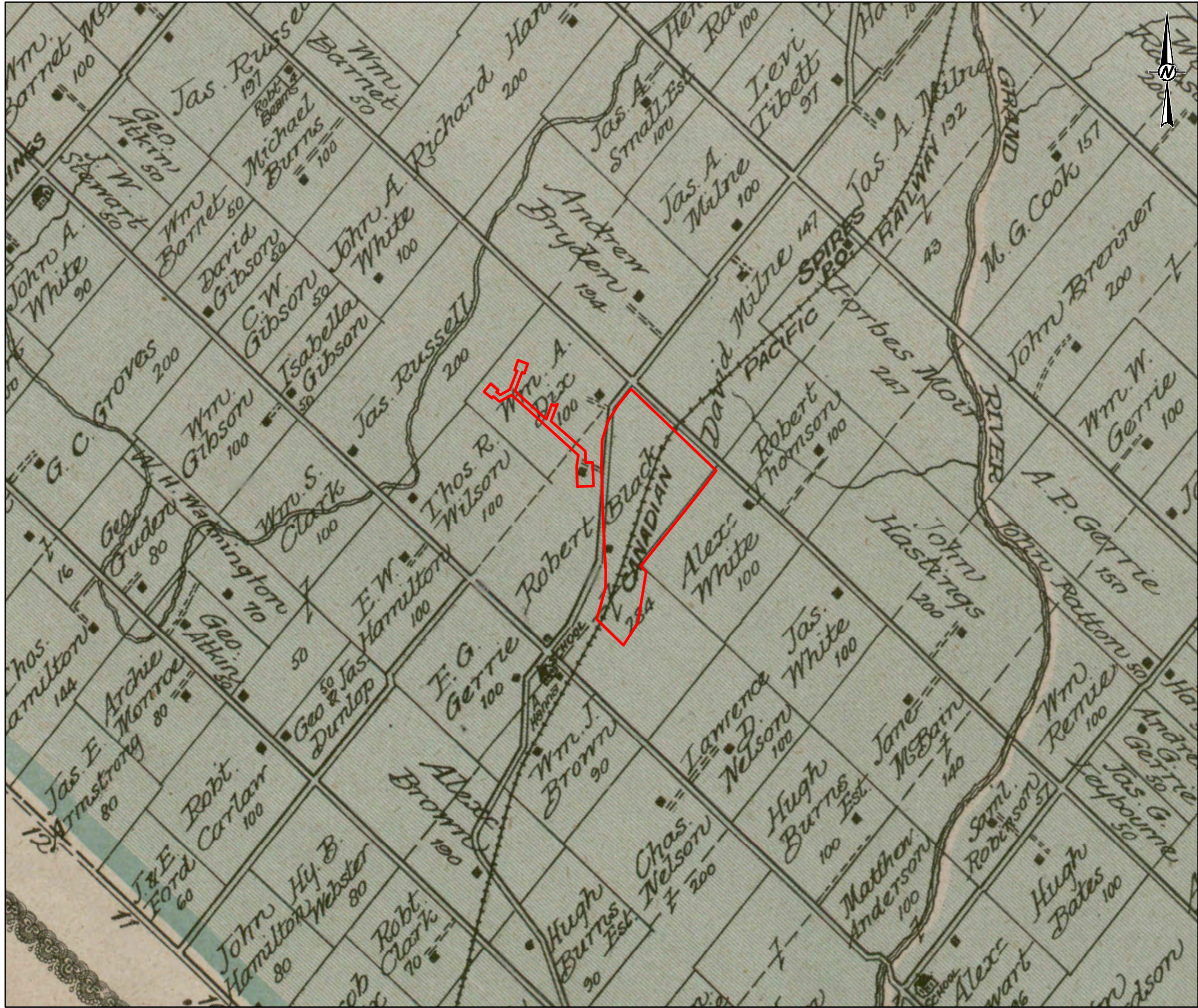
CLIENT
FERGUS DEVELOPMENT INC.

