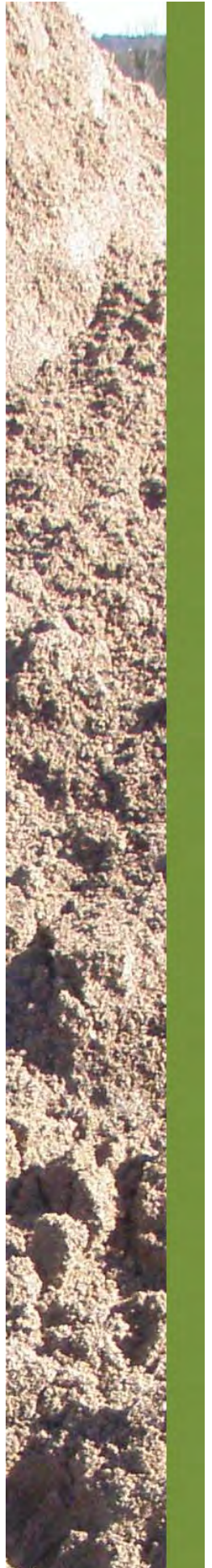


Appendix C

Archaeological Stage 1-2
Stantec Consulting Limited



**Stage 1-2 Archaeological
Assessment: Spencer Pit**

Part of Lots 14 to 18, Concession B
Township of Guelph-Eramosa,
Wellington County, Ontario



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ORIGINAL REPORT

November 6, 2013

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Executive Summary

Stantec Consulting Ltd. was retained by Tri City Lands Ltd. to conduct a Stage 1-2 archaeological assessment for a study area located on part of Lots 14 to 18, Concession B, Township of Guelph-Eramosa, Wellington County, Ontario (Figure 1). The study area consists of approximately 50.3 hectares of land.

This assessment was conducted to meet the requirements of Section 2.2.4 and Section 2.2.5 of the Provincial Standards under the *Aggregate Resources Act*, R.S.O. c.A.8 (Government of Ontario 1990a), prior to the submission of site plan applications to the Ministry of Natural Resources. Moreover, this assessment was conducted in accordance with the **Ministry of Tourism, Culture and Sport's (MTCS) 2011 Standards and Guidelines for Consultant Archaeologists** (Government of Ontario 2011).

The Stage 1 background research indicated that the entire study area exhibits moderate to high potential for the identification and recovery of archaeological resources. A subsequent Stage 2 property survey identified two archaeological sites, Location 1 and Location 2.

The artifact assemblage from Location 1 contains less than 20 artifacts that date prior to 1900 and background information related to the 20th century occupation of the study area does not indicate possible cultural heritage value or interest. Therefore, Location 1 does not fulfill the criteria of Section 2.2 Standards 1c and 1d of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains no further cultural heritage value or interest. Thus, **no further work is recommended for Location 1.**

The artifact assemblage from Location 2 contains less than 20 artifacts that date prior to 1900 and background information related to the 20th century occupation of the study area does not indicate possible cultural heritage value or interest. Therefore, Location 2 does not fulfill the criteria of Section 2.2 Standards 1c and 1d of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains no further cultural heritage value or interest. Thus, **no further work is recommended for Location 2.**

In summary, two archaeological locations were documented during the Stage 2 assessment of the Spencer Pit study area. Both Location 1 and Location 2 retain no further cultural heritage value or interest and are not recommended for further Stage 3 assessment or mitigation. Therefore, **no further archaeological assessment of the Spencer Pit study area is recommended.**

The MTCS is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.

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

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Project Personnel

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Acknowledgements

Proponent Contact:	Rick Esbaugh – Tri City Lands Ltd.
Ministry of Tourism, Culture and Sport:	Robert von Bitter

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Project Context
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1.0 Project Context

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by Tri City Lands Ltd. (Tri City) to conduct a Stage 1-2 archaeological assessment for a study area located on part of Lots 14 to 18, Concession B, Township of Guelph-Eramosa, Wellington County, Ontario (Figure 1). The study area consists of approximately 50.3 hectares of land.

This assessment was conducted to meet the requirements of Section 2.2.4 and Section 2.2.5 of the Provincial Standards under the *Aggregate Resources Act*, R.S.O. c.A.8 (Government of Ontario 1990a), prior to the submission of site plan applications to the Ministry of Natural Resources. Moreover, this assessment was conducted in accordance with the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Permission to enter the study area to document and remove archaeological resources was provided by Rick Esbaugh of Tri City.

1.1.1 Objectives

For the purposes of this Stage 1 -2 archaeological assessment, the MTCS's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) were followed. The objective of the Stage 1 background study is to document the property's archaeological and land use history and present conditions. This information was used to support recommendations regarding cultural heritage value or interest as well as assessment and mitigation strategies. The Stage 1 research information was drawn from:

- The MTCS' Archaeological Sites Database (ASDB) for a listing of registered archaeological sites within a one-kilometre radius of the study area;
- Reports of previous archaeological assessments within a radius of 50 metres around the property;
- Recent and historical maps of the property area;
- Archaeological management plans or other archaeological potential mapping when available;
- Commemorative plaques or monuments if applicable; and
- Visual inspection of the project area.

The objectives of the Stage 2 assessment were to document archaeological resources present within the study area, to determine whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to provide specific Stage 3 direction for the protection, management and/or recovery of the identified archaeological resources (Government of Ontario 2011).



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1.2 HISTORICAL CONTEXT

The study area consists of approximately 50.3 hectares of agricultural fields and woodlot spread across part of Lots 14 to 18, Concession B, Township of Guelph-Eramosa, Wellington County, Ontario.

1.2.1 Pre-contact Aboriginal Archaeological Resources

This portion of southwestern Ontario has been demonstrated to have been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Wellington County, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology of Wellington County

Period	Characteristics	Time Period	Comments
Early Paleo-Indian	Fluted Projectiles	9000 - 8400 B.C.	spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400 - 8000B.C.	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 - 6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000 - 2500 B.C.	environment similar to present
Late Archaic	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size
	Broad Points	1800 - 1500 B.C.	large chipped lithic tools
	Small Points	1500 - 1100B.C.	introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 B.C.	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 B.C. - A.D.500	increased sedentism
	Princess Point	A.D. 550 - 900	introduction of corn
Late Woodland	Early Ontario Iroquoian	A.D. 900 - 1300	emergence of agricultural villages
	Middle Ontario Iroquoian	A.D. 1300 - 1400	long longhouses (100m +)
	Late Ontario Iroquoian	A.D. 1400 - 1650	tribal warfare and displacement
Contact Aboriginal	Various Algonkian Groups	A.D. 1700 - 1875	early written records and treaties
Late Historic	Euro-Canadian	A.D. 1796 - present	European settlement

1.2.2 Post-contact Aboriginal Archaeological Resources

The post-contact Aboriginal occupation of Southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Konrad 1981; Schmalz 1991). By 1690, Algonkian speakers from the north appear to have begun to repopulate Bruce County (Roger 1978:761). This is the period in which the Mississaugas are known to have moved into southern Ontario and the lower Great Lakes watersheds (Konrad 1981). In southwestern Ontario, however, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) were immigrating from Ohio and Michigan in the late 1700s (Feest and Feest 1978:778-779).

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The nature of Aboriginal settlement size, population distribution, and material culture shifted as European settlers encroached upon their territory. **However, despite this shift, “written accounts of material life and livelihood, the correlation of historically recorded 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, First Nations peoples of Southern Ontario have left behind archaeologically significant resources throughout Southern Ontario which show continuity with past peoples, even if they have not been recorded in historical Euro-Canadian documentation.

The study area first enters the Euro-Canadian historic record on December 2, 1792 as part of Treaty Number 3. Treaty Number 3 was:

...made with the Mississa[ug]a Indians 7th December, 1792, though purchased as early as 1784. This purchase in 1784 was to procure for that part of the Six Nation Indians coming into Canada a permanent abode.

The area included in this Treaty is, Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties; Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County... .

(Morris 1943: 17-18)

While it is difficult to exactly delineate treaty boundaries today, Figure 2 provides an approximate outline of Treaty Number 3 (identified by the letter “D”).

Given the location of the study area is in close proximity to the Speed River and is part of the Grand River watershed, the post-contact Aboriginal archaeological potential of the study area is judged to be moderate to high.

1.2.3 Historic Euro-Canadian Resources

The criteria used by the MTCS to determine potential for historic archaeological sites include the presence of: 1) particular, resource-specific features that would have attracted past subsistence or extractive uses; 2) areas of initial, non-Aboriginal settlement; 3) early historic transportation routes; and 4) properties designated under the *Ontario Heritage Act* (Government of Ontario 1990c).

The study area falls within the former Township of Guelph, now Township of Guelph-Eramosa, Wellington County, Ontario. Originally belonging to The District of Wellington formed in 1838, Wellington County was named after Arthur Wellesley, the First Duke of Wellington. In 1854, Wellington County became an individual entity incorporating 12 Townships and Towns, including the independent Townships of Eramosa and Guelph. The amalgamation of the Township of Guelph, Township of Eramosa,

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and parts of the Townships of Pilkington and Nichol, to form the Township of Guelph-Eramosa was established in 1999.

The 1906 *Historical Atlas of the County of Wellington, Ont.'s map of the Township of Guelph* lists Jacob Miller as the landowner for Lots 17 and 18 and Samuel Rife as the landowner for Lots 14, 15, and 16 (Historical Atlas Publishing 1906). As it pertains to the study area, small structures or outbuildings are noted on the historic map in the northeastern corner of Lot 16 and the eastern corner of Lot 18 (Figure 3). A structure or outbuildings is noted in the southern half of Lot 14, but is outside of the current study area. Historical county atlases were produced primarily to identify factories, offices, residences and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997: 100). As such, all structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). By 1906 the current road system was constructed and is still recognizable today.

The Great Western Railway is depicted in the 1906 *Historical Atlas of the County of Wellington, Ont.'s map of the Township of Guelph*. A portion of this railway marks the eastern edge of the study area. In 1834, the London and Gore Railroad Company was incorporated and in 1845, changed its name to the Great Western Rail Road Company (Currie 1957). Later, in 1853, the company name changed again to the Great Western Railway. The rail line from Galt, Ontario to Guelph, Ontario was completed in 1857 (Currie 1957). The railway enjoyed initial financial success, but following the depression of 1857 it began to suffer. After decades of fierce competition with rival rail lines, the Great Western Rail Road Company was purchased by the Grand Trunk Railway in 1882 (Currie 1957).

The majority of the region surrounding the study area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes. Considering the above, the historic Euro-Canadian archaeological potential of the study area was judged to be moderate to high.

1.3 ARCHAEOLOGICAL CONTEXT

The Stage 1-2 assessment for the study area was conducted between May 14, 2013 and October 10, 2013 under PIF P001-741-2013 issued to Jim Wilson, MA by the MTCS. The study area consists of approximately 50.3 hectares of agricultural fields and that have been worked for the past 100 years, as well as fallow and overgrown grassy areas and a dense woodlot.

1.3.1 The Natural Environment

The study area is situated within the Guelph Drumlin Field region, as identified by Chapman and Putnam (1984). The Guelph Drumlin Fields consist of a general landform pattern containing drumlins or groups of drumlins fringed by gravel terraces and separated by swampy valleys in which slow moving tributaries of the Grand River are located (Chapman and Putnam 1984:138). The till in these drumlins is loamy and calcareous, containing fragments of underlying red shale (Chapman and Putnam). Moreover, “[T]he soils of the drumlins are classed in the Guelph catena which contains the predominant, well-drained Guelph loam...it is fertile, easily worked, and adaptable to many crops” (Chapman and Putnam 1984:138).

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Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. The closest extant source of potable water to the study area is a small tributary of the Speed River in the north end of the study area, while the Speed River itself is located approximately 400 metres to the east. The Speed River itself is a tributary of the larger Grand River, located approximately seven kilometres to the west of the study area.

1.3.2 Previously Known Archaeological Sites and Surveys

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB is maintained by the MTCS. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is within Borden Block AiHb.

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the *Freedom of Information and Protection of Privacy 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. The MTCS 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.

An examination of the ASDB has shown that no archaeological sites have been registered within a one-kilometre radius of the study area and no archaeological studies have been undertaken within 50 metres of the study area (personal communication, Robert von Bitter, October 28, 2013; Government of Ontario n.d.).

1.3.3 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).



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As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect sites locations and types to varying degrees. The MTCS categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

The closest primary source of extant potable water is the Speed River, which is located approximately 400 metres east of the study area. In addition to the Speed River itself, a small unnamed tributary of the Speed River is located in the extreme northern portion of the property. This tributary is also depicted on the 1906 *Historical Atlas of the County of Wellington, Ont.'s map of the Township of Guelph*. The Grand River, of which the Speed River is a tributary, is located approximately seven kilometres to the west of the study area. Additional ancient and/or relic tributaries of the Speed River, or the Grand River, may have existed but are not identifiable today and are not indicated on historic mapping.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. As indicated previously, soil within the Guelph Drumlin Fields is fertile, easily worked and adaptable to many different crops. These characteristics indicate that the soil in this region would be suitable for pre-contact Aboriginal agriculture.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* or property that local histories or informants have identified with possible historical events. The *Historical Atlas for the County of Wellington, Ont.* demonstrates that the study area and its environs were densely occupied by colonists by the later 19th century. Much of the established road system and agricultural settlement from that time is still visible today.

