

**The 2011 Stage 1-2 Archaeological Assessment of the
Proposed Sixth Line Corporation Development
Part of Lot 15, Concession 1 N.D.S.,
Geographic Township of Trafalgar,
Town of Oakville,
Regional Municipality of Halton,
Ontario**

Submitted to

Freeman Planning Solutions Inc.
6424 Eden Drive
Mississauga, Ontario
L5N 3H3
Telephone – 1 905-824-4375

and

The Ontario Ministry of Tourism, Culture and Sport

Prepared by

D.R. Poulton & Associates Inc.
69 Langarth Street West, London, Ontario, N6J 1P5
Telephone – 519 434-0319 Facsimile – 519 434-0517
e-mail - drpoulton@rogers.com.

Licensee: Sherri Pearce, Licence #P316
Type of Report: Revised

PIF # P316-111-2011

March 26, 2013

TABLE OF CONTENTS

Project Personnel	iv
Acknowledgments	iv
Executive Summary	v
1.0 PROJECT CONTEXT	1
1.1 Development Context	1
1.2 Historical Context	3
1.3 Archaeological Context	10
2.0 STAGE 1 ANALYSIS AND CONCLUSIONS	19
2.1 Known Sites of Demonstrable or Potential Significance	19
2.2 Potential for as-yet Undiscovered Sites	20
3.0 FIELD METHODS	24
4.0 RECORDS OF FINDS	29
4.1 Location 1	29
4.2 Location 2	33
4.3 Location 3	35
5.0 STAGE 2 ANALYSIS AND CONCLUSIONS	37
5.1 Location 1 Analysis	37
5.2 Location 2 Analysis	38
5.3 Location 3 Analysis	38
5.4 Conclusions	39
6.0 RECOMMENDATIONS	40
7.0 ADVICE ON COMPLIANCE WITH LEGISLATION	42
8.0 REFERENCES CITED	44

List of Tables

Table 1	Cultural Chronology for South-Central Ontario	4
Table 2	Registered Archaeological Sites in the Study Area	12
Table 3	Summary Data on Registered Archaeological Sites in the Study Area	14
Table 4	Frequency of Stage 2 Cultural Remains	30

List of Figures

Figure 1	Location of the Sixth Line Corporation Property	49
Figure 2	Sixth Line Corporation Proposed Plan of Development	50
Figure 3	Facsimile of the 1877 Historic Atlas Map of Trafalgar Township	51
Figure 4	Key Plan of Photographic Plates	52
Figure 5	Stage 2 Archaeological Survey Coverage and Techniques	53

List of Plates

Plate 1	Pedestrian Survey in Progress, View Southwest	55
Plate 2	Sixth Line Survey, View West to Low and Wet Area	55
Plate 3	Surface Survey in Progress, View North across Low and Wet Area	55
Plate 4	Surface Survey in Progress, View Northwest	55
Plate 5	Surface Survey in Progress, View South	55
Plate 6	Sixth Line Survey Area, View Northwest	55
Plate 7	View Northwest of Slope Leading to Low and Wet Area	56
Plate 8	Area of Disturbance, View North	56
Plate 9	Close-up of Test Pit Lacking Topsoil in Disturbed Area	56
Plate 10	Test Pit Survey in Progress, View West	56
Plate 11	Test Pit Survey in Progress, View Southeast	56
Plate 12	Test Pit Survey in Progress, View Southeast	56
Plate 13	Sixth Line Stage 2 Survey, Select Artifacts	57

Appendix

2011 Stage 2 Artifact Catalogue for the Sixth Line Corporation Property

Project Personnel

Project Manager	Dana R. Poulton
Project Archaeologist	Sherri H. Pearce (Licence # P316)
Field Directors	Chris G.W. Neill (Licence # P242) Sherri H. Pearce (Licence # P316)
Field Supervisor	Lorelyn Giese
Field Assistants	Daniella Horley Maddie Hague Rob Danter
Report Preparation	Dana R. Poulton Lorelyn Giese
Draughting	Christine F. Dodd
Photography	Sherri H. Pearce Lorelyn Giese Chris G.W. Neill

Acknowledgments

This assessment was facilitated by the following individuals and their agencies:

- **Rob Freeman**, MCIP, RPP., Freeman Planning Solutions Inc.; and
- **Robert von Bitter**, Archaeological Data Coordinator, Culture Services Unit, Ministry of Tourism, Culture and Sport.

Executive Summary

In April 2011, Arutip Engineering Limited, on behalf of Sixth Line Corporation, contracted D.R. Poulton & Associates Inc. to carry out a Stage 1-2 archaeological assessment of the proposed residential development of the Sixth Line Corporation property (*c.f.* page 1). As described on page 13 of the report, the subject property has a surface area of 37.57 hectares. It is located north of Dundas Street East, on the east side of Sixth Line, in the Town of Oakville, Regional Municipality of Halton. The property covers most of the south half of Lot 15, Concession 1 N.D.S., Trafalgar Geographic Township.

As detailed on pages 2-3 of the report, the original report on the archaeological assessment was submitted to the Ministry on November 5, 2012. It was the subject to a letter of review of February 22, 2013 that required it be revised. This is the revised version of the report on the 2011 assessment.

As described on pages 13-14 of this report, the subject property is bounded to the west by Sixth Line Road and several private residential housing lots, to the south by Dundas Street, and to the north and east by agricultural fields. Figure 1 shows the location of the Sixth Line Corporation property. Figure 2 is the proposed draft plan of the development. Figure 3 is a facsimile of the 1877 Historical Atlas map of Trafalgar Geographic Township; it shows the location of the property relative to mapped conditions as of 1877.

The Stage 1 background study did not identify any past archaeological investigations or known archaeological sites within or in close proximity to the proposed Sixth Line Corporation development (*c.f.* page 16). However, it did determine that archaeological assessments have been carried out in the lands to the north, south and west of the property, and that 71 archaeological sites have been registered within a one kilometre radius of the property. In addition, the assessment determined that the subject property had a moderate to high potential for as-yet undiscovered First Nations and Euro-Canadian archaeological remains (*c.f.* page 23).

The description of the subject property is presented in pages 27 and 30-37 of the report. The property primarily consists of five active agricultural fields. In addition, it is transected by the valley containing West Morrison Creek. Finally, the south end of the property consists of non-arable lands that include a long abandoned agricultural field and an abandoned farmstead.

As described on pages 25-29 of this report, the Stage 2 survey of the subject lands was undertaken on May 2, June 29 and July 6, 2011. On June 29, the cultivated portions of the property were assessed by a five-metre interval Stage 2 pedestrian survey. A Stage 2 test pit survey at a five-metre interval of the non-arable portions of the property occurred on all three dates. Figure 4 shows existing conditions within the property at the time of the survey; it also shows the location and direction of the 12 photographs that are illustrated in Plates 1 to 12 of this report. Finally, Figure 5 shows the extent of the archaeological survey coverage of the property; it also shows the survey techniques that were used.

The systematic survey encompassed lands with a surface area of 32.0 hectares, representing 85.3% of the entire property. Adding this total to the 1.5 hectares that were surveyed by systematic shovel test pitting, the survey of the Sixth Line Corporation property covered lands with a combined surface area of 33.5 hectares; they represent 89.3% of the entire property. The lands surveyed included all areas that had a potential for extent archaeological remains.

As detailed in Section 3.0 of this report (page 27), the survey resulted in the discovery of three sites. They were designated Locations 1, 2 and 3. The analyses of the artifacts from these sites is presented in Section 4.0 (pages 30-37) and the interpretations of the sites and their cultural heritage value and interest or lack thereof is presented in Section 5.0 (pages 30-37).

Locations 1 and 2 both include isolated First Nations findspots of unknown age and cultural affiliation; each is represented by a single undiagnostic chipped lithic artifact. In addition, Location 1 includes Euro-Canadian domestic refuse that dates from the late 19th century to the 20th century and Location 2 includes a modest amount of Euro-Canadian domestic refuse that dates ca. 1825-1850 A.D. Finally, Location 3 consists of an isolated Euro-Canadian findspot that is represented by a single piece of domestic tableware; it dates to the late 19th century or early 20th century.

The potential heritage value and interest of the archaeological components were evaluated using the criteria set out in the Standards and Guidelines (Ministry of Tourism and Culture 2011, Stage 2: Property Assessment, page 27). The results determined that the First Nations components of Location 1 and Location 2 do not have any cultural heritage value or interest and do not require any further archaeological assessment (*c.f.* page 31). Furthermore, it was also considered that the late historic isolated Euro-Canadian findspot that is represented by Location 3 of the Sixth Line Corporation property does not have any cultural heritage value or interest and does not require any further archaeological assessment (*Ibid*). In contrast, the Euro-Canadian component of Location 2 is considered to have potential cultural heritage value; as such, it warrants a more intensive Stage 3 archaeological assessment (*c.f.* page 31). This assessment is with Standard 2.2.1c, which states that post-contact archaeological sites containing at least 20 artifacts that pre-date the period of use to before 1900 require Stage 3 assessment (*Ibid*).

The Stage 1-2 archaeological assessment of the proposed Sixth Line Corporation development resulted in the formulation of a series of conclusions, recommendations and requests (*c.f.* pages 41-42). The key recommendations are as follows.

1. As it is the finding of the assessment that Locations 1 and 3 of the proposed development do not have any cultural heritage value or interest, it is recommended that neither of these sites warrants any further archaeological investigations or concerns.
2. The results of the Stage 2 survey determined that Location 2 does have potential cultural heritage value and interest. As such, the analysis of the cultural remains that were recovered by the survey determined that the site warrants a more intensive Stage 3 level of assessment.
3. It is recommended that the Ministry of Tourism, Culture and Sport issue a letter of satisfaction concurring with the findings of the Stage 1-2 assessment and accepting the present report into the Ontario Public Register of Archaeological Reports.
4. It requested that a copy of the Ministry's letter be forwarded to Rob Freeman of Freeman Planning Solutions. His e-mail address is planningsolutions@sympatico.ca.

1.0 PROJECT CONTEXT

The Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism and Culture 2011), which came into effect on January 1, 2011, define up to four sequential stages in an archaeological assessment. Stage 1 consists of background research to identify any past archaeological investigations or known sites. The background study also identifies the potential for as-yet undiscovered sites. Stage 2 consists of a field survey to confirm the presence or absence of archaeological sites. Stage 3 consists of a more detailed assessment of any sites that are of demonstrable or potential significance as heritage resources and planning concerns. Finally, Stage 4 consists of the mitigation of significant sites either by avoidance and preservation or by the implementation of salvage excavations.

Standard 3 of Section 7.2 of the Standards and Guidelines (Ibid: 115) states the following standard with respect to the reporting requirements for archaeological assessments: *“The final report must be filed in the form and manner as specified by the ministry in Section 7.5.”*

Standard 1 of Section 7.5 of the Standards and Guidelines (Ibid: 121) further states the following standard with respect to the reporting requirements for archaeological assessments: *“All project reports must contain the sections listed in the first column of Table 7.1.”* The present report conforms in all respects to the reporting requirements of the Standards and Guidelines.

This report documented the methods and results of the 2011 Stage 1-2 archaeological assessment of the proposed residential development of the Sixth Line Corporation in the Town of Oakville. Section 7.5.5 of the Standards and Guidelines (Ibid: 124) requires that the Project Context section of each report include the context for the archaeological investigations and that it cover three areas: development context; historical context; and archaeological context. They are covered in the following three subsections presented below.

1.1 Development Context

The information contained in this section of the report is being presented to satisfy Standard 1, 2 and 3 of Section 7.5.6 of the Standards and Guidelines (Ibid: 124-125).

In the last week of April 2011, Arutip Engineering Limited, on behalf of Sixth Line Corporation, contracted D.R. Poulton & Associates Inc. to carry out a Stage 1-2 archaeological assessment of the proposed Sixth Line Corporation development; it primarily consists of a residential development. Figure 1 shows the location of the property. Figure 2 is a draft plan of the proposed development.

The standard concerning permission for access that is specified in the standards and guidelines is as follows: *“Provide statements that the landowner or landowner’s representative (e.g. planner, engineer, lawyer) gave permission for the licensee to access the property to conduct all required archaeological fieldwork activities, including the recovery of artifacts, and state any limits placed on access (e.g. time limits, refusal of access to portions of property)”* (Ministry of Tourism and Culture 2011, Standard 3 Section 7.5.6, pages 125). In the present case, time limits and refusal of access were not issues for the Stage 2 survey of the proposed Sixth Line Corporation development. Permission for access to the property to conduct the archaeological survey and to remove and curate

any artifacts that might be discovered was granted by the landowner in advance of the fieldwork. The Ontario Ministry of Tourism, Culture and Sport designated the assessment as PIF #P316-111-2011. The assessment was conducted under Archaeological Consulting Licence #P316, issued by the Province of Ontario to Sherri Pearce of D.R. Poulton & Associates Inc. It was carried out in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario RSO 1990a) and the requirements of the *Ontario Planning Act* (Government of Ontario RSO 1990c). Finally, the assessment conformed to the Standards and Guidelines.

Further to the above, the assessment was also conducted in accordance with the 2005 Provincial Policy Statement 2.6.2, which has provisions for the conservation of archaeological resources, a definition of the same, and provisions for archaeological assessments. Finally, it was conducted in accordance with the Ontario Ministry of Culture's 2006 Heritage Tool Kit, most particularly with respect to Infosheet #3 and Infosheet #6; they detail provisions for the conservation of archaeological resources and provisions for heritage impact statements, respectively.

A few years ago the Ministry instituted a new system for the submission and review of archaeological assessment reports. Under this system, the first report an archaeological consultant submits on an assessment is termed the original report. If the review of the original report by one of the Ministry's Archaeological Review Officer identifies no issues with the report, the Ministry issues what is termed a letter of satisfaction accepting the report into the Ontario Provincial Register of Archaeological Reports. On the other hand, if the Archaeological Review Officer has issues with the report, the consultant has to make the changes necessary to resolve the issues, then submit what is termed a revised report.

In the present case, D.R. Poulton & Associates Inc. submitted the report on the 2011 Stage 1-2 archaeological assessment of the Sixth Line Corporation property on November 5, 2012. The report was the subject of a review letter of February 22, 2013. The letter of review by the Ministry identified four issues it wanted addressed. This report is the revised report on the 2011 Stage 1-2 archaeological assessment of the Sixth Line Corporation property.

Standard 2 of Section 7.5.6 of the Standards and Guidelines requires that the Development Context sections of assessment reports must provide any additional development-related information that may be relevant to the choice of fieldwork strategy of the recommendations (e.g., municipal master plan, forest management plan). In the present case, and as described in Section 1.3, the sources consulted included the archaeological master plan of the Regional Municipality of Halton (Archaeological Services Inc. 1998, 2009). However, as described in Section 2.2, the assessment considered that the site potential modeling the municipal master plan depicted for the proposed Sixth Line Corporation development was flawed. In consequence, the master plan's site potential modelling didn't factor into the fieldwork strategy for the Stage 2 survey of this property.

The records and artifacts pertaining to this project are currently housed in the corporate offices of D.R. Poulton & Associates Inc. The artifacts are contained within a 5lb plastic bag that measures 19 mm in length, 17 mm in width and 10 mm in depth. This bag is currently stored in the London, Ontario office of D.R. Poulton & Associates Inc., in a bankers' box labelled "2011 Small Sites". If the opportunity permits, however, the project archive and artifact assemblage will be transferred to a suitable long term repository. Potential repositories include local or other museums and the storage facility that is maintained by the Toronto office of the Ministry of Tourism, Culture and Sport.

1.2 Historical Context

The Standards and Guideline require that the Historical Context subsection of a report must include a statement concerning the rationale for fieldwork strategy (Ministry of Tourism and Culture 2011: Standard 2, Section 7.5.7, page 125). In the present case, the vast majority of the subject lands consist of five discrete agricultural fields. They comprise 85% of the surface area of the property. The remaining 15% of the property consists of non-arable lands. They include West Morrison Creek Valley, a small abandon agricultural field that is overgrown in scrub vegetation, an abandoned residential complex with an overgrown lawn, a poorly drained area and a disturbed area.

Given the current land use, the arable lands were assessed by a systematic pedestrian survey. The non-arable lands that were considered to have a potential for archaeological remains were surveyed by a systematic shovel test pitting. The purpose of the survey was to confirm the presence or absence of archaeological remains and, if archaeological remains were present, to determine if they showed heritage value and interest as defined in Table 3.2 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 60-61).

This section of the report also provides the historic context for the Euro-Canadian settlement of the area of the proposed development, as required by Standard 1 of Section 7.5.7 of the Standards and Guidelines (Ibid: 125). Brief summaries are included on the major environmental changes through time, and on the characteristics of settlement and subsistence patterns for the relevant time periods and cultures represented in the history of the area. For reference purposes, a cultural chronology of the region is presented in Table 1.

The Paleo-Indian Period (9500-7900 B.C.)

The first known human occupation of the province took place ca. 9500 B.C., following the retreat of the Wisconsin glacier. During this period, the environment in southern Ontario was characterized by a cool climate. The vegetation, in transition from spruce to pine dominated forests, would have resembled the modern sub-arctic.

The initial occupation of southern Ontario by Paleo-Indian peoples took place toward the end of a period of high water levels in the Great Lakes, including Lake Algonquin in the Lake Huron Basin, early Lake Erie to the south and Lake Iroquois in the Lake Ontario Basin to the east. Based on radiocarbon dates, Lake Iroquois averages 12,000 years old. It drained south through the Mohawk and Hudson valleys to the Atlantic Ocean. Water levels in Lake Iroquois were higher than in the present Lake Ontario. Over time, the retreat of glaciers and isostatic rebound led to the opening of the North Bay outlet ca. 8500-8000 B.C., draining Lake Algonquin and the other great lakes eastward. The resulting low water levels created Lake Stanley in the Lake Huron Basin, Lake Hough in the Georgian Bay Basin, what were in effect a series of large ponds in the Lake Erie Basin and lower than current water levels in the Lake Ontario Basin.

Paleo-Indian sites in the Great Lakes region are presumed to relate to a focal adaptation based primarily upon the communal hunting of seasonally migrating herds of woodland caribou. In general, favourite Paleo-Indian site locations include areas adjacent to glacial spillways and kettle lakes, often near present-day swamps on loam soils proximal to muck soils representing the margins of relic pro-glacial or post-glacial lakes. The most diagnostic Paleo-Indian artifacts consist of various types of Early Paleo-Indian fluted projectile points (ca. 9500 - 8500 B.C.) and of projectile

points of the Late Paleo-Indian Hi-Lo type (ca. 8300 - 7900 B.C.).

