

ARCHEOWORKS INC.

**Stage 2 Archaeological Assessment (AA) of:
The Proposed Highway 407 Subway Station
Within part of Lots 2 and 3, Concession 5
City of Vaughan
Regional Municipality of York
Ontario**

**Project #: 148-A1005-08
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CIF#: P029-574-2009**

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Executive Summary

Archeoworks Inc. was initially retained by AECOM, of Thornhill, Ontario to conduct a Stage 2 archaeological assessment for the proposed Highway 407 Subway Station, located west of Jane Street and south of Highway 407, in the City of Vaughan, Regional Municipality of York (*see Figure 1*). The proposed subway station is part of the Toronto-York Spadina Subway Extension (TYSSE) project; this subway to run north from Downsview Station to the Vaughan Corporate Centre. The recommended alignment of the subway extension begins at Dufferin Street, north of Sheppard Avenue, and runs generally northwest to Highway 7. The alignment will cross Black Creek, west of Jane Street, where the proposed Highway 407 Station is to be located.

Pre-survey research, generally outlined in the “*Stage 1 Archaeological Assessment of*” (*New Directions Archaeology Ltd.*, 2006), and specifically collected by Archeoworks Inc. has identified potential for the recovery of both Aboriginal archaeological remains and historic Euro-Canadian remains within undisturbed sections of the study area. This was based on the presence of already encountered, registered archaeological sites within close proximity to the study area, the bisection of Black Creek and the identification of two historic structures within the study area limits.

During the Stage 2 archaeological assessment, observed disturbances measuring approximately 2.5 acres in size and consisting of existing house structures, associated garages and outbuildings, and driveways were not surveyed due to their low archaeological potential classification. Furthermore, physiographic factors negatively affecting potential included steeply sloping terrain adjacent to Black Creek and the watercourse itself; these areas also not surveyed due to its low archaeological potential classification.

The undisturbed areas, comprised of 19.5 acres of open agricultural fields and approximately 5.5 acres of fallow fields and valleylands were subjected to pedestrian and test-pit survey as appropriate, complying with the *Final Draft: Standards and Guidelines for Consulting Archaeologists* (2006), published by the *Ministry of Culture*. During the pedestrian survey, two historic scatters were encountered and identified as **H1** (UTM 17T: 434701, 793122) and **H2** (UTM 17T: 434654, 793145). No additional archaeological resources were encountered during the test-pit survey. Due to the early date of the **H2** (1850s-1880s) site and its ability to inform upon the early settlement of the region, further Stage 3 investigations should be undertaken prior to the commencement of construction activities. Due to the scarce resources recovered from site **H1** and the late date of the material, no further archaeological investigations are recommended for the **H1** site area. Therefore, with the exception of the **H2** site area, the study area can be considered free of further archaeological concern.

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Introduction

Archeoworks Inc. was initially retained by AECOM, of Thornhill Ontario to conduct a Stage 2 archaeological assessment of the proposed Highway 407 Subway Station, located west of Jane Street and south of Highway 407, in the City of Vaughan, Regional Municipality of York (*see Figure 1*). This site forms part of the Toronto-York Spadina Subway Extension (TYSSE) project, which is proposed to run north from Downsview Station to the Vaughan Corporate Centre; the recommended alignment of the subway extension beginning at Dufferin Street, north of Sheppard Avenue, and running generally northwest to Highway 7. The subway extension will cross Black Creek, west of Jane Street, where the proposed Highway 407 Station is to be located.

The Stage 2 assessment, reported herein, was conducted under the project direction of Ms. Kim Slocki, in accordance with the *Ontario Heritage Act* (1990) under an archaeological consulting licence (P029). Permission to enter the subject lands, and to collect any artifactual, material, was granted on December 4th, 2008.