When the above listed criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal, post-contact Aboriginal, and historic Euro-Canadian sites is deemed to be moderate to high. Thus, in accordance with Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment of the Spencer Pit study area has determined that the study area exhibits moderate to high potential for the identification and recovery of archaeological resources.

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1.3.4 Existing Conditions

The study area comprises approximately 50.3 hectares of land. Much of the study area (approximately 82%) consists of open ploughed agricultural land. The remaining portion of the study area (approximately 18%) consists of a combination of dense woodlot, overgrown grassy areas, and previous construction disturbances, including hydro transmission towers, laneways, and existing structures.

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Field Methods
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2.0 Field Methods

The Stage 1-2 assessment of the Spencer Pit study area was conducted between May 14, 2013 and October 10, 2013 (Table 2). During the Stage 2 survey, assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. Photos 1 to 11 confirm that field conditions met the requirements for a Stage 2 archaeological assessment, as per the *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6 Standard 1a; Government of Ontario 2011). Figure 4 provides an illustration of the Stage 2 assessment methods, as well as photograph locations and directions.

Table 2: Field and Weather Conditions

Date	Activity	Weather	Field Conditions
May 14, 2013	Property inspection	Partly cloudy, warm	Good visibility of land features
August 13, 2013	Field conditions check	Sunny, warm	Soil visibility: 85%
September 3, 2013	Stage 2 survey	Overcast, cool	Soil visibility: 90%
September 4, 2013	Stage 2 survey	Sunny, hot	Soil visibility: 90%
October 10, 2013	Stage 2 survey	Sunny, cool	Soil Visibility: 90%

Approximately 82% of the study area consists of agricultural fields. As such, it was determined that these portions would be assessed by pedestrian survey at a five-metre interval (Photos 1 to 6). The pedestrian survey was conducted in accordance with Section 2.1.1 of the MTCS's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). During the pedestrian survey, when archaeological resources were identified, the survey transect was decreased to a one-metre interval and spanned a minimal 20 metre radius around the identified artifacts. This approach was established to determine if the artifact was an isolated find or part of a larger surface scatter. If the artifact was part of a larger scatter, the one-metre interval was continued until the full extent of the scatter was defined, as per Section 2.1.1 Standard 7 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). All formal diagnostic artifact types were collected and a GPS reading was taken for each.

Approximately 16% of the study area consists of sparse woodlot and overgrown grassy areas that were inaccessible for ploughing. These areas were subject to test pit assessment at a five metre interval (Photo 10) in accordance with Section 2.1.2 of the MTCS's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Each test pit was approximately 30 centimetres in diameter and excavated five centimetres into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. All soil was screened through six millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. No further archaeological methods were employed since no artifacts were recovered during the test pit survey.

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The remaining 2% of the study area was not assessed due to previous construction disturbances and existing structures, including hydro transmission towers (Photo 7); an old barn foundation and laneway (Photos 8 and 9); modern construction debris (Photo 9); and an existing house with associated storage buildings (Photo 11). While these areas were not assessed, they were photo documented. Photos 7 to 9 and Photo 11 confirm that physical features affected the ability to survey portions of the study area (Section 7.8.6 Standard 1b; Government of Ontario 2011).

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Record of Finds
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3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 2 below. Two locations were identified during the Stage 2 archaeological assessment of the study area, recovering a total of 23 artifacts.

Table 3: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments
13 Pages of Field Notes	Stantec office in London	In original field book and photocopied in project file
4 Hand Drawn Maps	Stantec office in London	In original field book and photocopied in project file
2 Maps Provided by Client	Stantec office in London	Hard and digital copies in project file
111 Digital Photographs	Stantec office in London	Stored digitally in project file

All of the material culture collected during the Stage 2 archaeological assessment of the study area is contained in one Bankers box. It will be temporarily housed at the Stantec London office until formal arrangements can be made for a transfer to a MTCS collections facility.

3.1 LOCATION 1

Location 1 is located in a ploughed agricultural field in the southern portion of Lot 17 (see Tiles 1 and 2 of the Supplementary Documentation). The Stage 2 archaeological assessment of this location resulted in the identification of 30 Euro-Canadian artifacts. A total of 21 artifacts were left *in situ* including 10 pieces of modern beer bottle glass, 6 miscellaneous metal artifacts, and 5 pieces of porcelain. As summarized in Table 3, nine artifacts were collected from a surface scatter measuring approximately 10 metres east-west by 17 metres north-south. The collected assemblage included all formal artifact types and diagnostic categories, and included a sample of non-diagnostic artifacts. A sample of artifacts collected from Location 1 is depicted in Plate 1.

Table 4: Location 1 Artifact Summary

Artifact	Frequency	%
Glass, bottle	6	66.67
Glass, undetermined	1	11.11
Recent material	1	11.11
Porcelain, undecorated	1	11.11
Total	9	100.00

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Record of Finds
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3.1.1 Ceramic Artifacts

3.1.1.1 Porcelain

One piece of porcelain was collected from Location 1. Porcelain is a type of earthenware fired at such a high temperature that the clay vitrifies, producing a translucent material when held up to light. Introduced just before the mid-19th century, porcelain became commonplace by the turn of the century (Collard 1967). Porcelain becomes relatively common by the 20th century as less expensive production techniques were developed in Europe (Kenyon 1980). This artifact dates to the early 20th century.

3.1.2 Non-ceramic Artifacts

A total of eight non-ceramic artifacts were recovered from Location 1, including seven household items and one piece of recent material. The various non-ceramic artifacts are discussed in further detail below.

3.1.2.1 Household Artifacts

The seven household artifacts recovered from Location 1 are all represented by glass fragments, including six bottle fragments and one fused piece of indeterminate glass.

Bottle glass colour can provide a tentative temporal range for Euro-Canadian domestic sites. Colourless, or clear, glass is relatively uncommon prior to the 1870s but becomes quite widespread in the 1910s (Kendrick 1971; Fike 1987). Of the six glass bottle fragments recovered, 4 (66.6%) are clear or colourless and date to after 1870. The remaining two pieces of bottle glass are represented by one green and one brown fragment.

Of the bottle glass fragments, two pieces provide temporally diagnostic information. One colourless glass fragment (Plate 1A) depicts a white painted label bearing the name “Coca...” and has the word “TRADEMARK” embossed beneath. This fragment has been identified as belonging to a 20th century Coca-Cola bottle. In 1906, the first Canadian-made Coca-Cola bottles became available on the market. Another colourless fragment (Plate 1B) is the base of a bottle with “W&A GILBEY CANADA LTD” and “2619” embossed. A Dominion Glass Company maker’s mark is also embossed on the base fragment, dating the bottle to post-1931.

One indeterminate piece of glass was recovered. The piece is a fused amalgamation of a number of independent colourless pieces, caused by exposure to extreme heat.

3.1.3 Recent Material

Also identified within the household artifact assemblage is one piece of recent material. The item is a threaded metal jar lid (Plate 1D) bearing the “ST. WILLIAMS BRAND” stylized font. The lid originates from St. Williams Preserve Ltd., a jam and preserves company, originally founded in the village of St. Williams, Ontario in the early 20th century before it relocated to Simcoe, Ontario where it ceased operation in the later part of the 20th century.

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Record of Finds
November 6, 2013

3.1.4 Location 1 Artifact Catalogue

Table 4 provides a catalogue of the Stage 2 artifact assemblage recovered from Location 1. A representative sample of artifacts is depicted in Section 8.2 of this report.

Table 5: Location 1 Artifact Catalogue

Cat #	Context	Artifact	Freq.	Comment
1	Surface find 1	glass, bottle	1	colourless, partial painted label "COCA-...", with "TRADEMARK..." embossed below colourless
2	Surface find 2	glass, bottle	1	colourless
3	Surface find 3	glass, bottle	1	colourless
4	Surface find 4	glass, bottle	1	colourless, bottle base, "W&A GILBEY CANADA LTD", "2619", D in diamond maker's mark - Dominion Glass Company, post 1931.
5	Surface find 5	glass, undetermined	1	colourless, multiple pieces of glass burnt and fused together
6	Surface find 6	recent material	1	metal jar lid, "ST. WILLIAMS BRAND", "ST. WILLIAMS PRESERVES LTD., SIMCOE, ONTARIO"
7	Surface find 7	glass, bottle	1	green
8	Surface find 8	glass, bottle	1	brown
9	Surface find 9	porcelain, undecorated	1	

3.2 LOCATION 2

Location 2 is centrally located in Lot 18, approximately 250 metres south of Location 1 in a ploughed agricultural field. The Stage 2 archaeological assessment of this location resulted in the recovery of 14 Euro-Canadian artifacts collected from a surface scatter measuring approximately 25 metres east-west by 35 metres north-south. The collected assemblage included all formal artifact types and diagnostic categories, and included a sample of non-diagnostic artifacts. Approximately 40 surface finds were left *in situ*, including yellow and red brick fragments, window glass, and utilitarian ceramics. In addition, more than 100 pieces of modern building and construction material, including blue Styrofoam fragments, black plastic, and sheet metal scraps, were left *in situ*. Immediately adjacent to the west and north of the Location 2 surface scatter are the remnants of two modern barn foundations (Photos 8 to 10). Table 5 provides an artifact summary for the Stage 2 archaeological assessment of Location 2. A sample of artifacts collected from Location 2 is depicted in Plates 2 and 3.

Table 6: Location 2 Artifact Summary

Artifact	Frequency	%
Glass, bottle	3	21.43
Glass, white	2	14.29
Ironstone, undecorated	1	7.14
Ironstone, moulded	1	7.14

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Record of Finds
November 6, 2013

Artifact	Frequency	%
Porcelain, undecorated	1	7.14
Earthenware, red	1	7.14
Earthenware, yellow	1	7.14
Hand bell	1	7.14
Brick	1	7.14
Glass, window	1	7.14
Recent material	1	7.14
Total	14	100.00

3.2.1 Ceramic Artifacts

A total of five ceramic artifacts were recovered during the Stage 2 assessment of Location 1. Of those, two are ironstone, two are utilitarian, and one is porcelain. The different ware types and decorative styles recovered from the Stage 2 assessment are discussed below and presented in Table 6. Plate 2 illustrates an example of the ceramic artifacts recovered from Location 2.

Table 7: Location 2 Ceramic Artifacts

Ceramic Artifacts	Frequency	%
Ironstone, undecorated	1	20.00
Ironstone, moulded	1	20.00
Porcelain, undecorated	1	20.00
Earthenware, red	1	20.00
Earthenware, yellow	1	20.00
Total	5	100.00

3.2.1.1 Ironstone

A total of two pieces of ironstone were collected from Location 2. Ironstone, also known as white granite, stone china and graniteware, is a variety of white earthenware introduced to Canada by the 1820s. It was widely available in the 1840s and was extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). Decorated ironstone, including hand painted, transfer printed, sponged, and stamped, generally dates to between 1805 and 1840; undecorated ironstone was most common after 1840 (Miller 1991). By 1897, ironstone was the cheapest dinnerware available and prices charged for moulded patterns were the same as those charged for plain, undecorated types (Sussman 1985:9). Of the ironstone fragments recovered from Location 2, one is plain or undecorated and the other is plain with a moulded scalloped edge, dating to the late 19th century at the earliest.

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Record of Finds
November 6, 2013

3.2.1.2 Utilitarian Earthenware

Two pieces of utilitarian ware were recovered from Location 2. One is a fragment of glazed yellow earthenware (Plate 2g). The other is a salt glazed red earthenware fragment with a blue painted exterior design and an Albany slip interior (Plate 2f). These types of unrefined earthenwares characterize Canadian sites from 1840 to 1900 and beyond (Adams 1994:99).

3.2.1.3 Porcelain

One piece of porcelain was collected from Location 2. Porcelain is a type of earthenware fired at such a high temperature that the clay vitrifies, producing a translucent material when held up to light. Introduced just before the mid-19th century, porcelain became commonplace by the turn of the century (Collard 1967). Porcelain becomes relatively common by the 20th century as less expensive production techniques were developed in Europe (Kenyon 1980). This artifact dates to the early 20th century.

3.2.2 Non-ceramic Artifacts

A total of nine non-ceramic artifacts were recovered from Location 2, including five household items, two structural pieces, one personal item, and one piece of recent material. The various non-ceramic categories are summarized in Table 7 and are discussed below. Plate 2 and Plate 3 illustrate examples of the non-ceramic artifacts recovered from Location 2.

Table 8: Location 2 Non-Ceramic Artifacts

Non-Ceramic Artifacts	Frequency	%
Household	5	55.56
Structural	2	22.22
Personal	1	11.11
Recent material	1	11.11
Total	9	100.00

3.2.2.1 Household Artifacts

The five household artifacts recovered from Location 2 included three pieces of bottle glass and two pieces of white glass. Bottle glass colour can provide a tentative temporal range for Euro-Canadian domestic sites. Two bottle glass shards are aqua coloured. Generally, aqua coloured glass originates from medical and pharmaceutical bottles from the 19th and 20th centuries (Kendrick 1971). The remaining bottle glass shard is brown in colour.

The remaining two pieces of glass are white glass. Opaque white, or “milk” glass was most commonly used for cosmetic containers, toiletry bottles, or cream jars from about 1870 through to the late 20th century (Lindsey 2013).

