STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT
CORMORANT ROAD EXTENSION
PART OF LOT 31, CONCESSION 4
(FORMER TOWNSHIP OF ANCASTER, COUNTY OF WENTWORTH),
CITY OF HAMILTON, ONTARIO

ORIGINAL REPORT

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Ministry of Tourism, Culture and Sport PIF# P392-0162-2015
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16 October, 2015
EXECUTIVE SUMMARY

ASI was contracted by the City of Hamilton to conduct a combined Stage 1 & 2 Archaeological Assessment (Background Study and Property Assessment) for the Cormorant Road Extension in the City of Hamilton, Ontario. The project involves extending Cormorant Road through to Trinity Road South and consists of city-owned lands only and includes a corridor approximately 25 m wide and 400 m long, totaling an area of 1.06 ha.

The Stage 1 background study of the history and geography of the area indicated potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the conditions of soils within the Stage 1 study area. It was also determined that ten previously registered archaeological sites are located within one kilometre of the Stage 1 study area.

The Stage 2 property survey was conducted on October 1, 2015. The majority of the Stage 2 study area was considered to possess archaeological potential and was subjected to pedestrian survey at five-metre intervals. Parts of the Stage 2 study area were considered to not retain archaeological potential on account of low and wet and steeply sloping conditions. Two findspots, P1 and P2, were encountered during the pedestrian survey.

In light of these results, ASI makes the following recommendations:

1. Given the isolated and non-diagnostic nature of pre-contact findspots P1 and P2, they are not considered to have further CHVI and no further archaeological assessment is required;

2. The remainder of the study area does not require further archaeological assessment; and

3. Should the proposed work extend beyond the current study area, then further archaeological assessment must be conducted to determine the archaeological potential of the surrounding lands.
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Table 1: Nineteenth-century property owner(s) and historical features(s) .............................................. 5
Table 2: Details of previously registered archaeological sites within one kilometer of the study area .......... 6
Table 3: P1 Locational Information .................................................................................................. 10
Table 4: P1 Artifact Catalogue ....................................................................................................... 11
Table 5: P1 Locational Information ................................................................................................. 12
Table 6: P2 Artifact Catalogue ....................................................................................................... 12
Table 7: Inventory of Documentary and Material Record .................................................................... 12

Figure 1: Study Area Location ......................................................................................................... 20
Figure 2: Study Area located on the 1875 Illustrated Historical Atlas of the County of Ancaster .......... 21
Figure 3: Study Area overlaid on Soil Drainage Information .......................................................... 22
Figure 4: Study Area overlaid on Surficial Geology Information ..................................................... 22
Figure 5: Cormorant Road Extension Stage 2 Property Survey Results ............................................ 23

Plate 1: View east of study area from western edge of study area at Trinity Road South ................. 24
Plate 2: View west at pedestrian survey. Just beyond field archaeologists to the right is the general location of findspot P1 ......................................................... 24
Plate 3: View east northeast toward location of findspot P2. Area to the north (left) is steeply sloping and is deemed to have no potential. ......................................................... 24
Plate 4: View west southwest of sloped area in background and low and wet area to the right .......... 24
Plate 5: View northwest across the western half of the study area. Area low and wet, no potential.............. 24
Plate 6: Selection of artifacts from P1; L1 on left and L2 on the right .................................................. 24
Plate 7: Selection of artifacts from P2; L3 biface fragment on top and secondary knapping flakes on the bottom
.................................................................................................................................................. 25
1.0 PROJECT CONTEXT

ASI was contracted by the City of Hamilton to conduct a combined Stage 1 & 2 Archaeological Assessment (Background Study and Property Assessment) for the Cormorant Road Extension in the City of Hamilton, Ontario (Figure 1). The project involves extending Cormorant Road through to Trinity Road South and consists of city owned lands only and includes a corridor approximately 25 m wide and 400 m long, totaling an area of 1.06 ha.

The objectives of this report are:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study area (Stage 1 background study);
- To document all archaeological resources in the study corridor;
- To determine whether the study corridor contains archaeological resources with cultural heritage value or interest that would require further assessment (Stage 2 property assessment); and,
- To recommend appropriate Stage 3 archaeological assessment strategies for any archaeological sites identified.

This report describes the Stage 1 and 2 archaeological assessment that was conducted for this project and is organized as follows: Section 1.0 describes the project context and summarizes the background study that was conducted to provide the historical and archaeological contexts for the project study area; Section 2.0 describes the field methods used during the archaeological assessment and summarizes the results of the property assessment; Section 3.0 describes any archaeological resources recovered during the property survey; Section 4.0 provides an analysis of the property assessment results and evaluates the archaeological potential of the study corridor and provides recommendations; the remaining sections contain other report information that is required by the Standards and Guidelines for Consultant Archaeologists (S & G), administered by the Ministry of Tourism, Culture and Sport (MTCS), e.g., advice on compliance with legislation, works cited, mapping and photo-documentation.