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE
A PORTION OF THE 1939 TOPOGRAPHIC MAP

CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO.	CONTROL	REV.	MAP
21456909	0016	0	6



LEGEND

STUDY AREA



NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. HISTORICAL ATLAS PUBLISHING COMPANY. 1906. HISTORICAL ATLAS OF THE COUNTY OF WELLINGTON, ONTARIO. HISTORICAL ATLAS PUBLISHING COMPANY

2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT

FERGUS DEVELOPMENT INC.

PROJECT

STAGE 2 ARCHAEOLOGICAL ASSESSMENT

FERGUS GOLF CLUB

CENTRE WELLINGTON TOWNSHIP, ONTARIO

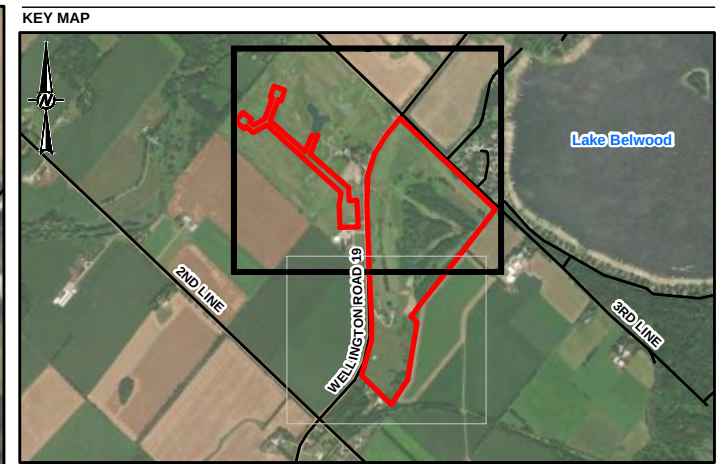
TITLE

A PORTION OF THE 1906 HISTORICAL ATLAS OF WELLINGTON COUNTY

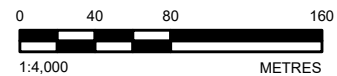
CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO.	CONTROL	REV.	MAP
21456909	0016	0	7

PATH: S:\Clients\Gerrard\Fergus_ColNorth_Properties\00_PROJ\21456909\00_16_HA\0008.mxd PRINTED ON: 2023-05-15 AT: 2:30:01 PM



- LEGEND**
- PERMANENT DATUM
 - PHOTO LOCATION AND DIRECTION
 - TEST PIT SURVEY AT 5M INTERVALS; NO FURTHER WORK RECOMMENDED
 - TEST PIT SURVEY AT 10M INTERVALS; PREVIOUSLY DISTURBED; NO FURTHER WORK RECOMMENDED
 - PREVIOUSLY DISTURBED; NO FURTHER WORK RECOMMENDED
 - TEST PIT SURVEY AT 5M INTERVALS; FILL-CAPPED SWAMP; NO FURTHER WORK RECOMMENDED
 - PERMANENTLY WET; NO FURTHER WORK RECOMMENDED
 - SLOPED; NO FURTHER WORK RECOMMENDED
 - NO PLANNED DEVELOPMENT IMPACTS; NOT ASSESSED AT THIS TIME
 - STUDY AREA
 - ROADWAY
 - WATERCOURSE
 - UNEVALUATED WETLAND
 - PROvincially SIGNIFICANT WETLAND (PSW)



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. HISTORICAL ATLAS PUBLISHING COMPANY, 1906, HISTORICAL ATLAS OF THE COUNTY OF WELLINGTON, ONTARIO, HISTORICAL ATLAS PUBLISHING COMPANY
2. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
FERGUS DEVELOPMENT INC.