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Record of Finds
November 6, 2013

3.2.2.2 Structural Artifacts

Two structural artifacts were recovered from Location 2 including one red brick fragment and one shard of clear window glass. Window glass can also be temporally diagnostic. In the 1840s window glass thickness changed dramatically. This shift was a result of the lifting of the English import tax on window glass in 1845, which taxed glass by weight and encouraged manufacturers to produce thin panes. Thus, most window glass manufactured before 1845 tends to be less than 1.6 millimetres thick, while later glass is thicker (Adams 1994; Kenyon 1980). The recovered piece of window glass from Location 2 is greater than 1.6 millimetres which suggests a production date after 1845.

3.2.2.3 Personal Artifacts

Only one personal artifact was recovered from Location 2: a bronze hand bell (Plate 3). Only the casting is evident as all other components are missing. The item has no markings to indicate a temporal affiliation.

3.2.3 Recent Material

One item of recent material was collected from Location 2, a piece of blue closed-cell extruded polystyrene foam branded “Styrofoam”. Extruded polystyrene foam is commonly used as thermal insulation in modern building applications.

3.2.4 Artifact Catalogue

Table 7 provides a catalogue of the Stage 2 artifact assemblage recovered from Location 2. A representative sample of artifacts is depicted in Section 8.2 of this report.

Table 9: Location 2 Artifact Catalogue

Cat #	Context	Artifact	Freq.	Comment
1	surface find 1	glass, window	1	greater than 1.6mm
2	surface find 2	glass, bottle	1	aqua, bottle base
3	surface find 3	glass, bottle	1	aqua, bottle base
4	surface find 4	ironstone, moulded	1	moulded decoration, scalloped edge
5	surface find 5	earthenware, yellow	1	glazed
6	surface find 6	glass, white	1	moulded decorative pattern on exterior
7	surface find 7	porcelain, undecorated	1	
8	surface find 8	ironstone, undecorated	1	
9	surface find 9	earthenware, red	1	salt-glazed exterior with blue painted design, Albany slip interior
10	surface find 10	glass, white	1	moulded decorative pattern on exterior
11	surface find 11	hand bell	1	casting, missing all other components, bronze
12	surface find 12	brick	1	red
13	surface find 13	glass, bottle	1	brown
14	surface find 14	recent material	1	blue foam

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Analysis and Conclusions
November 6, 2013

4.0 Analysis and Conclusions

Stantec was retained by Tri City to conduct a Stage 1-2 archaeological assessment for a study area measuring approximately 50.3 hectares located on part of Lots 14 to 18, Concession B, Township of Guelph-Eramosa, Wellington County, Ontario. The Stage 1 archaeological assessment of the Spencer Pit study area determined that the entire study area exhibits moderate to high potential for the identification and recovery of archaeological resources. As such, a Stage 2 archaeological assessment was recommended. The results of the assessment identified two areas of interest, Location 1 and Location 2.

4.1 LOCATION 1

A total of nine Euro-Canadian artifacts were collected from the surface scatter identified as Location 1. Artifact analysis of the collected assemblage from Location 1 indicates that the area represents a diffuse scatter of homestead related materials dating from the early 20th century. This date of occupation is supported by the recovery of porcelain, which reached its height of popularity in the early 20th century. **The recovery and identification of a “Coca-Cola” glass bottle fragment and threaded canning jar lid from the St. Williams Preserve company further supports an association with the early 20th century.** Moreover, additional 20th century material, including recent beer bottle glass, was left *in situ*. Thus, Location 1 represents a small and sparse scatter of early 20th century domestic Euro-Canadian artifacts that retain no further cultural heritage value or interest as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

4.2 LOCATION 2

A total of 14 Euro-Canadian artifacts were collected from the surface scatter identified as Location 2. Artifact analysis of the collected assemblage from Location 2 indicates that the area represents a farmstead occupation dating to the late 19th and early 20th century. This date of occupation is supported by the recovery of plain and moulded ironstone, as well as porcelain, which reached their height of popularity at the turn of the 20th century and early 20th century, respectively. A late 19th to early 20th century association is further supported by the recovery of thick window glass, aqua coloured bottle glass, **and “milk” glass. Furthermore,** the occupation of Location 2 continued into modern times as evidenced by the recovery of extruded polystyrene foam and the identification on the field surface of additional modern debris (including additional pieces of extruded polystyrene foam, plastic, and sheet metal siding). It is reasonable to conclude that the artifacts from Location 2 are the scattered remnants from the subsequent demolition of the 20th century structures. Satellite imagery obtained from 2006 confirms the presence of a modern barn and other structures. The presence of the existing modern barn foundation and associated modern building debris immediately adjacent to the Location 2 surface scatter suggests the two areas are affiliated with one another. Thus, Location 2 represents a surface scatter of early 20th century domestic Euro-Canadian artifacts derived from the demolition of a modern barn facility. The area retains no further cultural heritage value or interest as per Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Recommendations
November 6, 2013

5.0 Recommendations

5.1 LOCATION 1

The artifact assemblage from Location 1 contains less than 20 artifacts that date prior to 1900 and background information related to the 20th century occupation of the study area does not indicate possible cultural heritage value or interest. Therefore, Location 1 does not fulfill the criteria of Section 2.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains no further cultural heritage value or interest. Thus, **no further work is recommended for Location 1.**

5.2 LOCATION 2

The artifact assemblage from Location 2 contains less than 20 artifacts that date prior to 1900 and background information related to the 20th century occupation of the study area does not indicate possible cultural heritage value or interest. Therefore, Location 2 does not fulfill the criteria of Section 2.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains no further cultural heritage value or interest. Thus, **no further work is recommended for Location 2.**

5.3 SUMMARY

Two archaeological locations were documented during the Stage 1-2 assessment of the Spencer Pit study area. Both Location 1 and Location 2 retain no further cultural heritage value or interest and are not recommended for further Stage 3 assessment or mitigation. Therefore, **no further archaeological assessment of the Spencer Pit study area is recommended.**

The MTCS is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Advice on Compliance with Legislation
November 6, 2013

6.0 Advice on Compliance with Legislation

This report is submitted to the Ontario Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. 0.18 (Government of Ontario 1990b). The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ontario Ministry of Consumer Services.

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Bibliography and Sources
November 6, 2013

7.0 Bibliography and Sources

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STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

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STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

November 6, 2013

8.0 Images

8.1 PHOTOGRAPHS

Photo 1: Stage 2 Pedestrian Survey Ground Conditions, facing northwest



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

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Photo 2: Stage 2 Pedestrian Survey Ground Conditions, facing north



Photo 3: Stage 2 Pedestrian Survey at Five-metre Intervals, facing southwest



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

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Photo 4: Stage 2 Pedestrian Survey at Five-metre Intervals, facing northeast



Photo 5: Stage 2 Pedestrian Survey at Five-metre Intervals, facing southwest



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

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Photo 6: Location 1, One-Metre Intensification, facing north



Photo 7: Modern Disturbance from Barn Foundations and Hydro Towers, facing north



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

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Photo 8: Modern Disturbance from Barn Foundation, facing northeast



Photo 9: Modern Disturbance from Construction Debris, facing northwest



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images

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Photo 10: Stage 2 Test Pit Survey at Five-metre Intervals, facing west



Photo 11: Modern Disturbance from Existing Residence and Structures, facing west



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images
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8.2 ARTIFACTS

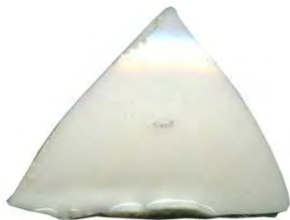
Plate 1: Sample of Artifacts from Location 1



A. Glass, Bottle, Cat. #1



B. Glass, Bottle, Cat. #4



C. Porcelain, Undecorated,
Cat. #9



D. Recent Material, Cat. #6



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Images
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Plate 2: Sample of Artifacts from Location 2



A. Glass, Bottle, Cat. #13



B. Glass, White, Cat. #10



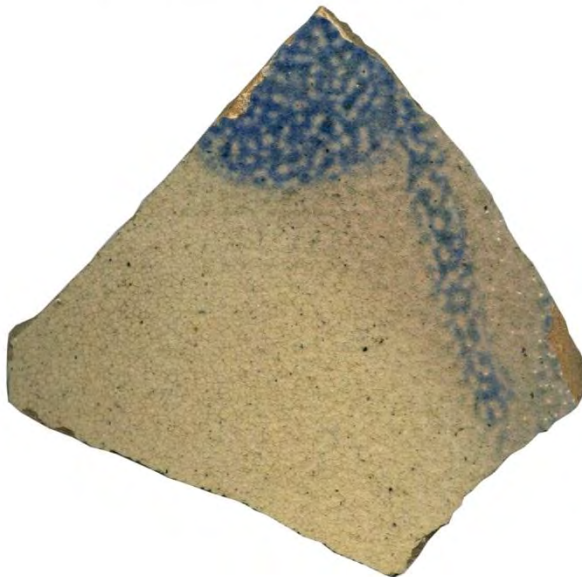
C. Ironstone, Undecorated,
Cat. #8



D. Ironstone, Moulded, Cat. #4



E. Porcelain, Undecorated,
Cat. #7



F. Earthenware, Red, Cat. #9



G. Earthenware, Yellow, Cat. #5



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

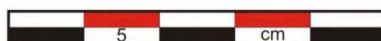
Images

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Plate 3: Bronze Hand Bell from Location 2



Hand Bell, Cat. #11



STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Maps
November 6, 2013

9.0 Maps

All maps will follow on succeeding pages. Maps identifying exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.



\\C:\1212\02\1609\active\6960833\drawing\MXD\Archaeology\Report\Figures\Stage 2\Figures\160940231_ArchSite\Fig01_StudyArea.mxd
 Revised: 2013-11-04 By: sstroszka



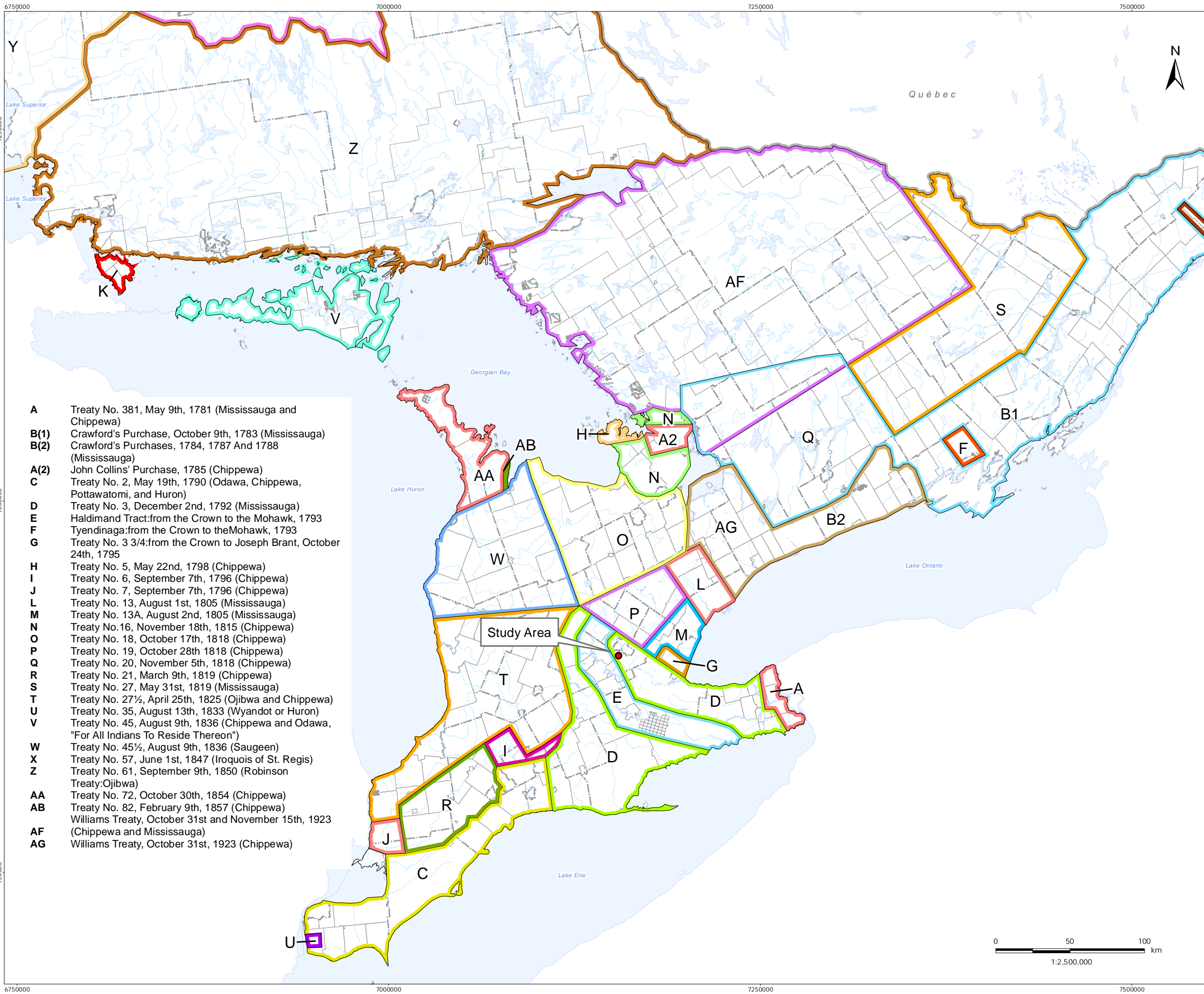
- Legend
- Study Area
 - Railway
 - Watercourse
 - Waterbody

- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
 3. Orthoimagery © First Base Solutions, 2013. Wellington County, 2006.