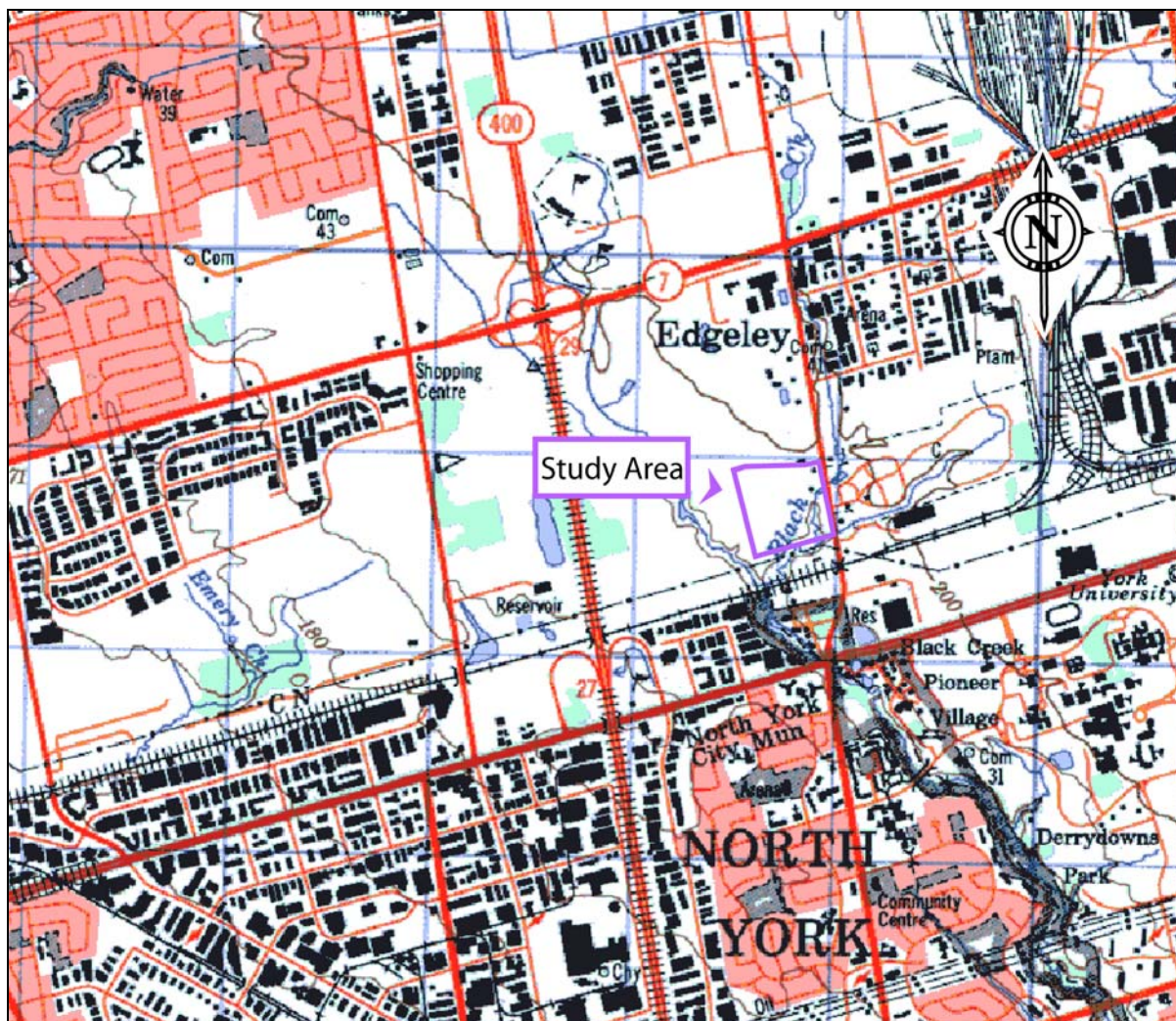


Figure 1: 1:50,000 Map Identifying Location of Study Area (Bolton 30M/13)