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

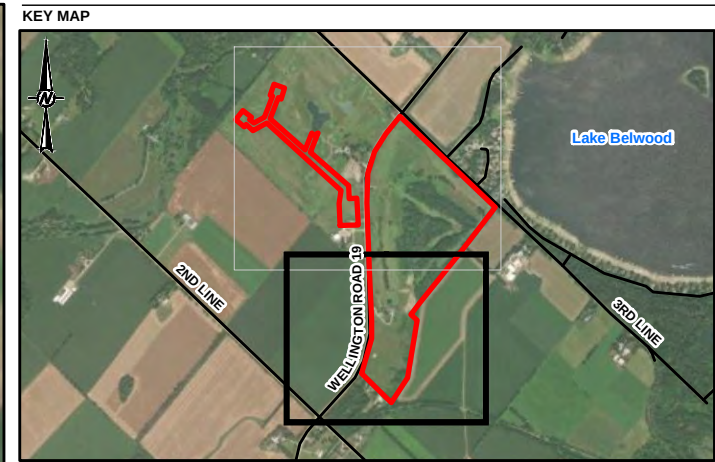
TITLE
STAGE 2 METHODS AND RESULTS

CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

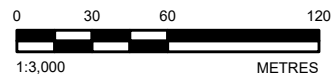
PROJECT NO. 21456909 CONTROL 0016 REV. 0 MAP 8A

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B 28mm

PATH: S:\Clients\Gerrard\Fergus_ColNorth_Properties\09_PROJ\21456909\00_16_HA\0008.mxd PRINTED ON: 2023-05-15 AT: 2:15:16 PM



- LEGEND**
- PHOTO LOCATION AND DIRECTION
 - TEST PIT SURVEY AT 5M INTERVALS; NO FURTHER WORK RECOMMENDED
 - PREVIOUSLY DISTURBED; NO FURTHER WORK RECOMMENDED
 - PERMANENTLY WET; NO FURTHER WORK RECOMMENDED
 - SLOPED; NO FURTHER WORK RECOMMENDED
 - NO PLANNED DEVELOPMENT IMPACTS; NOT ASSESSED AT THIS TIME
 - STUDY AREA
 - ROADWAY
 - WATERCOURSE
 - UNEVALUATED WETLAND



NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. HISTORICAL ATLAS PUBLISHING COMPANY. 1906. HISTORICAL ATLAS OF THE COUNTY OF WELLINGTON, ONTARIO. HISTORICAL ATLAS PUBLISHING COMPANY
2. IMAGERY CREDITS: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
FERGUS DEVELOPMENT INC.

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE
STAGE 2 METHODS AND RESULTS

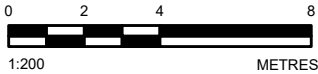
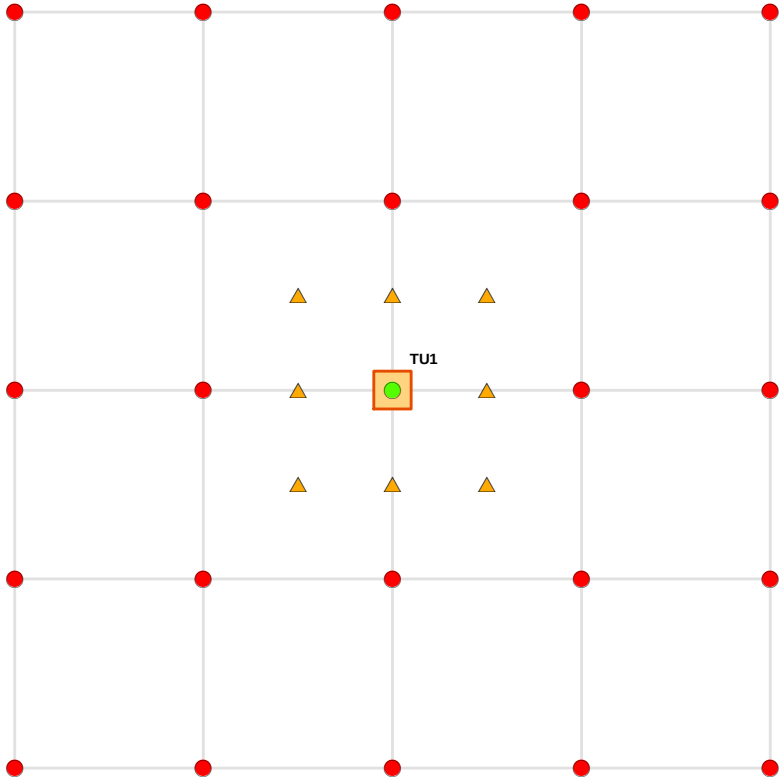
CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO.	CONTROL	REV.	MAP
21456909	0016	0	8B