1.1 Development Context

All work has been undertaken as per the Environmental Assessment Act, RSO (1990) and regulations made under the Act, as best practice.

All activities carried out during this assessment were completed in accordance with the Ontario Heritage Act (2005), and the S & G.

Permission to carry out all activities necessary for the completion of the assessment was granted by the City of Hamilton on September 2, 2015.
1.2 **Historical Context**

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information gathered through the Stage 1 background research. First, a summary is presented of the current understanding of the Aboriginal land use of the Stage 1 study area. This is followed by a review of the historical Euro-Canadian settlement history.

### 1.2.1 Aboriginal Land Use

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier, approximately 13,500 before present (BP) (Ferris 2013: 13). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the environment had progressively warmed (Edwards and Fritz 1988), and populations now occupied less extensive territories (Ellis and Deller 1990: 62-63).

Between approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines were then submerged. This period produces the earliest evidence of heavy wood working tools and is indicative of greater investment of labour in felling trees for fuel, to build shelter, or to produce tools, and is ultimately indicative of prolonged seasonal residency at sites. By approximately 8,000 BP, evidence exists for polished stone implements and worked native copper. The source for the latter from the north shore of Lake Superior is evidence of extensive exchange networks. Early evidence exists at this time for the creation of communal cemeteries and ceremonial funerary customs. This evidence is significant for the establishment of band territories. These communal places indicate shared meaning across the community and are reflective of a people’s cosmology (Brown 1995: 13; Holloway and Hubbard 2001: 74; Parker Pearson 1999: 141). Between approximately 4,500-3,000 BP, there is evidence for construction of fishing weirs. These structures indicate not only the group sharing of resources, but also the organization of communal labour (Ellis et al. 1990; Ellis et al. 2009).

The Ancaster area is a well known locus for Aboriginal settlement during this time period. Large sites have been well documented in the Big Creek drainage (Jackson and Morrison 1997). Steiss et al. (1997) have demonstrated how a number of sites in the Ancaster region had been continuously if intermittently occupied for approximately 7,000 years. This pattern of site re-use is likely indicative of the area being particularly rich in resources and that it continued to draw mobile populations for portions of the year over the span of millennia. Such a seasonal increase in population density has significant implications for our understanding of how territorialism and socio-politics developed in southern Ontario.

Between 3,000-2,500 BP, populations continued with residential mobility harvesting seasonally available resources, including spawning fish. Exchange and interaction networks broaden at this time (Spence et al. 1990: 136, 138) and by approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal harvesting of resources (Spence et al. 1990: 155, 164). It is also during this period that maize was first introduced into southern Ontario, though it would have only supplemented people’s diet (Birch and Williamson 2013: 13-15). Bands likely retreated to interior camps during the winter.

From approximately 1,000 BP until approximately 300 BP, lifeways became more similar to those described in early historical documents. Populations in the study area would have been Iroquoian speaking though full expression of Iroquoian culture is not recognized archaeologically until the fourteenth century AD. During the Early Iroquoian phase (AD 1000-1300), the communal site is replaced
by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson 1990: 317). By the second quarter of the first millennium BP, during the Middle Iroquoian phase (AD 1300-1450), this episodic community disintegration was no longer practiced, and populations now communally occupied sites throughout the year (Dodd et al. 1990: 343). In the Late Iroquoian phase (AD 1450-1649), this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this process, the socio-political organization of the Aboriginal Nations was developed, as described historically by the French and English explorers who first visited southern Ontario.

Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the New York Iroquois and the Huron-Wendat were at peace and remained “la nation neutre”. In subsequent years, the French visited and traded among the Neutral, but the first documented visit was not until 1626, when the Recollect missionary Joseph de la Roche Daillon recorded his visit to the villages of the Attiwandaron, whose name in the Huron-Wendat language meant “those who speak a slightly different tongue” (the Neutral apparently referred to the Huron-Wendat by the same term). Like the Huron-Wendat, Petun, and New York Iroquois, the Neutral people were settled village agriculturalists. Several discrete settlement clusters have been identified in the lower Grand River, Fairchild-Big Creek, Upper Twenty Mile Creek, Spencer-Bronte Creek drainages, Milton, Grimsby, Eastern Niagara Escarpment and Onondaga Escarpment areas, which are attributed to Iroquoian populations. These settlement clusters are believed by some scholars to have been inhabited by populations of the Neutral Nation or pre- (or ancestral) Neutral Nation (Lennox and Fitzgerald 1990). The study area is situated on the periphery of the documented Fairchild-Big Creek settlement cluster (Lennox and Fitzgerald 1990: Figure 13.3). The Fairchild-Big Creek settlement cluster has documented occupation from the sixteenth century (e.g. Fonger site – Warrick 1984) until the mid seventeenth century (e.g. Sealey site - Kenyon and Kenyon 1983).