1) Stage 1 Summary

The pre-survey research, outlined in the “*Stage 1 Archaeological Assessment of*” (New Directions Archaeology Ltd., 2006), and specifically collected by Archeoworks Inc. has identified potential for the recovery of both Aboriginal archaeological remains and historic Euro-Canadian remains within undisturbed sections of the study area. This was based on the presence of already encountered, registered archaeological sites within close proximity to the study area, the bisection of Black Creek and the identification of two historic structures within the study area limits (*see Figure 2*). Thus, it was recommended that, due to this established archaeological potential, a Stage 2 archaeological assessment, following the *Final Draft: Standards and Guidelines for Consulting Archaeologists* (2006), published by the *Ministry of Culture*, be undertaken in all undisturbed locations. The results of our Stage 2 survey are listed below.

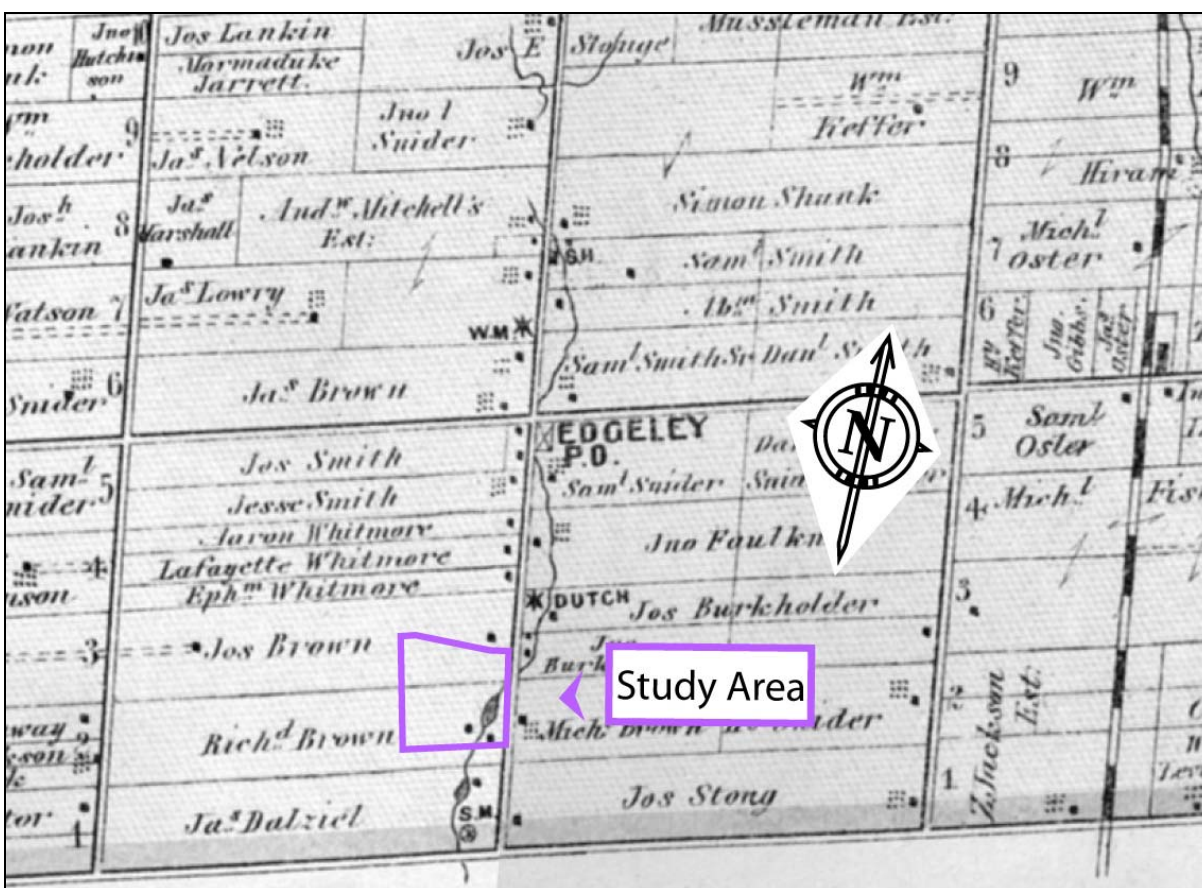


Figure 2: Historical Map of Study Area: York County Atlas 1878

2) Stage 2 Field Assessment

The Stage 2 archaeological assessment of the study area, illustrated in **Figure 3**, was undertaken on April 20-22, 2009 and on May 22nd, 2009. The weather during the Stage 2 investigations was overcast with temperatures reaching 10°C during April, but reached approximately 15 °C on May 22nd.

The study area is primarily rural in condition, consisting of open agricultural fields, fallow fields and valley lands. Observed disturbances consisted of existing house structures, associated garages and outbuildings, and driveways; all of these areas classified as low in archaeological potential (*see Figure 3, see Plates 1-6*). Also affecting archaeological potential were physiographic factors, including steeply sloping terrain surrounding Black Creek and the watercourse itself (*see Plates 7-9*). Due to the low archaeological potential classification of all of these areas listed above, totalling approximately 2.5 acres in size, systematic survey was not warranted nor was it undertaken.