Client/Project
 Spencer Pit
 Township of Guelph-Eramosa

Figure No.
1

Title
General Project Location



- Legend**
- Province
 - Waterbody
 - Watercourse
 - Municipal Boundary - Upper
 - Municipal Boundary - Lower

- A** Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- B(1)** Crawford's Purchase, October 9th, 1783 (Mississauga)
- B(2)** Crawford's Purchases, 1784, 1787 And 1788 (Mississauga)
- A(2)** John Collins' Purchase, 1785 (Chippewa)
- C** Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- D** Treaty No. 3, December 2nd, 1792 (Mississauga)
- E** Haldimand Tract: from the Crown to the Mohawk, 1793
- F** Tyendingaga: from the Crown to the Mohawk, 1793
- G** Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
- H** Treaty No. 5, May 22nd, 1798 (Chippewa)
- I** Treaty No. 6, September 7th, 1796 (Chippewa)
- J** Treaty No. 7, September 7th, 1796 (Chippewa)
- L** Treaty No. 13, August 1st, 1805 (Mississauga)
- M** Treaty No. 13A, August 2nd, 1805 (Mississauga)
- N** Treaty No. 16, November 18th, 1815 (Chippewa)
- O** Treaty No. 18, October 17th, 1818 (Chippewa)
- P** Treaty No. 19, October 28th 1818 (Chippewa)
- Q** Treaty No. 20, November 5th, 1818 (Chippewa)
- R** Treaty No. 21, March 9th, 1819 (Chippewa)
- S** Treaty No. 27, May 31st, 1819 (Mississauga)
- T** Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
- U** Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- V** Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- W** Treaty No. 45½, August 9th, 1836 (Saugeen)
- X** Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- Z** Treaty No. 61, September 9th, 1850 (Robinson Treaty: Ojibwa)
- AA** Treaty No. 72, October 30th, 1854 (Chippewa)
- AB** Treaty No. 82, February 9th, 1857 (Chippewa)
- AF** Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- AG** Williams Treaty, October 31st, 1923 (Chippewa)

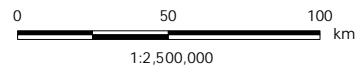
- Notes**
1. Coordinate System: NAD 1983 Statistics Canada Lambert
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
 3. Treaty boundaries adapted from MNR July 1980, based on map compiled by J.L. Morris 2 March 1931. For cartographic representation only.

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Spencer Pit
Township of Guelph-Eramosa

Figure No.
2

Title
Treaties and Purchases
(Adapted from Morris 1943)

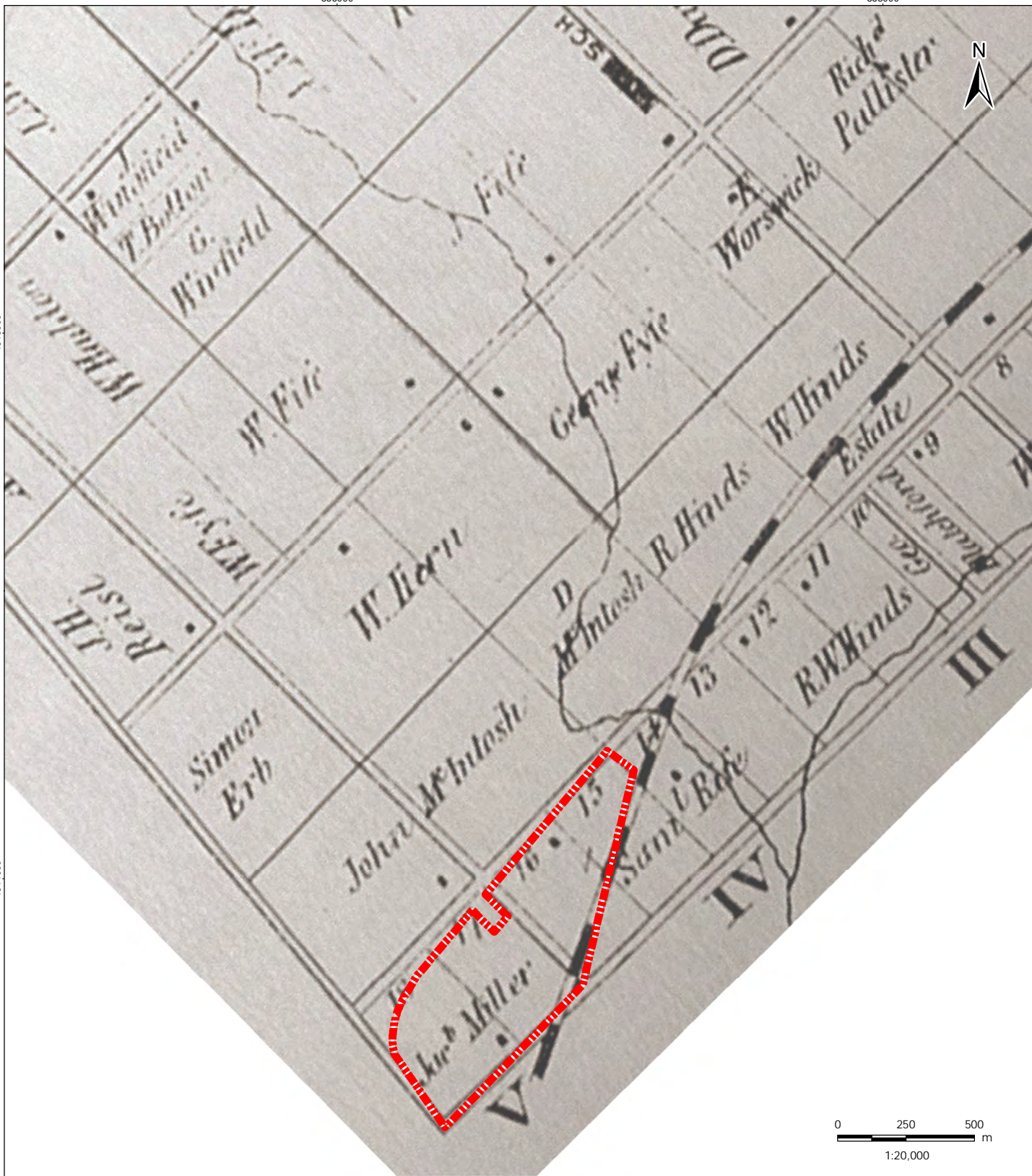


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Revised: 2013-11-05 By: sstroskall

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Legend
 Study Area

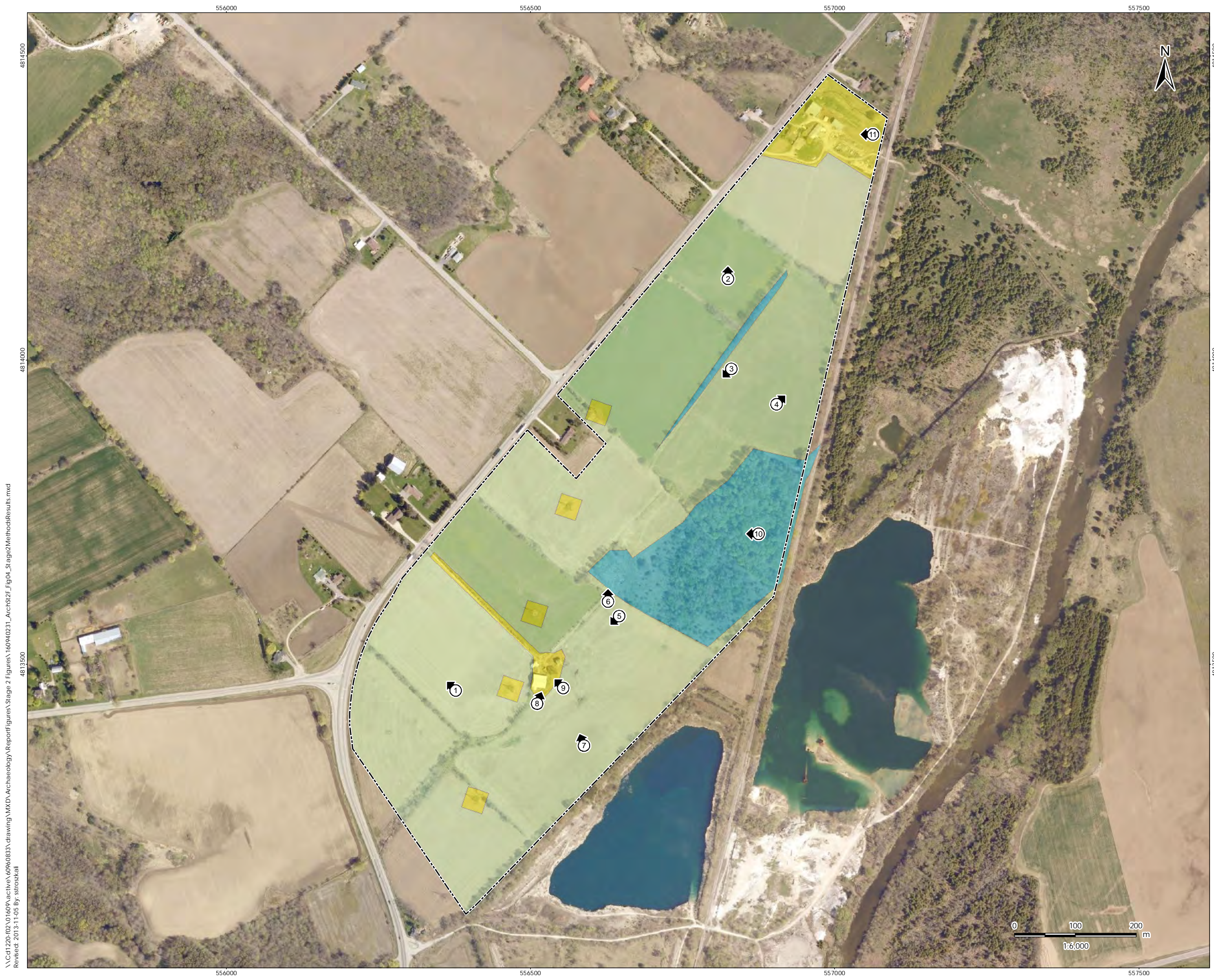
Client/Project
 Spencer Pit
 Township of Guelph-Eramosa

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
3. Guelph Township map from Illustrated Historical Atlas of the County of Wellington, Ont. published by Historical Atlas Publishing Co. 1906.

Figure No.
 3

Title
 Portion of the 1906
 Historical Map of
 The Township of Guelph



- Legend
- Study Area
 - Photo Location
- Stage 2 Archaeology Methods
- Modern Disturbance, Not Assessed
 - Pedestrian Survey At 5 m Interval
 - Test Pit Assessed At 5 m Interval

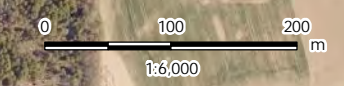
- Notes
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Client/Project
Spencer Pit
Township of Guelph-Eramosa

Figure No.
4

Title
Stage 2 Methods



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 Revised: 2013-11-05 By: sstroszkall

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT: SPENCER PIT

Closure
November 6, 2013

10.0 Closure

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We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.



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Appendix A – Qualifications of Principal Investigator

Jim Wilson M.A.

Regional Discipline Leader, Archaeology



Mr. Wilson is the Regional Discipline lead for Archaeology at Stantec and is a licensed archaeological consultant (Stages 1-4) who specializes in the pre-contact Aboriginal and early historic occupations of the Northeast. He received a B.A. from the University of Western Ontario in 1988 and a Master's degree in Archaeology from McMaster University in 1990. Over the past 25 years Mr. Wilson has worked on and directed numerous surveys and excavations funded by grants from the National Geographic Society, the Ontario Heritage Foundation, as well as contract projects for various consulting firms. He spent two years as the Archaeologist/Planner for the City of London, where he authored the City of London Archaeological Master Plan, the first GIS driven archaeological master plan in Ontario. He has lectured in archaeology at both the University of Western Ontario and McMaster University and has published extensively and delivered numerous public presentations on the prehistory of Ontario.

EDUCATION

MA, Department of Anthropology, McMaster University, Hamilton, Ontario, 1990

BA (Hons), Department of Anthropology, University of Western Ontario, London, Ontario, 1988

REGISTRATIONS

Professional Archaeologist #License #P001, Ontario Ministry of Tourism, Culture and Sport

MEMBERSHIPS

Member, Ontario Archaeological Society

PROJECT EXPERIENCE

Cement / Aggregates

Cayuga Materials Quarry*, Nanticoke, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-2 archaeological assessment was conducted for a 183.7 acre proposed limestone quarry located in Nanticoke, Ontario. During the 1999 assessment sixteen archaeological sites were documented, although not all of the property was assessed due the presence of crops in several fields. In 2003 the entirety of the property was subject to assessment. In total, the Stage 2 field assessment resulted in the identification of twenty-two archaeological sites. Due to their significance and information potential, additional Stage 3 archaeological assessment was recommended for all but one of these sites. The Stage 3 assessment of 5 of these locations, resulted in the determination that there are significant archaeological deposits at each and additional Stage 4 mitigation was required for these 5 locations.

