STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT
OF THE COLLEGE STREET EAST EXTENSION,
PART OF LOTS 12, 13, and 14, CONCESSION 2,
GEOGRAPHIC TOWNSHIP OF THURLOW,
CITY OF BELLEVILLE, COUNTY OF HASTINGS, ONTARIO

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PIF #: P121-100-2011

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EXECUTIVE SUMMARY

In the fall of 2011, Advance Archaeology was contracted to conduct a Stage 1 and 2 archaeological assessment of the College Street East Extension in the City of Belleville, on part of Lots 12, 13, and 14, Concession 2, Geographic Township of Thurlow, County of Hastings. This assessment was conducted as part of the proponent’s environmental assessment for this project and in compliance with the 2011 Standards and Guidelines for Consultant Archaeologists, as prepared by the Ministry of Tourism and Culture (MTC).

The subject property, which is a proposed industrial expansion, consists of a narrow corridor of land starting at the east end of College Street East and extending eastward for approximately 730m; it is 75m in width. Stage 1 research conducted in relation to the subject property indicated that it had areas of archaeological potential, according to MTC standards and guidelines, primarily because it includes wetland zones, is in close proximity to a secondary watercourse (a tributary of Bell Creek) and a 19th century Euro-Canadian house, and is topographically suitable for past use or settlement by aboriginal peoples. The surrounding area also has a lengthy history of Euro-Canadian settlement, including prior agricultural use of the subject lands and residential and industrial use of adjacent lands dating back to the mid-1800s.

The proposed road extension corridor is primarily made up of extensive sections of standing water and water-saturated soils in two types of wetland communities (both swamp and meadow marsh) and large, heavily-disturbed zones (including a dump and a drainage channel). Therefore, it would not have been possible to plough these lands due to the extensive prior disturbances and the presence of trees, thickets of scrub vegetation, and pooling of water, which would damage machinery (Standard 1, Section 2.1.2, MTC, 2011).

The subject property was therefore assessed using test-pit survey at 5m intervals in the zone with high archaeological potential, at 10m intervals in the zone with moderate archaeological potential, and at judgmental intervals in the area along the north edge of the drainage channel, where a visual inspection could not determine the shallowness of the soil or the degree of prior disturbance from the excavation of the drainage channel, in accordance with MTC standards and guidelines. Zones of low archaeological potential included the sections with heavily-saturated soils or permanent open pools of standing water, as well as sections with extensive prior soil disturbance caused during construction of drainage channel and the snow disposal area. Testing was conducted under excellent weather and lighting conditions on November 9, 2011.

No archaeological material or any other cultural heritage resources of any kind were discovered during the Stage 2 assessment. Since there is nothing of cultural heritage value or interest on the subject property, complete clearance of the archaeological condition is recommended. If any archaeological resources or human remains should be discovered during the course of construction, all excavation must stop immediately and MTC must be contacted.
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PROJECT PERSONNEL

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Field Technicians
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Eric Porter
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Nelson Jacobs
Jon-Erik Monague
1.0 DEVELOPMENT CONTEXT

In compliance with the requirements of the Ontario Ministry of Tourism and Culture (MTC) regarding land development (see 2011 Standards and Guidelines for Consultant Archaeologists), a contract to carry out a Stage 1 and 2 archaeological assessment of the proposed College Street East Extension was awarded to Advance Archaeology. This assessment report is being submitted as part of the proponent’s environmental assessment for this project.

The subject property is located in a part of Belleville that is called the North East Industrial Park, and it extends eastward for a distance of approximately 730 metres from the existing turnaround at the current east end of College Street East (see Maps 1, 2, and 3 in Section 10.0). The width of this corridor is 75m, which includes the width of the road allowance plus additional space for the construction and installation of associated infrastructure. The 75m width also provides for an ample buffer zone beyond the road.

The legal description for this parcel of land is part of Lots 12, 13, and 14, Concession 2, Geographic Township of Thurlow, County of Hastings (City of Belleville).

Project Director for this Stage 1 and 2 archaeological assessment is Donna Morrison. This report was written by Donna Morrison, with maps drafted by Dale Bateman. The base map for Maps 1 and 2 in Section 10.0 were created by the City of Belleville and were provided by the proponent.