The open agricultural fields, totalling 19.5 acres in size, were subjected to pedestrian survey at intervals of five metres, complying with the *Final Draft: Standards and Guidelines for Consulting Archaeologists* (2006), published by the *Ministry of Culture*. The fields had been recently ploughed and weathered and were assessed to have 95-100 % visibility (*see Plates 10-11*). During the survey, two historic scatters, both located just west of Jane Street, were encountered and identified as **H1** (UTM 17T: 434701, 793122) and **H2** (UTM 17T: 434654, 793145). Once each historic scatter was encountered, survey intervals were reduced to a half-metre, for a radius of 15 metres around each surface find. All artifacts encountered during our Stage 2 assessment in the field were collected (*see Plates 16-17*). Catalogues of the historic finds for each site have been provided in *Tables 1-2* and a description of the sites finds is listed below.

Table 1: H1 Historic Artifact Inventory –Pedestrian survey

<i>Cat. No.</i>	<i>Quantity</i>	<i>Material</i>	<i>Class</i>	<i>Object</i>
.001	3	Ceramic	Foodways	White ironstone
.002	1	Ceramic	Foodways	Green transfer printed ware on white ironstone
Total: 4 artifacts				

Table 2: H2 Historic Artifact Inventory –Pedestrian survey

<i>Cat. No.</i>	<i>Quantity</i>	<i>Material</i>	<i>Class</i>	<i>Object</i>
.001	3	Ceramic	Foodways	RWE Blue Transferprint
.002	2	Ceramic	Foodways	RWE blue sponge ware
.003	1	Ceramic	Foodways	RWE late palette
.004	2	Ceramic	Foodways	RWE blue banded ware
.005	1	Ceramic	Foodways	RWE undecorated
.006	1	Ceramic	Foodways	Brown banded ironstone rim sherd
.007	4	Earthenware	Utilitarian	Red earthenware sherds with brown glaze
.008	2	Ferrous	Architectural	Machine cut nails
.009	1	Ball clay	Personal	Pipe stem fragment “HENDERSON”
Total: 17 artifacts				

Site H1

Despite intensive survey efforts, only four ceramic fragments dating from the mid to the late nineteenth century were recovered at Site **H1**. Based on artifact count and type, it is possible Site **H1** represent an isolated dumping event as it would appear that the ceramics are all from the same vessel.