Between 1647 and 1651, the Neutral were decimated by epidemics and ultimately dispersed by the Five Nations Iroquois, who subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the mid seventeenth-century. One French explorer who is known to have entered the Burlington Bay area during this period was Rene-Robert Cavalier de La Salle, who left Montreal with a flotilla of nine canoes and eventually reached the head of Lake Ontario in September of 1669. After landing, de La Salle’s group travelled to the Seneca village of Tinaouataoua, the exact location of which is open to speculation (ASI 2005:13-14).

Compared to settlements of the New York Iroquois, the “Iroquois du Nord” occupation of the landscape was less intensive. Only seven villages are identified by the early historic cartographers on the north shore of Lake Ontario, and they are documented as considerably smaller than those in New York State. The populations were agriculturalists, growing maize, pumpkins and squash. These settlements also played the important alternate role of serving as stopovers and bases for New York Iroquois travelling to the north shore of Lake Ontario for the annual beaver hunt (Konrad 1974).

Beginning in the mid-late seventeenth century, the Mississaugas began to replace the Seneca as the controlling Aboriginal group along the north shore of Lake Ontario, since the Five Nations Iroquois confederacy had overstretched their territory between the 1650s and 1670s (Williamson 2008). The Five Nations Iroquois could not hold the region and agreed to form an alliance with the Mississauga peoples and share hunting territories with them. The Mississaugas traded with both the British and the French in order to have wider access to European materials at better prices, and they used their strategic position on the Humber to act as trade intermediaries between the British and tribes in the north.
The eighteenth century saw the ethnogenesis in Ontario of the Métis. Métis people are of mixed First Nations and French ancestry, but also mixed Scottish and Irish ancestry as well. The Métis played a significant role in the economy and socio-political history of the Great Lakes during this time. Living in both Euro-Canadian and Aboriginal societies, the Métis acted as agents and subagents in the fur trade but also as surveyors and interpreters. Métis populations were predominantly located north and west of Lake Superior, however Métis populations lived throughout Ontario (MNC n.d.; Stone and Chaput 1978:607,608).

In 1784, under the terms of the “Between the Lakes Purchase,” the Crown acquired from the Mississauga Nation over one million acres of land stretching westward from near the head of Lake Ontario along the north shore of Lake Erie to Catfish Creek (AANDC 2014).

1.2.2  Euro-Canadian Land Use: Township Survey and Settlement

Historically, the study area is located in part of Lot 31, Concession 4 in the Former Township of Ancaster, County of Wentworth.

The S & G, Section 1.3.1, stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Aboriginal pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls for Great Lakes traffic and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Aboriginal trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006a).

Ancaster Township

The land within Ancaster Township was acquired by the British from the Mississaugas in 1784. The first township survey was undertaken in 1793, and the first legal settlers occupied their land holdings two years later. The township is said to have been named after a town in Lincolnshire, England. Ancaster was initially settled by disbanded soldiers, mainly Butler’s Rangers, and other Loyalists following the end of the American Revolutionary War. In 1805, Boulton noted that this township contained both excellent and indifferent soils. By the 1840s, the township was noted for its fine farms and was populated by a number of industries in the latter part of the nineteenth century, including the Ancaster Knitting Factory. By 1875, Ancaster was famous for mineral springs found in the township, the waters from which were considered
therapeutic and medicinal (Armstrong 1985:141; Boulton 1805:79; Kernighan 1875:8; Rayburn 1997:11; Smith 1846:6).

1.2.3 Historic Map Review

The 1875 Illustrated Historical Atlas of the County of Wentworth was examined to review the historic context of the study area during the nineteenth century (Figure 2). Use of historic map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

It should also be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. Details of nineteenth century property owners are provided in Table 1.

<table>
<thead>
<tr>
<th>Lot #</th>
<th>Concession #</th>
<th>Property Owner(s)</th>
<th>Historical Features(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>4</td>
<td>A. Miller</td>
<td>n/a</td>
</tr>
</tbody>
</table>

The historic mapping indicates that the study area is located in proximity to a historic transportation route (Trinity Road South) (Figure 2). Transportation and communication networks are important because they serve to integrate social and economic activities between disparate settlement centres. As these settlements grew, and traffic increased between them, toll gates, taverns, hotels and other services for travellers were established where major transportation routes were crossed. Early overland routes followed the natural topography, avoiding swamps or rocky outcrops.

1.2.4 Summary of Historical Context

The background research determined that the study area has been intensively occupied by Aboriginal peoples for millennia. The study area is located within the understood territory of the (pre-/ancestral) Neutral Nation and was subsequently occupied by the Five Nations Iroquois during the mid-late seventeenth century and then and by Ojibwa peoples until 1784. The background research also acknowledges the presence of the Métis across Ontario, however their presence is often muted in the historical record.

