

Stage 2 Property Assessment

**Sheppard East Light Rail Vehicle Maintenance and
Storage Facility Environmental Assessment,
City of Toronto, Ontario**

Prepared for:

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Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment, City of Toronto, Ontario

EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was contracted by AECOM, Markham, on behalf of the Toronto Transit Commission (TTC), to conduct a Stage 2 property assessment as part of the Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment (EA), in the City of Toronto, Ontario.

A Stage 1 background study and property inspection of the study area was previously conducted by ASI, and the results were summarized in a report that will be submitted to the Ontario Ministry of Culture (MCL). Background research was completed, and it determined that archaeological potential was present within the study area based on its proximity to a primary water source, early Euro-Canadian settlements, and early transportation roads. A property inspection of the study area was also conducted, and it concluded that three areas within the study area retained archaeological potential, and a Stage 2 property assessment was recommended for these areas, if they are to be impacted by the proposed undertaking.

The Stage 2 property assessment focused on the three areas that were deemed to have archaeological potential, and all work was conducted in accordance with the *Ontario Heritage Act* (2005) and the *Draft Standards and Guidelines for Consultant Archaeologists* (MCL 2009). Although systematic test pit survey was completed, no archaeological remains were encountered.

In light of these results, ASI recommends that the Stage 2 project area investigated for the TTC LRT Facilities does not require any additional assessment and can be considered clear of further archaeological concern.



**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENT DIVISION**

PROJECT PERSONNEL

| | |
|-------------------------------------|--|
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| <i>Project Administrator:</i> | Sarah Jagelewski, Hon. BA Research Archaeologist |
| <i>Field Director:</i> | Caitlin Lacy, Hon. BA [MCL license R303] Staff Archaeologist |
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| <i>Report Reviewer:</i> | Robert Pihl |



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1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by AECOM, Markham, on behalf of the Toronto Transit Commission (TTC), to conduct a Stage 2 property assessment as part of the Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment (EA), in the City of Toronto, Ontario (Figure 1).

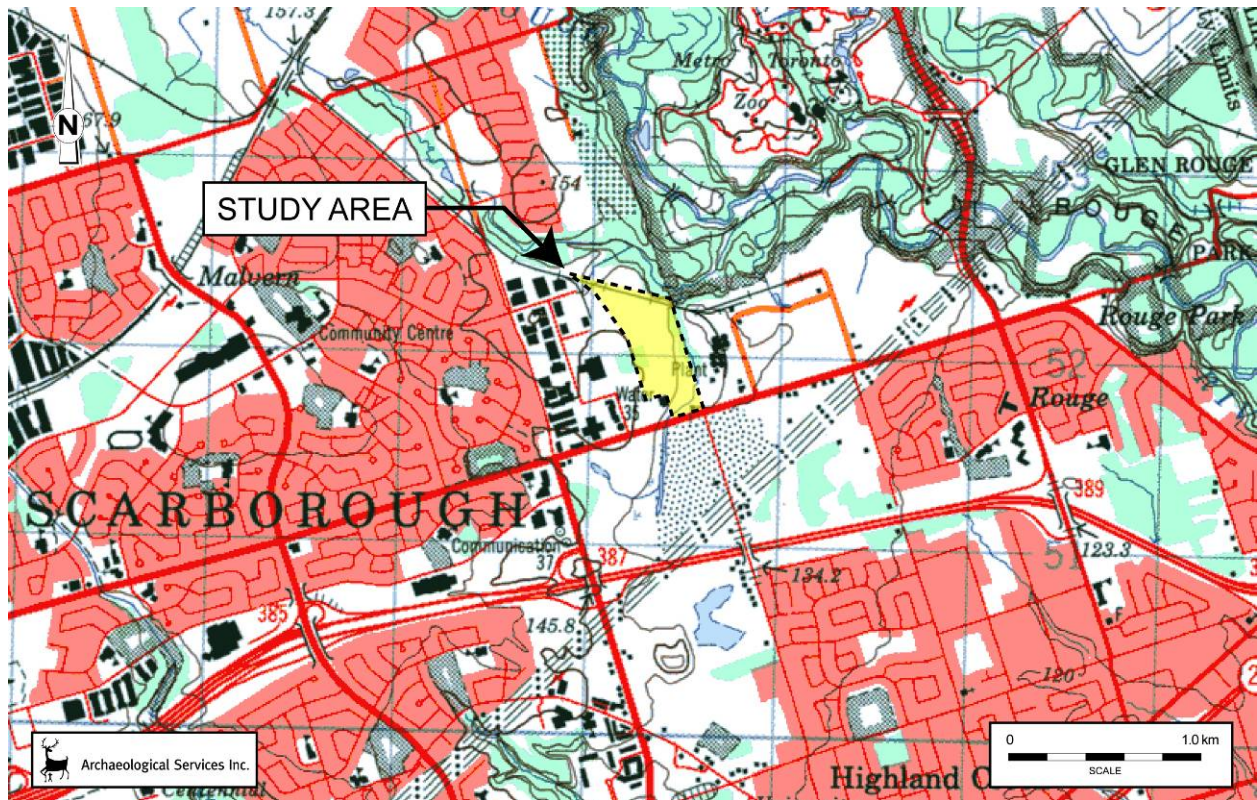


Figure 1: Location of the study area.