Site H2

The sample collection of artifacts retrieved at **H2** represents a typical mid to late nineteenth century domestic, historic assemblage in rural Ontario. The dates of common use for refined white earthenware (RWE) tablewares range from the 1820s to the 1860s and for white ironstone from 1847 to the 1880s. The date range for machine cut nails is from the 1790s to the 1890s while Henderson pipes were manufactured from 1847 to 1876. Taking into consideration all of this data, it can be stated that Site **H2** ranges in date from the 1850s to 1880s.

The fallow fields and valleylands, totalling approximately 5.5 acres in size, were subjected to a test-pit survey at intervals of five metres, complying with the *Archaeological Assessment Technical Guidelines* (1993), published by the *Ministry of Tourism, Culture and Recreation*, now the *Ministry of Culture*. Shovel test-pit surveys are defined as excavating 30x30cm units at set intervals on a grid pattern in areas requiring this form of assessment. Approximately 880 test-pits were excavated to sterile subsoil depths of 20-30 centimetres and the topsoil was screened through six-millimetre mesh in order to facilitate the recovery of artifacts. All test-pits were backfilled (*see Figure 3, Plate 12-15*). Despite careful scrutiny, the test pit survey did not yield any archaeological resources within the study area limits.

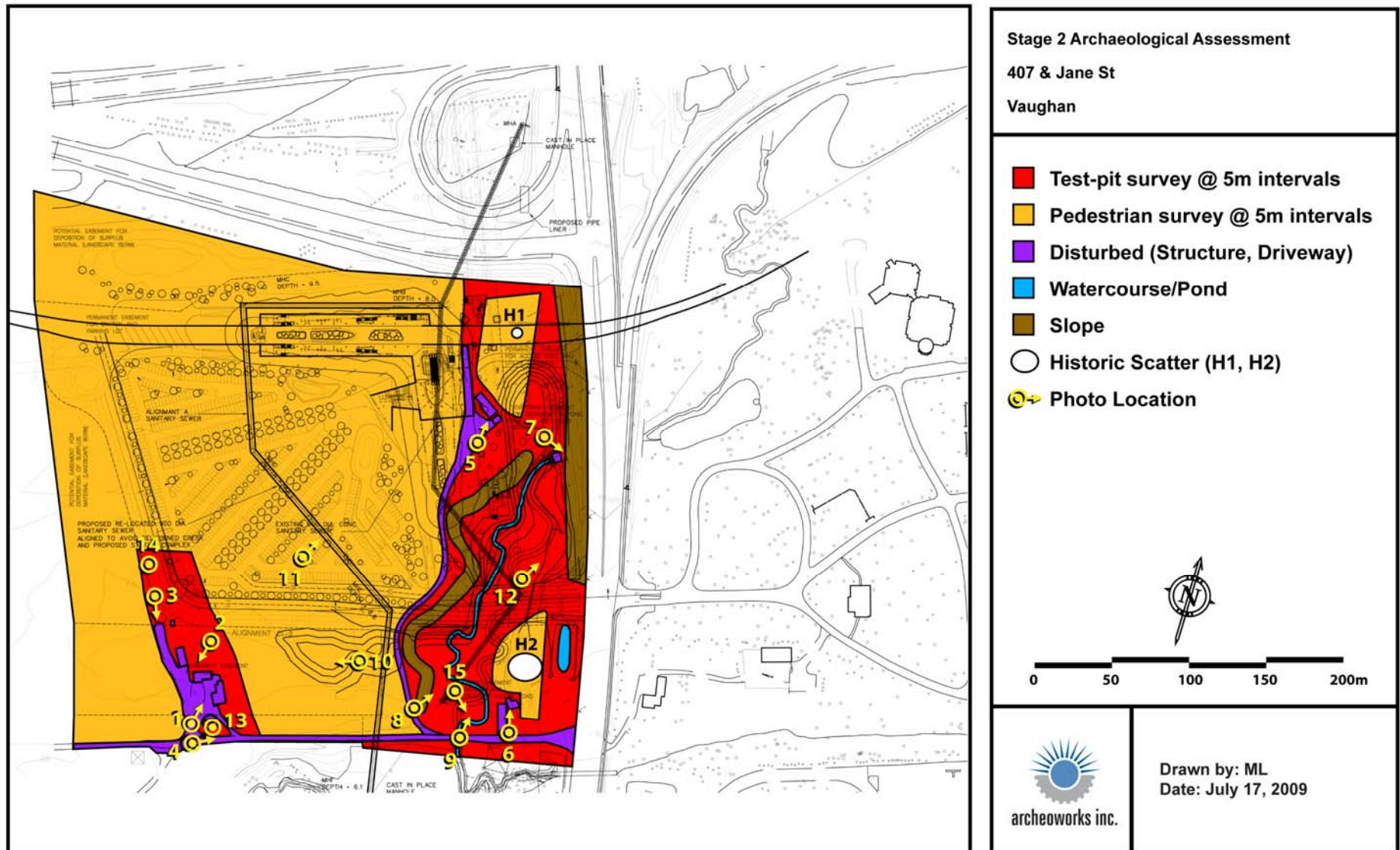


Figure 3: Stage 2 archaeological assessment

3) Conclusions and Recommendations

During the Stage 1-2 archaeological assessment Stage 2 archaeological assessment of the proposed Highway 407 Subway Station, located west of Jane Street and south of Highway 407, in the City of Vaughan, Regional Municipality of York, two historic sites were encountered (**H1** and **H2**). As a result, it is recommended that:

1. Due to the late date and scarcity of material recovered from site **H1**, and the likelihood that it represents an isolated dumping event, further investigations are unlikely to yield any significant data about early pioneer settlement in the immediate area. Thus, no further archaeological concern is warranted for **H1**.