Table 1 Cultural Chronology for South-Central Ontario

PERIOD	GROUP	TIME RANGE	COMMENT
PALEO-INDIAN			
	Fluted Point Hi-Lo	9500 - 8500 B.C. 8300 - 7900 B.C.	Big game hunters; small nomadic groups
ARCHAIC			
Early	Nettling	7700 - 6900 B.C.	Nomadic hunters and gatherers.
	Bifurcate Base	6800 - 6000 B.C.	
Middle	Laurentian	3500 - 2500 B.C.	Transition to territorial settlements.
Late	Lamoka	2500 - 1800 B.C.	Polished/ground stone tools
	Broad Point	1800 - 1400 B.C.	
	Crawford Knoll	1500 - 500 B.C.	
	Glacial Kame	ca. 1000 B.C.	Burial ceremonialism
WOODLAND			
Early	Meadowood	1000 - 400 B.C.	Introduction of pottery
	Red Ochre	1000 - 500 B.C.	
Middle	Point Peninsula	300 B.C. - 500 A.D.	Long distance trade networks. Incipient horticulture
	Princess Point	500 – 800 A.D.	
Late	Pickering	800 - 1280 A.D.	Transition to village life and agriculture
	Uren	1280 - 1330 A.D.	Large village sites
	Middleport	1330 - 1400 A.D.	Widespread stylistic horizon
	Huron & Neutral	1400 - 1650 A.D.	Tribal differentiation and warfare
HISTORIC			
Early	Odawa, Ojibwa, Mississauga	1700 - 1875 A.D.	Social displacement
Late	Euro-Canadian	1800 A.D. – present	European settlement

The Paleo-Indian period was characterized by gradually warming temperatures and by the northward migration of modern flora and fauna that were established throughout their current range by around 4000 B.C. Water levels continued to rise throughout this period, but in the earlier millennia vast areas in the Lake Erie, Lake Huron and Lake Ontario basins were dry and habitable. Indeed, research suggests that these lake plains would have represented the richest environment for prehistoric hunters and gatherers in the entire Lower Great Lakes region, and that they probably contained a

wealth of early Camps and other archaeological resources that were later flooded. To date, relatively few sites of the Paleo-Indian period have been discovered in North Oakville and vicinity.

The Archaic Period (7700-1000 B.C.)

Archaeologists divide the Archaic Period into three sequential sub-periods: the Early Archaic (ca. 7700 to 6000 B.C.), the Middle Archaic (ca. 3500 to 2500 B.C.) and the Late Archaic (ca. 2500 to 1000 B.C.). Sites of the Archaic period are common in North Oakville and vicinity.

In general, settlement and subsistence patterns of the Archaic Period are characterized by small camps and scattered findspots related to a seasonal round of hunting, fishing and the gathering of wild plant foods. A significant development in settlement at the very end of the Late Archaic was the use of communal cemeteries by peoples of the Glacial Kame Culture. These cemeteries date to ca. 1000 B.C. and typically feature rich mortuary ceremonialism.

The Woodland Period (1000 B.C. – 1650 A.D.)

The Woodland Period that follows the Archaic in the lower Great Lakes region spans a series of important changes in culture and adaptation. This period is most commonly divided into three chronological sub-periods: Early, Middle and Late.

Early Woodland (ca. 900 to 500 B.C.)

The Woodland Period is marked by the introduction into Ontario of pottery, the earliest of which dates to the Early Woodland sub-period. Beyond this there appear to have been no substantial changes in the hunting, fishing and gathering settlement and subsistence patterns followed during the Late Archaic. Burial ceremonialism, however, suggest an increased social or territorial identity with a particular resource area such as a drainage system. Mortuary ceremonialism is characteristic of the Early Woodland and, as expressed by the inclusion of elaborate grave goods in burials, represents the fluorescence of a pattern recorded for the slightly earlier Glacial Kame Culture of the Terminal Archaic. Early Woodland sites are relatively rare in North Oakville and vicinity.

Middle Woodland (ca. 400 B.C. to 800 A.D.)

This sub-period reflects, at least initially, a continuation of the settlement and subsistence patterns and mortuary ceremonialism previously described. As represented by the Point Peninsula Complex (300 B.C. - A.D. 500), large fishing stations located at major rapids to exploit spring-spawning fish are particularly in evidence. By about A.D. 500, Middle Woodland populations centred on large drainages with extensive flood plains began experimenting with incipient corn agriculture. By A.D. 700 corn had begun to assume a significant role in settlement and subsistence, and major habitation sites were shifting away from larger rivers onto higher ground adjacent to minor tributaries. As with the preceding Early Woodland time period, Middle Woodland sites are relatively rare in North Oakville and vicinity.

Late Woodland (ca. A.D. 800-1650)

The Late Woodland sub-period spans one of the most dynamic series of changes in the entire 11,000 year history of Ontario. This sub-period covers the immediate origins and subsequent development of the various Iroquoian-speaking historic tribal confederacies in southern Ontario, the Neutral (also known as the Attawandaron) and the Huron-Petun, down to the time of the first direct contact with Europeans in the early 17th century.

Although the Late Woodland subsumes many changes in settlement and subsistence patterns, it is broadly characterized by an increasing sedentarism. This was both necessitated and made possible by an increasing reliance on the cultivation of corn, beans and squash. In consequence, Late Woodland sites tend to be at once larger and more densely distributed than those of earlier time periods.

Just as the introduction of ceramics marks the beginning of the Woodland Period, so the Late Woodland is marked by the appearance of semi-permanent villages. These Iroquoian villages were often surrounded by a defensive palisade and were occupied year-round for some 12-20 years whereupon the settlement would move. Villages may cover from one to several acres in size and included numerous dwellings known as longhouses. In addition to villages, smaller, more temporary habitations such as agricultural cabin sites and fishing and hunting camps may occur. The typical burial pattern consists of individual graves within a village.

As originally formulated by J.V. Wright (1966), the full sequence of the Ontario Iroquoian Tradition involves three main stages, termed Early, Middle, and Late Ontario Iroquoian. The Iroquoian peoples of southwestern Ontario consisted of the Neutral tribal confederacy and their prehistoric ancestors.

The Early Iroquoian stage in this region spans the period ca. 800-1280 A.D. and comprises the evolution of various communities. They were typically oriented to drainage systems on sand plains in the area of the Thames River drainage, along streams courses that flowed into the north shore of Lake Erie, and stream courses in the Niagara Peninsula and around the west end of Lake Ontario. The succeeding Middle Iroquoian stage subsumes the Uren sub-stage (ca. 1280-1330 A.D.) and the Middleport sub-stage (ca. 1330-1400 A.D.). This period was characterized by an increase in village size and, around the beginning of the Middleport substage, by the abandonment of sand plains and a shift into areas with heavier, more drought-resistant soils.

Tribal confederacies evolved during the succeeding Late Iroquoian stage, with the Neutral tribal confederacy in southwestern Ontario and the Huron tribal confederacy in south-central Ontario. What is now the Town of Oakville is situated in the eastern extremity of the Neutral territory, near the border with the peoples of the Huron tribal confederacy.

Archaeologists typically divide the Late Iroquoian stage in this region into three successive periods: the prehistoric (or pre-contact) Neutral (ca. 1400-1550 A.D.); the proto-historic Neutral (ca. 1550-1580 A.D.); and the historic Neutral (ca. 1580-1651 A.D.). Of these, the proto-historic Neutral marks the period of indirect contact with European fur traders and missionaries, while the historic Neutral marks the period of direct contact with Europeans.

The prehistoric Neutral were widely distributed throughout the southern part of southwestern Ontario, from Lake Ontario and the Niagara Peninsula westward to west of London. In the mid 16th

century, however, the communities in the western part of the region moved east of the Grand River.

The Neutral and the other Ontario Iroquoian tribal confederacies all met the same fate in the mid 17th century: first devastated by a series of plagues accidentally introduced by the Europeans; and finally dispersed and driven from their homelands by raids from the Iroquois of New York State in 1649-1651 A.D. Iroquoian sites of the Late Woodland period are well represented in the Regional Municipality of Halton. However, relatively few sites of this time period have been discovered to date in North Oakville, within which the Sixth Line Corporation property is situated.

The Historic Period (A.D. 1700 to Present)

The history of the First Nations peoples during the second half of the 17th century and the succeeding 18th century was one of wide-scale cultural displacement. The displacement of the Iroquoians from southern Ontario in 1649-51 and the Algonquin people from adjacent Michigan and Ohio resulted in a re-organization of the cultural landscape of southern Ontario in the second half of the 17th century.

In the late 1660s and early 1670s the Seneca, the most powerful of the Five Nations Iroquois Confederacy in Upper New York State, established separate villages on Lower Humber and Lower Rouge Rivers to control the Fur Trade within the Upper Great Lakes. A third Seneca village straddled the trail that led from Burlington Bay to the Grand River. These villages were occupied until ca. 1700 A.D. when the Mississauga, an Ojibwa tribe from the north shore of Lake Huron, established itself in the region. The Mississauga subsistence was based on a mixture of hunting, fishing, agriculture and foraging for plant foods. Maple sugar was also an important product during this period. Mississauga sites are rare in this region. A more extensive data search would be required to determine whether any such sites have been documented to date within North Oakville but no Mississauga sites are included in the archaeological inventory of the 1 kilometre study area that surrounds the proposed Sixth Line development.

France formally ceded New France to the British Crown in 1763. That year King George III issued a royal proclamation recognizing the title of the Great Lakes Indians to their lands. The loss of the Thirteen Colonies in the American Revolution in 1782 provided the British Crown with an impetus to expand settlement into what became Upper Canada in 1791. To that end, the Crown negotiated a series of treaties with the resident First Nations peoples. Trafalgar Township formed part of a more extensive tract of land that was ceded by the Mississauga to the British Crown for the sum of £1000 by Treaty 13A. It was negotiated on August 2, 1805.

In June of the following year, 1806, the survey of the township was completed by Samuel Wilmot. His 1806 map of the township, entitled "*Plan of the Second Township in the Tract of Land Lately Purchased from the Mississauga Indians*," depicts the owner of all 200 acres of Lot 15, Concession 1 NDS as John Robinson. This is the lot in which the proposed Sixth Line Corporation property is situated. According to Golder (2012: 9), the Patent for this property was deeded to Robinson on November 23, 1804, some 19 months before the Mississauga ceded the lands within which it is situated.

Trafalgar Township, within which the proposed Sixth Line Corporation property is located, was first settled by Euro-Canadians in the 1790s, a decade or so before the 1806 treaty with the Mississauga. The crossroads hamlet of Trafalgar to the east was centred on the intersection of Dundas Street West

and Trafalgar Road. The first pioneers to settle there were emigrants from Pennsylvania who arrived in 1806, the year of the township survey. At that time, what was termed “*wild land*” (un-cleared land) in the township was being sold for 7 shillings and 6 pence per acre.

By 1817 the township had a population of 548 and industries included four saw mills and one grist mill. In addition, the value of land had almost tripled, to 22 shillings per acre. The first post office in Halton County was established in Trafalgar in 1820. At the time it was the only post office between York (now Toronto) and Dundas. The mail between York (now Toronto) and Niagara were carried by horseback through Trafalgar Township following Dundas Street West. In time, the fortunes of the community of Trafalgar declined as the village of Oakville grew. By 1850 the population of Trafalgar Township had increased to 5,072.

The changes in the landscape over the decades from the early 19th century onwards are reflected in the following description of Trafalgar Township in the Historic Atlas (Walker & Miles 1877: 59):

The woods were in early times well stocked with deer, bears, game of all kinds, and the streams abounded in fish, particularly salmon. These have all long since disappeared, and in place of the forests are well tilled farms, beautiful residences and everything that constitutes a thriving and well to do community.

The proposed Sixth Line Corporation development is immediately north and east of the crossroads hamlet of Munn’s Corners. The community is centred on the intersection of Dundas Street West and Sixth Line. Figure 3 shows the location of the proposed Sixth Line Corporation property relative to a segment of the 1877 Historic Atlas map of Trafalgar Geographic Township. This map also shows the location of the proposed development relative to Munn’s Corners and the nearby village of Trafalgar.

Trafalgar Township was largely a rural township in the 19th century. In addition to the aforementioned Munn’s Corners, local hamlets in the township included Sixteen Hollow and Post’s Corners. The latter was situated at the crossroads of Dundas Street West and Trafalgar Road; it was later renamed Trafalgar. At different times, inns were located in both Munn’s Corners and Post’s Corners. Daniel Munn owned and operated the inn at Munn’s Corners and his in-laws, the Posts, owned and operated the inn at Post’s Corners.

Golder (2012: 9) states that it isn’t clear from the land registry records when the southern 100 acres of Lot 15 came into the possession of Daniel Munn. However, it must have been some time in the first three decades or so of the 19th century. The reason is that Daniel Munn died sometime in or before 1841. It was in that year that the Estate of the late Daniel Munn sold the 100 acre property to his son, Jordon D. Munn. He is depicted as the landowner of the 100 acre property on Tremaine’s 1858 map of Halton County. Over the next 28 years, from 1842 to 1870, Jordon Munn sold parcels of the property ranging in size from half an acre to five acres in size, all within or close to the hamlet of Munn’s Corners. As part of this process, in 1842 he deeded parts of his original 100 acre property to be used as a school house and a church.

The 1851 census lists Jordon Munn as a 43 year old farmer who was born in York (now Toronto), Upper Canada. His wife Harriet, aged 32, was born in New Brunswick and they lived in a 1 ½ storey frame house. They had five children, aged 2 to 14. By the 1861 they were still living in a 1 storey frame house. That could have been a different house, but census’ sometimes do make mistakes in the number of storeys in a house.

Much of what remained of Jordon Munn's land holdings in the south half of Lot 15, Concession 1 N.D.S. were sold in 1862 to John Hastings. Thereafter, the ownership of the property flipped faster and faster. Hastings sold the property to George Aude in 1873, and Aude sold it to William Perkins the next year. Perkins was the owner at the time the 1877 Historic Atlas map of Trafalgar Township was published (*c.f.* Figure 3). Perkins retained the land for eight years, then in 1881 sold it to Joseph Orr. He sold it the same year, and from the last two decades of the 19th century onward for the next century the ownership of the property changed several times.

The alignment of Dundas Street forms the south edge of the proposed Sixth Line Corporation development. The Early Ward 5 History that was prepared by the Trafalgar Township Historical Society (n.d.) states that Dundas Street was laid out as a trail in 1793 but that it was not until 1806 that it was surveyed as a standard 66 foot (11 chains) wide road right-of-way. The survey followed the 1806 treaty with the Mississauga that opened Trafalgar Township and the Home District to Euro-Canadian settlement. Reportedly, it was also by or about 1806 that Daniel Munn settled in Lot 15, Concession 1 SDS., where Munn's Pioneer Cemetery was later established. As such, he was part of the very first wave of Euro-Canadian settlement in what is now the Town of Oakville.

The log cabin Daniel Munn constructed after he settled on Lot 15, Concession 1 S.D.S. in or about 1806 was likely located within what is now Munn's Pioneer Cemetery (D.R. Poulton & Associates 2011). Sometime prior to 1814 he opened an inn and stage coach stop at the cabin. In 1820 Munn deeded land for a cemetery at the southeast corner of Dundas Street and Sixth Line – what is now Munn's Pioneer Cemetery. Born in 1779, Daniel Munn died in 1822. He likely moved shortly after he deeded the land for the cemetery, either into a new house elsewhere in Lot 15, Concession 1 S.D.S., which he owned, or in the property he owned just across the road to the north, in Lot 15, Concession 1 N.D.S. Either way, the first recorded burial in the cemetery was only a few years later, in the spring of 1825.

As stated previously, in 1842, after Daniel Munn's death, his son Jordon deeded parts of Lot 15, Concession 1 N.D.S. to be used as a school house and a Methodist church. Initially, the school house was only used as a church on Sundays, and the latter was known as the Parsonage Church. It was constructed of wood. In 1852 a separate building was constructed to the west for the school house. Both structures are depicted on the 1858 Tremaine map, and on the 1877 Historic Atlas map.

The school house was later moved away from this area in 1900, and it was moved again in 1955. In 1898 the 56 year old wooden church was replaced by the current brick church, now Munn's United Church. In the 1970s, in advance of the proposed northward widening of Highway 5, the church was moved back 12 metres from the north edge of the expanded road alignment (Golder 2012: 14). This widening of the road would have also severed the southern 12 metres or so of the Dundas Street frontage of what is now the Sixth Line Corporation property.

The 1877 Historic Atlas of the south part of Trafalgar Township depicts a small number of buildings within the community of Munn's Corners. The most notable mapped features in the community are the church on the northeast corner of the intersection and the related cemetery at the southeast corner. In the first few decades of the 19th century, Daniel Munn owned the lands at both corners, a fact that is commemorated in the name of the hamlet.

As previously stated, and as illustrated in Figure 3, by 1877 William Perkins owned what is now the Sixth Line Corporation property. The letter "8" presented in brackets after the name indicates that

Perkins received his mail at the Trafalgar Post Office (Walker & Miles 1877: 30). By convention, Historic Atlas township maps depict a farmstead as a single structure with an associated orchard. The 1877 Historic Atlas depicts the Perkins farmstead as being located just north of Dundas Street, in the south-central portion of the property, just east of West Morrison Creek. Historic Atlas maps do not depict the locations of farmsteads with precision. With that proviso, the mapped location of the Perkins farmstead matches that of the abandoned residence and the associated outbuildings on the Sixth Line Corporation property.

The 1858 Tremaine map of the County of Halton was also consulted during the course of the background study. As with the 1877 Historic Atlas map of the Township, it shows the small crossroads community of Munn's Corners. Also shown on the extreme southwest corner of Lot 15, Concession 1 NDS are two buildings with accompanying written notation of "S.H." and "Ch." (Tremaine 1858). They are the school house and the church, respectively. They were located directly north of Dundas Street, between Sixth Line and West Morrison Creek.

Individual residences and farmsteads for the different landowners are not depicted on the 1858 Tremaine map. However, with the exception of the hamlet of Munn's Corners itself, the Tremaine map does identify Jordon Munn as the landowner of all of the south half of Lot 15, Concession 1 NDS, the land that now forms the proposed Sixth Line Corporation property.