The background research and historic mapping also demonstrates that the study area is situated within the Former Township of Ancaster, Wentworth County. The historic mapping indicates that Trinity Road South a historic road.
1.3 Archaeological Context

This section provides background research pertaining to any previous archaeological fieldwork conducted within and in the vicinity of the study corridor, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research in the study corridor: the site record forms for registered sites housed at the MTCS; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

The Stage 1-2 study area consists of an area of approximately 1.06 ha of municipal land that is presently planned for ROW development. The study area is located within the Ancaster Business Park, which features a mix of active agricultural, industrial and commercial lands. The park is situated between Shaver and Trinity Church Roads north and south of Wilson Street and totals 660 gross site acres.

1.3.2 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area under review is located in Borden block AhHa.

According to the OASD there are 10 previously registered archaeological sites within one kilometre of the Stage 1 study area (MTCS 2015). Site details are listed below in Table 2.

<table>
<thead>
<tr>
<th>Borden #</th>
<th>Site Name</th>
<th>Cultural Affiliation</th>
<th>Site Type</th>
<th>Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>AhHa-45</td>
<td>UG Kirkwall 20</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>MPP 1986</td>
</tr>
<tr>
<td>AhHa-46</td>
<td>UG Kirkwall 21</td>
<td>n/a</td>
<td>n/a</td>
<td>MPP 1986</td>
</tr>
<tr>
<td>AhHa-208</td>
<td>n/a</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>Scatter</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhHa-209</td>
<td>n/a</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>Scatter</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhHa-210</td>
<td>Valeri I</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>AhHa-211</td>
<td>Valeri III</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>Sutton 2006</td>
</tr>
<tr>
<td>AhHa-212</td>
<td>Valeri III</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>Scatter</td>
<td>Sutton 2006</td>
</tr>
<tr>
<td>AhHa-213</td>
<td>Valeri IV</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>Sutton 2006</td>
</tr>
<tr>
<td>AhHa-214</td>
<td>Valeri V</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>Sutton 2006</td>
</tr>
<tr>
<td>AhHa-215</td>
<td>Valeri VI</td>
<td>Aboriginal (pre-sixteenth century)</td>
<td>n/a</td>
<td>Sutton 2006</td>
</tr>
</tbody>
</table>
According to the background research, three previous archaeological assessments (ASI 2006b; 2006c; AAL 2006) have been completed within 50 m of the Stage 1 study area. These reports are summarized below.

ASI completed a Stage 1 & 2 Archaeological Assessment of the proposed Valery Business Park in 2005. The Stage 2 field survey was completed over the course of four days in the fall of 2005 by pedestrian survey. One pre-contact findspot (P1) was encountered in the northern half of the study area and one pre-contact site (P2) was found in the south eastern corner of the study area. P2 (AhHa-209), encompassed an area of approximately 15 meters by 25 meters and consisted of twelve pieces of shatter or distal flake fragments, five secondary knapping flakes and four retouched flakes. The site was determined to represent a significant archaeological resource and was recommended for Stage 3 assessment.

The Stage 3 Archaeological Assessment of AhHa-209 was completed by ASI in the summer of 2006. The assessment was completed by a controlled surface collection (CSC) followed by excavation of a series of one-meter square test units. A total of 28 pieces of primarily Onondaga debitage were recorded during the CSC and a further 21 Onondaga chert artifacts were recovered during the excavation of 19 test units, no unit yielded more than five artifacts and no subsurface settlement features were encountered. It was determined that the integrity of the site had been compromised by bulldozer grading prior to the commencement of the archaeological assessment. The site was determined to be a seasonal campsite associated with the Small Point tradition of the Late Archaic period. No further work was recommend for AhHa-209 and it was considered free of any further archaeological concern.

Archaeological Assessment Ltd. Conducting a Stage 1-3 Archaeological Assessment of the Valeri Business Park, Phase 2 Lands in 2006 (AAL 2006). The Stage 2 property survey identified a total of 12 archaeological sites which including six indeterminate pre-contact findspots and six indeterminate pre-contact campsites; Valeri I (AhHa-210), Valeri II (AhHa-211), Valeri III (AhHa-212), Valeri IV (AhHa-213), Valeri V (AhHa-214), and Valeri VI (AhHa-215). Two sites were subject to Stage 3 site specific assessment. The Stage 3 consisted of controlled surface collection and test excavation at the Valeri III and Valeri VI sites. The results of the Stage 3 assessment indicate that both sites are not signification and no additional work was recommended.

1.3.3 Geography

In addition to the known archaeological sites and historic features, the state of the natural environment is an important indicator of archaeological potential. Accordingly, a description of the study corridor physiography and soils is provided below.

The S & G, Section 1.3.1, stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is
the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow and Warner 1990: Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

The S & G, Section 1.3.1, also lists other geographic characteristics that can indicate archaeological potential including: elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rocky outcrops, caverns, mounds, and promontories and their bases. Physical indicators of use may be present, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential.