Stage 2 fieldwork was undertaken on November 9, 2011, with Donna Morrison acting as field director and Justin Tighe, Myles Allen, Jon-Erik Monague, Eric Porter, and Nelson Jacobs as field technicians. All fieldwork was carried out under excellent weather and lighting conditions; photos taken during this assessment are found in Section 11.0. The PIF number for this Stage 1 and 2 assessment is P121-100-2011, and permission to enter the property for the purpose of conducting the assessment was granted by the landowner/proponent.
2.0 HISTORICAL CONTEXT

2.1 Historical Information and Settlement History

The subject property is located on part of Lots 12, 13, and 14 in the 2nd Concession of the geographic township of Thurlow (now in the city of Belleville), in the County of Hastings. Louis Kotte surveyed Thurlow Township in 1787 and, in the Spring of 1789, fifty United Empire Loyalists came to settle Thurlow and Sidney Townships, which were united until 1798. The Moira River, which runs through the township, was an early attraction for water power and for the logging industry. The Belleville and Grand Junction Railway also served the region, and macadamized roads were common. The village of Cannifton on the Moira River was noted for paper mills, a large flouring mill, a distillery, and a hotel. Other small villages similarly developed throughout the township.

At the mouth of the Moira River on Lake Ontario’s Bay of Quinte, the village called “Meyer’s Creek” grew and prospered. This village was renamed “Belleville” in 1816. A large number of commercial and industrial enterprises were established, as well as an important harbor. Belleville grew slowly and by 1836, when it became an independent municipality, had 1,700 inhabitants. In 1850, the town of Belleville was separated from the county of Hastings and, by 1878, had a population of 11,000 people. It was one of the most significant commercial, industrial, and transportation hubs in this part of the province.

The 1878 Belden & Company historical atlas map for Thurlow Township shows the location of the lots and concessions as well as historical roads and buildings, if present, at that time. Based on this 1878 historical atlas map, the east half of Lot 12 of Concession 2 (on which the westernmost end of the subject property is located) was a 100-acre parcel of land owned by “S. Belch”; moving eastward across the subject property, the west half of Lot 13 (100 acres) was owned by J. H. Granger, the east half of Lot 13 (100 acres) was owned by “Mrs. Barrett”, and the 100-acre west half of Lot 14 (on which the easternmost end of the subject property is located) was owned by “J. Carscallen”. While each of the four half-lots show the presence of a house, they are all roughly 350-400 metres south of the subject property, except for the house on Mrs Barrett’s land on the east half of Lot 13, which is only 250m to the south.

Therefore, in terms of 19th-century structures, there are no houses or other buildings and features (such as schools, churches, or mills) shown on the subject property on the 1878 Belden map, and the nearest 19th-century transportation corridor includes a road and the Grand Trunk Railway line (now the C.N.R.), which run east-west along the southernmost edges of Lots 12, 13, and 14 of Concession 2, roughly 700m south of the subject property.
2.2 Present Land Use of Subject Property

The west half of the subject property includes a wide and deep drainage channel that was excavated out of the limestone bedrock; it extends eastward from the current end of College Street East (see Image 1, Section 11.0) before it makes a turn to the south. On the north side of this drainage channel is an area of exposed limestone bedrock or bedrock with less than 10cm of soil on top (see Image 2, Section 11.0); on the south side of the drainage channel is an area of swamp. Just east of the drainage channel and an adjacent narrow hydro corridor, the west half of the subject property also includes part of a snow disposal site that has experienced extensive impacts to the entire width of the west half of Lot 13 in this area (see Maps 2, 3, and 5 in Section 10.0). Consequently, there has been complete disturbance of the original ground surface as the site has been graded and used as a disposal site for excavated limestone bedrock and other debris; the subject property in this area is covered in large mounds of debris ranging from 1m to 7m in height (see Image 3 in Section 11.0). This area is also used as a snow dump during winter by the City’s snow-removal teams.

On the east half of the subject property, most of the drier upland areas were used during the 19th century for agricultural purposes, likely as hay fields or pasture land. These fields appear to have been abandoned for some time, however, and the area is currently classified as meadow marsh; it is predominantly covered in sedge grasses, with red cedar thickets, scrub vegetation, and pools of water with cattails also present (Savanta 2011). Maps 2, 3, and 5 in Section 10.0 and Images 4, 5a, 5b, and 6 in Section 11.0 show these conditions. Over all, drainage is fairly poor on the east half of the property, with moderate-to-high degrees of water saturation in the soils throughout, although the fields appear from a distance to be completely dry.
3.0 ARCHAEOLOGICAL CONTEXT

3.1 Known Archaeological Sites In The Vicinity

A search of the Ontario Archaeological Sites Database (maintained by the Ontario Ministry of Tourism and Culture) was carried out by MTC Data Coordinator, Robert von Bitter. According to the results of this search, there are no known archaeological sites located on the subject property. In fact, there are no archaeological sites registered within a 1km radius of the subject property.