The 1851 Personal Census indicates that Jordan Munn lived in a 1 ½ storey frame house. The existing house on the property is a small 1 ½ storey brick house on a stone foundation, so it is not the same structure as that documented in the 1851 Personal Census and the 1861 Census. The west side of the existing house is 1 storey frame addition or summer kitchen. There is frame outbuilding to the northeast of the existing house, but no evidence of a large barn that is typically an integral part of working farms in southern Ontario.

1.3 Archaeological Context

This section of the report consists of several distinct elements as defined in Section 7.5.8 of the Standards and Guidelines (Ministry of Tourism and Culture (2011: 125-126). They are described below.

Sources

As required by Standard 2 of Section 7.5.8 (Ministry of Tourism and Culture 2011: 125), the Stage 1 background study examined data for a study area that encompassed a one kilometre buffer surrounding the proposed Sixth Line Corporation development. Three collective sources were examined in the course of the basic background research.

The Ministry of Tourism, Culture and Sport does not maintain a database of properties that have had past archaeological investigations. In consequence, the only way a consulting archaeologist will know that a past assessment has been conducted in a given area is if he or she has personal knowledge of it, or if the assessment resulted in the discovery and registration of one or more archaeological sites.

One key source for the background study was the Archaeological Sites Database of the Ministry of Tourism, Culture and Sport. It houses site record forms for registered sites as well as published and unpublished reports on past surveys, assessments and excavations. On May 10, 2011, Robert von Bitter, Archaeological Data Coordinator of the Ministry, provided data on registered sites within the study area. As such, the registered sites data presented in this report satisfy the standard required by the first bullet of Standard 1, Section 1.1 of the Standards and Guidelines (Ibid: 14).

The second collective source for the assessment was the library/archives of D.R. Poulton & Associates Inc. It includes an extensive inventory of published and unpublished reports on past archaeological assessments in the one kilometre study area, as well as inventories of registered and unregistered archaeological sites in the area. As such, the background research on past investigations within the area satisfies the standard required by the second bullet of Section 1.1.1 of the Standards and Guidelines (Ibid: 14).

The documents consulted included past archaeological planning studies that had been conducted on behalf of the Regional Municipality of Halton. Several were conducted by Archaeological Services Inc. (ASI). One such document is the Stage 1 Archaeological Assessment of the North Oakville Secondary Plan, West of Sixteen Mile Creek (ASI 2004). A third is the report on a 2005-2006 Stage 1 archaeological background study of the Dundas Street (Regional Road 5) corridor from Neyagawa Boulevard east to Oak Park Boulevard, Town of Oakville, Ontario (ASI 2006).

The background study also examined several different sources concerning the 19th century Euro-Canadian settlement of the area. They included the reprint of the Illustrated Historic Atlas of Halton County (Walker & Miles 1877).

The third collective source for the background study is the Archaeological Master Plan of the Regional Municipality of Halton. The master plan was prepared in 1998 by Archaeological Services Inc. (ASI) (1998). In 2008, the Region had the firm prepared some additional information to update it; the addenda were released the following year (Archaeological Services Inc. 2009).

Figure 1 of the addenda to the master plan depicts archaeological site locations. It has not been included in the online version of the Master Plan to “*protect the integrity of the archaeological sites and the artifacts they may contain*” (ASI 2009: 6). However, information regarding registered archaeological sites within the subject property would have been captured by the 2011 site data request for the 1 km buffer surrounding the subject property; it is an essential component of any Stage 1 archaeological assessment.

Figure 12 of the addenda to the master plan depicts Historic Features. It specifically shows the general locations of features of the following categories Historic Settlement; Historic Structures; and Historic Homesteads (ASI 2009: 11). In reality, however, this information is duplicated in other sources, including the 1877 Historic Atlas map of Trafalgar Township, which shows building locations with greater precision. Pertinent data in this case include the existing but now abandoned farm house situated in the south-central portion of the subject property, and Munn’s United Church and Munn’s Pioneer Cemetery, which are situated to the west and southwest, respectively.

In addition to the above, Figure 13 of the addenda to the master plan depicts Archaeological Potential. For some reason, except for the extreme southeast edge of the property, all of the rest of the 38-hectare Sixth Line Corporation property falls outside of the zones of positive potential for as-yet undiscovered archaeological remains, even though the property has several positive indicators

that should have indicated a potential for archaeological remains, such as the presence within the property of the documented 19th century farmstead, the proximity of a natural water source, and the close proximity of Dundas Street, Sixth Line and the hamlet of Munn’s Corners. As such, the lack of archaeological potential for this property as mapped in Figure 13 of the addenda to the master plan can only be some kind of omission.

All of the above sources were consulted in preparing the original report that was submitted to the Ministry on November 5, 2012. One unpublished source that was not available at that time was consulted in preparing this revised report. It is entitled “*Heritage Impact Statement, Part of Lot 15, Concession 1 North of Dundas, Geographic Township of Halton, Now City of Oakville.*” The report is by Golder Associates (2012) and is germane to the Stage 1-2 archaeological assessment of the Sixth Line Corporation property in that both assessments deal with the same property. The Golder report is dated November 14, 2012.

Registered Archaeological Sites

A check of the Archaeological Sites Database of the Ministry determined that 71 sites have been registered within a one kilometre radius of the proposed Sixth Line Corporation development. A few of the sites have two components each. Accordingly, the number of discrete components represented in the inventory is 74. Data on the sites are presented in Table 2. The sample includes 52 First Nations components, 21 Euro-Canadian components and one site for which no data are available.

Table 2 Registered Archaeological Sites in the Study Area

Borden #	Site Name	Site Type	Cultural Affiliation
AiGw-175	81-TCPL-2	Findspot	Indeterminate Pre-Contact
AiGw-177	81-TCPL-3	Findspot	Indeterminate Pre-Contact
AiGw-179		Findspot	Indeterminate Pre-Contact
AiGw-180		Findspot	Indeterminate Pre-Contact
AiGw-181		Findspot	Indeterminate Pre-Contact
AiGw-182		Lithic Scatter	Indeterminate Pre-Contact
AiGw-202	Silwell	Findspot	Indeterminate Pre-Contact
AiGw-210	Chestnut	Findspot	Indeterminate Pre-Contact
AiGw-211	Bastille	Findspot	Indeterminate Pre-Contact
AiGw-212	Robespierre	Camp	Indeterminate Pre-Contact
AiGw-215	Potemkin	Camp	Indeterminate Pre-Contact
AiGw-216	Acorn	Findspot	Early Archaic
AiGw-217	Walnut	Findspot	Middle Archaic
AiGw-218	Levar-Reid	Homestead	Euro-Canadian
AiGw-219	Oakdene	Camp	Indeterminate Pre-Contact
AiGw-227	Abigail Post Homestead	Homestead	Euro-Canadian
		Findspot	Indeterminate Pre-Contact
AiGw-228	Uptown Core Lands 2	Homestead	Euro-Canadian
AiGw-229	Uptown Core Lands 3	Homestead/School	Euro-Canadian
		Findspot	Indeterminate Pre-Contact

Borden #	Site Name	Site Type	Cultural Affiliation
AiGw-230	Daniel Munn Homestead	Homestead	Euro-Canadian
		Findspot	Indeterminate Pre-Contact
AiGw-231	Uptown Core Lands 5	Findspot	Early Woodland, Meadowood
AiGw-235	PenEquity 2	Findspot	Middle Archaic
AiGw-236	PenEquity 3	Lithic Scatter	Indeterminate Pre-Contact
AiGw-237	PenEquity 4	Findspot	Middle Woodland
AiGw-238	PenEquity 5	Findspot	Middle Archaic
AiGw-239	PenEquity 6	Lithic Scatter	Indeterminate Pre-Contact
AiGw-240	PenEquity 8	Findspot	Early Woodland
AiGw-241	PenEquity 9	Findspot	Late Archaic
AiGw-242	PenEquity 10	Findspot	Middle Archaic
AiGw-243	PenEquity 11	Findspot	Early Archaic
AiGw-261	Macoakville	Findspot	Late Woodland
AiGw-414	Fourth Lands	No data	No data
AiGw-415		Findspot	Early Woodland
AiGw-416		Findspot	Indeterminate Pre Contact
AiGw-417		Lithic Scatter	Indeterminate Pre-Contact
AiGw-418	Pendant	Camp	Middle Archaic
AiGw-419		Findspot	Early Archaic
AiGw-420		Lithic Scatter	Indeterminate Pre-Contact
AiGw-421		Homestead	Euro-Canadian
AiGw-427	Landing	Lithic Scatter	Indeterminate Pre-Contact
AiGw-428	Thompson	Homestead	Euro-Canadian, Early to Mid 19 th
AiGw-429		Findspot	Indeterminate Pre-Contact
AiGw-430		Findspot	Indeterminate Pre-Contact
AiGw-431		Findspot	Middle Woodland
AiGw-432		Findspot	Indeterminate Pre-Contact
AiGw-433		Findspot	Indeterminate Pre-Contact
AiGw-434		Findspot	Indeterminate Pre-Contact
AiGw-453		Findspot	Early Archaic
AiGw-454		Camp	Indeterminate Pre-Contact
AiGw-456		Isolated Findspot	Indeterminate Pre-Contact
AiGw-465	Loyalist	Homestead	Euro-Canadian
AiGw-466	Kaitting	Homestead	Euro-Canadian
AiGw-467		Findspot	Indeterminate Pre-Contact
AiGw-468		Findspot	Indeterminate Pre-Contact
AiGw-469		Findspot	Middle Woodland
AiGw-470		Findspot	Indeterminate Pre-Contact
AiGw-471	Trafalgar	Homestead	Euro-Canadian
AiGw-481		Findspot	Indeterminate Pre-Contact
AiGw-488		Findspot	Early Woodland
AiGw-489	Phillips	Homestead	Euro-Canadian
AiGw-490		Homestead	Euro-Canadian
AiGw-491		Homestead	Euro-Canadian
AiGw-492		Unknown	Euro-Canadian
AiGw-494		Findspot	Euro-Canadian

Borden #	Site Name	Site Type	Cultural Affiliation
AiGw-495		Unknown	Euro-Canadian
AiGw-496	Mosley Farm House	Homestead	Euro-Canadian
AiGw-497		Unknown	Euro-Canadian
AiGw-498		Unknown	Euro-Canadian
AiGw-499		Unknown	Euro-Canadian
AiGw-500		Unknown	Euro-Canadian
AiGw-501	Morrison Creek	Lithic Scatter	Indeterminate Pre-Contact
AiGw-504		Findspot	Indeterminate Pre-Contact

Summary data on the registered archaeological inventory of the study area are presented in Table 3. As indicated, the inventory demonstrates that the study area within which the proposed development is situated has been occupied at least intermittently for almost 9,000 years, from the Early Archaic period onward.

Table 3 Summary Data on Registered Archaeological Sites in the Study Area

Age & Culture	Site Type	Total
Early Archaic:	Findspot	4
Middle Archaic	Camp	1
	Findspot	4
Late Archaic	Findspot	1
Early Woodland	Findspot	4
Middle Woodland	Findspot	3
Late Woodland	Findspot	1
Indeterminate First Nations	Findspot	23
	Camp or Lithic Scatter	11
	<i>Subtotal</i>	34
Subtotal – First Nations Components		52
Euro-Canadian	Homestead	13
	School & Homestead	1
	Findspot	1
	Unknown	6
Subtotal – Euro-Canadian Components		21
No Data (Site Record Form not yet filed)		1
Total		74

The inventory of 52 First Nations components is dominated by 34 sites that are of unknown age and cultural affiliation. Of these, 40 sites are categorized as isolated findspots; they consist of sites where only one or a few undiagnostic artifacts were recovered. A further 12 sites have been categorized as camps or lithic scatters. The term “*lithic scatter*” is used by archaeologists to refer to ploughed-disturbed sites where most or all of the artifacts consist of chipped stone tools and debitage, the waste product of chipped stone tool manufacture and maintenance. In most cases, lithic scatters represent temporary occupations by small groups of people; these are characteristic of sites such as hunting camps.

Eighteen of the First Nations sites have produced artifacts diagnostic of particular cultures or time periods. The earliest First Nations occupation is represented by four isolated findspots of the Early Archaic period, ca. 7800-6000 B.C. The succeeding Middle Archaic Period is represented by four findspots and one camp site; they date ca. 3500-2500 B.C. Eight additional sites in the study area date to the Woodland period, which is marked in Ontario by the use of ceramics. They are four Early Woodland isolated findspot that date ca. 500 B.C., a Middle Woodland isolated findspot that dates ca. 100 B.C. and a Late Woodland isolated findspot that dates ca. 800-1650 A.D.

The remaining 21 sites in the archaeological inventory of the study area consist of 19th century Euro-Canadian components. Thirteen of them are homestead sites, one is the site of a homestead and a school, one is a findspot and the other six are of unknown type. Two of these sites also contain small amounts of undiagnostic chipped lithic material that are classified as isolated First Nations findspots.

Previous Archaeological Fieldwork

Standard 4 of Section 7.5.8 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 125) requires that assessment reports include information on past any archaeological investigations within or immediately adjacent to the property that is being assessed, and on any sites that have been documented within 50 metres of the property. In the present case, the authors of this report are not aware that any past archaeological investigations were ever carried out within the Sixth Line Corporation property prior to the 2011 Stage 2 survey of the property, and there are no registered sites within 50 metres of the property.

Several archaeological assessments have been conducted in the vicinity of the subject property, some of which encompassed or abutted the property. They include a Stage 1 archaeological assessment of the North Oakville Secondary Plan that was conducted by Archaeological Services Inc. (ASI) (2004). They also include a 2005-2006 Stage 1 archaeological assessment of the segment of the Dundas Street (Regional Road 5) corridor from Neyagawa Boulevard east to Oak Park Boulevard (ASI 2006) (PIF #057-198-2005), a segment of which runs along the south edge of the Sixth Line Corporation property. In addition, past assessments in the area of the proposed development include a 2007 Stage 1-2 archaeological assessment of the Argo property. It is located directly north of the Sixth Line Corporation property.

Other past assessments in the immediate area of the Sixth Line Corporation property were conducted by D.R. Poulton & Associates Inc. (DPA). They included a 2007-2008 Stage 1-2 assessment of the Arrassa Investments Inc. property and the Timsin Holding Corp. property (PIF #053-157-2007) (DPA 2008) and a 2010 Stage 1-2 assessment of the 3030, 3042 and 3094 Sixth Line properties, part of Draft Plan 24T-0525 (PIF #316-051-2010) (DPA 2010). All of those properties are slated for

residential development and all of them are situated on the west side of Sixth Line, across the road from the Sixth Line Corporation property.

The most recent assessment in the area of the Sixth Line Corporation property involved a 2011 Stage 1 background study. It focussed on the alignment of the proposed Timsin Storm Sewer, Woodland Trails, Timsin Phase I Development, Draft Plan 24T-05025/0 (DPA 2011) and on the adjacent Munn's Pioneer Cemetery (PIF #316-120-2011). The proposed storm sewer will be situated within the Dundas Street right-of-way just south of the Sixth Line Corporation property, on the opposite side of the road. The assessment did not include any fieldwork but it did determine that Munn's Pioneer Cemetery contains the site of Daniel Munn's homestead. It was established in 1806 and around the time of the War of 1812 it also operated as an inn and tavern. It was the earliest such enterprise in the history of Trafalgar Township.

Dates of the 2011 Archaeological Fieldwork

The Stage 2 archaeological fieldwork that forms the subject of this report was conducted on over the course of three days in the spring and summer of 2011; on May 2, June 29 and July 6. This information is being included herein to satisfy Standard 8 of Section 7.5.8 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 125).

Conditions in the Subject Lands

The subject property has a surface area of 37.57 hectares (92.8 acres). It covers much of the south half of Lot 15, Concession 1 NDS, Trafalgar Geographic Township, former County of Halton, Town of Oakville, Regional Municipality of Halton, Ontario. The property is bounded to the west by Sixth Line, to the south by Dundas Street East, and to the east and north by agricultural fields. A more detailed description of the property is presented in Section 3.0, which describes the methods and results of the 2011 Stage 2 survey of the proposed development. The description of the proposed undertaking that is presented herein and in Section 3.0 has been prepared to satisfy Standard 2 of Section 7.5.8 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 125).

The south-central portion of the property contains a residential lot with a vacant former farm house and two outbuildings. According to the environmental assessment report by Golder (2011: 26), the former owner of the Sixth Line Corporation property purchased it in 1987 and sold it in 2010. From 1981 to 1987 the house was only occasionally occupied by a person who came to cut the grass in the front yard (Ibid: 21), and it essentially been vacant since 1987, although a squatter was observed to have been occupying it during the 2011 environmental and archaeological assessments. Based on these data, it appears that the house was occupied continuously from when it was built sometime in the 19th century through to about 1980.

The house also has two other small outbuildings. A hand-dug well is located northeast of the house. The municipal address is 41 Dundas Street East. The house and the two associated outbuildings were included in the 2012 Heritage Impact Statement by Golder Associates. It described the building as a 1½ storey red brick side gable structure in the Neo-Classical style (Golder 2012: 19). The Heritage Impact Statement by Golder (2011: 20) states the following:

With regards to a construction date, the main brick structure in the Neo-Classical style was very popular in Ontario from approximately 1815 to 1850. The brick portion of the house is decorated with cornice returns, which generally date to pre-1870; additionally, the exterior brick is decorated with cambered window heads, a feature that generally dates post 1870 (Plate 16) (McIlwraith 1997). Given the presence of the cambered window heads, it is likely that the brick structure dates to the later end of the Neo-Classical architectural style in Ontario. The City of Oakville Register of Properties of Cultural Heritage Value and Interest describes this property as “*William Perkins Farm – this property has potential cultural heritage value for its c. 1850 house and for its association with the agricultural development of Trafalgar Township*” (Town of Oakville 2010b). The architectural style of this house generally agrees with a circa 1850 date.”

The brick house has two additions. One is described by the Heritage Impact Assessment as a kitchen addition sided with vinyl siding over imitation red brick asphalt siding; it has an earthen basement and a loft. The other addition is probably a mud room; it is vinyl sided and accesses the kitchen addition.