West Elgin Pit Expansion*, Elgin County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-2 archaeological assessment was conducted an approximate 10 acre property located in the Geographic Township of Aldborough, Elgin County, Ontario. The background research indicated that there were no previously registered archaeological sites within 2.0 kilometers of the subject property, however the Stage 2 field assessment resulted in the identification of two pre-contact Aboriginal sites within the proposed license area. Due to the potential significance of these sites, additional Stage 3 assessment was recommended in order to assess their significance and information potential.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Lobo Sand and Gravel Pit Expansion*, Middlesex County, Ontario (Project Manager / Senior Archaeologist)

Stages 1-4 archaeological assessments were conducted for an approximate 11.9 hectare aggregate pit expansion, located in the Geographic Township of Westminster, Middlesex County, Ontario. The Stage 2 field assessment resulted in the identification of one mid-19th century Euro-Canadian site, as well as four pre-contact Aboriginal sites, each of which was subject to a Stage 3 assessment in order to evaluate its significance and information potential. The Stage 3 assessment resulted in the determination that the Euro-Canadian site consisted of a post-1860 occupation and no additional assessment was recommended. Likewise, only a minimal amount of pre-contact Aboriginal cultural material was recovered from the first pre-contact Aboriginal site and no additional assessment was recommended. However, the additional 3 pre-contact Aboriginal sites each produced a significant amount of pre-contact Aboriginal cultural material and additional Stage 4 excavation was recommended in advance of extraction.

Lafarge Uxbridge Pit Expansion*, Region of Durham, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximate six acre aggregate pit located in the Region of Durham, Ontario. The Stage 2 field assessment did not result in the identification of any archaeological resources and additional assessment was not recommended.

Lawford Pit*, Region of Peel, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-3 archaeological assessment was conducted on a 400 acre property located in the Town of Caledon East, Region of Peel, Ontario. The Stage 2 field assessment resulted in the identification of four pre-contact Aboriginal sites and one mid-to-late 19th century Euro-Canadian site. Additional Stage 3 assessment was recommended for two of the pre-contact Aboriginal sites to further evaluate their significance and information potential. The Stage 3 testing of these locations resulted in the recovery of sufficient pre-contact Aboriginal cultural material to warrant additional Stage 4 investigation at each location.

Don Young Trucking Sand Pit*, Middlesex County, Ontario (Project Manager / Senior Archaeologist)

This Stage 1-2 assessment was conducted for an approximate 3.5 hectare proposed aggregate pit located in Middlesex County, Ontario. The Stage 2 field assessment resulted in the identification of four locations producing pre-contact Aboriginal cultural material. The first two locations were located outside the boundary of the proposed licensed area. Due to the low significance and information potential of the second two locations, no further archaeological fieldwork was recommended.

Olympia Sand and Gravel Pit*, Region of Peel, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-2 Archaeological Assessment was conducted for an approximate 300 acre proposed aggregate extraction site located in the Town of Caledon, Region of Peel, Ontario. The Stage 2 assessment did not result in the identification of any archaeological resources and no additional assessment was recommended.

Dufferin Aggregates - Cochrane Pit*, Region of Durham, Ontario (Project Manager / Senior Archaeologist)

An archaeological assessment (Stage 1 & 2) was conducted for an approximate 32.5 hectare aggregate extraction property located in the Geographic Township of Clarke, Region of Durham, Ontario. The Stage 2 field assessment resulted in identification of one late 19th to 20th century Euro-Canadian site. Given the relatively late date of the location, as well as its lengthy occupational history, it was determined to have low archaeological significance and information potential.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Dufferin Aggregates - Erin Pit Expansion* , Wellington County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-3 archaeological assessment was conducted on a 60.2 hectare aggregate extraction property located in the Township of Erin, County of Wellington, Ontario. At that time, one mid 19th century Euro-Canadian site was documented and a recommendation was made that it be subject to additional Stage 3 assessment to determine its significance and information potential. The Stage 3 excavations resulted in a determination the location, a pre-1860 Euro-Canadian homestead, had moderate to high informational potential. As such it was recommended that the site should undergo a Stage 4 salvage excavation in advance of construction. The Stage 4 assessment of the location resulted in the documentation of a mid-19th century Euro-Canadian pioneer homestead. The site was fully investigated and no additional archaeological assessment was recommended.

Bingo West Pit* , Lambton County, Ontario (Project Manager / Senior Archaeologist)

The Stage 2 fieldwork resulted in the identification of 11 locations with pre-contact Aboriginal cultural material. Additional Stage 3 assessment was recommended for four of these archaeological sites in order to better evaluate their significance and information potential. The Stage 3 excavations of these 4 locations resulted in the recovery of a significant amount of cultural material and it was determined that these sites would require Stage 4 assessment in advance of any aggregate extraction activities. During the 2008 field season a Stage 4 assessment was conducted within Phase 2 of aggregate expansion of the Bingo West Pit.

Mast North Snyder Pit Extension* , Wellington County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-3 archaeological assessment was conducted for an approximate 100 acre aggregate pit expansion located in the Township of Puslinch, County of Wellington, Ontario. The Stage 2 field assessment resulted in the identification of one pre-contact Aboriginal find spot and two mid-19th century Euro-Canadian sites. Due to the potential significance and information potential of the two Euro-Canadian archaeological resources, additional Stage 3 assessment was recommended. The Stage 3 investigations resulted in the determination that both locations constitute significant archaeological concerns. As such each site was excluded from the excavation area, and Ministry of Culture approved long-term protection measures were put in place.

West Elgin Pit Expansion* , Elgin County, Ontario (Project Manager / Senior Archaeologist)

The Stage 2 field assessment for an approximate 10 acre aggregate extraction site located in the Geographic Township of Aldborough, County of Elgin, Ontario resulted in the identification of two pre-contact Aboriginal sites within the proposed licence area. Due to the potential significance of these sites, additional Stage 3 assessment was recommended. The Stage 3 assessment of the second location resulted in the recovery of only a minimal amount of cultural material of limited significance and information potential. Consequently, no additional assessment was recommended for this location. The Stage 3 assessment of the first location resulted in the recovery of a significant amount of pre-contact Aboriginal cultural material, and additional Stage 4 mitigation was required for this location. The Stage 4 assessment of the West Elgin Pit site resulted in the documentation of one small pre-contact Aboriginal activity area or campsite. The diagnostic artifacts recovered suggest that the site consists of a small Meadowood special purpose camp (circa 950-400 B.C.). The Stage 4 mitigation at the West Elgin Pit site was completed and no further archaeological fieldwork was required.

Steve Smith Pit* , Oxford County, Ontario (Project Manager / Senior Archaeologist)

A Stage 2 archaeological survey did not result in the discovery of any archaeological materials and no additional assessment was recommended for the area.

Robinson Pit* , Oxford County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-2 archaeological assessment was conducted for a 37.03 hectare proposed aggregate pit located in Oxford County, Ontario. The Stage 2 examination resulted in the identification of five locations producing pre-contact Aboriginal cultural material. Due to the limited significance and information potential of these locations no further archaeological fieldwork was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Orford Sand and Gravel Pit Expansion*, Municipality of Chatham-Kent, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximately 16 acres aggregate pit expansion located in the Municipality of Chatham-Kent, Ontario. The Stage 2 field assessment resulted in the identification of a single find spot of chipping detritus material. Due to the limited significance and information potential of this find, no additional archaeological assessment was recommended.

McCann Redi-Mix Plant Expansion*, Perth County, Ontario (Project Manager / Senior Archaeologist)

The Stage 1 background research indicated that there were no previously registered archaeological sites within two kilometers of the subject property, an approximate 9.2 hectare property located in Perth County, Ontario. The Stage 2 field assessment did not result in the identification of any archaeological material and no additional assessment was recommended.

Nelson Aggregates Quarry Expansion*, Burlington, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1, 2 & 3, were conducted on an approximate 200 acre property located in the City of Burlington, Ontario. The Stage 2 field assessment resulted in the identification of five previously unregistered pre-contact Aboriginal sites. Additional Stage 3 assessment was recommended for three of the sites to further evaluate their significance and information potential. The Stage 3 testing of the first two locations resulted in the recovery of sufficient pre-contact Aboriginal cultural material to warrant additional Stage 4 investigation. The Stage 3 testing of the fourth location resulted in the recovery of a smaller amount of cultural material, but enough to warrant limited Stage 4 testing. The Stage 4 assessment the first location resulted in the documentation of a historic Neutral period cabin site, circa 1600-1650 A.D. The Stage 4 assessment of the second location resulted in the documentation of another small Aboriginal cabin site or small hamlet. The diagnostic artifacts recovered also suggest an occupation during the historic Neutral period, circa 1600-1650 A.D. The Stage 4 assessment of the fourth location resulted in the documentation of a small area of Aboriginal activity. The diagnostic artifacts recovered from this location also dated to the historic Neutral period, circa 1600-1650 A.D. The Stage 4 mitigation at these sites was completed.

Lowndes Quarry*, Hamilton, Ontario (Project Manager / Senior Archaeologist)

Stage 1, 2 & 3 archaeological assessments were conducted for an approximate 193 hectare proposed quarry site, City of Hamilton, Ontario. The Stage 2 field assessment resulted in the identification of four previously unregistered sites; including one find spot of an isolated pre-contact Aboriginal artifact and three 19th century Euro-Canadian artifact scatters. Due to the limited significance and information potential of the find spot location and one of the 19th century Euro-Canadian artifact scatters which is very diffuse, no additional assessment was recommended. Additional Stage 3 assessment was recommended for the remaining two locations in order to further evaluate their significance and information potential. The Stage 3 field assessment of these locations produced a number of mid-19th and early 20th century artifacts. Given the relatively late date of material recovered it was determined that both locations had a low degree of significance and information potential and no additional archaeological assessment was recommended.

Holman Pit Extension*, Wellington County, Ontario (Project Manager / Senior Archaeologist)

An archaeological assessment (Stages 1 & 2) was conducted for a 10.1 hectares proposed aggregate pit located in the Township of Guelph-Eramosa, County of Wellington, Ontario. The Stage 2 field assessment resulted in the discovery of a diffuse scatter of mid-to-late 19th century Euro-Canadian cultural material. Due to the diffuse nature of the concentration and the relatively late date of material recovered, it was determined that this location had a low degree of significance and information potential and no further archaeological assessment was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Hard Rock Paving - Law Quarry*, Niagara Region, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1, 2 & 3, were conducted for an approximate 287 acre proposed quarry site, situated in the Township of Wainfleet, Niagara Region, Ontario. The Stage 2 field assessment resulted in the identification of 15 previously unregistered sites; including one late 19th century Euro-Canadian site and 14 pre-contact Aboriginal sites. Due to the limited significance and information potential of the Euro-Canadian site, and three of the pre-contact Aboriginal sites, no further archaeological assessment was recommended for these locations. Additional Stage 3 assessment was recommended for the remaining locations. The Stage 3 assessment of Location 2, Location 4, Location 7 and Location 9 resulted in the recovery of a small amount of cultural material. Due to the limited significance and information potential of these locations no further archaeological assessment was recommended. The Stage 3 assessment of the remaining seven locations resulted in the recovery of a significant amount of cultural material and consequently Stage 4 mitigation was required in advance of any aggregate extraction activities.

Thamesford Highway 19 Pit*, Oxford County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-3 archaeological assessment was conducted for a proposed aggregate pit located south of Thamesford, along Highway 19. In total the study area consists of approximately 85 acres located in Oxford County, Ontario. The Stage 2 archaeological assessment resulted in the identification of one archaeological resource producing mid-19th century Euro-Canadian cultural material. Due to this the site was judged to exhibit sufficient significance and information potential to warrant further Stage 3 archaeological assessment. The Stage 3 excavations at the location resulted in the recovery of a large amount of predominantly mid-to-late 19th century cultural material. As late 19th century domestic sites are relatively common in southwestern Ontario, this location was judged to have a low degree of significance and information

Thames Valley Aggregates - Putnam Pit*, Oxford County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-3 archaeological assessment was conducted for an approximate 29 acre proposed aggregate pit located in Oxford County, Ontario. The Stage 2 assessment resulted in the identification of two locations, one producing 19th century Euro-Canadian cultural remains and one producing pre-contact Aboriginal cultural material. Due to the fact that only early to mid 19th century Euro-Canadian artifacts were recovered from the first location, additional Stage 3 assessment was recommended in order to better evaluate its significance and information potential. Only a limited amount of pre-contact Aboriginal cultural material was recovered from the second and therefore no additional assessment was recommended for this location. The Stage 3 excavation of the first location resulted in the recovery of a significant amount of additional early-to-mid 19th century Euro-Canadian cultural material. Consequently, due to the significance and information potential of the site it was recommended that it be subject to additional Stage 4 assessment in advance of any ground disturbance in this area. The Stage 4 assessment of this location was completed and no further archaeological assessment was required.

Aikensville Pit*, Wellington County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1-2 archaeological assessment was conducted for a 52.5 hectare proposed aggregate pit located in the Township of Puslinch, Wellington County, Ontario. The Stage 2 field assessment did not result in the discovery of any archaeological cultural material. Consequently, no further archaeological work was required.