3.2 Existing Conditions on the Subject Property

The subject property is located in the Napanee Plain physiographic region of Southern Ontario, which is a flat-to-undulating plain of limestone (of both the Gull River and Bobcaygeon Formations) stripped of most of the overburden during the last period of glaciation (Chapman and Putnam 1984:186). With the town of Napanee at its geographic centre, this physiographic region is roughly 700 square miles in size, with soils only a few inches deep over much of the region (Chapman and Putnam 1984).

Locally, the subject property lies within a Drumlinized Till Plain zone, which is just east of the mouth of the Moira River and its associated Limestone Plain zone. Also to the west is a narrow Clay Plain zone that runs along the shoreline of the Bay of Quinte west of the Moira River (Chapman and Putnam 1984; OMNR 1984). Approximately 250-300m east and southeast of the subject property’s east end is a small secondary watercourse (a tributary of the Bell River), which flows southward into the Bay of Quinte. Heavily-saturated soils and permanent open pools of standing water are found at the west end of the subject property, on the south side of the excavated drainage channel (see Image 1, Section 11.0), in an area classified as White Cedar-Hardwood Mineral Mixed Swamp and White Elm Mineral Deciduous Swamp (Savanta 2011). Similar wet ground conditions are also present on much of the east half of the subject property, in what is classified as Mineral Meadow Marsh (Savanta 2011); the amount of surface water is lower on this part of the subject property, however, with the drier sections being slightly more elevated and the lower sections having larger open pools of water and cattails (see Images 4, 5a, 5b, and 6 in Section 11.0).
4.0 STAGE 2 ASSESSMENT METHODOLOGY

The subject property has archaeological potential, according to the 2011 MTC standards and guidelines (Section 1.3.1), primarily because it includes wetland zones, is in close proximity to a secondary watercourse (a tributary of Bell Creek) and a 19th-century Euro-Canadian house, and is topographically suitable for past use or settlement by aboriginal peoples. The surrounding area also has a lengthy history of Euro-Canadian settlement, including prior agricultural use of the subject lands as well as residential and industrial use of adjacent lands dating back to the mid-1800s.

The subject property is a narrow corridor of land measuring 75m in width by 730m in length. It is made up primarily of extensive sections of open standing water and water-saturated soils in two types of wetland communities (both swamp and meadow marsh) and large, heavily-disturbed zones (including the dump and the drainage channel). Therefore, it would not have been possible to plough these lands due to the extensive prior disturbances and the presence of trees, thickets of scrub vegetation, and pooling of water, which would damage machinery (Standard 1, Section 2.1.2, MTC, 2011).

The Stage 2 assessment therefore consisted of test-pit survey, as per Section 2.1.1 of MTC’s 2011 Standards and Guidelines. Accordingly, the undisturbed areas were subject to test-pit survey at 5m intervals (for the drier wooded section that is considered to be of high archaeological potential), at 10m intervals (for those sections of meadow marsh that appeared to be fairly well drained and are considered to be of moderate archaeological potential), and at judgmental intervals (for the low-to-moderate zone along the north edge of the drainage channel, where the degree of prior disturbance and shallowness of the soil was not obvious from a visual inspection alone). The wetland areas that contain heavily saturated soils or permanent open pools of standing water, and the areas that had been subject to extensive prior soil disturbance (i.e., the drainage channel and the disposal area), were considered to be of low archaeological potential and were exempt from Stage 2 testing.

All Stage 2 test pits were at least 30cm in diameter and were excavated to at least 5cm into subsoil or to bedrock (if present); all soils from within the test pits were screened using 6mm-mesh portable rocker screens. The Stage 2 test pits were examined for evidence of stratigraphy, cultural features, and foreign fill, and were backfilled after screening of soil was completed.