The Heritage Impact Assessment Statement by Golder (2011: 19) also states the following:

It is possible that what is referred to as the kitchen addition in this report is actually the original remaining structure on this property, with the larger brick part added at a later date. However, this can only be determined by an invasive structural investigation.

Further to the above, the Heritage Impact Assessment Statement describes one of the two associated outbuildings as a wood frame, front gable single car garage (Golder 2011: 26). It also describes the other associated outbuilding as a wood frame, side gable shed supported by aluminum siding (Ibid.).

Munn’s United Church and the associated Munn’s Pioneer Cemetery, which lie outside of the proposed development, are both designated under Part IV of the Ontario Heritage Act. Neither the former farm house nor the two associated outbuildings within the proposed Sixth Line Corporation property are designated. However, the house is listed on the Town of Oakville’s Register of Properties of Cultural Heritage Value and Interest. It was one of approximately 350 such structures that had been added to the Town’s inventory by the time the Heritage Impact Statement was initiated in May 2012 (Golder 2012: 14; Town of Oakville 2010).

The abandoned farm house and the two associated outbuildings within the proposed Sixth Line Corporation property are slated to be demolished in advance of the proposed development. The Heritage Impact Assessment Statement included the following recommendation concerning this house:

Prior to demolition, the house should be documented to accepted standards...The documentation would include at a minimum, high resolution photography of the building exterior and interior under optimum environmental conditions, measured drawings of the floor plans and building elevations and additional structure-specific research and analysis. As part of the documentation work, the house should be monitored during demolition by a qualified individual to determine construction details of the building and this information added to the final report. (Golder 2012: 30)

The proposed Sixth Line Corporation development falls within the South Slope Physiographic Region. The region between Lake Ontario and the Oak Ridges Moraine is divided into three zones: Trafalgar Moraine, Peel Plain and the South Slope. The Peel Plain covers much of the central portions of the Regional Municipalities of Halton, Peel and York and has a gradual but fairly regular slope toward Lake Ontario (Chapman and Putnam 1984: 174). The physiographic region is characterized by a gently rolling to very gently rolling topography. Soils are dominated by Chinguacousy and Oneida clay loam (Gillespie et al. 1971).

The soils map for Halton County indentifies the majority of soils in the subject property as Oneida with a much smaller amount of Chinguacousy in the southeast portion. A narrow strip of land associated with the small stream course is identified as Jeddo. All of the soils are clay loam, with the Oneida soil being well-drained, Chinguacousy as imperfectly drained and Jeddo as poorly drained (Gillespie et al. 1971). These clay soils have developed on top of the underlying shale and limestone till plain (Chapman and Putnam 1984:175).

The most significant stream course in the immediate area of the Sixth Line Corporation property is West Morrison Creek. It flows southward through the central and southern portions of the property. To the west of the abandoned farm house it enters an elongated wetland or former pond with cattails. At the south end of the wetland/pond it enters a culvert and follows south under Dundas Street. It enters a second, more prominent pond on the south side of Dundas Street East immediately east of Munn's Pioneer Cemetery. The southeast corner of the property also has a smaller poorly-drained area that feeds into West Morrison Creek.

2.0 STAGE 1 ANALYSIS AND CONCLUSIONS

There are two basic categories of possible archaeological planning concerns for any proposed development. The first consists of known sites that are of demonstrable or potential significance as cultural resources and planning concerns. The second consists of the potential for as-yet undiscovered sites. These are considered in turn, below.

2.1 Known Sites of Demonstrable or Potential Significance

The original framework for assigning levels of archaeological significance in Ontario was drawn from Provincial environmental assessment guidelines (Weiler 1980). The information included the identification and evaluation of any site that met one or more of the following criteria:

it has the potential through archaeological exploration, survey, or fieldwork to provide answers to substantive questions (i.e. relate to particular times and places) about events and processes that occurred in the past and therefore add to our knowledge and appreciation of history;

it has the potential through archaeological exploration, survey, and fieldwork to contribute to testing the validity of general anthropological principles, cultural change and ecological adaptation, and therefore to the understanding and appreciation of our man-made heritage; or

it is probable that various technical, methodological, and theoretical advances are likely to occur during archaeological investigation of a feature, alone or in association with other features, and therefore contribute to the development of better scientific means of understanding and appreciating our man-made heritage (Weiler 1980:8).

The document quoted above was prepared a quarter of a century ago and while the principles it was based upon are still current, some of the language is now dated, including phrases such as “*man-made*”. The issue of archaeological site significance is also covered in a more recent publication entitled *Conserving a Future for Our Past: Archaeology, Land Use & Development in Ontario* (Ministry of Citizenship, Culture and Recreation 1997). As stated in that document, the key factors an archaeologist considers in evaluating the significance of an archaeological site include the following:

1. The Integrity of the site (e.g. is it in pristine or near pristine condition; despite past disturbances; can important data still be recovered from it?).
2. The Rarity or Representativeness of the site (e.g. is it one of a kind, locally, regionally or provincially; is it a good comparison to similar sites from other regions, etc?).
3. The Productivity of the site (e.g. does it have the potential to contain large quantities of artifacts or exceptionally detailed data about what occurred there; etc?).

4. The Age of the site.
5. The Potential for Human Remains within the site.
6. The Geographic or Cultural Association (e.g., does the site have a clear and distinct relationship with the surrounding area or to a particular geographic feature, such as a unique rock formation, historic transportation corridor, etc.; is the site associated with a distinctive cultural event, ceremony or festival, etc.?).
7. The Historic Significance of the site (i.e., is the site associated with a renowned event, person or community?).
8. Community Interest (e.g., is the site important to a particular part of the community; does it represent a significant local event; etc.?).

The Archaeological Sites Database contains information on the 71 archaeological sites that have been registered within one kilometre of the proposed development; none of the sites is situated in close proximity to the subject property. While their significance as heritage resources and planning concerns is variable, the fact is that none of them would be subject to potential impact from the proposed development. Accordingly, possible archaeological planning concerns for the proposed development of the Sixth Line Corporation property were limited to the potential for as-yet undiscovered archaeological remains. That potential is discussed below.

2.2 Potential for as-yet Undiscovered Sites

Standard 1 of Section 7.7.3 of the Standards and Guidelines formulated by the Ministry of Tourism and Culture (2011a: 132) requires that the Analysis and Conclusions section of reports on Stage 1 assessments address the following statement: “*Identify and describe areas of archaeological potential within the project area.*” Further, Standard 2 of Section 7.7.3 of the Standards and Guidelines (Ibid) states that the Stage 1 report must “*Identify and describe areas that have been subject to extensive and deep land alterations (e.g., development or other activity) that have severely damaged the integrity of archaeological resources and have removed archaeological potential.*” The information that is presented in this section of the report is intended to satisfy these two standards.

Since the mid 1980s several models have been generated in an attempt to quantify archaeological potential in southern Ontario (e.g., Peters 1986, Pihl 1986). The issue of archaeological site potential criteria is also covered at some length in a 1997 publication entitled *Conserving a Future for Our Past: Archaeology, Land Use & Development in Ontario* (Ministry of Citizenship, Culture and Recreation 1997). The most recent criteria set out for evaluating the archaeological potential of a property or proposed development are detailed in the 2011 Standards and Guidelines for Consultant Archaeologists that were formulated by the Ministry of Tourism and Culture (2011a: Section 1.3.1, pages 17-18). They are quite similar to the criteria that were defined by the Ministry of Citizenship, Culture and Recreation (1997) and identify the following features that indicate archaeological potential:

- The presence of previously identified archaeological sites in the area;
- the proximity of water sources, including primary water sources (lakes, rivers, steam or creeks), secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), and features indicating past water sources (e.g. glacial lake shorelines, and accessible or inaccessible shorelines);
- the presence of elevated topography (eskers, drumlins, large knolls, plateaux);
- pockets of well-drained sandy soil, especially near areas of heavy soil or rock ground;
- distinctive landforms that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases;
- resource areas, including food or medical plants, scarce raw materials, or resources that attracted early Euro-Canadian industry (e.g. fur trade, logging, prospecting and mining);
- areas of early Euro-Canadian settlement, including places of military or pioneer settlement (e.g. pioneer homesteads, isolated cabins, farmstead complexes), pioneer churches and cemeteries, etc.;
- early historical transportation routes (e.g. trails, passes, roads, railways, portage routes);
- a property that is listed on a municipal register or designated under the *Ontario Heritage Act*, or that is a federal, provincial or local landmark or site; and
- a property that local histories or informants have identified with possible archaeological sites, historic events, activities or occupations.

The Standards and Guidelines for Consultant Archaeologists also identify features that indicate the archaeological potential of a property or area has been removed (Ministry of Tourism and Culture 2011a: Section 1.3.2, page 18). They consist of the following: quarrying; major landscaping involving grading below topsoil, building footprints, and sewage and infrastructure development. In the case of the Sixth Line Corporation property, the Stage 2 survey determined past landscaping had impacted much of the non-arable southern portion of the property that includes the abandoned farmhouse and outbuilding, the southeast corner of the property and the southern edge of the property, all of which front on Dundas Street.

Finally, while Section 1.3 of the Standards and Guidelines identifies features that indicate archaeological potential and features that indicate the archaeological potential of a property or area has been removed (as cited above), it does not include explicit statements on criteria that indicate a property or area never had any archaeological potential in the first place. Granting that, Standard 2a of Section 2.1 of the Standards and Guidelines, which deals in part with property survey requirements, does identify some of the conditions in which an archaeological survey is not required. They are as follows:

- a lands are evaluated as having low or no potential based on the Stage 2 identification of physical features of no or low potential, including but not limited to:
 - i permanently wet areas;
 - ii exposed bedrock;
 - iii steep slopes (greater than 20°) except in locations likely to contain pictographs or petroglyphs.

Slope and poor drainage are issues for West Morrison Creek, the valley of which flows through the Sixth Line corporation property. In addition, the creek flows into an elongated wetland or ponds west of the abandoned farm house. Finally, the southeast corner of the property also has a smaller poorly-drained area that feeds into West Morrison Creek.

Following the site potential criteria that are set out in the 2011 Standards and Guidelines (Ministry of Tourism and Culture, Section 1.3.1, pages 17-18), several factors indicated that most of the that are involved in the proposed Sixth Line Corporation development had a moderate to high potential for as-yet undiscovered First Nations and Euro-Canadian archaeological remains. Following the second bullet of Section 1.3.1 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 17), they include the fact that the location is suitable for pre-contact and historic agriculture and that the vast majority of the property is well-drained and suitable for habitation. In addition, it is transected by West Morrison Creek, which would have served as a reliable source of potable water.

Furthermore, the proposed development is located at the juncture of historic trade and transportation routes: Dundas Street and Sixth Line Road. The early cross roads community of Munn's Corners has developed where these two early roads intersect, including the construction of a church, a school house and a cemetery. All of these considerations would generally indicate a moderate to high potential for as-yet undiscovered Euro-Canadian archaeological remains within the property.

Notwithstanding the above considerations, yet another factor in evaluating the potential for as-yet undiscovered archaeological remains in any given proposed development is the extent to which past impacts may have decreased or altogether eradicated the potential for extant archaeological remains. This was not an important consideration in the present case, as virtually all of the lands in question are arable.

Standard 1 of Section 1.1 of the Standards and Guidelines requires that the background study must include research information from various sources. Among them, when available, are archaeological management plans or other potential mapping. In the case of the present assessment, and in accordance with this standard, the sources consulted included the archaeological site potential modelling formulated by Archaeological Services Inc. (2009) as part of the archaeological master plan of the Regional Municipality of Halton.

The inferred archaeological site potential for Halton is plotted on Figure 13 of the addenda to the master plan. For some reason, virtually all of the 38-hectare Sixth Line Corporation property is depicted as falling outside of the zones of positive potential for as-yet undiscovered archaeological remains. The only exception is a narrow strip along the extreme southwest edge of the property. It appears to correspond to a 100 metre wide strip of the portion of the property that fronts on Dundas

Street East, with the exclusion of the artificial embankment and the culvert in the southwest corner of the property.

Notwithstanding the lack of inferred potential that Figure 13 of the master plan indicates for virtually all of the property, the other considerations discussed above all indicated that virtually all of the subject property had a moderate to high potential for archaeological remains. Those factors include the presence within the property of the documented 19th century farmstead, the presence within the property of a natural water source (West Morrison Creek), the close proximity of the hamlet of Munn's Corners, which was established at the beginning of the 19th century, and the fact that the south and west sides of the property are abutted by Dundas Street and Sixth Line, which formed part of the historic road network in the area.

Given the above considerations, the lack of archaeological potential for this property as mapped in Figure 13 of the addenda to the master plan can only be some kind of omission. In consequence, the background study made its own independent assessment of the archaeological potential of the property, and included a field-based assessment of the lands that did and did not warrant systematic survey coverage.

3.0 FIELD METHODS

As previously mentioned, the vast majority of the subject lands consist of five discrete agricultural fields. They comprise 85% of the surface area of the property. The remaining 15% of the property consists of non-arable lands. They include West Morrison Creek Valley, a wetland or former pond within the valley, a small abandoned agricultural field in the southwest corner of the property that is overgrown in scrub vegetation, an abandoned residential complex to the east of the creek, in the south-central portion of the property with an overgrown lawn and three remnant buildings of a former farmstead, and a disturbed area in the southeast part of the property with poor drainage.

The differing conditions in the above areas required the application of different archaeological survey techniques. The Stage 2 survey of the property was conducted at an interval of five metres or less. Figure 4 shows the location and direction of the 12 photographic plates that are illustrated in this report. Figure 5 illustrates the extent and techniques of the Stage 2 archaeological assessment.

The Stage 2 survey of the property was conducted over the course of three days in the spring and early summer of 2011. The May 2 survey was conducted by a crew of three individuals under the direction of Chris Neill (Licence P242). The June 29 and July 6 surveys were conducted by a crew of four individuals under the direction of Sherri Pearce (Licence P316). The July 6 survey was conducted by a crew of two individuals under the direction of Sherri Pearce. Lighting conditions for the observation of cultural remains were excellent on all three days. The weather on May 2 was overcast and cool. The weather on both June 29 and July 6 was sunny and hot.

The systematic survey encompassed lands with a surface area of 32.0 hectares, representing 85.3% of the entire property. Adding this total to the 1.5 hectares that were surveyed by systematic shovel test pitting, the survey of the Sixth Line Corporation property covered lands with a combined surface area of 33.5 hectares; they represent 89.3% of the entire property. Altogether, the lands that were surveyed by systematic shovel test pit survey at a five-metre interval had a surface area of 1.5 hectares; they represent 4.0% of the entire property. Areas of disturbance and the building footprints of the abandoned building complex had a combined surface area of 0.7 hectares; they represent 1.9% of the entire property. The balance of the property consisted of slope and poorly-drained valley land of West Morrison Creek. They had a combined surface area of 3.3 hectares and represent 8.8% of the entire property.

The first visit to the subject property occurred on May 2, 2011. It was conducted to check conditions within the property, and to determine a schedule for the implementation of the survey. On that date, it was observed that none of the cultivated fields could be assessed at that time as they contained a significant amount of corn stubble from the previous year's harvest. Following the May 2 visit, D.R. Poulton & Associates contacted the client to discuss the need to coordinate the upcoming pedestrian survey of the agricultural fields with the tenant farmer and, if necessary, to make arrangements for contract ploughing. The fields were ploughed and cultivated on June 23, 2011. The Stage 2 pedestrian survey of the fields was conducted on June 29, 2011 by a crew of three under the direction of Sherri Pearce. It involved walking back and forth across the fields at an interval of five metres between surveyors, checking the ground surface for cultural remains. Between the time of the ploughing and the archaeological survey there had been a significant rainfall and the fields were adequately weathered. The ground visibility was excellent, at roughly 90%.

The non-arable lands were assessed by a visual examination and shovel test pit survey. The technique consisted of excavating test pits approximately 30 cm in diameter into the topsoil and into the upper 5 cm of the underlying subsoil. The test pits were conducted to within 1 metre of the abandoned buildings. All excavated soils were screened through 6 mm mesh to maximize artifact recovery and each test pit was immediately backfilled upon completion. Unless otherwise mentioned, all test pit survey was conducted at an interval of five metres or less.

As previously described (Section 1.3), the abandoned residential complex is located on the east side of the creek, just north of Dundas Street. It was surveyed on May 2, 2011 by a crew of three under the direction of Chris Neill. The building complex includes a red brick house, a wooden garage and a wooden shed. The front yard of the abandoned house has a buried septic tank (Golder 2011: 22). The test pit survey of the former residential lot extended to within 1 metre of the three abandoned buildings.

The initial five metre interval shovel test pit survey determined that the front yard of the abandoned residential lot had been disturbed to the extent that it did not retain a potential for extant archaeological remains. Accordingly, the systematic survey switched to a judgemental test pit survey until the surveyors had moved out of the areas of disturbance. In this area, the normal clay loam topsoil and clay subsoil had been replaced by a mottled soil dominated by red clay. This material is typically observed at much greater depths in the area and indicated a significant level of past disturbance. There was only one test pit within the abandoned residential lot – what came to be designated Location 1 – contained cultural remains; all other test pits in the abandoned residential lot were sterile.

The May 2 survey described above also extended south to the south edge of the property, which fronts of Dundas Street East. Once again, the survey began with a systematic five metre interval shovel test pit survey, then switched to a judgemental test pit survey when the extent of the past disturbance had been realized. In that case, the past disturbances were related to the widening of Dundas Street in the 1970s, and to ditching along the north edge of the road right-of-way.