Base Map: NTS Sheet 30 M/14 (Markham)

Authorization to carry out the activities necessary for the completion of the Stage 2 assessment was granted to ASI by AECOM on October 28, 2009.

This report summarizes the results of the Stage 1 background study and property inspection, provides the results of the Stage 2 property assessment, and makes a recommendation.



2.0 SUMMARY OF STAGE 1 BACKGROUND STUDY AND PROPERTY INSPECTION

This section presents a summary of the Stage 1 report for the Sheppard East Light Rail Vehicle Maintenance and Storage Facility EA that was previously prepared by ASI and will be submitted to the Ontario Ministry of Culture (MCL) (ASI 2009). The Stage 1 study area is bounded by Sheppard Avenue East to the south, an industrial development and Thornmount Drive to the west, a rail corridor to the north, and an unopened road allowance to the east. The Stage 1 background study and property inspection were conducted in order to identify the potential for Aboriginal and Euro-Canadian archaeological resources within the study area.

The Ontario Archaeological Sites Database (OASD) maintained by the MCL was consulted, and it indicated that no archaeological sites have been registered within or immediately adjacent to the study area. However, three sites have been registered within 1 km of it.

The study area is situated within the South Slope physiographic region of southern Ontario (Chapman and Putnam 1984:172-174). This region forms the southern slope of the Oak Ridges Moraine, which divides the drainages of Lake Ontario, Lake Huron, and the Trent River system. It begins level with the top of the moraine, approximately 250 to 300 m above sea level (asl), and descends to between 120 and 180 m asl, where it meets the Iroquois Lake Plain in an area of gently rolling till plain and low drumlins. A tributary of the Rouge River flows just north of the study area. Therefore, based on the proximity of a primary water source, it was concluded that there is potential for the recovery of Aboriginal cultural material within the study area.

Historically, the study area was located on Lot 9, Concession III, in the former Township of Scarborough, County of York. According to the 1878 *Illustrated Historical Atlas of the County of York, Ontario*, the eastern half of Lot 9 was under the ownership of J. Harrington, and a single structure is illustrated in the southeast corner of the property. The western half of Lot 9 was under the ownership of George Scott, and a single structure is illustrated in the north central portion of the property. In addition, Sheppard Avenue East is an early settlement road. Therefore, based on the proximity to early Euro-Canadian settlements and early settlement roads, it was concluded that there is potential for the recovery of Euro-Canadian cultural material within the study area.

A property inspection of the TTC LRT Facilities: Scarborough study area determined that although portions of the study area have been previously disturbed, or are situated on land that can be characterized as having excessive slope or as being low and wet - factors which negate archaeological potential - three areas with archaeological potential are present within the study area. It was recommended that a Stage 2 property assessment be conducted on these if they will be impacted by the proposed undertaking.



3.0 STAGE 2 PROPERTY ASSESSMENT

3.1 Methodology

The Stage 2 property assessment was conducted under the Transit Project Assessment process, and in accordance with the *Ontario Heritage Act* (2005) and the *Draft Standards and Guidelines for Consultant Archaeologists* (MCL 2009; Section 2). The study area lands to be assessed have closed surface visibility that will require test pit survey according to the MCL's draft standards and guidelines: any undisturbed areas within 300 m of any feature of archaeological potential must be subject to systematic test pit survey at 5 m intervals (MCL 2009; Section 2), and any undisturbed areas more than 300 m from these features must be systematically test pitted at 10 m intervals. For this Stage 2 assessment all areas requiring assessment test pit surveyed following the above standards.

Test pit survey involves the excavation of 30 cm diameter test pits into the first 5 cm of subsoil, and the screening of all test pit fills through 6 mm mesh to facilitate artifact recovery. All test pits were backfilled and their locations were recorded on field maps. If archaeological resources were uncovered, test pit intervals were intensified to 2.5 m around the positive test pits to define site boundaries. Any factors that preclude the excavation of test pits (e.g. excessive slope, drainage, exposed bedrock, previous disturbance) were noted, and the areas were mapped and photographed. Where necessary, areas of disturbance were confirmed by the excavation of test pits at judgmental intervals. The results of this assessment were mapped (Figure 2) and associated photographs are presented in Section 6.0.