The study area is situated within the Haldimand clay plain physiographic region of southern Ontario. The study area is situated within the Haldimand Clay Plain physiographic region of southern (Chapman and Putnam 1984). The Haldimand Clay Plain is located between the Niagara Escarpment and Lake Erie. It occupies all of the Niagara Peninsula except the fruit belt below the escarpment, and has an area of about 349,600 ha (Chapman and Putnam 1984:156). The Haldimand clay plain can be described as falling into a series of parallel belts which direct the drainage of the region eastward in parallel streams. In general, the soils of this region have a heavy texture and poor drainage but irregular areas of better-drained soils do exist.

Clay plains are glaciolacustrine features which are formed when glacial melt waters pond between ice margins, high ground or flood basins. Clay plains are formed in deep water by sediment sorting (Karrow and Warner 1990: 5).

Soil drainage information for the study area is incomplete. Extant information is mapped on Figure 3. The study area includes well drained soils. Surficial geology information is mapped in Figure 4. The Stage study area is underlain by deposits of clay. These clay deposits consist of fine-textured massive to well-laminated glaciolacustrine deposits and include deposits of silt as well as minor deposits of sand and gravel (OGS 2010).

Soils within the study area include Brantford silt loam-Brant silt loam complex, Grimsby sandy loam-Brant silt loam complex and Alberton silt loam (Dept. of Agriculture 1967). For detailed soil descriptions, see Appendix A.

The study area is located in proximity to a tributary of the Big Creek subwatershed of the Grand River. Big Creek has a length of approximately 19 km (Chapman and Putnam 1984:95). The study area is located adjacent to the Grand River, which drains an area of approximately 673,397 ha. Its main stream begins northeast of Dundalk at 526 m above sea level and flows for approximately 290 km to Lake Erie at Port Maitland (Chapman and Putnam 1984: 95). The Grand River was an important transportation route and a critical resource extraction area for generations of aboriginal people. Historically, the Grand River has been utilized as a navigable water-way, as a power source (such power sites served as settlement nuclei) and above Brantford as a course for driving logs (Chapman and Putnam 1984: 98). It is also the focus of the Haldimand Tract; Joseph Brant was awarded 8 miles on either side of the river (Johnston 1964: 35-38; Lytwyn 2005).
1.3.4 Stage 1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. Accordingly, the Stage 1 study area meets the following criterion indicative of archaeological potential:

- Primary watercourse (e.g. tributary of Big Creek)
- Well-drained sandy soil (e.g. Grimsby sandy loam)
- Historic transportation route (e.g. Trinity Road South)

The above criteria are indicative that the study area possesses potential for the identification of Aboriginal and Euro-Canadian archaeological resources within the Stage 1 study area, depending on the conditions of soils within the study area.

2.0 FIELD METHODS

The Stage 2 property assessment was conducted on October 1, 2015 by Stacey Franklin (R435) in accordance with the Ontario Heritage Act and the S & G. The Stage 2 study area measures approximately 1.06 ha in size and consists of municipal land that is presently slated for ROW development. Some lands within the study area were documented as steep slopes or low and wet. These lands were determined to have no archaeological potential. The remainder of the study area was subjected to pedestrian survey at five metre intervals.

Weather conditions for the property assessment were partially cloudy skies and a temperature of approximately 12 C. Survey results are mapped on Figure 5. Field conditions are photo-documented in Plates 1-5.

Pedestrian survey was conducted on approximately 0.51 ha (48%) of the study area on lands with acceptable survey conditions, according to S & G: 2.1.1 Standards 1-6. Pedestrian survey was undertaken in a previously fallow field that has been ploughed and weathered. The ground surface visibility was 90% or greater and had been surveyed at a maximum interval of 5 m. When archaeological resources were encountered survey transects would be decreased to 1 m intervals over a minimum radius of 20 m around each find.

Approximately 46% (0.49 ha) of the Stage 2 study area was considered to have no archaeological potential due to low and wet conditions. As per the S & G, Section 2.1, Standard 2.a, these lands do not have archaeological potential. Approximately 6% (0.06 ha) of the Stage 2 study area was documented to have steeply sloping conditions. As per the S & G, Section 2.1, Standards 2.a, lands with greater than 20° slope have no archaeological potential.

3.0 RECORD OF FINDS

Results of the Stage 1 background research and the Stage 2 property assessment are mapped in Figure 5. Areas subject to pedestrian survey are shown in orange, steeply sloping areas are shown in pink, low and wet areas are shown in blue. Archaeological resources were recovered during the Stage 2 property survey of the study area.
3.1 Findspot P1

**General Site location:** East of Trinity Road South and south of Wilson Street West. For detailed location information including GPS coordinates and detailed mapping see Table 3 and Figure 5.

**Topography:** Site located within a gently flat agricultural field within the Haldimand Clay Plain physiographic region.

**Soil Type:** Loamy clay topsoil, clay subsoil.

**Features of Archaeological Potential:** Secondary water source east of site (i.e., tributary of Big Creek); well-drained location with gently undulating topography; early transportation routes (i.e., Trinity Road South); relatively undisturbed.

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** Recently-ploughed agricultural field, greater than 80% surface visibility.