Another non-arable portion of the property was assessed by test pit survey on July 6, 2011. It was the small area in the southeast corner of the subject property, directly north of Dundas Street. Much of this area showed evidence of previous disturbances. Areas were stripped of topsoil with gravel and sand mixed into the remaining soil matrix (Plate 9). Red clay was observed close to Dundas Street. Other areas either had trenches dug into the soil, or had been mounded up along with the accumulation of organic debris or gravel fill. The northern portion of this section was also poorly drained and seasonally wet, with muck soils observed in the test pits. Evidence of an altered relic stream channel was also observed. Reference to the archaeological site potential of the Halton Master Plan (Archaeological Services Inc. 2009: Figure 13) shows two finger tip stream courses coming together near the southeast corner of the Sixth Line corporation property, then flowing west along the south edge of the property into West Morrison Creek

The test pit survey of small abandoned agricultural field that is overgrown in scrub vegetation was conducted on June 29, 2011, at the same time as the pedestrian survey. Although the field had been cultivated in the past, it was no longer in active agricultural use and had not been for many years. Extensive shoulder high weed growth had occurred in all parts of the field, along with the saplings of young maple trees. Originally, access to this field would have been provided via the small hobby farm residence on Sixth Line. This is the only way the field could have been accessed since the West

Morrison Creek and associated slopes form the east and north boundary to the field and the steep bank and guardrail prevent access from the heavily travelled Dundas Street to the south. Several other small properties (Church, Parish Hall, Day Care Centre) back onto the southwestern portion of the subject property, also preventing access. Finally, the field also could not have been accessed along Sixth Line since the only portion where the field met the road was at a higher elevation and was blocked by a tree line and by guy-wires for hydro poles. All things considered, and as illustrated by Plate 12 of this report and Plates 3, 5 and 6 of the supplementary documentation, the observed field conditions in this field conformed with what the Standards and Guidelines describe as “*abandoned farmland with heavy brush and weed growth.*” Following Standard 1c of Section 2.1.2, these conditions allowed for the Stage 2 assessment of this field by a shovel test pit survey.

No sites were discovered in the 32.0 hectares of the Sixth Line property that were assessed by pedestrian survey. Three sites were discovered in the 1.5 hectares that were assessed by systematic shovel test pitting. They were designated Locations 1, 2 and 3. In each case, the initial discovery was a single positive test pit containing an artifact. The initial test pit at Location 1 yielded a single piece of Onondaga chert chipping debitage, the test pit at Location 2 yielded a chipped stone graver, and the test pit at Location 3 yielded a single Euro-Canadian tableware sherd.

Following the Standards and Guidelines, the survey conducted intensified investigations around the discovery of First Nations artifacts at all three locations. In each case, eight additional test pits were excavated at a 2.5 metre interval at the cardinals surrounding each of these three positive test pits. In no case were any additional artifacts recovered from the intensified test pitting. Single one metre squares were then excavated over the positive test pits at Location 1 and Location 2, since they had produced First Nations lithic material. A test unit was not excavated at the Location 3 test pit, as the negative results of the supplementary pitting at this location is considered to demonstrate that it is an isolated findspot.

No additional First Nations artifacts were recovered from the test squares excavated at Location 1 and Location 2. However, both units yielded Euro-Canadian domestic refuse. Details on these discoveries are presented in Sections 4.0 and 5.0 of this report.

The one metre unit excavated over the positive test pit at Location 1 did not recover any additional First Nations material. As can be seen from the wall profile illustrated in Plate 2 of the supplemental documentation, the upper 15 cm of this unit is disturbed and is mottled with large chunks of red clay. This overlies a thick artifact-rich layer containing late 19th to 20th century Euro-Canadian material. Most of the coal fragments and faunal remains were recovered from the base of this layer, just above the subsoil interface. The subsoil is a yellow-brown clay that is consistent with the other undisturbed areas on the subject property.

The one metre unit excavated over the positive test pit at Location 2 did not recover any additional First Nations material. As can be seen in Plate 4 of the Supplemental Documentation, the topsoil or ploughzone layer is a leached clay loam overlying a yellow-brown clay subsoil. A small but significant amount of early to mid 19th century Euro-Canadian material was recovered from this test unit.

Plates 1 to 6 illustrate the pedestrian survey that was conducted on June 29 and Plates 7 to 12 illustrate various aspects of the test pit survey. Plate 1 is a view southwest from the northwest corner of the subject property. Plate 2 is a view west along the northern alignment of West Morrison Creek where it transects the property. Plate 3 is a view north from the northern end of the small overgrown

field that is located in the southwest portion of the subject property. It illustrates the extensive wetland vegetation that occupies the West Morrison Creek valley in the foreground and another loop of the creek beyond the small cultivated field that field crew is surveying. Plate 4 is a view northwest from the east-central portion of the subject property. Plate 5 is a view south from the northeast portion of the subject property. Plate 6 is a view northwest of the narrow section of cultivated field close to Dundas Street.

Plate 7 is a view northwest from the west side of West Morrison Creek close to Dundas Street. It shows the slope leading down from the small overgrown field into the valley that contains the creek. Plate 8 is a view north of the disturbed area located within the abandoned residential lot. It shows the gravel drive leading from Dundas Street to the large equipment shed. Plate 9 is a close-up of a test pit from the disturbed portion of the property showing a heavy clay and complete lack of topsoil. Plate 10 is a view west of the test pit survey. The existing red brick house on the subject property can be seen to the left, while the buildings to the left are Munn's United Church and Parish Hall on Sixth Line. Plate 11 is a view southeast from the small shed looking toward Dundas Street. The excavated test pit is being backfilled upon completion. Finally, Plate 12 is a view southeast from the north end of the small overgrown field during the test pit survey on June 29. The extensive weed growth in the field is clearly evident in this photograph.

Section 7.8.1 Standard 2a requires that this section of the Stage 2 report provide detailed and explicit descriptions of how each standard was addressed for survey generally. Section 7.8.1 Standard 2b of (Ministry of Tourism and Culture 2011: 137) requires that this section of the Stage report provide detailed and explicit descriptions of how each standard was addressed for pedestrian survey and test pit survey. All of the information required to satisfy these two standards is provided in the following paragraphs.

Standard 1 of Section 2.1 (Ministry of Tourism and Culture 2011: 28) requires that the entire property be included in the survey. The survey of the Sixth Line Corporation property included 100% of all lands that will be subject to impact from the proposed development and are considered to retain a potential for extant archaeological remains. Accordingly, the survey satisfies this standard.

Standard 3 of Section 2.1 of the Standards and Guidelines (Ibid: 29) requires that the property be surveyed when weather and lighting conditions permit good visibility of land features. The weather and lighting conditions that pertained during the three days of the 2011 survey that is described in this report satisfied this standard.

Section 2.1 of the Standards and Guidelines (Ibid: 29) requires that artifacts discovered during the course of the Stage 2 survey be recorded using a GPS unit. The three artifact locations documented in this report are provided in the supplementary documentation appended to this report, as per Standard 1 of Section 7.6 (Ibid: 130).

Standard 5 of Section 2.1 of the Standards and Guidelines (Ibid: 29) requires that assessment reports map all field activities (e.g. extent and location of field methods, survey intervals) in reference to fixed landmarks, survey stakes and development markers. The standard also requires that mapping must be accurate to 5 m or to the best scale available. The mapping in this report satisfies this standard.

Standard 6 of Section 2.1 of the Standards and Guidelines (Ibid: 30) requires that surveyors photo-document examples of all field conditions encountered (e.g. ploughed field, pasture or woodlot, disturbances). The 12 photographs that are included in this report satisfy this standard.

Standards 1-6 inclusive of Section 2.1.1 of the Standards and Guidelines (Ibid: 30) relate to survey techniques. Standard 1 requires that cultivated agricultural lands must be subject to a pedestrian survey. Standard 2 of this section requires that lands to be surveyed must be recently ploughed and that the use of chisel ploughs is not acceptable. Standard 3 requires that lands to be assessed by pedestrian survey must be weathered by one heavy rainfall or several light rains to improve visibility of archaeological resources. Standard 4 requires that direction be given to the individuals farming the property to ensure that it be ploughed deep enough to provide total exposure but not deeper than previous ploughing. Standard 5 requires that lands to be assessed by pedestrian survey have at least 80% ground visibility. In addition, Standard 6 requires that survey transects should be spaced at a 5 m interval in all areas inferred to have archaeological potential. In the present case, the survey satisfied all of the above standards.

Standard 1 of Section 2.1.2 requires that only those lands for which ploughing is not viable be subjected to a test pit survey (Ministry of Tourism and Culture 2011: 31-32). Standard 2 requires that the test pit survey be conducted at no greater than a 5 m interval in areas within 300 m of archaeological potential. Standard 4 requires that the test pitting survey extend to within 1 metre of built structures (both intact and ruins). Standards 5-9 inclusive require that the test pit survey consist of the excavation of 30 cm diameter pits to a depth of 5 cm into subsoil, that all soils are screened using 6 mm mesh in order to maximize artifact recovery, that all artifacts from each test pit are collected, and that all test pits are backfilled upon completion. In the present case, the spring and summer 2011 test pit survey satisfied all of the above standards.

Further to the above, Section 2.1.3 Standard 2 of the Standards and Guidelines (Ibid: 33) outlines two options for the intensification of a shovel test pit survey when an artifact is recovered from a test pit. Of these, Option A provides for the excavation of a maximum of eight additional test pits surrounding the positive test pit followed by the excavation of at least one unit over the positive test pit. The intensification of the survey at a Locations 1 and 2, which were initially identified as single occurrences of First Nations chipped lithic artifacts, accorded with Option A of Standard 2 of Section 2.1.3.

Standard 2c of Section 7.8.1. of the Standards and Guidelines (Ibid: 137) requires that this section of the Stage 2 report provide detailed and explicit descriptions to address any differences in approach for areas possessing different conditions. In the case of the assessment described in this report, there were none, so that is not an issue for the present assessment.

Standard 2d of Section 7.8.1 of the Standards and Guidelines (Ibid: 137) requires that this section of the Stage 2 report provide detailed and explicit descriptions of how each standard was addressed where alternative methods acceptable through guidelines or special conditions were used. In the case of the assessment described in this report, no alternative assessment methods were used, so that is not an issue for the present assessment.

4.0 RECORDS OF FINDS

Standard 2 of Section 7.8.2 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 137-138), the Record of Finds section of the document, requires that archaeological assessment reports include an inventory of the documentary record that was generated by the fieldwork. The documentary record that has been generated by the fieldwork documented in this report includes hand-made notations on printouts of digital aerial photographs and on plans of the proposed development. It also includes field notes. Finally, it includes digital photographs of the fieldwork.

As stated in Section 1.0, the present report documents the Stage 1 background research and the Stage 2 pedestrian and test pit survey of the Sixth Line Corporation property. No artifacts were discovered during the course of the pedestrian survey. Three sites were discovered by the shovel test pit survey of non-arable lands.

Section 7.8.2 Standards 1c and 1d of the Standards and Guidelines (Ibid: 138) require that reports include a catalogue of the artifacts that were recovered as well as a description of artifacts and features that were left in the field. In the present case, no artifacts were left in the field. The catalogue of the artifacts that were recovered from Locations 1, 2 and 3 is presented in the Appendix to this report. Summary data on the material recovered from each of the three sites are presented in Table 4.

Section 7.5.11 of the Standards and Guidelines (Ibid: 128), which concerns images in Stage 2 survey reports, requires that reports include images of a representative sample of artifacts. A representative sample of the artifacts recovered by the Stage 2 assessment of the property is illustrated in Plate 13. The pertinent photographs of the site locations themselves are presented as Plates 1-3 of the supplementary documentation report. The supplementary documentary also included specific information regarding the location of each site. The three sites are described below.

4.1 Location 1

A single piece of Onondaga chert chipping debitage was discovered during the May 2, 2011 Stage 2 test pit survey. This discovery was designated Location 1. The find is located north of the abandoned red brick farmhouse in the south-central portion of the subject property. No other artifacts were recovered from the eight cardinal test pits dug at 2.5 meter intervals around the initial find. The single pre-contact specimen is a large tertiary flake and is illustrated in Plate 13a. This specimen represents an isolated First Nations findspot of unknown age and cultural affiliation.

The one-meter square test unit excavated over the location of the positive test pit did not recover any additional First Nations artifacts. However, it did recover 159 pieces of Euro-Canadian domestic refuse. They primarily date to the 20th century (Table 4).

The vast majority of the artifacts from Location 1 consist of Euro-Canadian domestic refuse; it numbers 158 pieces. The sample is dominated by hardware (n=70), followed by faunal remains (n=24), miscellaneous (n=20), tableware (n=12), recent materials (n=11), architectural items (n=9), utilitarian wares (n=10) and horse equipment (n=2). The analysis of these remains follows.

Table 4 Frequency of Stage 2 Cultural Remains from Locations 1, 2 & 3

Category	Class	Location 1	Location 2	Location 3
LITHIC	Chipping Detritus	1		
	Graver		1	
	Subtotal	1	1	
TABLEWARE	Ceramic	10	15	1
	Glass	2		
	Subtotal	12	15	1
UTILITARIAN	Ceramic	7	12	
	Glass	3		
	Subtotal	10	12	
HARDWARE	Nail	60		
	Spike	5		
	Fence Staple	2		
	Fence Wire	3		
	Subtotal	70		
HORSE EQUIPMENT	Horseshoe Nail	2		
ARCHITECTURAL	Brick	6	2	
	Glass	3	4	
	Subtotal	9	6	
MISCELLANEOUS	Glass	5	1	
	Metal	2		
	Coal	6		
	Slag	6		
	Ceramic	1		
	Subtotal	20	1	
RECENT MATERIAL	Metal	1		
	Rubber	5		
	Plastic	5		
	Subtotal	11		
FAUNAL REMAINS		24	2	
Total		159	37	1

Tableware

Tableware consists of glass and ceramic items that were used at the table. The glass tableware sample from Location 1 consists of two pieces: a rim and a sherd of colourless glass, such a tumbler or drinking glass. Tableware glass is rarely found on sites that date before 1850 but is a common occurrence on later domestic Euro-Canadian sites.

Archaeologists use ceramic tableware as indicators of the time period represented by historic archaeological sites. For example, creamware and pearlware are two types of ceramic tablewares that were popular in late 18th century and early 19th century but were replaced in the 1830s by white earthenware with a clear glaze. Various decorative techniques and patterns are also time sensitive.

Refined white earthenware with a bluish or greenish glaze is traditionally identified as pearlware. This ware type is found on sites that date to between the 1780s and the 1830s or 1840s (Kenyon 1986:6, Sussman 1997:57). The term whiteware is used for refined white earthenware with a clear glaze. Whiteware began in the 1830s. It followed creamware and pearlware as the most commonly available and widespread ceramic tableware. Although plain whiteware steadily declined in popularity through the 19th century, these wares had a moderate resurgence in the 1860s to 1880s (Kenyon 1991). Further, whiteware is still in production today (Brown 1982: 19; Miller et al. 2000: 13). Plain white earthenware ceramics were the least expensive tableware to produce, which partially explains their popularity (Kenyon 1983; Sussman 1997). Ironstone, also known as white granite, is a hard, thick bodied vitreous ceramic. It was introduced into Ontario in the 1840s and continued until the 1930s. An early mention of it in Ontario occurs in an invoice of 1848 (Kenyon 1985). The earliest pieces were plain, many with angular shapes. Moulded or raised edges were introduced in the late 1840s (Sussman 1985). During the 1850s and 1860s ironstone comprised approximately 10% of storekeepers' stocks; by the last quarter of the 19th century ironstone had saturated the Ontario market (Kenyon 1991).

The small sample of 10 pieces of tableware ceramics from Location 1 is equally divided between ironstone (n=5) and whiteware (n=5). Of the latter, four are plain and one is decorated with a transfer print. Transfer printing derives its name from the transfer paper used to put designs on ceramics (Collard 1983). Printed ceramics was one of the most expensive wares to purchase in the 19th century. For example, in 1850, printed plates were 50% more expensive than plain plates (Miller and Hunter 1990). Transfer printed ceramics were not commonly available at the beginning of the 19th century (Kenyon 1983, 1991; Miller and Hunter 1990). By 1828, printed ceramics were being produced in a variety of colours, such as red, green, brown and black, in addition to the standard blue printed wares (Majewski and O'Brien 1987: 143; Miller et al. 2000: 13). Transfer printed wares began to decline in popularity in the 1850s but picked up again in the 1870s (Miller 1991: 9). The transfer printed example from Location 1 is a blue printed plate rim (Plate 13d).

Of the five pieces of ironstone from Location 1, four are plain and one is moulded. The moulded plate rim is illustrated in Plate 13b. It is decorated with a design that includes a plain medallion with a floral or twig motif. The design or manufacturer has not been identified.

Utilitarian Wares

Utilitarian wares consist of ceramics and glass that were used for the storage and preparation of food. Unlike tablewares, ceramic utilitarian wares are common throughout the historic period and cannot be used for relative dating. Earthenware is commonly used for storage crocks and baking dishes. Stoneware is often used for bottles, ink wells and small storage jars. However, ironstone and whiteware were also used for storage containers.

The artifact sample from Location 1 includes 10 pieces of utilitarian ware. Location 1 contains both ceramic and glass utilitarian ware and includes red earthenware (n=6), bottle glass (n=3) and whiteware (n=1). Given the variation in glaze colours, it is likely that five different vessels are represented. A fragmentary rim sherd from one is illustrated in Plate 13c.

The piece of plain whiteware comes from a storage container and has been identified on the basis of the characteristic groove below the lip. The bottle glass includes two plain and one moulded. One of

the plain pieces is solarized while the other two are colourless glass. Solarization is normally seen in tableware and bottle glass. It results when the manganese used in the glass manufacturing process to dissipate the light green or yellow tint that results from iron oxide is exposed to the sunlight's ultraviolet for an extended period of time. Solarized glass dates from the 1870s until the 1920s (Jones et al 1989:13).

Architectural Items

Location 1 produced six red earthenware brick fragments and three sherds of colourless flat or window glass. All three pieces of window glass have a thickness of 1.9 mm.

Horse Equipment

Location 1 also produced two ferrous metal items that have been identified as horse shoe nails. They are larger with a heavier and more rounded head than typical horse shoe nails. This may indicate that they were used on large draft animals rather than the smaller horses that would have been used for saddle riding or pulling buggies or carriages.

Hardware

Hardware items such as nails can be used to assist in dating historical sites. For example, the type of manufacture, wrought or machine-cut, can be used as indicators of the time period for the site (Wells 2000). Rectangular headed nails are invariably machine cut nails, although some machine cut nails could be rose headed. Machines for cutting nails were introduced around 1800. These machines manufactured shanks but still required the head to be fashioned by hand. However, by the 1820s machines were developed for the manufacture of cut nails which included mechanical headers (Rempel 1980:369). Although machines for the production of wire nails were introduced into England by 1840 and the United States by 1850, wire nails are generally considered indicators of a 20th century occupation since machine cut nails were commonly produced and used as late as 1913 (Rempel 1980:102).