2. If site **H2** cannot be protected from disturbance, further work at this site area should be undertaken to determine its limits and function and to gather a larger sample of artifacts. Further investigations should commence with a controlled surface collection (CSC) to determine the precise extent of the site. The CSC should then be followed by the excavation of a series of 1x1metre units, excavated to subsoil to identify the presence or absence of any cultural features and to determine the extent of deposits in the ploughzone. The placement of these units should be based on the location and frequency of surface artifacts and where discreet concentrations of artifact classes have been encountered. The soil from these units should be screened through 6mm mesh to facilitate artifact recovery. The results of the Stage 3 investigation will determine if further Stage 4 mitigations are necessary.
3. The remainder of the proposed construction area, as illustrated in *Figure 3*, be cleared of further archaeological concern.
4. This report is filed with the Minister of Culture in compliance with Section 65 (1) of the *Ontario Heritage Act*. The ministry reviews reports to ensure that the licensee has met the terms and conditions of the licence and archaeological resources have been identified and documented according to the standards and guidelines set by the ministry, ensuring the conservation, protection and preservation of the heritage of Ontario. It is recommended that construction not proceed before receiving confirmation that the *Ministry of Culture* has entered the report into the provincial register of reports.
5. Should previously unknown or unassessed deeply buried archaeological resources be uncovered during development, 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 archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*. The office of the Heritage Operations Unit, *Ministry of Culture* (416-314-7146) should be contacted immediately.
6. Any person discovering human remains must immediately notify the office of the Heritage Operations Unit, *Ministry of Culture* (416-314-7146), the police or coroner,

and the Registrar of Cemeteries, Cemeteries Regulation Unit, *Ministry of Government Services* (416-326-8404).

Under Section 6 of Regulation 881 of the Ontario Heritage Act, *Archeoworks Inc.* will, “keep in safekeeping all objects of archaeological significance that are found and all field records that are made.”

4) Bibliography

Burke, Charles

1982 *From Potter to Spoilheap: Temporal Ranges and Popularity of Nineteenth-Century Ceramics.* MS on file, Canadian Parks Service, Ontario Regional Office, Cornwall.

Chapman, L. J. and Putnam, D. F.