**Site Size (approximate):** 35 m (east-west) x 10 m (north-south).

**Assessment Method:** Pedestrian survey at 5 m intervals; this was reduced to 1 m transect intervals once artifacts were recovered, to a minimum of 20 metres beyond the limits of the scatter.

**Density & Distribution:** Four isolate flake fragments.

**Content Summary:** A total of 4 artifacts was collected (100% of artifacts were retained/collection).

**General Collection Description:** Three non-diagnostic Bois blanc flakes and one flake fragment were recovered (Plate 6).

**Site Interpretation:** The presence of non-diagnostic flakes of Bois blanc chert do not represent a pre-contact occupation. The flake may have the by-product of tool repair by an individual passing through the site area.

Has CHVI been sufficiently assessed and documented in Stage 2: Yes

**Recommendations:** No further assessment is required.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

<table>
<thead>
<tr>
<th>Table 3: P1 Locational Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPS Model &amp; Type:</strong></td>
</tr>
<tr>
<td><strong>UTM Grid Zone:</strong></td>
</tr>
<tr>
<td><strong>Datum:</strong></td>
</tr>
<tr>
<td><strong>Method of Correction:</strong></td>
</tr>
<tr>
<td><strong>Site Co-ordinates Error (± m):</strong></td>
</tr>
<tr>
<td><strong>P1</strong></td>
</tr>
</tbody>
</table>
3.2 Findspot P2

**General Site location:** East of Trinity Road South and south of Wilson Street West. For detailed location information including GPS coordinates and detailed mapping see Table 5 and Figure 5.

**Topography:** Site located within a flat agricultural field.

**Soil Type:** Loamy clay topsoil, clay subsoil.

**Features of Archaeological Potential:** Secondary water source east of site (i.e., tributary of Big Creek); well-drained location with gently undulating topography; early transportation routes (i.e., Trinity Road South); relatively undisturbed.

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** Recently-ploughed agricultural field, greater than 80% surface visibility.

**Site Size (approximate):** 35 m (east-west) x 7 m (north-south).

**Assessment Method:** Pedestrian Survey at 5 m intervals. After the artifact was encountered, the intervals were reduced to 1 m within a minimum radius of 20 m of the findspot.

**Density & Distribution:** Diffuse scatter of 10 artifacts.

**Content Summary:** A total of 10 artifacts was collected (100% of artifacts were retained/collected). These include: 10 lithics.

**General Collection Description:** Eight non-diagnostic Bois blanc flakes, one Bois blanc biface fragment and one Bois blanc flake fragment were recovered.

**Site Interpretation:** The presence of a small scatter of non-diagnostic Bois Blanc chert flakes and fragments does not represent a pre-contact occupation.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes

**Recommendations:** No further assessment is required.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.
Table 5: P2 Locational Information

<table>
<thead>
<tr>
<th>GPS Model &amp; Type:</th>
<th>Garmin Oregon 450</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTM Grid Zone:</td>
<td>17T</td>
</tr>
<tr>
<td>Datum:</td>
<td>NAD 83</td>
</tr>
<tr>
<td>Method of Correction:</td>
<td>Wide Area Augmentation System (WAAS)</td>
</tr>
<tr>
<td>Site</td>
<td>UTM Co-ordinates</td>
</tr>
<tr>
<td>P2</td>
<td>578164,4781889</td>
</tr>
<tr>
<td>Off site datum</td>
<td>578055,4781803</td>
</tr>
<tr>
<td>Error (± x m)</td>
<td>5</td>
</tr>
<tr>
<td>Site Datum (Grid Co-ordinate) and/or Location information</td>
<td>Findspot P2 – center</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Hydro pole on west side Trinity Road South and the north side of the driveway leading into the Ancaster Fairgrounds.</td>
</tr>
</tbody>
</table>

Table 6: P2 Artifact Catalogue

<table>
<thead>
<tr>
<th>Cat #</th>
<th>Qty</th>
<th>Provenience</th>
<th>Artifact Type</th>
<th>Material</th>
<th>Thermal Alt.</th>
<th># Alt.</th>
<th>Retouch</th>
<th>Length</th>
<th>Width</th>
<th>Thickness</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>3</td>
<td>surface</td>
<td>Primary reduction flake</td>
<td>Bois blanc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L2</td>
<td>5</td>
<td>Surface</td>
<td>Secondary knapping flake</td>
<td>Bois blanc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L3</td>
<td>1</td>
<td>Surface</td>
<td>Biface fragment</td>
<td>Bois blanc</td>
<td>17.6</td>
<td>17.7</td>
<td>5.7</td>
<td></td>
<td></td>
<td></td>
<td>Unrefined tip fragment</td>
</tr>
<tr>
<td>L4</td>
<td>1</td>
<td>Surface</td>
<td>Flake fragment</td>
<td>Bois blanc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The documentation related to this archaeological assessment will be curated by ASI until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the MTCS and any other legitimate interest groups.