Location 1 produced a quantity of ferrous alloy metal hardware items (n=70). More than half of the artifacts from Location 1 consists of nails (n=60). Only two, a rose head nail and a shaft have been identified as wrought. The bulk are either machine cut (n=12) or wire (n=35). The remaining eleven (six unidentified head, five shaft) could not be identified due to extensive corrosion. Six of the machine cut nails could be identified as rectangular head, four are the shaft portion only while the head shape of the remaining two machine cut nails could not be identified due to corrosion. The wire nails are either shafts (n=6) or have flat round heads (n=29) in a variety of sizes.

Spikes are not a common occurrence on sites. The combination of a low demand and high cost resulted in most spikes being produced as needed by the local blacksmith for specific jobs since they were too expensive to keep stocked for occasional sales and were handmade almost until the advent of the wire nail (Rempel 1980:102). Five hardware fasteners with round flat heads and wire shafts have been identified as spikes on the basis of size. The remaining five hardware items recovered from Location 1 include two wire staples and three sections of wire from a page wire fence.

Miscellaneous

Miscellaneous material consists of unidentified pieces of glass, metal and ceramics that are too small to identify, lack distinctive features to place in other categories, or are too poorly preserved to identify their original function. Location 1 produced 20 pieces of miscellaneous material.

The miscellaneous material from Location 1 includes slag (n=6), coal (n=6), glass (n=5) and metal (n=2) and one ceramic (n=1). Both the slag and coal are typical finds on early to mid 20th century domestic habitation sites. The glass includes four pieces of indeterminate colourless glass of which three have been partially melted and the remaining piece of glass is a small indeterminate sherd of opaque white or “milk” glass. The two metal items are both ferrous alloy of which one appears to be a cylindrical valve mounted on a short round rod. The second piece of metal is a flat strip with several triangular cuts along the body creating narrow tangs that would be used as tacks to secure the strip to a wooden object, most likely a shipping crate. The single sherd of ceramic appears to be the collar portion of an unglazed red earthenware flower pot.

Faunal Remains

Twenty-four pieces of faunal remains were recovered from Location 1. Both mammal and bird bone are represented in the sample. The three pieces of bird bone include the scapular end of the coracoid, a shaft section of from a scapula and an indeterminate bone fragment. All are from a medium size bird, although it was possible to identify the coracoid as *Gallus gallus* (domestic chicken).

The mammal bone is all identified as large and includes six long bone shaft fragments, a single cervical vertebrae fragment from a subadult animal and ten indeterminate fragments, of which two are also calcined or burnt. The size and density of the fragments long bone shaft and vertebrae indicate *Bos* or domestic cattle. One of the long bone fragments has been saw cut, indicating modern butchering methods.

Recent Material

Eleven pieces of recent material was recovered from Location 1. This is not surprising since Location 1 produced a range of material typical with ongoing occupation of an existing homestead throughout the 20th century and possible into the early 21st century.

The pieces of recent material from Location 1 include hard black rubber (n=5), unidentified thin plastic (n=5) and a piece of thick metal foil. There is no corrosion on the metal and it may be from a beverage can.

4.2 Location 2

A single expedient tool made of Onondaga chert was discovered during the June 29, 2011 Stage 2 test pit survey of the proposed development. It is a large tertiary flake that has been worked into a graver. It measures 51.7 mm in length, 27.8 mm in width and has a thickness of 8.0 mm. The primary use wear is located on the dorsal/lateral surface and measures 39.5 mm in length with a

height of 4.5 mm. This portion contains two spurs. A secondary area of use wear is located on the dorsal/distal surface and is associated with a single spur. The graver is illustrated in Plate 13e. This discovery has been designated Location 2. The find was located in the southern half of the abandoned agricultural field, on the west side of West Morrison Creek, in the southwest portion of the subject property. No other artifacts were recovered from the eight cardinal test pits dug at 2.5 meter intervals around the initial find. This specimen represents an isolated First Nations findspot of unknown age and cultural affiliation. West Morrison Creek separates this findspot from the Location 1 First Nations findspot.

The one-meter square test unit dug over the location of the positive test pit did not recover any additional First Nations artifacts. However, it did recover 36 pieces of Euro-Canadian domestic refuse. They date from the early to mid 19th century. As indicated in Table 4, the sample of 36 specimens is dominated by the ceramic tableware (n=15), followed by utilitarian wares (n=12), architectural items (n=6), faunal remains (n=2) and miscellaneous (n=2).

Tableware

Although the overall artifact sample from Location 2 is only one quarter that of Location 1, the Stage 2 investigations of Location 2 yielded a slightly larger sample of ceramic tablewares (15 specimens from Location 2 compared to 12 from Location 1). In addition, the material from Location 2 is earlier in date.

The small ceramic tableware sample from Location 2 is dominated by 13 pieces of whiteware with two pieces of pearlware. The 13 pieces of whiteware consist of 10 plain sherds, one unidentified sherd, one painted sherd and one transfer printed sherd.

As stated previously, refined white earthenware with a bluish or greenish glaze is traditionally identified as pearlware. This ware type is found on sites that date to between the 1780s and the 1830s or 1840s (Kenyon 1986: 6, Sussman 1997: 57). The two pieces of pearlware from Location 2 are both very small (Plate 13f, 13g); they have been identified as edge decorated in the colour green (Plate 13f, 13g), primarily due to the traces of distinctive green colour. One piece appears to have a scalloped rim; the other piece has a trace of an impressed design.

Edged ceramics usually occur in Ontario in the form of plates of various sizes where the decoration is confined to the edge of the rim. Edged ceramics were first produced in the 1770s. Green edged ceramics were manufactured into the early 1830s. Blue edged ceramics overlap them in date and continued to be manufactured well into the late 19th century (Miller 1991:6). Edged wares were an inexpensive product for most of the period of their manufacture (Miller 1991:6).

The Location 2 sample also includes painted wares. Blue painted floral designs took over from the Chinese style popular from the 1770s to the War of 1812 (Miller 1991:8). Floral patterns retained their popularity into the 1820s (Miller 1991:8). Polychrome painted wares (Early Palette) using brown, olive green and mustard yellow were first introduced ca. 1795 (Miller 1991:8). These colours were common on floral patterned tea wares into the 1820s. By the 1830s, the tea ware colour palette was extended to include a greater variety of colours, including red (Miller 1991:8). The new (Late Palette) principal colours are blue, green, red and black and range in date from the 1830s to the 1870s. However, by the 1850s the use of painted wares had declined significantly (Kenyon 1986:3,

1991:12). Like edged and dipt ceramics, painted wares were relatively inexpensive to produce (Kenyon 1986:5).

Location 2 produced the only piece of painted tableware recovered by the Stage 2 survey of the Sixth Line Corporation property. It is a very small sherd of blue painted whiteware. The delicacy of the design suggests that this is a fairly early piece of whiteware and that it was most likely manufactured before 1840. The specimen is illustrated in Plate 13h.

Based on the small sample of ceramic tablewares, the genesis of the material from Location 2 dates at least as early as the 1830s and may date as early as the 1820s. On the whole, the available evidence indicates that the site dates to the second quarter of the 19th century, ca. 1825-1850.

Utilitarian Wares

The 12 pieces of utilitarian ware from Location 2 consists entirely of ceramic material, primarily red earthenware (n=11) plus a single piece of stoneware. Most of red earthenware has the same dark brown glaze (n=10) and are likely fragments from the same vessel. They include two small rim pieces that appear to come from a shallow dish.

Miscellaneous

This category in the Location 2 sample is limited to a single small piece of colourless curved miscellaneous glass.

Architectural Items

Location 2 produced two tiny red earthenware brick fragments and four sherds of flat or window glass. One sherd is aqua coloured and has a thickness of 1.1 mm. The other three sherds are colourless glass with a thickness of 1.8 mm.

Faunal Remains

Two pieces of faunal remains were recovered from Location 2. They are both pieces of mammal bone but are too small to identify to species. One is from an indeterminate medium-sized mammal while the other is from a large mammal such as a pig or sheep.

4.3 Location 3

A single Euro-Canadian ceramic tableware sherd was discovered during the June 29, 2011 Stage 2 test pit survey of the proposed development. This discovery has been designated Location 3. The find was located in the northern half of the abandoned agricultural field, west of West Morrison Creek, in the southwest portion of the subject property. No other artifacts were recovered from the eight cardinal test pits dug at 2.5 meter intervals around the initial find.

The single sherd from this location is a piece dipt ware, also known as banded ware and industrial slip ware. It has a blue glaze. As such, this sherd represents a fragment from a broad blue band of a dipt ware vessel. Decoration of this type dates from the latter half of the 19th century into the 20th century. It is illustrated in Plate 13k.

Given the lack of other Euro-Canadian material at this locus and the relatively late date of the single piece of ceramic, Location 3 was determined to be an isolated findspot. As such, it was considered that a one-meter square excavation unit was not required for this location.

5.0 STAGE 2 ANALYSIS AND CONCLUSIONS

Standard 1 that is specified in Section 7.8.3 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 138) requires that the Analysis and Conclusions section of reports on Stage 2 fieldwork addresses the following statement: “*Summarize all findings from the Stage 2 survey, or state that no archaeological sites were identified.*” The information that is presented in this section of the report is intended to satisfy the standard that is specified in Section 7.8.3.1 of the 2011 standards and guidelines.

In the present case, no artifacts were recovered during the Stage 2 pedestrian survey of the cultivated portions of the Sixth Line Corporation property. The Stage 2 test pit survey of uncultivated portions of the subject property resulted in the discovery of cultural remains from three locations. They have been designated as Locations 1, 2 and 3. Summary data on the material recovered from each of the three sites are presented in Table 4. A representative sample of the artifacts recovered by the Stage 2 assessment of the property is illustrated in Plate 13.

5.1 Location 1 Analysis

As described in Section 4.0 of this report, the Stage 2 assessment of Location 1 recovered an isolated First Nations graver of unknown age and cultural affiliation as well as 158 pieces of Euro-Canadian domestic refuse. The latter is dominated by hardware (n=70), which represents fully 44% of the sample. The sample also includes miscellaneous metal, coal and slag, which are generally indicative of late sites.

Ceramic tablewares, which usually dominate artifact samples on 19th century domestic homestead sites, are only represented by 12 specimens in this collection, making up only 8% of the sample. Wares and vessel forms typical of early to mid 19th century, such as pearlware and creamware and scalloped edgeware, are absent, as are traits and decorative techniques that are typical of the mid 19th century, such sponged and stamped wares and angular ironstone.

White ware, ironstone and machine cut nails, which are present in this sample, can date to the 19th century. However, they are not exclusive to the 19th century. Rather, they can be decades later. For example, white ware is still in production today (Brown 1982: 19; Miller et al. 2000: 13). In addition, ironstone continued to be produced until the 1930s (Miller et al. 2000: 13). Finally, cut nails were still manufactured in the early 1900s (Rempel 1980: 102), and are still produced today as a specialty nail (*ibid*; Miller et al. 2000: 14).

All things considered, the material recovered from Location 1 suggests that the Euro-Canadian material dates to the late 19th and early 20th century. This assessment is based in part on the large sample of wire nails, the lack of earlier ceramic tablewares, and the presence of solarized glass. Solarized glass was intended to be colourless when it was manufactured. However, an additive to the glass, manganese dioxide, created a chemical reaction under prolonged exposure to sunlight; it resulted in the glass having a slight purple hue. Solarized glass generally dates from the final quarter of the 1800s to the World War I (Jones & Sullivan 1985:13).

As indicated in the information presented in the Heritage Impact Statement by Golder (2012), there are some outstanding questions about the date of construction of the abandoned farm house at 41 Dundas Street East, the house beside Location 1. The heritage inventory of the Town of Oakville (2010b) has identified this house as the residence of William Perkins; he owned the property for seven years, from 1874 to 1881. Given the unknowns about the date of construction, it is theoretically possible that the house was constructed sometime late in the land tenure of Jordon Munn (1841-1862). Other possible candidates include subsequent owners of Lot 15, Concession 1 N.D.S., and what is now the Sixth Line Corporation property. They include John Hastings (1862-1873), George Aude (1873-1874), and William Perkins (1874-1881). Regardless of the specifics, the historical and archaeological evidence suggests that the house had multiple occupants during the 100 years or so that it was occupied, and it would be impossible to associate the archaeological remains with any one owner and occupant.

5.2 Location 2 Analysis

As indicated in Table 4, the Stage 2 investigations recovered 37 artifacts from Location 2. The single pre-contact specimen is a large tertiary flake that has been worked into a graver. This specimen represents an isolated First Nations findspot of unknown age and cultural affiliation.

Based on the small sample of ceramic tablewares, the genesis of the Euro-Canadian material from Location 2 dates at least as early as the 1830s and may date as early as the 1820s. On the whole, the available evidence indicates that the site dates to the second quarter of the 19th century, ca. 1825-1850. This assessment is based on the presence of pearlware and the absence of ironstone. The presence of edged and painted ceramics also supports an early to mid 19th century date for this location.

As little material has been recovered from Location 2 to date, the function of the Euro-Canadian component at this location is unknown. However, the site is located on a knoll beside a creek, the type of settling for log shanties and cabins that was favoured by early pioneers. If this site does prove to be a homestead, the fact that it isn't rich suggests that it was not occupied for very long. The question as to which pioneer or pioneers it is related to also remains to be answered.

Based on the history of land tenure presented earlier in this report, John Robinson owned the property from 1804 until sometime in the first two or three decades of the 19th century, when he sold it to Daniel Munn. It is unknown if Robinson lived on the property. Munn lived just south of the property, but in 1820 he deeded the land in Lot 15, Concession 1 S.D.S, where he had settled in 1806, for use as a cemetery. The next documented owner of what is now the sixth Line Corporation property Jordan Munn, who received it in a bequest from his father Daniel in 1841, and retained it until he sold it in 1862. Possible candidates for the pioneer or pioneers to whom Location 2 is related, then, are John Robinson and Jordan Munn.

5.3 Location 3 Analysis

An isolated piece of dipt tableware was recovered from the Stage 2 survey of Location 3. Despite an intensified test pit survey, no other artifacts were recovered from this location.

5.4 Conclusions

Standard 2b of Section 7.8.3 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 139) requires that this section of the report include a comparison against the criteria in the Stage 2 *Property Assessment* to determine whether further assessment is required. This element of the standard is addressed below.

Standard 1 of Section 2.2 states (Ibid: 40), in part, the following:

Artifacts, groups of artifacts or archaeological sites meeting the following criteria require Stage 3 assessment:

- a. *pre-contact diagnostic artifacts or concentration of artifacts (or both):*
 - i. *within a 10 by 10 m pedestrian survey area:*
 - (1) *at least one diagnostic artifact or fire cracked rock in addition to two or more or more non-diagnostic artifacts.*
 - (2) *in areas east or north of the Niagara Escarpment at least Five non-diagnostic artifacts*
 - (3) *in areas on or west of the Niagara Escarpment, at least 10 non-diagnostic artifacts.*
 - b. *Single examples of artifacts of special interest:*
 - i. *Aboriginal ceramics*
 - ii. *exotic or period-specific cherts*
 - iii. *an isolated Paleo-Indian or Early Archaic diagnostic artifact.*

In the case of the two pre-contact isolated finds recovered from Location 1 and Location 2, neither of the two isolated finds of First Nations sites meets the requirements of Standard 1ai (1) or (3). Further, no aboriginal ceramics or exotic or period-specific cherts were recovered. The two First Nations artifacts recovered are undiagnostic and of unknown age and cultural affiliation. Therefore, they do not meet the criteria of Standard 1bii or 1biii. As such, the two First Nation artifacts recovered from Locations 1 and 2 do not have any cultural heritage value or interest and do not warrant a Stage 3 level of assessment.

Standard 1c of Section 2.2 of the Standards and Guidelines requires “*post-contact sites containing at least 20 artifacts that date the period of use to before 1900*” (Ministry of Tourism and Culture 2011a: 41) to proceed to a Stage 3 level of investigation. Location 1 dates to the late 19th - early 20th century and does not contain any artifacts that can be exclusively assigned to a pre-1890 date. Therefore, Location 1 has no cultural heritage value or interest and does not require any further archaeological assessment. Further, Location 3 is an isolated find and as such has no cultural heritage value or interest and does not require any further archaeological assessment.

Location 2 is the only Euro-Canadian component from which artifacts that date to the early to mid 19th century were recovered. It is also the only component that meets the requirements outlined in Standard 1c of Section 2.2. Given these considerations, Location 2 is considered to have cultural heritage value and interest and to warrant concerns for a more intensive Stage 3 level of assessment.

6.0 RECOMMENDATIONS

As detailed elsewhere in this report, the Stage 1 background study determined that no previous archaeological investigations had been carried out within the proposed Sixth Line Corporation development prior to the 2011 assessment, and that no archaeological sites had been documented within the property. The subsequent Stage 2 survey confirmed the presence of three archaeological sites within the proposed development. Of these, one was determined to have potential cultural heritage value and interest. It is Location 2.

The material the Stage 2 survey recovered from Location 2 includes early to mid Euro-Canadian domestic refuse that may be associated with an early homestead. As the results of the Stage 2 investigations indicate this site has potential cultural heritage value and interest, it is recommended that a more detailed Stage 3 assessment of Location 2 be carried out.

One task for the proposed Stage 3 assessment will be to carry out more detailed archival research on the history of land tenure of the property that contains the site. The purpose of this research will be to reconstruct the history of the settlement and land tenure of the property during the 19th century. It is anticipated that this will assist in identifying the individuals who occupied or were otherwise responsible for the site as well as details on their occupation of the property. That information, in turn, will assist in interpreting the information that will be obtained by the Stage 3 archaeological fieldwork at Location 2.

The second task for the Stage 3 work plan will be to conduct the systematic Stage 3 test excavation of the historic site. Initially, it will involve the manual excavation of a checkerboard pattern of one-metre test squares at a 5 metre interval across the site. As required by Standard 2 of Section 3.2.3 of the Standards and Guidelines (Ministry of Tourism and Culture 2011: 51) additional test units amounting to 20% of the five-metre grid total will then be excavated to investigate particular areas of artifact concentrations within the site limits. All test units will be excavated five cm into the subsoil unless cultural features are encountered at the ploughzone-subsoil interface. In addition, all excavated soils will be screened through 6 mm mesh in order to maximize artifact recoveries. Finally, each test unit will be backfilled upon completion.