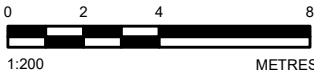
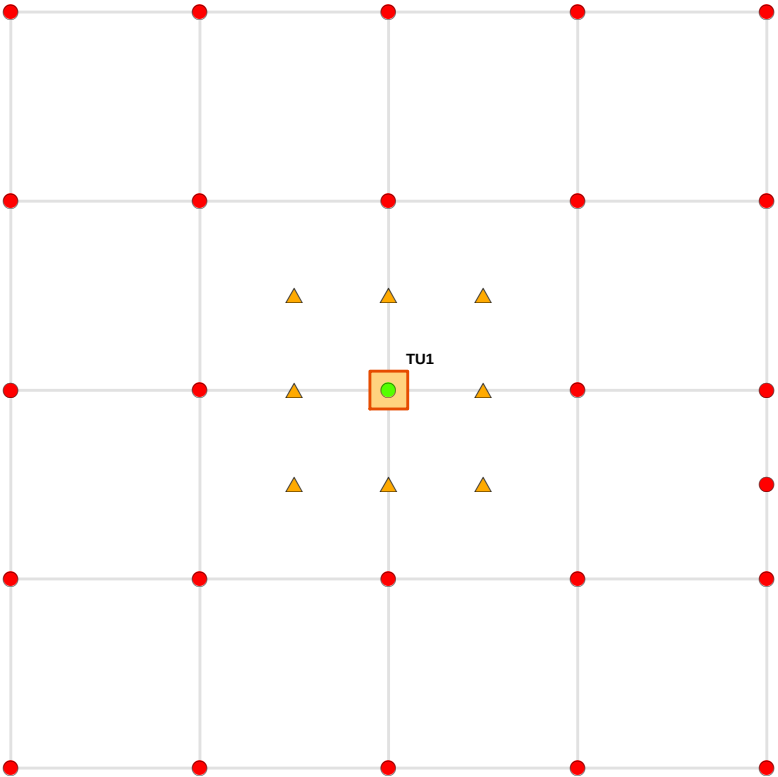
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

PATH: S:\Clients\Gerrard\Fergus_GolfNorth_Properties\09_FRC\21456909\FRC\0016_S0_Arch21456909.mxd PRINTED ON: 2023-05-15 AT: 2:35:40 PM

LOCATION 1



LOCATION 2



- LEGEND
- POSITIVE TEST PIT
 - NEGATIVE TEST PIT
 - ▲ NEGATIVE CARDINAL TEST PIT
 - TEST UNIT
 - 5 METRE GRID

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
FERGUS DEVELOPMENT INC.

PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT
FERGUS GOLF CLUB
CENTRE WELLINGTON TOWNSHIP, ONTARIO

TITLE
INTENSIFIED SURVEY MAPS

CONSULTANT	YYYY-MM-DD	2023-05-15
DESIGNED	LCM	
PREPARED	BR	
REVIEWED	LCM	
APPROVED	MT	

PROJECT NO.	CONTROL	REV.	MAP
21456909	0016	0	9



IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

11.0 CLOSURE

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

WSP Canada Inc.



Lafe Meicenheimer, M.A.
Project Archaeologist



Michael Teal, M.A.
Director, Archaeology and Heritage, Ontario

LCM/MT/ca

[https://golderassociates.sharepoint.com/sites/142682/project files/6 deliverables/archaeological/stage 2/p457-0129-2022_15may2023_re.docx](https://golderassociates.sharepoint.com/sites/142682/project%20files/6%20deliverables/archaeological/stage%202/p457-0129-2022_15may2023_re.docx)

APPENDIX A

Artifact Catalogues

Location 1 Artifact Catalogue

Cat. #	Loc.	CSP #	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	Alteration	# of Artifacts	Note
1	1	TP1	Stone	Chert: Onondaga	Tools & Equipment	Debitage	Biface Thinning Flake	Complete			Chipped		1	

Location 2 Artifact Catalogue

Cat. #	Loc.	CSP #	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	Alteration	# of Artifacts	Note
1	2	TP1	Stone	Chert: Indeterminate	Tools & Equipment	Debitage	Primary Thinning Flake	Complete			Chipped		1	Cortex