Preston Sand & Gravel - Roszell Pit*, Wellington County, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximate 80 acre proposed aggregate pit to be in Puslinch Township, County of Wellington, Ontario. The Stage 2 field assessment resulted in the discovery of 12 locations producing pre-contact Aboriginal artifacts. Due to the limited amount of cultural material recovered at these sites, they were determined to exhibit a low level of significance and information potential and no additional assessment was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

McNally East Pit*, Wellington County, Ontario (Project Manager / Senior Archaeologist)

Stages 1-3 archaeological assessments were conducted on an approximate 100 acre proposed aggregate pit property located in the Township of Puslinch, Wellington County, Ontario. The Stage 2 archaeological assessment resulted in the identification of one location producing 19th century Euro-Canadian cultural material. Due to the fact that only early to mid 19th century Euro-Canadian artifacts were recovered from this location it was recommended that it be subject to additional Stage 3 assessment in order to further assess its significance and information potential. The subsequent Stage 3 excavations of this location resulted in the recovery of a significant amount of additional early-to-mid 19th century Euro-Canadian cultural material. Consequently, Stage 4 mitigation was recommended in advance of development. The Stage 4 excavations at the location produced a collection of 19th century artifacts that are consistent with a mid 19th century domestic settlement. Additional historic background research conducted as part of the Stage 4 assessment suggests that this location consists of the remains of a mid 19th century log cabin or frame home which was in all likelihood the homestead of the McNaughton family. The residence was likely constructed in the mid 19th century, and abandoned sometime prior to 1877. The site was fully mitigated and no further archaeological work was recommended.

Lafarge Hagersville Quarry Extension*, Haldimand County, Ontario (Project Manager / Senior Archaeologist)

A Stage 1 archaeological assessment was conducted for an approximate 9.11 hectare quarry extension property, 6.77 hectares to be extracted, located East of Plank Road in the Town of Hagersville, Township of Oneida, Haldimand County, Ontario. During the field inspection the study area was found to have been entirely disturbed by access roads, a railway bed, machine landings and overburden piles, and as a consequence to have low archaeological potential. Given the results of the Stage 1 assessment, no additional Stage 2 assessment was recommended.

Johnson Brothers - Huron Pit*, Huron County, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximate 60 acre proposed aggregate pit located in the Geographic Township of Colborne, Huron County, Ontario. Stage 2 examination did not result in the identification of any archaeological resources. Consequently, the archaeological condition of the aggregate pit licensing process was met and no further archaeological work was recommended.

Moore Quarry - Wayside Pit Permit*, Ottawa, Ontario (Project Manager / Senior Archaeologist)

An archaeological assessment (Stage 1) was previously conducted for the Moore Property in the City of Ottawa, Ontario. Based on the results of the Stage 1 assessment, a Stage 2 archaeological assessment was conducted for an approximate 140 acre portion of the R.W. Tomlinson Limited Moore property, located in the City of Ottawa, Ontario. The Stage 2 field assessment resulted in the documentation of two Euro-Canadian archaeological resources. The Stage 2 assessment of the first location resulted in the documentation of an early to mid 19th century Euro-Canadian artifact scatter. Due to the significance and information potential of this site, additional Stage 3 assessment was recommended for this location. The Stage 2 assessment of the second location resulted in the documentation of a late 19th to 20th century cluster of artifacts. Due to the late date of material recovered, the significance and information potential was judged to be limited and no further archaeological assessment was recommended. The Stage 3 excavations at the first location resulted in the recovery of a significant amount of early-to-mid 19th century cultural material. Consequently, this site will require further Stage 4 assessment in advance of the licensing of this portion of the property. The Stage 4 mitigation of this site resulted in the documentation of primarily 19th century occupation. The excavation documented the remains of an early frame or log structure that predates the present brick home constructed circa 1875. The location was fully excavated no further archaeological documentation required.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Naylor/Foreman Pit*, Region of York, Ontario (Project Manager / Senior Archaeologist)

The land to be assessed consists of an approximate 18 hectare property located in the Town of Whitchurch-Stouffville, Region of York, Ontario. The Stage 2 field assessment resulted in the documentation of the Naylor site, a midden associated with an existing residential structure, constructed on the site circa 1860. Due to the late date of material recovered, the archaeological significance and information potential of the Naylor site, it was judged to be limited and no further archaeological assessment was recommended. The Stage 2 archaeological assessment of the remaining portions of the study area did not result in the identification of any archaeological material and no further archaeological assessment was recommended.

Leitch Farm Pit*, Middlesex County, Ontario (Project Manager / Senior Archaeologist)

A Stage 2-3 archaeological assessment was conducted for an approximate 220 acre proposed Leitch Farm Pit located at 20304 Heritage Road, Middlesex County, Ontario. The Stage 2 assessment resulted in the identification of one location producing mid 19th century Euro-Canadian cultural material. In order to better understand the significance and information potential of this location, additional Stage 3 archaeological assessment was recommended. The Stage 3 assessment resulted in the recovery of a substantial amount of primarily late 19th century cultural material. Due to the larger percentage of later artifacts and the existence of a structure in the same approximate location in the 1878 Illustrated Historical Atlas of Middlesex County the significance and information potential for this site was judged to be limited and no further archaeological assessment was recommended.

Dufferin Aggregates - Brown Pit*, Region of Waterloo, Ontario (Project Manager / Senior Archaeologist)

Stages 1 & 2 archaeological assessments were conducted for a proposed approximately 42 hectare gravel pit, Brown Pit, located in the Region of Waterloo, Ontario. The Stage 2 field assessment resulted in the identification of 31 archaeological finds on the subject property. Of these 31 finds, 17 had a small amount of cultural material and were not considered significant, the eight remaining sites were judged to be significant and these sites were provided protection from aggregate activities on the site plan. The Stage 3 excavations at the Beattie Site resulted in the recovery of only a small amount of Euro-Canadian cultural material. It was determined that the majority of the Beattie Site remains undisturbed underneath an earth berm constructed between the area of extraction and Regional Road 71. As the Beattie site was inaccessible at the time, and appeared to be relatively undisturbed, it was recommended that in advance of rehabilitation of this area a licensed archaeologist should monitor the removal of the berm and excavations should be conducted on the remaining portion of the site. This Stage 4 assessment would consist of the excavation of a series of additional one meter units in the area of greatest artifact density, followed by the mechanical removal of topsoil from the remainder of the site area in order to uncover all subsurface post or cultural features. The Stage 3 excavations at the other location resulted in the recovery of only a small amount of pre-contact Aboriginal cultural material.

Lafarge Fonthill Pit Expansion*, Niagra Region, Ontario (Project Manager / Senior Archaeologist)

Stages 1 & 2 archaeological assessments were conducted for an approximate 76 acre property located in the Town of Fonthill, Niagara Region, Welland County, Ontario. The Stage 2 archaeological assessment resulted in the identification of two locations producing pre-contact Aboriginal cultural material. The sites identified during the Stage 2 investigation are characterized by a very small amount of cultural material. Due to the paucity of material at each site the significance and information potential was judged to be limited and no additional archaeological assessment was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Inland West Pit*, Lambton County, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximate 40 acres potential aggregate property located in the Township of Warwick, Lambton County, Ontario. The Stage 2 investigation resulted in the identification of fifteen locations producing pre-contact Aboriginal material. Six of the archaeological sites consisted of isolated findspots or very small clusters of cultural material. Due to the limited significance of these sites no additional archaeological assessment was recommended for these sites. A significant amount of cultural material was noted at nine of the fifteen sites and additional Stage 3 assessment was recommended to better understand the nature of these archaeological resources. The Stage 3 assessment of four of these locations resulted in the recovery of a small amount of pre-contact Aboriginal cultural material. Due to the limited significance and information potential of these sites they were judged to have a low cultural interest or value and no further archaeological assessment was recommended. The Stage 3 assessment of the remaining five locations resulted in the recovery of a significant amount of pre-contact Aboriginal cultural material and additional Stage 4 mitigation was warranted.

CBM Olalondo Fanshawe Pit Expansion*, Middlesex County, Ontario (Project Manager / Senior Archaeologist)

Stage 1-2 archaeological assessments were conducted for an approximate 4.9 acre proposed pit expansion located in the Middlesex County, Ontario. The subject property was formerly used as a camp and is comprised primarily of areas of previous disturbance with lesser areas of overgrown scrub and trees. Although all of the camp buildings have been removed, foundations and other recent structural debris are evident. The Stage 2 investigation did not result in the documentation of any archaeological material or concerns. As there were no sites of cultural heritage interest on the subject property, no further archaeological assessment was recommended.

CBM Huxley Pit*, Wellington County, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for an approximate 1.53 acre property located in the Town of Hillsburgh, Wellington County, Ontario. The Stage 2 field assessment did not result in the identification of any archaeological material. As a result, no further archaeological assessment was recommended.

Vidcom Uxbridge Main Pit Expansion*, Region of Durham, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stage 1, 2 & 3, were conducted for an approximate 53 hectare aggregate extraction property located in the Township of Uxbridge, Region of Durham, Ontario. The Stage 2 field assessment resulted in identification of one small pre-contact Aboriginal site and one historic scatter. Due to the potential archaeological significance of these locations, both were subject to a Stage 3 assessment in order to better evaluate its significance and information potential. The Stage 3 assessment of the pre-contact Aboriginal site resulted in the recovery of a minimal amount of cultural material and no additional assessment was recommended. The Stage 3 assessment of historic scatter site resulted in the recovery of additional 19th century Euro-Canadian material and a Stage 4 assessment of this archaeological site was recommended if the area could not be satisfactorily avoided. The intent was to avoid this site and afford it long term protection on the site plan.

Sykes Aggregates - Jenner Pit*, Municipality of Chatham-Kent, Ontario (Project Manager / Senior Archaeologist)

Stage 1 & 2 archaeological assessments were conducted for an 18.4 hectare property slated to be a gravel pit located in the Geographic Township of Harwich, Municipality of Chatham-Kent, Ontario. The Stage 2 field assessment did not result in the identification of any archaeological material. As a result, no further archaeological assessment was recommended.

Orchardview Pit*, Kingsville, Ontario (Project Manager / Senior Archaeologist)

Stages 1 & 2 archaeological assessments were conducted for a 13 hectare property located in the Town of Kingsville, Essex County, Ontario. The Stage 2 field assessment did not result in the identification of any archaeological material. As a result, no further archaeological assessment was recommended.

East Garafraxa Pit Expansion*, Dufferin County, Ontario (Project Manager / Senior Archaeologist)

Archaeological assessments, Stages 1 & 2, were conducted for a 9.6 hectare property slated to be a gravel pit expansion located in the Township of East Garafraxa, Dufferin County, Ontario. The Stage 2 archaeological assessment resulted in the identification of four locations producing pre-contact Aboriginal cultural material. All four locations produced only a limited amount of cultural material and as a consequence no additional assessment was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Amherst Quarry Expansion* , Amherstberg, Ontario (Senior Archaeologist)

Stage 1-4 Archaeological Assessment. Contracted to conduct an archaeological assessment for an approximate 65 hectare property located in Essex County, Ontario. The Stage 3 field investigations was conducted in 2009 and concluded that 1 location produced a significant amount of early to mid 19th century cultural material and additional Stage 4 archaeological assessment was recommended and subsequently completed.

Highland Melancthon Quarry* , Dufferin County, Ontario (Senior Archaeologist)

Stage 1-4 Archaeological Assessment. The Stage 2 archaeological assessment resulted in the identification of 22 locations, including four pre-contact Aboriginal find spots and 18 historic Euro-Canadian domestic occupations. Two pre-contact Aboriginal findspots were judged to require precautionary Stage 3 assessment and eight historic Euro-Canadian locations were judged to have significant information potential and to require Stage 3 assessment. The Stage 3 excavations were conducted and the heritage concerns for the two pre-contact Aboriginal findspots and four of the historic Euro-Canadian locations were considered to be sufficiently documented at that time and no further work was recommended. However, 4 locations yielded mid-to-late 19th century material and therefore their level of significance and information potential was judged to be moderate to high. Stage 4 archaeological mitigation of these sites was recommended and subsequently completed.

Limebeer Pit* , Region of Peel, Ontario (Senior Archaeologist)

Stage 1-2 Archaeological Assessment on an approximate 39 hectare development property located in the Town of Caledon, Region of Peel, Ontario. The Stage 2 archaeological assessment resulted in the identification of two pre-contact Aboriginal archaeological locations. Due to the low cultural value of one isolated scraper, no further archaeological assessment is recommended for the first location. However, the second location represents a relatively dense and spatially discrete cluster of pre-contact Aboriginal material, therefore, further Stage 3 archaeological assessment was recommended.

Nash Pit* , Oxford County, Ontario (Senior Archaeologist)

Stage 1-4 Archaeological Assessment. The Stage 2 archaeological assessment resulted in the identification of two Euro-Canadian historic sites. Due to the possible information potential and cultural heritage value of the two Euro-Canadian locations it, was recommended that they be subject to additional Stage 3 archaeological assessment in advance of any extraction activities. The Stage 3 assessment determined that 2 locations consisted of a concentration of early 19th century Euro-Canadian historic material and further Stage 4 mitigation was recommended. The client has chosen avoid impacts to both locations by protecting them with permanent fencing as well as a note on the Site Plan.