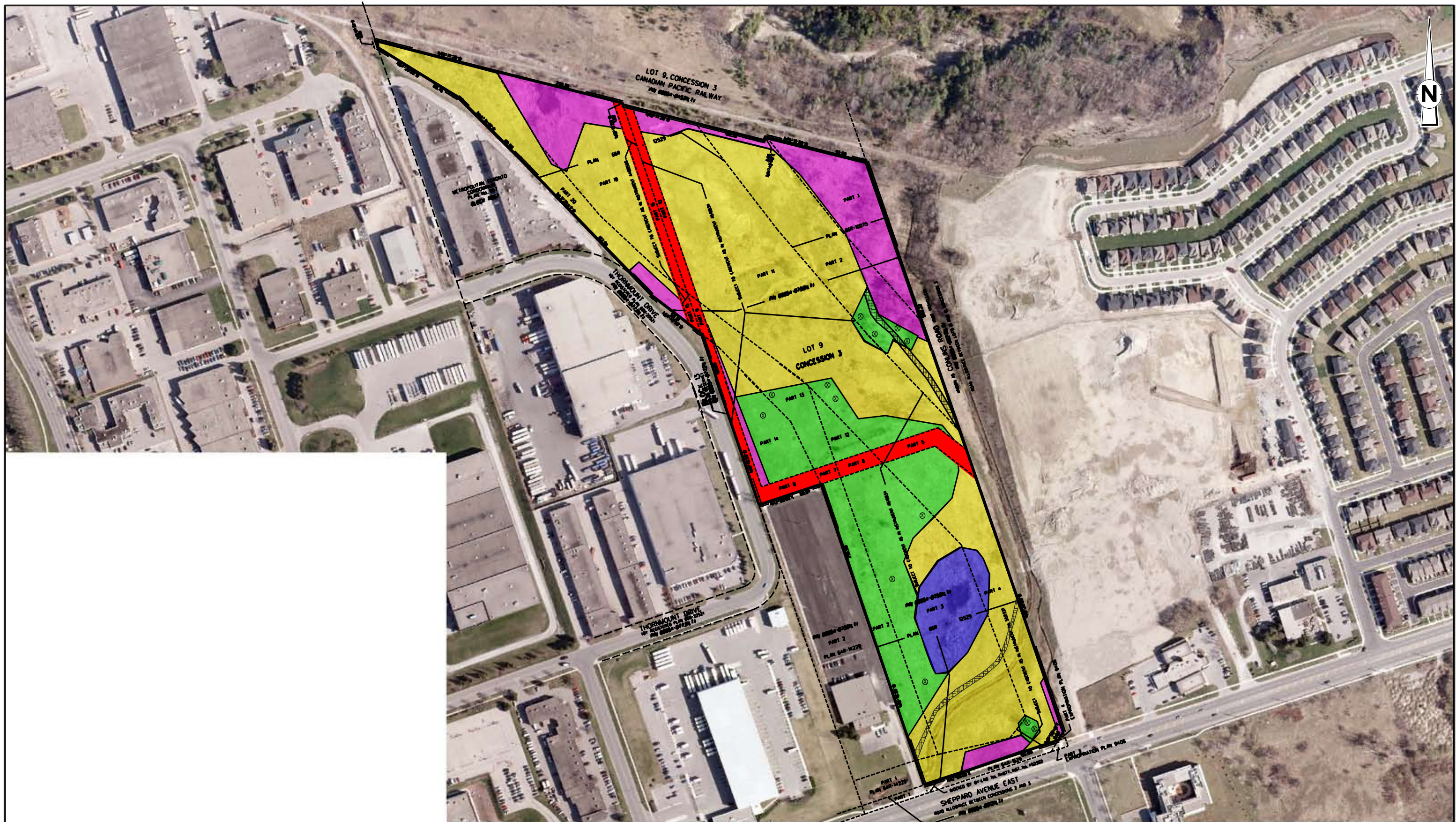
3.2 Stage 2 Property Survey

Stage 2 fieldwork was completed on October 29, 2009, under the field direction of Caitlin Lacy (R303), ASI. The weather was overcast and 10°C. Viewing conditions were considered acceptable.

The study area is bounded by Sheppard Avenue East to the south, an industrial development and Thornmount Drive to the west, an abandoned rail corridor to the north, and an unopened road allowance to the east. Three areas that were deemed to have archaeological potential were subjected to systematic test pit survey (ASI 2009; Figure 3).