1984 *The Physiography of Southern Ontario*; Ontario Geological Survey, Special Volume 2. Government of Ontario: Toronto.

Collard, Elizabeth

1967 *Nineteenth-Century Pottery and Porcelain in Canada.* McGill University Press, Montreal.

Miles & Co.

1878 *Illustrated Historical Atlas of York County.* Toronto.

Murphy, James L.

1976 *Clay Pipes in the Upper Great Lakes: The Ermatinger Assemblage, by CS “Paddy” Reid and Reed Stem Tobacco Pipes from Point Pleasant, Clearmont Countuy, Ohio.* Northeast Historical Archaeology.

Ontario Ministry of Citizenship, Culture and Recreation (now the Ministry of Culture)

1997(revised 1998) *Conserving a Future for our Past: Archaeology, Land Use Planning & Development in Ontario. An Educational Primer and Comprehensive Guide for Non-Specialists.* Cultural Programs Branch, Archaeology & Heritage Planning Unit. Toronto.

Ontario Ministry of Culture

2006 *Final Draft: Standards and Guidelines for Consulting Archaeologists.*
http://www.culture.gov.on.ca/english/culdiv/heritage/arch_custsvc_draft_final.htm

Appendix A:
Plates



Plate 1: Looking north at structures & driveway located within western half of study area



Plate 2: Looking SW at structures located within western half of study area



Plate 3: Looking south at structure & gravel laneway adjacent to ploughed cultivated fields in western half of study area



Plate 4: Looking at gravel laneway at southern boundary of study area



Plate 5: Looking at structures located at north eastern section of study area



Plate 6: Looking at structures and gravel driveway located within south eastern section of study area



Plate 7: Looking SE at culvert associated with Black Creek and raised grade of Jane Street



Plate 8: Looking north at sloping terrain leading to Black Creek & surrounding floodplain/wetlands



Plate 9: Looking NE at Black Creek and adjacent floodplain/wetlands



Plate 10: Looking west at pedestrian survey of agricultural fields



Plate 11: Looking north at recently ploughed agricultural fields



Plate 12: Looking east at test-pit survey within Black Creek floodplain



Plate 13: Looking east at test-pit survey surrounding existing structures on western half of study area



Plate 14: Looking east at test-pit survey surrounding existing structures on western half of study area



Plate 15: Looking SE at test-pit survey within Black Creek floodplain



Plate 16: Collection of artifacts recovered at Site H2

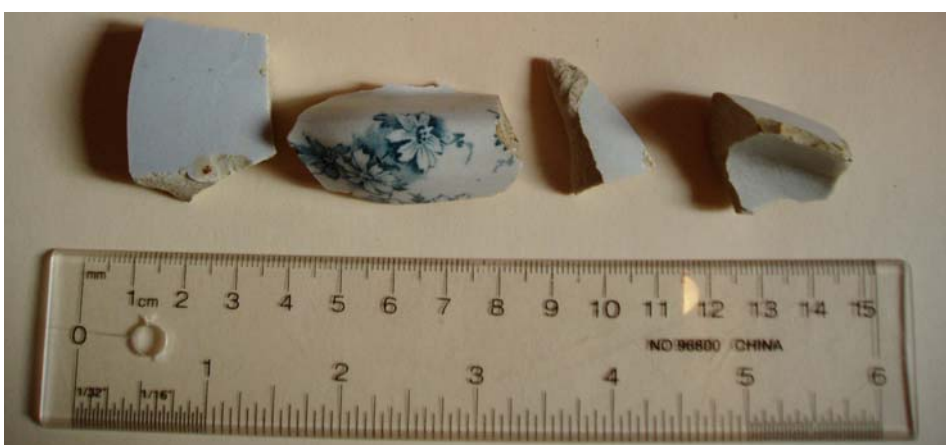


Plate 17: Collection of artifacts recovered at Site H1