Table 3 provides an inventory and location of the documentary record for the project as per the S & G, Section 6.7 and Section 7.8.2, Standard 3.

Table 7: Inventory of Documentary and Material Record

<table>
<thead>
<tr>
<th>Document/Material</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Field Notes, Annotated Field Maps, GPS Logs, etc.</td>
<td>ASI, 528 Bathurst Street, Toronto, ON M5S 2P9</td>
<td>Field notes hard copy, GPS data (digital) [three pages; two files]</td>
</tr>
<tr>
<td>Field Photography (Digital)</td>
<td>ASI, 528 Bathurst Street, Toronto, ON M5S 2P9</td>
<td>Stored on ASI network servers [11 photographs]</td>
</tr>
<tr>
<td>Research/Analysis/Reporting Materials (Various Formats)</td>
<td>ASI, 528 Bathurst Street, Toronto, ON M5S 2P9</td>
<td>Hard copy and/or digital files stored on ASI network servers [four files]</td>
</tr>
</tbody>
</table>

4.0 ANALYSIS AND CONCLUSIONS

A combined Stage 1-2 archaeological assessment was conducted for the Cormorant Road Extension project in the City of Hamilton. The Stage 1 background study of the history and geography of the study area indicated potential for the identification of Aboriginal and Euro-Canadian archaeological resources. It was also determined that ten previously registered archaeological sites are located within one kilometre of the study area.
The Stage 2 property assessment documented that 52% of the study area is considered to have no potential due to low and wet and steeply sloping conditions. The remaining lands (48%) were considered to possess archaeological potential and were subject to a pedestrian pit survey at five metre intervals, as per the S & G. Findspots P1 and P2 were identified during the course of the survey.

Analysis indicates that two findspots, P1 and P2, are isolated and/or undiagnostic finds and as such are not considered to have cultural heritage value and further investigation of these findspots is not warranted. Due to the ephemeral nature of these finds (per S & G Section 2.2, Standard 1.4.2), these sites do not have further cultural heritage value.

5.0 RECOMMENDATIONS

In light of the results, Archaeological Services Inc. makes the following recommendations:

1. Given the non-diagnostic nature of pre-contact findspot P1 and P2, they are not considered to have further CHVI and no further archaeological assessment is required;

2. The remainder of the study area does not require further archaeological assessment; and,

3. Should the proposed work extend beyond the current study area, then further archaeological assessment must be conducted to determine the archaeological potential of the surrounding lands.

Notwithstanding the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the MTCS should be immediately notified.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. 18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the MTCS a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development;

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

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

- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner.

### 7.0 REFERENCES CITED

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2006 The Stage 1-3 Archaeological Assessment of the Valeri Business Park, Phase 2 Lands, Part of Lot 32, Concession 4, Geographic Townships of Ancaster, City of Hamilton. Report on file with the Ministry of Tourism, Culture and Sport, Toronto.

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Department of Agriculture  


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Lytwyn, V.P.  

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Ministry of Environment
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Williamson, R.F.

8.0   MAPS
Figure 2: Study Area located on the 1875 Illustrated Historical Atlas of the County of Ancaster.
Figure 3: Study Area overlaid on Soil Drainage Information

Figure 4: Study Area overlaid on Surficial Geology Information
9.0 IMAGES

Plate 1: View east of study area from western edge of study area at Trinity Road South.

Plate 2: View west at pedestrian survey. Just beyond field archaeologists to the right is the general location of findspot P1.

Plate 3: View east northeast toward location of findspot P2. Area to the north (left) is steeply sloping and is deemed to have no potential.

Plate 4: View west southwest of sloped area in background and low and wet area to the right.

Plate 5: View northwest across the western half of the study area. Area low and wet, no potential.

Plate 6: Selection of artifacts from P1; L1 on left and L2 on the right.
10.0 APPENDIX A: DETAILED SOIL DESCRIPTIONS

Alberton silt loam is an alluvial soil with variable drainage which has been deposited in stream valleys, likely during flood events. This soil typically occurs on level valley flats and frequently overlies finer sediments. The soil depth and underlaying sediments have a major effect on the soils internal drainage, though it is commonly imperfect. Alberton silt loam has been documented to possess the following profile (Presant et al. 1965: 44-45, 56):

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Colour</th>
<th>Texture/Structure</th>
<th>Profile depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ah</td>
<td>Dark yellowish-brown (10YR 3/4)</td>
<td>Silt loam; fine granular structure; friable consistency</td>
<td>0-20 cm</td>
</tr>
<tr>
<td>C1</td>
<td>Grayish-brown (10YR 5/2)</td>
<td>Silty clay loam; weak medium platy; firm; slightly mottled</td>
<td>20-46 cm</td>
</tr>
<tr>
<td>C2</td>
<td>Yellowish-brown (10YR 5/4)</td>
<td>Silty clay loam; weak angular blocky; very firm; mottled</td>
<td>46+ cm</td>
</tr>
</tbody>
</table>

Brantford-Brant soil complex consists of a combination of Brantford silt loam and Brant silt loam and occurs on moderately sloping ridges and hummocks. Most of the area of this soil has a surface of silt loam however subsurface material is typically variable, ranging from silt loam to silty clay loam and silt clay (Presant et al. 1965:46).