Clarington Aggregate Depot and Asphalt Plant* , Region of Durham, Ontario (Senior Archaeologist)

The Stage 2 archaeological assessment resulted in the identification of three 19th century Euro-Canadian locations. The Stage 2 investigation these locations resulted in the recovery of a significant amount of mid-19th century Euro-Canadian cultural material and additional Stage 3 assessment was recommended. The results of the Stage 3 assessment are currently being report on and further Stage 4 archaeological assessment is recommended.

Strickland Richmond Pit* , Elgin County, Ontario (Senior Archaeologist)

This Stage 1 and 2 assessment was conducted for an approximate 35 acre property located in Elgin County, Ontario. The Stage 2 archaeological assessment resulted in the identification of one piece of pre-contact Aboriginal chipping detritus. Due to the low significance and information potential of this location no further archaeological assessment was recommended. The Stage 2 archaeological assessment did not result in the identification of any archaeological material and no further archaeological assessment was recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Sunderland Pit Expansion* , Region of Durham, Ontario (Senior Archaeologist)

This Stage 1 and 2 archaeological assessment for the proposed North Sunderland Pit Expansion property, located in the Region of Durham, Ontario. The assessment resulted in the identification of two archaeological locations. Both locations were clusters of three positive test pits each yielding late 19th and 20th century Euro-Canadian archaeological material in immediate proximity to existing 20th century houses. Due to their proximity to existing houses and the limited cultural heritage value or interest of the artifacts recovered, no further archaeological assessment was recommended.

Environmental Assessment

Manning Road Corridor* , Lakeshore, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted as part of the environmental assessment for the Manning Road Corridor, St. Gregory's Road to Sylvestre Drive, in the Town of Lakeshore, County of Essex, Ontario. The study area consisted of a linear transportation corridor (Manning Road) beginning at St. Gregory's Road and extending westerly for 1.9 km to Sylvestre Drive. The Manning Road right-of-way is 86 feet (26.21 m) wide along the length of this corridor. The Stage 1 assessment resulted in the determination that six portions of the right-of-way retained sufficient integrity to warrant Stage 2 archaeological assessment in advance of construction. No archaeological resources were documented during Stage 2 investigations and no additional assessment was recommended.

Tecumseh Road Corridor* , Tecumseh, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the Tecumseh Road corridor, from Manning Road to Bedell Street, in the Town of Tecumseh, Ontario. The study area consists of a linear transportation corridor beginning at Manning Road and extending westerly for 1.1 km to Bedell Street. The entire 86 foot (26.21 m) width of the Tecumseh Road right-of-way was examined for the Stage 1 assessment. The Stage 1 assessment resulted in the conclusion that four small areas within the study corridor retained archaeological potential. No archaeological resources were documented during Stage 2 investigations and no additional assessment was recommended.

Bradley Avenue Extension Class Environmental Assessment* , London, Ontario (Cultural Science Project Director)

A Stage 1 "archaeological overview/background study" was conducted as part of the preparation of the Bradley Avenue Extension Class E.A. The study area consists of an approximate 40 meter wide by 3.4 kilometers long linear corridor, extending from the intersection of Pack Road and Bostwick Road in the west, to White Oaks Road in the east in the City of London, Ontario. The majority of the impact corridor fell within the area predetermined by the City of London to have moderate to high potential for archaeological sites and retained sufficient integrity to harbor intact archaeological deposits.

Springbank Drive Widening Environmental Assessment* , London, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1 & 2) was conducted for an approximate 2.4 kilometer stretch of Springbank Drive in the City of London. The study area consists of an approximate five-meter wide strip along both sides of the existing paved surface, from the end of the Horton Street extension in the east to Wonderland Road in the west. The small portion of the study area retaining archaeological potential was located at the West Coves, along the north side of the right-of-way. The Coves is a large oxbow meander of the Thames that was cut off from the main channel of the river in the late 18th century. The Stage 2 field assessment of the corridor did not result in the identification of any archaeological materials and additional assessment was not recommended.

James Snow Parkway Extension* , Milton, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1 - 4) was conducted for the James Snow Parkway extension, located on part of Lots 6-10, Concession 5, Geographic Township of Trafalgar, Town of Milton, Ontario. The Stage 2 archaeological assessment resulted in the identification of one location producing pre-contact Aboriginal cultural material. Due to the fact that this location consisted of a spatially discrete and relatively dense concentration of pre-contact Aboriginal artifacts it was recommended that it be subject to additional Stage 3 assessment in order to further assess its significance and information potential. The Stage 3 excavations at this location resulted in the recovery of a significant amount of pre-contact Aboriginal cultural material. Consequently, further Stage 4 assessment was recommended and carried out in advance of any ground disturbance in this area.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Wonderland Road Class Environmental Assessment Study*, London, Ontario (Cultural Sciences Project Director)

A Stage 1 "archaeological overview/background study" was conducted as part of the Wonderland Road Class Environmental Assessment Study. The study area consists of a 1.4 kilometer length of Wonderland Road, extending between Gainsborough Road in the South and Fanshawe Park Road in the north in the City of London, Middlesex County, Ontario. The Stage 1 assessment resulted in the determination that the majority of the study area had been previously disturbed by development activities. The proposed improvements to Wonderland Road between Gainsborough Road and Fanshawe Park Road had a very low probability of impacting intact archaeological resources. As such this project did not require any additional archaeological assessment.

Highway 24 Rehabilitation*, Brant County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for a 4.7 kilometer length of Highway 24 from Highway 403 to Brant County Road 53 in Brant County, Ontario. Due to the fact the entire existing right-of-way has been impacted by previous road construction and ditching, no Stage 2 assessment was recommended for this area. However any new properties along the right-of-way will require a Stage 2 assessment in advance of any impacts, in particular, those areas adjacent to the existing bridge should it be realigned.

Highway and Transportation

Stage 4 Archaeological Assessment - Tara Site*, Burlington, ONtario (Project Director / Senior Archaeologist)

This project involved the full salvage excavation of a large pre-contact Aboriginal settlement.

Stage 4 Archaeological Assessment - Highway 12*, Simcoe County (Project Director / Senior Archaeologist)

This project involved the analysis of a large collection of previously excavated materials along with the completion of the final project report.

Stage 3 Archaeological Assessment - Highway 6*, Central Ontario (Project Director / Senior Archaeologist)

This project involved the Stage 3 testing of one pre-contact Aboriginal camp as well as the full salvage excavation of a second pre-contact Aboriginal settlement.

Stage 2 Archaeological Assessment - Highway 401 Interchanges*, Southwestern Ontario (Project Director / Senior Archaeologist)

This project involved the Stage 2 assessment of various new interchange sites, County Road 42 and Highway 77, along Highway 401 in Southwestern Ontario.

Archaeological Assessment (Stage 4) - The Scarab Site*, Central Ontario (Project Director)

This project involved the salvage excavation of a large 3000 year old Aboriginal occupation.

Archaeological Assessment - Topsoil Monitoring at the Trust Site, Two Areas*, Central Ontario (Project Director / Senior Archaeologist)

Stage 1 and 2 Archaeological Assessments, Assessment of Two Areas and the Topsoil Monitoring at the Trust Site. This project involved the Stage 2 assessment of 800 meters of the Highway 6 (New) Right-of-Way (ROW) as well as the Stage 4 monitoring of topsoil removal at a small pre-contact Aboriginal camp.

Stage 4 Archaeological Assessment - Highway 6 (New)*, Central Ontario (Project Director / Senior Archaeologist)

Stage 4 monitoring in advance of Highway 6 (New) construction adjacent to the Jerome Iroquoian Village.

Heritage Impact Assessment - 3805 Salem Road*, Pickering, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1880's domestic structure in advance of construction of Highway 407 East Extension.

Heritage Impact Assessment - 268 Winchester Road*, Oshawa, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1880's domestic structure in advance of construction of Highway 407 East Extension.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Heritage Impact Assessment - 78 Catharine Street*, Hamilton, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1880's domestic structure in advance of demolition in advance of road widening.

Manning Road Corridor*, Tecumseh, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 1 and 2 Archaeological Assessments, Town of Tecumseh, Manning Road Corridor, St. Gregory's Road to Sylvestre Drive. R. Lucente Engineering. This project consisted of the Stage 2 field assessment of a four kilometer section of Manning Road in the Town of Tecumseh.

Heritage Impact Assessment - 5415 Solina Road*, Township of Darlington, Municipality of Clarington, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1880's domestic structure in advance of construction of Highway 407 East Extension.

Heritage Impact Assessment - 725 Old York Road*, Hamilton, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1880's domestic structure.

Tecumseh Road Corridor - Inventory of Underpass Bridges*, Tecumseh, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

Stages 1 and 2 Archaeological Assessments, Town of Tecumseh, Tecumseh Road Corridor, Manning Road to Bedell Street. R. Lucente Engineering. This project consisted of the Stage 2 field assessment of a four kilometer section of Tecumseh Road in the Town of Tecumseh.

Heritage Impact Assessment - 5675 Thickson Road North*, Whitby, Ontario (Project Director / Senior Archaeologist)

This project involved the Heritage Impact Assessment of an 1870's domestic structure in advance of construction of Highway 407 East Extension.

Inventory of Underpass Bridges*, Multiple Locations, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

This project involved the Heritage impact Assessment and scoring of 50 concrete Highway 401 and Highway 400 Underpass Bridges in Ontario.

Heritage Impact Assessment - 823 Old York Road*, Burlington, Ontario (Project Director / Senior Archaeologist)

Heritage Assessment of 823 Old York Road, City of Burlington, Ontario. Ministry of Transportation, Central Region. This project involved the Heritage Impact Assessment of an 1880's domestic structure in advance of construction of the Highway 407 East Extension.

Highway 402 Queue End Warning System*, Lambton County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

Front Street, Sarnia, Ontario to Lambton Road 26, Lambton County, Ontario. Delcan. This project consisted of the background research and preliminary field evaluation of a four kilometer section of Highway 402.

James Snow Parkway Extension*, Milton, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

Stage 1 to 4 Archaeological Assessments, Town of Milton, Ontario. SRM Associates. This project involved the Stage 4 of one Pre-contact Aboriginal camp.

Highway 40 (Courtright Line to Rokeby Line)*, Lambton County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

Stage 1 Archaeological Assessment, Highway 40, Courtright Line to Rokeby Line, Lambton County. Delcan. This project consisted of the background research and preliminary field evaluation of a 22 kilometer section of Highway 40.

Highway 24 (Highway 403 to Brant County Road 53)*, Brant County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)

Stages 1 and 2 Archaeological Assessment, Highway 24, from Highway 403 to Brant County Road 53. Delcan. This project consisted of the background research and preliminary field evaluation of an eight kilometer section of Highway 24.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Thames Street Bridge*, Ingersoll, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Heritage Impact Assessment, Thames Street Bridge, Ingersoll. Totten Simms Hubicki Associates. Heritage Impact Assessment of a 1938 Steel Warren Truss structure.

Stroy's Bridge Removal*, Wellington County, Ontario (Senior Archaeologist)
Stage 1 Archaeological Assessment and Heritage Impact Assessment, Stroy's Bridge Removal, Puslinch Township, Wellington County, Ontario. This project involved the archaeological assessment of those areas to be impacted by the removal of Stroy's Bridge and associated earthworks. The Heritage Impact Assessment involved the assessment of a 1905 one-span steel Pratt truss structure over the Speed River in Wellington County.

Highway 9 & 21 Bridges and Culverts*, Bruce County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 1-2 Archaeological Assessment. Stage 2 archaeological assessment as part of the Rehabilitation of Five Bridges and Rehabilitation/Replacement of Culverts on Highways 9 and 21 in the County of Bruce. The Stage 1 assessment had been previously completed by Golder Associates Ltd. and resulted in the recommendation that 12 culverts retained archaeological potential and would require Stage 2 assessment in advance of development (Golder 2009). The objective of the Stage 2 assessment was to physically inspect these 12 culverts within the study area and to locate any archaeological resources that might be present.

Highway 24 and Whitemans Creek Bridge*, Brant County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 4 Archaeological Assessment. archaeological assessment (Stage 1-3) was previously conducted by Archaeologix Inc. as part of the environmental assessment for the reconstruction of a portion of Highway 24 in Brantford Township, Brant County. The project involved the rehabilitation of Highway 24 from 600 meters north of the Highway 403 interchange southerly to Brant Road 53 (approximately 4.7 kilometers in length) and Whitemans Creek Bridge Replacement. The Stage 4 assessment of Location 1 (AgHc-164) was conducted and resulted in the documentation of one Early Archaic pre-contact Aboriginal lithic scatter interspersed with a limited amount of late 19th century and recent historic Euro-Canadian artifacts.

Highway 7 Rehabilitation*, Perth County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 2 Archaeological Assessment, Highway 7 Rehabilitation from Prospect Hill Road to Perth County Line 9. This project involved the Stage 2 assessment of 18 kilometers of Right-of-Way (ROW), including heritage impact assessments for three bridge structures.

Cameron Road Extension*, Bruce County, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 1-2 Archaeological Assessment. Stage 1 and 2 archaeological assessment for the approximate 20 meter by 1300 meter right-of-way lands to be impacted by the proposed reconstruction of Municipal Cameron Road, west of Bruce Road 9 at the border of the Town of South Bruce Peninsula, Municipality of Northern Bruce Peninsula, Bruce County, Ontario. The Stage 1 archaeological assessment determined that areas retaining archaeological integrity were likely on the property and that there was sufficient archaeological potential to necessitate a Stage 2 field assessment. The required Stage 2 archaeological assessment did not result in the identification of any archaeological sites of cultural heritage value or interest and no further archaeological assessment was recommended.