One objective of the test excavations will be to increase the artifact sample from the site. A second objective will be to determine the location and extent of any artifact concentrations that may represent or relate to middens (refuse deposits) and to subsurface cultural features such as root cellars. A third objective will be to better determine the effective limits of the site. The results of the test excavations will facilitate the interpretations of the nature of the site.

The main purpose of the proposed test excavations will be to confirm whether Location 2 does indeed represent a significant archaeological resource and planning concern. If that were to be confirmed, there would be two options to mitigate potential impacts to the site from the proposed construction of the Sixth Line Corporation development. One would be preservation by avoidance. The other would be mitigation by the implementation of Stage 4 salvage excavations.

If it should evolve that the preferred mitigative option for this site were to be preservation by avoidance, the Stage 3 assessment would effectively confirm the area that will require preservation and avoidance. On the other hand, if the preferred mitigative option for this site should prove to be

Stage 4 salvage excavations, the results of the Stage 3 assessment would confirm the limits of the area of concern for the salvage excavations. They would also help inform the requirements of the salvage excavations.

The Stage 1-2 archaeological assessment of the proposed Sixth Line Corporation development resulted in the formulation of a series of conclusions, recommendations and requests. They are as follows.

5. As it is the finding of the assessment that Locations 1 and 3 of the proposed development do not have any cultural heritage value or interest, it is recommended that neither of these sites warrants any further archaeological investigations or concerns.
6. The results of the Stage 2 survey determined that Location 2 does have potential cultural heritage value and interest. As such, the analysis of the cultural remains that were recovered by the survey determined that the site warrants a more intensive Stage 3 level of assessment.
7. It is recommended that the Ministry of Tourism, Culture and Sport issue a letter of satisfaction concurring with the findings of the Stage 1-2 assessment and accepting the present report into the Ontario Public Register of Archaeological Reports.
8. It requested that a copy of the Ministry's letter be forwarded to Rob Freeman of Freeman Planning Solutions. His e-mail address is planningsolutions@sympatico.ca.
9. In the event that any deeply buried cultural remains should be discovered during future earthmoving or construction related to the proposed construction of the Sixth Line Corporation development, it is recommended that the discovery be reported immediately to archaeological staff of the Ministry of Tourism, Culture and Sport by telephone (416 212-8886) or by e-mail (Archaeology.ontario.ca). The Ministry will then allocate an Archaeological Review Officer to respond to the reported discovery.
10. In the event that any human remains should be discovered during future earthmoving or construction related to the proposed construction of the Sixth Line Corporation development, it is similarly recommended that the discovery be reported immediately to archaeological staff of the Ministry of Tourism, Culture and Sport, and to the police, the coroner and Michael D'Mello. Mr. D'Mello is the Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Consumer Services. His telephone number is 416 326-8404 and his e-mail address is Michael.D'Mello@ontario.ca.

7.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The standards and guidelines formulated by the Ministry of Tourism and Culture (2011) that came into effect on January 1, 2011 have requirements that archaeological assessment reports must include statements that concern compliance with pertinent legislation. Those statements were draughted by the Ministry's legal department. Furthermore, it is understood that in order for reports to conform to the current standards and guidelines the pertinent statements regarding compliance legislation must not only be cited but must also be quoted verbatim.

The pertinent standards in the current standards and guidelines are as follows:

1. Advice on compliance with legislation is not part of the archaeological record. However, for the benefit of the proponent and approval authority in the land use planning and development process, the report must include the following standard statements.
 - a. This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, 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.
 - b. 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 complete archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
 - c. 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*.
 - d. 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 Ministry of Consumer Services.

2. Reports recommending further archaeological fieldwork or protection for one or more archaeological sites must include the following statement: *“Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the Ontario Heritage Act and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.”*

The above standards are quoted verbatim from Section 7.5.9 of the standards and guidelines (Ministry of Tourism and Culture 2011: 126-127). All of them apply to the present report. However, it should be noted that effective July 1, 2012 matters relating to cemeteries and human remains are subject to the provisions of the Funeral, Burials and Cremations Act alone; the Cemeteries Act (RSO 1990b) is no longer in effect.

8.0 REFERENCES CITED

Archaeological Services Inc.

- 1998 Master Plan of the Archaeological Resources of the Regional Municipality of Halton. Report on file, Regional Municipality of Halton and Ontario Ministry of Tourism, Culture and Sport.
- 2004 Stage 1 Archaeological Assessment of the North Oakville Secondary Plan, West of Sixteen Mile Creek in the Town of Oakville, Regional Municipality of Halton, Ontario. Draft for Review and Discussion. Submitted to Macaulay Shiomi Howson Ltd. February 2004.
- 2006 Stage 1 Archaeological Assessment, Dundas Street (Regional Road 5), Neyagawa Boulevard to Oak Park Boulevard Class Environmental Assessment, Town of Oakville, Ontario. PIF #057-198-2005. Draft report on file, McCormick Rankin Corporation and Regional Municipality of Halton.
- 2009 Master Plan of the Archaeological Resources of the Regional Municipality of Halton: 2008 Update. Phase 3 Sustainable Halton Report 3.06. April 3, 2009. On file, Regional Municipality of Halton and Ontario Ministry of Tourism, Culture and Sport.

Brown, Ann R.

- 1982 Historic Ceramic Typology with Principal Dates of Manufacture and Descriptive Characteristics for Identification. Delaware Department of Transportation. Division of Highway, Location and Environmental Studies Office.

Chapman, Lyman John and Donald F. Putnam

- 1984 **The Physiography of Southern Ontario (Third Edition)**. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Collard, Elizabeth

- 1984 **Nineteenth Century Pottery and Porcelain in Canada**. McGill-Queen's University Press, Kingston and Montreal. (Second edition).

Ferris, Neal and Ian Kenyon

- 1983 There was an Englishman, A Scotsman and An Irishman. *KEWA* 83:4:2-12.

Gillespie, J. E., R.E. Wicklund and M. H. Miller

- 1971 **The Soils of Halton County. Report No. 43 of the Ontario Soil Survey**. Research Branch of the Canadian Department of Agriculture and the Ontario Agricultural College. Guelph, Ontario.

Golder Associates

- 2011 Final Report, Phase I Environmental Site Assessment, Sixth Line Corporation, Sixth Line and Dundas Street East, Oakville, Ontario. July 11, 2011. Prepared for the Sixth Line Corporation, c/o Arutip Engineering Limited.
- 2012 Heritage Impact Statement, Part of Lot 15, Concession 1 North of Dundas, Geographic Township of Halton, Now City of Oakville. November 14, 2012. Prepared for the Sixth Line Corporation, c/o Krpan Group.

Government of Ontario

1990a **The Ontario Heritage Act (RSO 1990)**. Queen's Printer, Toronto.

1990b **The Cemeteries Act (R.S.O. 1990)**. Queen's Printer, Toronto.

1990c **The Planning Act (R.S.O. 1990)**. Queen's Printer, Toronto.

2002 **The Funeral, Burial and Cremation Services Act**. Queen's Printer, Toronto.

Jones, Olive and Catherine Sullivan

1989 **The Parks Canada Glass Glossary for the Description of Containers, Tableware, Closures and Flat Glass**. Studies in Archaeology, Architecture and History. National Historic Parks and Sites Branch, Parks Canada, Environment Canada.

Kenyon, Ian

1980 *Window Glass Thickness*. Nineteenth Century Notes **KEWA** 1980-2.

1983 *Plates and Dishes in Early 19th Century Ontario*. **KEWA** 83-1:13-16.

1985 A History of Ceramic Tableware in Ontario, 1780-1840. *Arch Notes* 1985:41-57.

1986 The Consulting Archaeologist and the Analysis of 19th Century Ceramic Tablewares. Archaeology Unit, Ontario Ministry of Tourism, Culture and Sport.

1991 A History of Ceramic Tableware in Ontario: 1780-1890. Paper prepared for distribution at "An Introduction to English Ceramics for Archaeologists Workshop", sponsored by the Association of Professional Archaeologists, and held in Toronto.

1992 Spilled Ink and Broken Cups: The Distribution and Consumption of Ceramic Tableware in Upper Canada, 1800-1840. Paper prepared for the 25th Annual Meeting of the Canadian Archaeological Association, London.

1995 Weeds Upspring Where the Hearth Should Be: Rural House Abandonment in Southern Ontario. **KEWA** Issue 95-6:2-16.

Miller, George L.

1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. **Historical Archaeology** Volume 25 No. 1:1-25.

1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. **Historical Archaeology** Volume 25 No. 1:1-25.

Miller, George L. and Robert R. Hunter, Jr.

1990 English Shell Edged Earthenware: Alias Leeds Ware, Alias Feather Edge. **35th Annual Wedgewood International Seminar**. pages 107-136.

Miller, George L., with contributions by P. Samford, E. Shlasko and A. Madsen
2000 Telling Time for Archaeologists. **Northeast Historical Archaeology** 29:1-22.
Ontario Ministry of Citizenship, Culture and Recreation

Ontario Ministry of Tourism and Culture
2011 Standards and Guidelines for Consultant Archaeologists.

Peters, John

1986 Transmission Line Planning and Archaeological Resources: A Model of Archaeological Potential for Southwestern Ontario. Archaeological Consulting in Ontario: Papers of the London Conference 1985. **Occasional Papers of the London Chapter, Ontario Archaeological Society, Inc.** No. 2.

Pihl, Robert

1986 Site Potential Modeling in Archaeological Consulting. Archaeological Consulting in Ontario: Papers of the London Conference 1985. **Occasional Papers of the London Chapter, Ontario Archaeological Society Inc.** No. 2.

D.R. Poulton & Associates Inc.

2008 The 2007-2008 Stage 1-2 Archaeological Assessment of the Arrassa Investments Inc. Property and the Timsin Holding Corp. Property, Part of Lot 16, Concession 1 NDS., Geographic Township of Trafalgar, Town of Oakville, Ontario. PIF #053-157-2007. July 2008. Report on file, Ontario Ministry of Tourism, Culture and Sport.

2010 The 2010 Stage 1-2 Archaeological Assessment of the 3030, 3042 and 3094 Sixth Line Properties, Part of Draft Plan 24T-0525, Trafalgar Geographic Township, Town of Oakville, Regional Municipality of Halton, Ontario. PIF #316-051-2010. Report on file, Ontario Ministry of Tourism, Culture and Sport. May 12, 2010.

2011 The 2011 Stage 1 Archaeological Assessment of the Proposed Timsin Storm Sewer & Munn's Pioneer Cemetery, Woodland Trails, Timsin Phase I Development, Draft Plan 24T-05025/0, Town of Oakville, Regional Municipality of Halton, Ontario. PIF #316-120-2011. Revised report, July 5, 2011.

Rempel, John I.

1980 **Building with Wood: and other aspects of nineteenth-century building in central Canada.** Revised Edition. University of Toronto Press, Toronto, Ontario.

Sussman, Lynne

1985 **The Wheat Pattern: An Illustrated Survey.** Studies in Archaeology, Architecture and History. National Historic Parks and Sites Branch, Parks Canada, Environment Canada.

1997 *Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware.* **Studies in Northeast Historical Archaeology**, No.1.

Town of Oakville

2010 Section E: Register of Properties of Cultural Heritage Value or Interest (Not Designated).
http://www.oakville.ca/Media_Files/heritage/HeritageRegisterE-May10.pdf.

Trafalgar Township Historical Society

n.d. Early Ward 5 History. www.trafalgartownshiphistory.ca/ward5.html

Tremaine, Geo. R.

1858 **Tremaine's Map of the County of Halton, Canada West.** Compiled and drawn by Geo. R. Tremaine from actual survey. Published by Geo. C. Tremaine, Oakville.

Walker & Miles

1877 **Historical Atlas of Halton County, Ontario.** Toronto.

Wells, Tom

2000 Nail Chronology: The Use of Technologically Derived Features. In **Approaches to Material Culture Research for Historical Archaeologists, 2nd Edition.** A Reader from Historical Archaeology. Compiled by D. Brauner. The Society for Historical Archaeology.