The Stage 2 test-pit survey was conducted on November 9, 2011, under excellent weather and lighting conditions; there was no frost in the ground. Map 5 in the Section 10.0 shows the zones of archaeological potential and Stage 2 fieldwork methodology used. Images 1 to 6 in Section 11.0 illustrate the conditions on the subject property and the Stage 2 testing in progress; Map 6 in Section 10.0 shows the locations from which these photographic images were taken and the direction that the photographer was facing.
5.0 RECORD OF FINDS

In the test-pitted areas, the clay-loam topsoil ranged from 1cm to 25cm in depth, and many small sections of exposed limestone bedrock were also noted. There was no frost in the ground at the time of the Stage 2 assessment, and the weather and lighting conditions were excellent. The low-to-moderate-potential zone along the north edge of the drainage channel had little to no topsoil overlaying limestone bedrock and some parts of it showed signs of prior disturbance from the excavation of the drainage channel. In the moderate-potential zone, which appeared to be fairly-well drained, saturated soils were often encountered below ground surface level; it is probable that this zone would be covered in pools of standing water in the spring or after heavy rainfall events.

Nothing of archaeological significance, dating to either the historic or the precontact time periods, was recovered during the Stage 2 test-pit survey. No artifacts or other cultural heritage resources were found in the test pits and no structural remains were noted.

6.0 ANALYSIS AND CONCLUSIONS

A Stage 1 and 2 archaeological assessment of the subject property was conducted in accordance with the current Standards and Guidelines used by the Ministry of Tourism and Culture (2011). The Stage 1 assessment indicated that the subject property had high or moderate archaeological potential in the sections that were relatively undisturbed and that appeared relatively well-drained, while those sections with extensive prior soil disturbance and heavily-saturated soils or permanent open pools of standing water had low archaeological potential and were exempt from Stage 2 testing.

Despite the use of 5m and 10m test-pitting intervals in all of the high-potential and moderate-potential zones, and judgmental test-pitting intervals in the low-to-moderate-potential zone beside the excavated drainage channel, nothing of archaeological or cultural heritage significance, dating to either the historic or pre-contact time periods, was recovered during the Stage 2 assessment and no structural remains were encountered. Therefore, there is nothing of archaeological or cultural heritage value or interest on the subject property and no further archaeological assessment is necessary.

7.0 RECOMMENDATIONS

Based on the results of the Stage 1 and 2 archaeological assessment, we offer the following recommendation:

(1) Since no archaeological material, structural remains, or cultural heritage resources of any kind were found anywhere on the subject property, complete clearance of the archaeological condition is recommended, based on a complete lack of cultural heritage value or interest therein.
8.0 ADVISE ON COMPLIANCE WITH LEGISLATION

a. This report is submitted to the Minister of Tourism and Culture as a condition of licencing 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 licenced 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*.

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 licenced consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

9.0 REFERENCES CITED

Belden, H. and Company

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

MTC (Ministry of Tourism and Culture)

Ontario Department of Mines and Northern Affairs, and Ontario Research Foundation
1984 Map # 2226: Physiography of the South Central Portion of Southern Ontario.

Ontario Ministry of Natural Resources

Savanta, Inc.
10.0 MAPS

Map 1: Location of Subject Property in the City of Belleville, Ontario.
Map 2: Location of Proposed College Street East Extension and Associated Main Installations.
Map 3: Aerial View of Subject Property Location.
Map 4: 1878 Historical Atlas Map of Thurlow Township, Showing Approximate Location of Subject Property (after Belden 1878).
Map 5: Zones of Archaeological Potential on the Subject Property and Stage 2 Methodology Used.
Map 6: Locations from which photographic images in Section 11.0 were taken. Arrows indicate direction that photographer was facing.
11.0 IMAGES

**Image 1:** View to East of Excavated Drainage Channel at West End of Subject Property.

**Image 2:** View to West of Exposed Limestone Bedrock on North Side of Drainage Channel.
Image 3: View to Northeast of 7m-tall Rubble and Debris Piles in Disposal Area.

Image 4: View to Southeast of Stage 2 Test Pitting Survey in Progress in Moderate-Potential Zone.
Image 5a: View to East of Meadow Marsh at East End of Subject Property.

Image 5b: Close-Up of Saturated Soils in Meadow Marsh at East End of Subject Property.
Image 6: View to South of Standing Water Zone (part of the meadow marsh) at East End of Subject Property.