Block Line Road Extension*, Kitchener, Ontario (Cultural Sciences Project Director / Senior Archaeologist)
Stage 2 Archaeological Assessment. This Stage 2 assessment was conducted to meet the standard requirements of a Class Environmental Assessment prior to the construction of the roadway and bridge extension of Block Line Road. The assessment did not result in the identification of any archaeological sites and no further archaeological assessment was recommended.

Power Transmission & Distribution City of Hamilton Easement through Hydro One Corridor*, Hamilton, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1-2) was conducted for an approximate 0.9 acre study area located on Part of Lot 1, Concession 1, in the former Glancaster Township, Hamilton, Ontario. The Stage 1-2 archaeological assessment did not result in the recovery of any archaeological material, consequently no further work was required.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Wilmot Transformer Station*, Region of Waterloo, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1 & 2) was conducted for an approximate one hectare property located at 1799 Wilmot Centre Road, on part of Lot 14, Bleam's Road Concession, Township of Wilmot, Region of Waterloo, Ontario. The Stage 2 archaeological assessment did not result in the identification of any archaeological concerns. As no cultural material was recovered during the Stage 2 archaeological field investigation, the property was judged to have limited cultural heritage value or interest and no further assessment was recommended.

Hydro One Hydro Puller-Tensioner Stations*, Elgin County and Middlesex County, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1 & 2) was conducted for sixteen puller-tensioner station pads associated with ten hydroelectric towers and the Buchanan Transmission Station along the Chatham to Buchanan transmission corridor in Elgin and Middlesex counties. The study area was comprised of sixteen 20 by 20 meter pad locations as well as the associated seven meter wide access roads. All areas identified by Hydro One to be impacted by the puller-tensioner pads and their associated access roads were fully subject to assessment. The Stage 2 field assessment did not result in the identification of any archaeological material and no additional archaeological assessment was required.

Hydro One Bruce to Milton Transmission Corridor Project (Western Portion)*, Bruce County and Grey County, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stages 1 & 2) was conducted for a 90.49 kilometer long, 53 to 55 meter wide linear corridor, encompassing approximately 500 hectares, located between Lot 7, Concession 4, Bruce Township, Bruce County and Lot 3, Concession 6, Proton Township, Grey County, Ontario. The Stage 2 archaeological assessment resulted in the identification of 14 locations, four producing pre-contact Aboriginal cultural material, two locations producing both pre-contact Aboriginal and historic Euro-Canadian cultural material and ten historic Euro-Canadian homestead sites. The Stage 3 assessment of 5 Euro-Canadian Locations returned a large number of primarily mid 19th century artifacts and Stage 4 assessment was recommended.

Bracebridge Falls and Wilson Falls Generating Stations*, Bracebridge, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the site of a proposed turbine removal and replacement and tailrace channel widening at Bracebridge Falls station and demolition and replacement of the Wilson's Falls generating station, Town of Bracebridge, Muskoka County, Ontario. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be very low for these two properties. No further archaeological assessment was recommended.

Renewable Energy

Port Albert Wind Farm*, Huron County, Ontario (Cultural Sciences Project Director)

An archaeological assessment (Stage 1 & 2) was conducted for various parcels of land totalling approximately 400 acres, located on Part of Lots 1E & 1W, Concessions I, II, III & IV, Ashfield Township, Huron County, Ontario. The Stage 2 examination resulted in the identification of two locations producing pre-contact Aboriginal artifacts and one location producing 19th century Euro-Canadian cultural material. Due to the potential significance and information potential of the Euro-Canadian site it was recommended it be subject to additional Stage 3 investigative work in advance of any developmental impacts.

Kent Breeze Wind Farm*, The Municipality of Chatham-Kent, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for two parcels located in the Municipality of Chatham-Kent. The western parcel covered parts of Lots 4, 5, 6 and 7, Concession 1, and parts of Lots 5 and 6, Concession 2; the eastern parcel covered parts of Lots 8, 9, 10, and 11, Concession 2, all in the Geographic Township of Camden. Both parcels were slated to be sites for wind turbines, most likely in the northern portions of both parcels. The archaeological potential for pre-contract Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. The historic Euro-Canadian potential was on account of documentation indicating possible late 18th century and early 19th century occupation plus the continued existence of historic transportation routes. As a result, Stage 2 archaeological assessment was required for both parcels.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

TCI Adelaide Wind Farm*, Middlesex County, Ontario (Cultural Sciences Project Coordinator)

A Stage 1 archaeological background study was conducted for a parcel in the Township of Adelaide-Metcalf, Middlesex County, Ontario. This area would eventually be the site of 30 to 40 wind turbines. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. The historic Euro-Canadian potential was on account of documentation indicating early 19th century occupation, abandoned villages, plus the continued existence of historic transportation routes such as Egremont Road. As a result, Stage 2 archaeological assessment was required for all areas to be disturbed during tower or access road construction.

TransCanada Romney Wind Farm*, Essex County and The Municipality of Chatham-Kent, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for a large 17,072 hectare parcel spanning the Municipality of Chatham-Kent and Essex County. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the middle of the 19th century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites.

Twenty Two Degrees Wind Farm*, Huron County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the proposed Twenty Two Degree Wind Energy wind farm and associated transmission line. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high on the project site. For pre-contact Aboriginal sites this assessment was based on the presence of nearby potable water sources, level topography, strandlines, and agriculturally suitable soils. The determination of historic Euro-Canadian archaeological potential was based on the documentation indicating occupation from the middle of the 19th century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites, their associated infrastructure, and the transmission line.

Aaron Wind Farm*, Saugeen Shores, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the proposed Arran Wind Farm. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high on the project site. As a result, Stage 2 archaeological assessment was recommended prior to any ground disturbance activities associated with the construction of the Aaron Wind Farm.

Summerhaven Wind Energy Centre*, Haldimand County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the proposed Summerhaven Wind Energy Centre. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 Section 22(3) of the Environmental Protection Act. As a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites and their associated infrastructure. Further Stage 2 archaeological assessment was recommended for any areas to be impacted by turbine construction, access road construction, or other infrastructure construction related activities.

North Bruce Wind Energy Project*, Bruce County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the proposed North Bruce Wind Energy Project. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high and as a result, Stage 2 archaeological assessment was recommended for the project site.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Bluewater Wind Energy Centre*, Huron County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was conducted for the proposed Bluewater Wind Energy Centre to be located in Huron County, Ontario. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the Environmental Protection Act. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high and as a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites and their associated infrastructure.

Armow Wind Project*, Kincardine, Ontario (Cultural Sciences Project Manager)

A Stage 1 archaeological background study was conducted for the proposed Armow Wind Energy Project. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high and as a result, Stage 2 archaeological assessment was recommended for the project site.

Grand Renewable Energy Park*, Haldimand County, Ontario (Cultural Sciences Project Director)

A Stage 1 archaeological background study was previously conducted for a project area located in the Geographic Townships of Dunn, Rainham, South Cayuga, North Cayuga and Walpole in Haldimand County, Ontario. This area is proposed to be the site of approximately 67 wind turbines, at least three areas of solar panels and project-related infrastructure comprising the Grand Renewable Energy Park. As a result of the Stage 1 assessment, Stage 2 archaeological assessment was recommended. The 2010 - 2011 winter field assessment resulted in the identification of 55 locations, comprising 54 pre-contact Aboriginal sites and one historic Euro-Canadian site. In summary, 25 of the 55 archaeological locations identified within the study area in were recommended for Stage 3 assessment. Further field assessment was conducted in the Spring/Summer of 2011, which resulted in the identification of a further 128 locations, all of which are pre-contact Aboriginal sites. In order to further evaluate their cultural heritage value or interest, 48 of the 128 archaeological locations identified within the study area in the spring and summer of 2011 have been recommended for Stage 3 assessment. Stage 3 assessment is ongoing.

Water

Dorchester Water Treatment / Reservoir Facility*, Middlesex County, Ontario (Project Director)

Archaeological assessments, Stages 1, 2 & 3, were conducted for an approximate 3.25 hectare property located on part of Lot 16, Concession B, Geographic Township of North Dorchester, Middlesex County, Ontario. These assessments were undertaken as part of the Class Environmental Assessment planning process as a Schedule C project, for the new Dorchester Water Treatment/Reservoir Facility. The Stage 3 assessment resulted low artifact recovery rates from all of the test units. However five small areas were identified as requiring additional Stage 4 mitigation if they could not be satisfactorily avoided during construction of the new facility. One of these locations consisted of a cluster of three projectile points, and required block excavation. The remaining four locations consisted of sparse scatters of chipping detritus and highly fragmented Late Woodland ceramics.

Murray/Marr Storm Water Management Facilities 2 & 3 and Murray Channel Reconstruction*, London, Ontario (Project Director)

Stage 1 & 2 archaeological assessments were conducted for an approximate 50 hectare area to be impacted by the construction of the Murray/Marr Storm Water Management Facility and the Murray Channel Reconstruction, on part of Lots 16 & 17, Concession 3, former Township of Westminster, now City of London, Ontario. Background research indicated the presence of eight registered archaeological sites within two kilometers of the study area. The Stage 2 field assessment resulted in the identification four find spots of non-diagnostic pre-contact Aboriginal artifacts. Due to the limited significance and information potential of these locations, additional assessment was not recommended.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

Hyde Park Storm Water Management Facility No. 4*, London, Ontario (Project Director)

Archaeological assessments, Stage 1, 2 & 3, were conducted for an approximate 3.5 hectare area to be impacted by the construction of a new storm water management facility on Part Lot 25, Concession IV, City of London, Ontario. The Stage 2 field assessment resulted in the identification of one previously unregistered archaeological site producing pre-contact Aboriginal material. Additional Stage 3 investigation was recommended for this location to further evaluate its significance and information potential. The Stage 3 assessment resulted in the recovery of a minimal amount of pre-contact Aboriginal material and consequently, no additional archaeological work was required for this location.

North Perth Drainage Project*, Listowel, Ontario (Project Director)

Stage 1 and 2 archaeological assessments were conducted for an approximate five acre area to be impacted by the construction of a new storm water management facility associated with the North Perth Drainage Project, on part of Lot 35, Concession 1, Geographic Township of Elma, in Listowel, Ontario. The study area consists of an overgrown field adjacent to the Middle Maitland River. Although the archaeological potential was high, no resources were documented and no additional assessment was recommended.

Dingman Pumping Station Storage Facility*, London, Ontario (Cultural Sciences Project Director)

Stage 1 and 2 archaeological assessments were conducted for an approximate five acre area to be impacted by the construction of the Dingman Pumping Station Storage Facility located on part of Lot 47, Concession 3, former Township of Westminster, now City of London, Ontario. Background research indicated the presence of eight registered archaeological sites within two kilometers of the study area. However the Stage 2 field assessment did not result in the identification of any archaeological materials and additional assessment was not recommended.

Byron Pumping Station Class Environmental Assessment*, Middlesex County, Ontario (Cultural Sciences Project Director)

Stage 1 archaeological overview/background study was conducted as part of the preparation of the Byron Pumping Station Class Environmental Assessment. The majority of the proposed impact corridor falls within the area predetermined by the City of London to have moderate to high potential for archaeological sites and retains sufficient integrity to harbour intact archaeological deposits. As such, it was recommended that when the final design plans had been finalized, those portions of the study area not previously assessed to the current standards of the Ministry of Culture, should be assessed prior to any ground disturbance impacts.

Water Transmission Main Archaeological Study*, Middlesex County, Ontario (Project Director)

A Stage 1 archaeological background study was conducted for a 17 kilometer linear water main corridor located in Middlesex County, running through Middlesex Centre Township from Arva to Komoka. The only area that still retained archaeological potential was the stretch of Melrose Drive from Egremont Drive to Vanneck Road, including the unopened road allowance. In addition, the stretch of road along the north side of Oxbow Road but south of Campbell Cemetery was most likely disturbed but it was recommended that it should be examined as a precautionary measure. As a result, Stage 2 assessment was recommended for the east end of Melrose Drive and for the north side of Oxbow Drive.

Wonderland Pumping Station*, London, Ontario (Project Director)

An archaeological assessment, Stages 1-4, was conducted for two potential pumping station locations along Dingman Drive in the southwest end of the City of London, Ontario, in conjunction with the White Oak Road South Sanitary Servicing Project Class Environmental Assessment. The Stage 4 excavations of the Euro-Canadian component of the location produced a relatively small assemblage of artifacts that were consistent with an early to mid 19th century domestic cabin. Stage 4 excavations of the pre-contact Aboriginal component of the location produced a relatively small number of artifacts, with no diagnostic artifacts recovered. In all likelihood, the Aboriginal component of this location represented a temporary camp associated with hunting and hide preparation activities.

* denotes projects completed with other firms

Jim Wilson M.A.

Regional Discipline Leader, Archaeology

**Water Transmission Main Archaeological Study*,
Middlesex County, Ontario (Project Director)**

A Stage 1 archaeological background study was conducted for an approximately eight kilometer linear water main corridor located in Middlesex County, running through Middlesex Centre and Caradoc Townships from Komoka to Mount Brydges. Given the low archaeological potential due to modern road modifications, no other Stage 2 assessment was deemed necessary.

** denotes projects completed with other firms*