Brant soils are well-drained soils and typically consist of alternating layers of silt loam and fine sandy loam. The soil typically has inclusions of shale and sandstone. This soil is prone to erosion. Brant soil has been documented to possess the following profile (Presant et al. 1965:37, 58).
Horizon  | Colour  | Texture/Structure                          | Profile depth |
---------|---------|--------------------------------------------|--------------|
Ap       | Dark brown (10YR 3/3) | Silt loam; fine granular structure; very friable consistence | 0-13 cm      |
Ae₁      | Yellowish-brown (10YR 5/4) | Fine sandy loam; weak medium granular; friable | 13-30 cm    |
Ae₂      | Strong brown (7.5YR 5/6) | Fine sandy loam; weak medium platy; friable | 30-71 cm    |
Bt₁      | Reddish brown (5YR 4/3) | Silt loam; medium subangular blocky; firm | 71-86 cm    |
Bt₂      | Reddish-brown (5YR 4/4) | Silt loam; weak platy; firm | 86-132 cm   |
C        | Brown (7.5YR 4/4) | Silt loam and fine sandy loam; weak platy; friable; weakly calcareous | 132+ cm     |

Brantford soil is a well-drained soil and typically consists of layered massive deposits of silty clay loam and silty clay. This soil occurs on gently to moderately sloping topography, caused by postglacial erosion dissecting the region. This soil is typically covered by a thin surface deposit of silt loam. This soil is extremely prone to erosion. Brantford soil has been documented to possess the following profile (Presant et al. 1965:38-39, 59):

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Colour</th>
<th>Texture/Structure</th>
<th>Profile depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ap</td>
<td>Very dark grayish-brown (10YR 3/2)</td>
<td>Silt loam; fine granular structure; very friable consistence</td>
<td>0-10 cm</td>
</tr>
<tr>
<td>Ae₁</td>
<td>Brown (10YR 5/3)</td>
<td>Silt loam; fine platy; friable</td>
<td>10-23 cm</td>
</tr>
<tr>
<td>Ae₂</td>
<td>Brown (10YR 5/3)</td>
<td>Silt loam; medium platy; friable</td>
<td>23-36 cm</td>
</tr>
<tr>
<td>Bt</td>
<td>Dark grayish-brown (10YR 4/2)</td>
<td>Silty clay; medium angular blocky; very firm</td>
<td>36-69 cm</td>
</tr>
<tr>
<td>C</td>
<td>Brown (10YR 5/3)</td>
<td>Silty clay; large angular blocky; very firm; slightly stony; calcareous</td>
<td>69+ cm</td>
</tr>
</tbody>
</table>

Grimsby-Brant soil complex occurs on gentle to steeply sloping topography. This soil consist of a combination of Grimsby sandy loam and Brant silt loam. The soil is prone to erosion and drought (Presant et al. 1965:46).

Grimsby sandy loam is a well-drained soil developed on alluvial and lacustrine materials. The soil occurs on gently to moderately sloping topography and is prone to erosion and drought. The soil commonly has inclusions of shale and sandstone. Grimsby sandy loam has been documented to possess the following profile (Presant et al. 1965:40, 63):

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Colour</th>
<th>Texture/Structure</th>
<th>Profile depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ah</td>
<td>Dark brown (10YR 3/3)</td>
<td>Sandy loam; fine granular structure; very friable consistence</td>
<td>0-5 cm</td>
</tr>
<tr>
<td>Ae₁</td>
<td>Strong brown (7.5YR 5/6)</td>
<td>Sandy loam; weak fine platy; very friable</td>
<td>5-20 cm</td>
</tr>
<tr>
<td>Layer</td>
<td>Color Description</td>
<td>Texture</td>
<td>Depth Range</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Ae2</td>
<td>Yellowish brown (10YR 5/4)</td>
<td>Loamy sand; single grain; loose</td>
<td>20-38 cm</td>
</tr>
<tr>
<td>Ae3</td>
<td>Brown (10YR 5/3)</td>
<td>Loamy sand; single grain; loose</td>
<td>38-53 cm</td>
</tr>
<tr>
<td>Bt1</td>
<td>Reddish brown (5YR 4/3)</td>
<td>Sandy loam; medium subangular blocky; firm</td>
<td>53-81 cm</td>
</tr>
<tr>
<td>Bt2</td>
<td>Brown (7.5YR 5/4)</td>
<td>Sandy loam; fine subangular blocky; friable</td>
<td>81-99 cm</td>
</tr>
<tr>
<td>C</td>
<td>Brown (10YR 5/3)</td>
<td>Sandy loam; weak platy; friable; calcareous</td>
<td>99+ cm</td>
</tr>
</tbody>
</table>