FIGURES

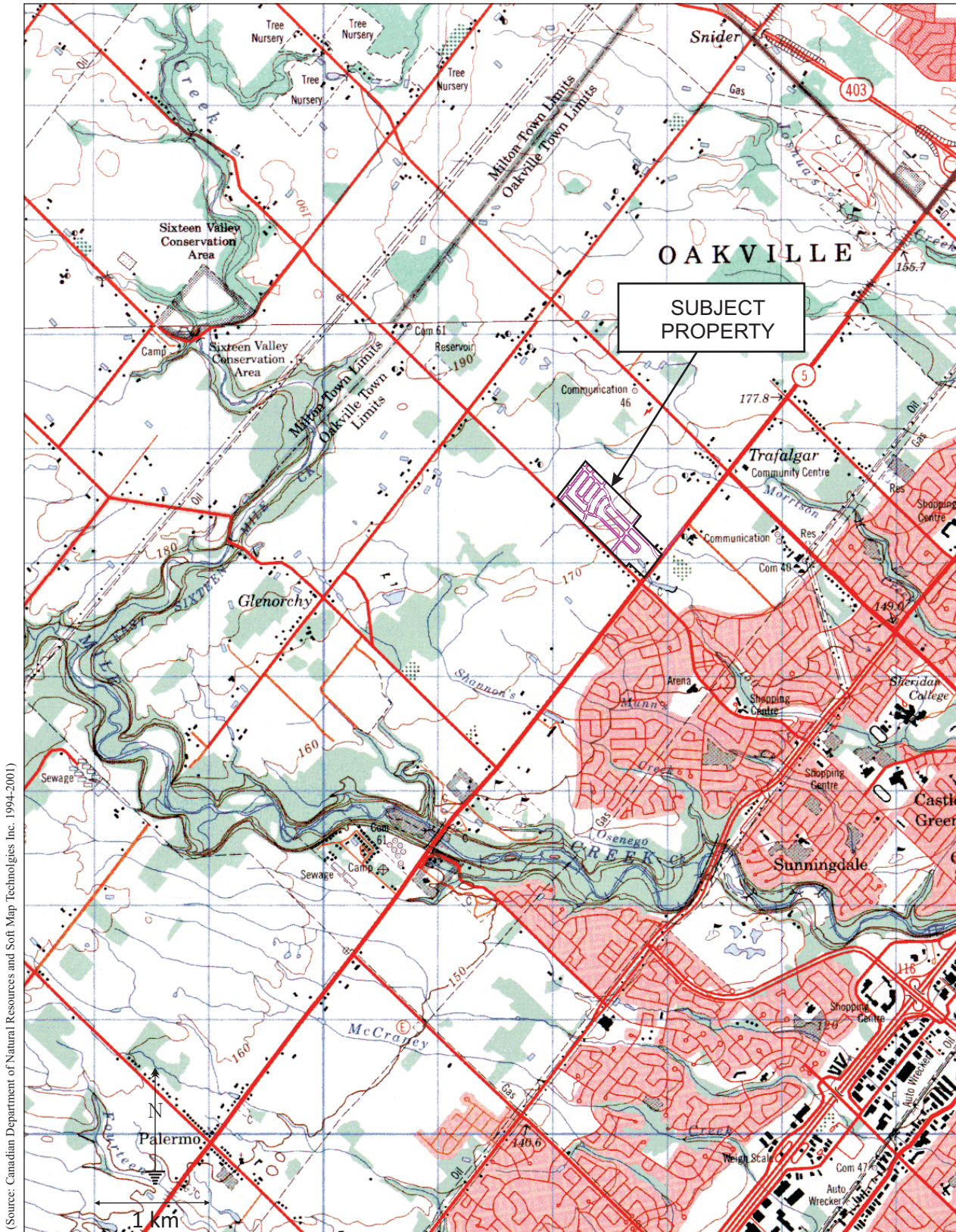


Figure 1 Location of the Sixth Line Corporation Property

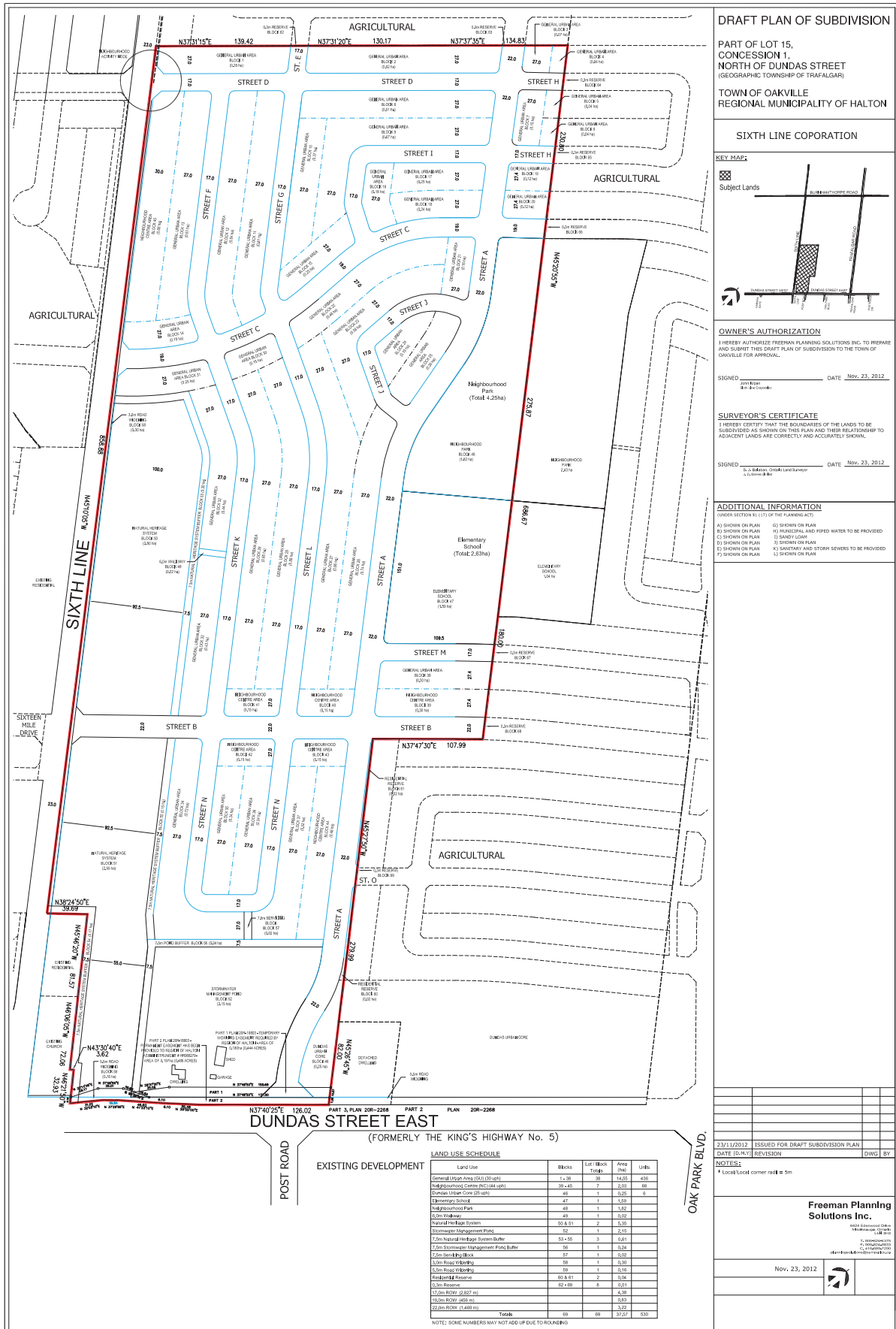


Figure 2 Sixth Line Corporation Proposed Plan of Development

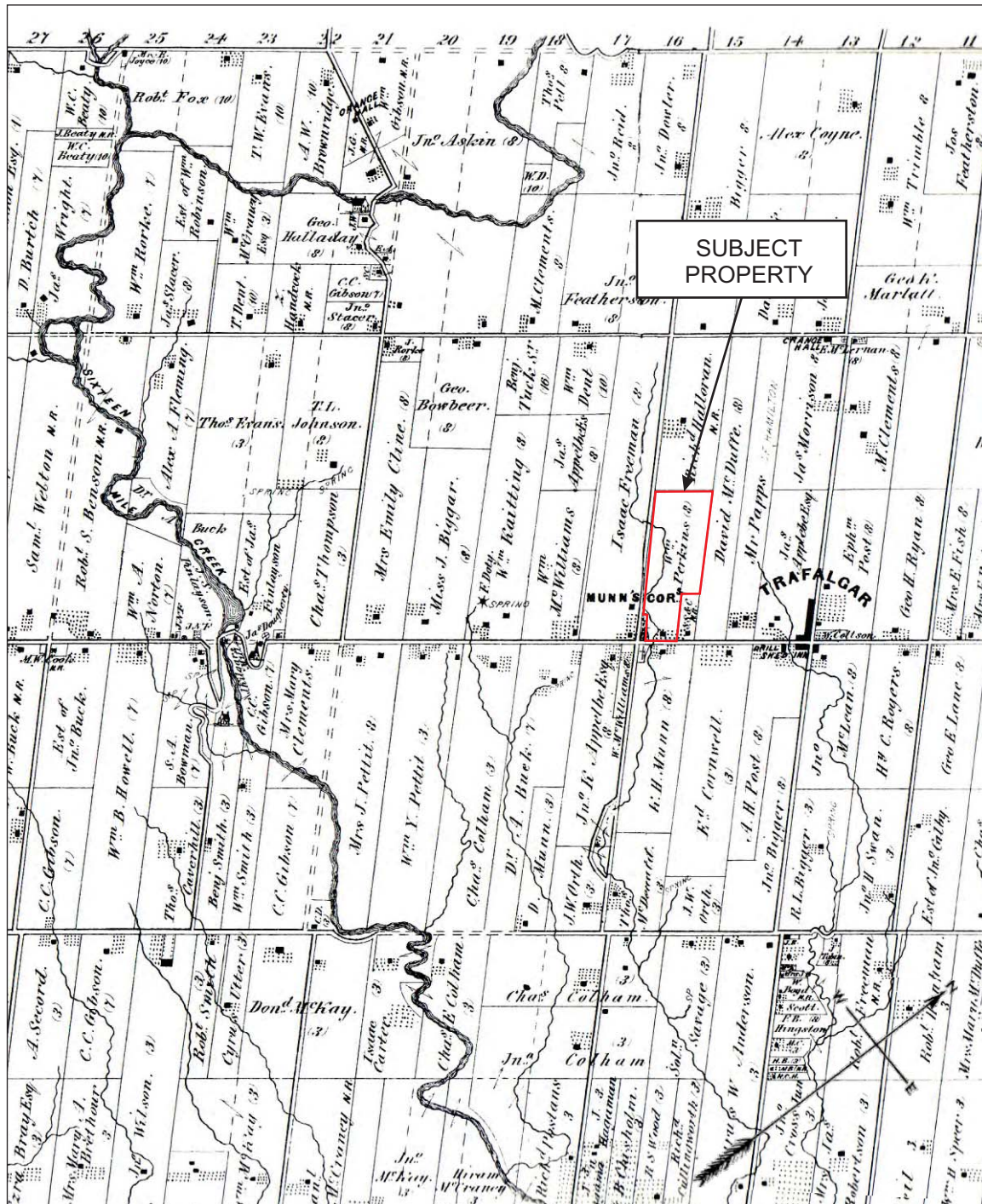


Figure 3 Facsimile of the 1877 Historical Atlas Map of Trafalgar Township



IMAGE © 2011 DIGITAL GLOBE 2011 GOOGLE IMAGE DATE 8/31/2009

Figure 4 Key Plan of Photographic Plates



Figure 5 Stage 2 Archaeological Survey Coverage and Techniques

PLATES



Plate 1 Pedestrian Survey in Progress, View Southwest



Plate 2 Sixth Line Survey, View West to Low and Wet Area



Plate 3 Surface Survey in Progress, View North across
Low and Wet Area



Plate 4 Surface Survey in Progress, View Northwest



Plate 5 Surface Survey in Progress, View South



Plate 6 Sixth Line Survey Area, View Northwest



Plate 7 View Northwest of Slope Leading to Low and Wet Area



Plate 8 Area of Disturbance, View North



Plate 9 Close-up of Test Pit Lacking Topsoil in Disturbed Area



Plate 10 Test Pit Survey in Progress, View West



Plate 11 Test Pit Survey in Progress, View Southeast



Plate 12 Test Pit Survey in Progress, View Southeast

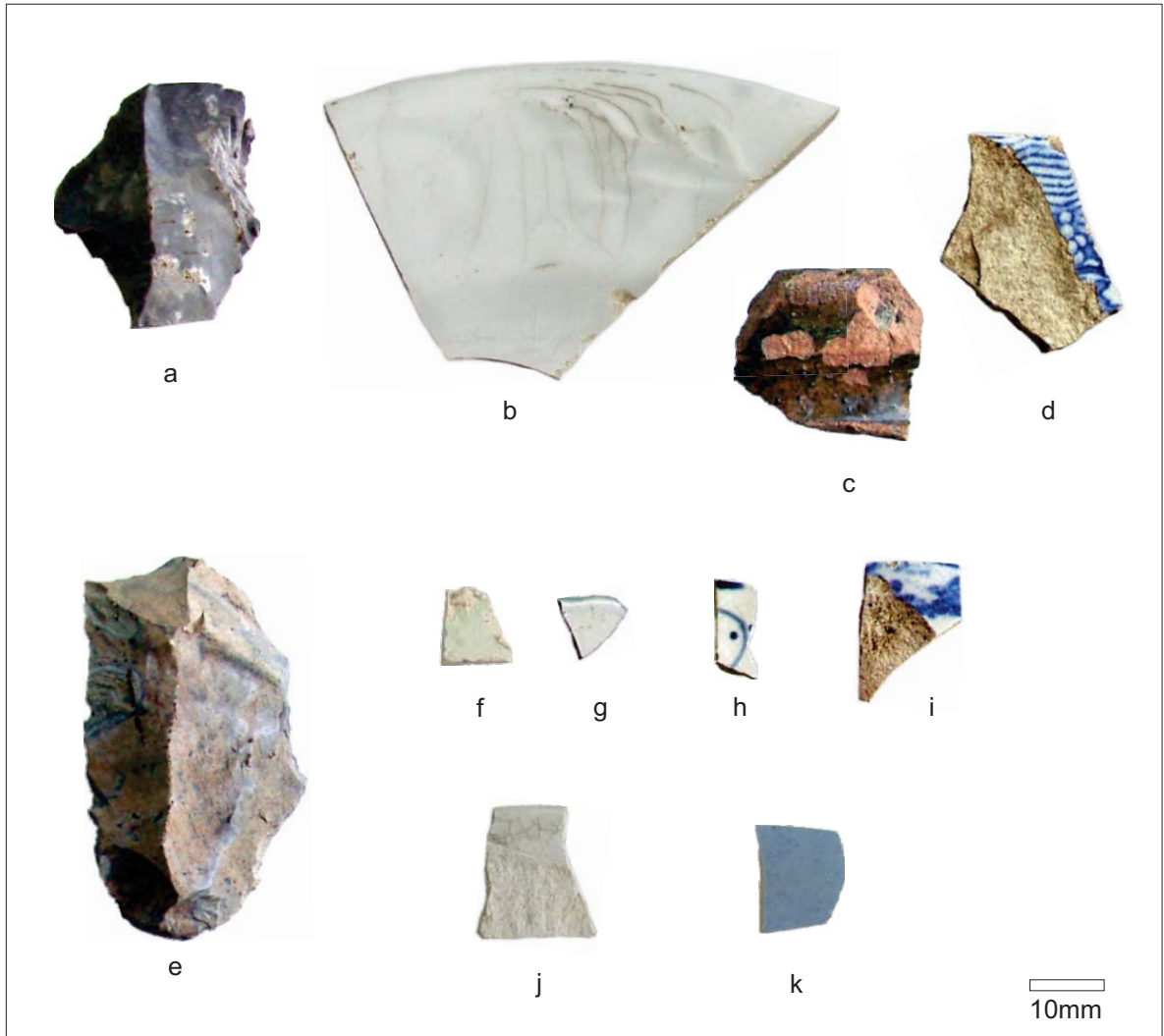


Plate 13 Sixth Line Stage 2 Survey, Select Artifacts

Location 1

- a Onondaga chert debitage
- b Moulded Ironstone plate rim
- c Red Earthenware sherd
- d Transfer Printed Whiteware plate rim

Location 2

- e Onondaga chert graver
- f & g Green Edged Pearlware sherds
- h Blue Painted Whiteware sherd
- i Transfer Printed Whiteware sherd
- j Plain Whiteware cup rim

Location 3

- k Dipt Whiteware sherd

APPENDIX

SIXTH LINE CORPORATION PROPERTY LOCATION 1

Date	Stage	Depth	Cat #	Category	Class	Type	Description	Mat / Colour	Freq	Burnt	Portion
May 2, 2011	2 Test Pit		1	Lithic	chipping detritus	teritary		Onondaga	1		
July 6, 2011	2 Test Unit	00 - 43 cm	1	Tableware	ceramic	whiteware	plain		4		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	2	Tableware	ceramic	whiteware	transfer print		1		rim
July 6, 2011	2 Test Unit	00 - 43 cm	3	Tableware	ceramic	ironstone	plain		4		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	4	Tableware	ceramic	ironstone	moulded		1		rim
July 6, 2011	2 Test Unit	00 - 43 cm	5	Utilitarian	ceramic	whiteware	plain		1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	6	Utilitarian	ceramic	red earthenware	glazed	assorted	5		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	7	Miscellaneous	ceramic	red earthenware	unglazed		1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	8	Architectural	brick	red earthenware			6		fragment
July 6, 2011	2 Test Unit	00 - 43 cm	9	Tableware	glass	vessel	plain	colourless	1		rim
July 6, 2011	2 Test Unit	00 - 43 cm	10	Tableware	glass	vessel	plain	colourless	1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	11	Utilitarian	glass	bottle	plain	colourless	1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	12	Utilitarian	glass	bottle	plain	solarized	1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	13	Utilitarian	glass	bottle	moulded	colourless	1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	14	Miscellaneous	glass	unidentified		colourless	4	3	sherd
July 6, 2011	2 Test Unit	00 - 43 cm	15	Miscellaneous	glass	unidentified		milk glass	1		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	16	Architectural	glass	flat	regular	colourless	3		sherd
July 6, 2011	2 Test Unit	00 - 43 cm	17	Hardware	nail	rose head	wrought	ferrous	1		complete
July 6, 2011	2 Test Unit	00 - 43 cm	18	Hardware	nail	shaft	wrought	ferrous	1		partial
July 6, 2011	2 Test Unit	00 - 43 cm	19	Hardware	nail	shaft	machine cut	ferrous	4		
July 6, 2011	2 Test Unit	00 - 43 cm	20	Hardware	nail	rectangular head	machine cut	ferrous	3	2	partial
July 6, 2011	2 Test Unit	00 - 43 cm	21	Hardware	nail	rectangular head	machine cut	ferrous	2		complete
July 6, 2011	2 Test Unit	00 - 43 cm	22	Hardware	nail	rectangular head	machine cut	ferrous	1		complete
July 6, 2011	2 Test Unit	00 - 43 cm	23	Hardware	nail	unidentified head	machine cut	ferrous	2		
July 6, 2011	2 Test Unit	00 - 43 cm	24	Hardware	nail	unidentified head	corroded	ferrous	6		partial
July 6, 2011	2 Test Unit	00 - 43 cm	25	Hardware	nail	shaft	corroded	ferrous	5		
July 6, 2011	2 Test Unit	00 - 43 cm	26	Hardware	nail	round head	wire shaft	ferrous	7		
July 6, 2011	2 Test Unit	00 - 43 cm	27	Hardware	nail	round head	wire shaft	ferrous	7		
July 6, 2011	2 Test Unit	00 - 43 cm	28	Hardware	nail	round head	wire shaft	ferrous	15		
July 6, 2011	2 Test Unit	00 - 43 cm	29	Hardware	nail	shaft	wire shaft	ferrous	6		
July 6, 2011	2 Test Unit	00 - 43 cm	30	Hardware	spike	round head	wire shaft	ferrous	5		complete
July 6, 2011	2 Test Unit	00 - 43 cm	31	Horse Equip	nail	horse shoe nail	large	ferrous	2		partial
July 6, 2011	2 Test Unit	00 - 43 cm	32	Hardware	staple	fencing	wire shaft	ferrous	2		complete
July 6, 2011	2 Test Unit	00 - 43 cm	33	Hardware	wire	fencing	page wire	ferrous	3		section
July 6, 2011	2 Test Unit	00 - 43 cm	34	Miscellaneous	metal	strip	self secured	ferrous	1		section
July 6, 2011	2 Test Unit	00 - 43 cm	35	Miscellaneous	metal	valve	round shaft	ferrous	1		partial
July 6, 2011	2 Test Unit	00 - 43 cm	36	Miscellaneous	coal				6		fragment
July 6, 2011	2 Test Unit	00 - 43 cm	37	Miscellaneous	slag				7		fragment
July 6, 2011	2 Test Unit	00 - 43 cm	38	Recent	rubber	unidentified			5		
July 6, 2011	2 Test Unit	00 - 43 cm	39	Recent	foil				1		
July 6, 2011	2 Test Unit	00 - 43 cm	40	Recent	plastic	unidentified		blue	2		
July 6, 2011	2 Test Unit	00 - 43 cm	41	Recent	plastic	unidentified		white	3		
July 6, 2011	2 Test Unit	00 - 43 cm	42	Faunal	bone	mammal	large	cow	6		fragment
July 6, 2011	2 Test Unit	00 - 43 cm	43	Faunal	bone	mammal	large	cow	1		partial
July 6, 2011	2 Test Unit	00 - 43 cm	44	Faunal	bone	mammal	large	unidentified	10	2	fragment

July 6, 2011	2 Test Unit	00 - 43 cm	45	Faunal	bone	bird	medium	chicken	1	partial
July 6, 2011	2 Test Unit	00 - 43 cm	46	Faunal	bone	bird	medium	unidentified	1	partial
July 6, 2011	2 Test Unit	00 - 43 cm	47	Faunal	bone	bird	medium	unidentified	5	fragment

SIXTH LINE CORPORATION PROPERTY LOCATION 2

Date	Stage	Depth	Cat #	Category	Class	Type	Discription	Mat / Colour	Freq	Burnt	Portion
June 29, 2011	2 Test Pit		1	Lithic	graver	teritary	dorsal/lateral	Onondaga	1		
July 6, 2011	Topsoil	00 - 23 cm	1	Tableware	ceramic	pearlware	edged	green	2		sherd
July 6, 2011	Topsoil	00 - 23 cm	2	Tableware	ceramic	whiteware	plain		9		sherd
July 6, 2011	Topsoil	00 - 23 cm	3	Tableware	ceramic	whiteware	plain		1		rim
July 6, 2011	Topsoil	00 - 23 cm	4	Tableware	ceramic	whiteware	unidentified	burnt	1	1	sherd
July 6, 2011	Topsoil	00 - 23 cm	5	Tableware	ceramic	whiteware	painted	blue	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	6	Tableware	ceramic	whiteware	transfer print	blue	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	7	Utilitarian	ceramic	red earthenware	int / ext glazed	brown	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	8	Utilitarian	ceramic	red earthenware	interior glazed	dark brown	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	9	Utilitarian	ceramic	red earthenware	int / ext glazed	dark brown	2		rim
July 6, 2011	Topsoil	00 - 23 cm	10	Utilitarian	ceramic	red earthenware	glazed	dark brown	7		sherd
July 6, 2011	Topsoil	00 - 23 cm	11	Utilitarian	ceramic	stoneware	glazed	brown	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	12	Architectural	glass	flat	thin	aqua	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	13	Architectural	glass	flat	regular	colourless	3		sherd
July 6, 2011	Topsoil	00 - 23 cm	14	Miscellaneous	glass	slight curve	plain	colourless	1		sherd
July 6, 2011	Topsoil	00 - 23 cm	15	Architectural	brick	red earthenware			2		fragment
July 6, 2011	Topsoil	00 - 23 cm	16	Faunal	bone	mammal	large	pig / sheep	1	1	fragment
July 6, 2011	Topsoil	00 - 23 cm	17	Faunal	bone	mammal	medium	unidentified	1		fragment
July 6, 2011	Subsoil	23 - 28 cm	na	STERILE					0		

SIXTH LINE CORPORATION PROPERTY LOCATION 3

Date	Stage	Depth	Cat #	Category	Class	Type	Discription	Mat / Colour	Freq	Burnt	Portion
June 29, 2011	2 Test Pit		1	Tableware	ceramic	ref white earthenware	dipt	blue	1		sherd