Area 1 is roughly 0.012 ac in size and is located approximately 150 m south of the northeast corner of the study area. The area was generally flat and covered in heavy vegetation, including long grasses and weeds (Plates 1-2). A gravel pathway bisects this area. Two test pits, consisting of top soil mixed with gravel and asphalt, were visibly disturbed east of the pathway (Plate 3). Two additional test pits were excavated west of the pathway, and these were also disturbed. All test pits were approximately 30 to 40 cm deep.





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LEGEND



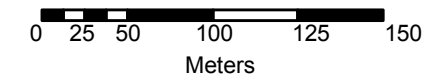
Study Area
 Stage 2 test pit survey
 No Potential: sewer easement



No Potential: disturbed (Stage 1 archaeological assessment)
 No Potential: low/wet (Stage 1 archaeological assessment)
 No Potential: slope (Stage 1 archaeological assessment)



Gravel Pathway
 Location of disturbed test pit
 Photo Location & Direction



ASI PROJECT NO.: 09EA068_069 DATE: August 25th, 2009
 DRAWN BY: J.F. FILE: 09EA68_69_s1

Figure 2: Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment - Results of the Stage 2 Property Assessment

Area 2 is roughly 5 ac in size and covers the majority of the middle section of the study area. The area was generally flat and also covered in heavy vegetation (Plate 4). Four test pits at the north end of Area 2 were visibly disturbed, and consisted of top soil mixed with gravel. Judgmental testing continued to the south (Plate 5). A total of seven test pits were excavated over the area, and all showed disturbed soil contexts.

Following the completion of the Stage 1 assessment, it was noted that an underground trunk sewer crosses the study area (email communication, Karl van Kessel, Senior Environmental Planner, AECOM, October 5, 2009). As such, the portion of Area 2 that follows the sewer easement has been previously disturbed (Figure 2: area marked in red).

Area 3 is roughly 0.006 ac in size, and is located in the southeast corner of the study area around a cluster of elm trees that possibly relate to the structure illustrated in the southeast corner of the property in the 1878 *Illustrated Historical Atlas of the County of York* (Plate 6). Five test pits were excavated at this location. Two test pits were visibly disturbed and consisted of concrete and asphalt mixed with gravel. The remaining three test pits, consisting of brown-grey clay-loam top soil mixed with gravel fill, and were also considered to be disturbed (Plate 7).

Despite careful scrutiny, no archaeological remains were encountered within the three areas that were deemed to have archaeological potential.

4.0 RECOMMENDATIONS AND COMPLIANCE ADVICE

ASI was contracted by AECOM, of Markham, to conduct a Stage 2 property assessment as part of the Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment.

A Stage 1 background study and property inspection of the study area suggested that three areas of the study area have remained relatively undisturbed and exhibited archaeological potential due to the proximity to a primary water source, early Euro-Canadian settlements, and early transportation roads. A Stage 2 property assessment was recommended for these locations, if they were to be impacted by the proposed undertaking. Although systematic test pit survey was completed, no archaeological remains were encountered.

In light of these results, ASI recommends that the Stage 2 project area investigated for the TTC LRT Facilities does not require any additional assessment and can be considered clear of further archaeological concern.

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of 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 the licensed consultant archaeologist has met the terms and conditions of their archaeological licence, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.

- 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*.
- The Cemeteries Act requires that any person discovering human remains must notify the police or coroner and the Registrar of cemeteries, Ministry of Small Business and Consumer Services.

The documentation related to the archaeological assessment of this project will be curated by Archaeological Services Inc. 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, the Ontario Ministry of Culture, and any other legitimate interest groups.

5.0 REFERENCES CITED

ASI (Archaeological Services Inc.)

- 2009 Stage 1 Archaeological Resource Assessment Sheppard East Light Rail Vehicle Maintenance and Storage Facility Environmental Assessment, City of Toronto, Ontario (P057-548-2009).

Chapman, L.J. and F. Putnam

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

MCL (Ontario Ministry of Culture)

- 2009 *Draft Standards and Guidelines for Consultant Archaeologists* (June 2009). Culture Policy, Programs and Services Division, Programs and Services Branch, Culture Programs Unit, Toronto.

Miles & Co.

- 1878 *Illustrated Historical Atlas of the County of York, Ontario*. Toronto.



6.0 PHOTOGRAPHY



Plate 1: Looking east towards Area 1.



Plate 2: Looking northeast at test pit survey.



Plate 3: Example of fills from disturbed test pit.



Plate 4: Looking north-northwest into Area 2.





Plate 5: Example of excavated test pit (top soil mixed with gravel).



Plate 6: Looking north at test pit survey in Area 3



Plate 7: Example of disturbed test pit.

