

Appendix E

Stage 1 Archaeological Assessment

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**Banwell Road Extension Improvements
Class EA and Preliminary Design,
CP Rail Line northerly to Tecumseh Road,
City of Windsor, Ontario**

Submitted to:

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**ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENTS**

PROJECT PERSONNEL

| | |
|------------------------------------|--|
| <i>Project Director:</i> | Robert H. Pihl, M.A. Partner and Senior Archaeologist Manager, Environmental Assessments |
| <i>Project Administrator:</i> | Caitlin Pearce, Hon. B.A. Research Archaeologist |
| <i>Field Director:</i> | Deborah Pihl, M.A. Staff Archaeologist |
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Stage 1 Archaeological Assessment

Banwell Road Extension Improvements Class EA and Preliminary Design, CP Rail Line northerly to Tecumseh Road, City of Windsor, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted by the City of Windsor to conduct a Stage 1 archaeological assessment for the Banwell Road Extension Improvements Class EA and Preliminary Design, from the Canadian Pacific rail line northerly to Tecumseh Road, City of Windsor, Ontario (Figure 1). The study corridor is 2.75 kilometers in length.

The Stage 1 archaeological assessment was conducted under the project direction of Mr. Robert Pihl, ASI, under an archaeological licence (P057) issued to Mr. Pihl pursuant to the *Ontario Heritage Act*. A field review of the study corridor was conducted by Ms. Deborah Pihl, ASI (archaeological licence P130).

Permission to access the study corridor and to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted to ASI by the City of Windsor on June 30, 2006.

This report presents the results of the Stage 1 background research and field review and makes several recommendations.

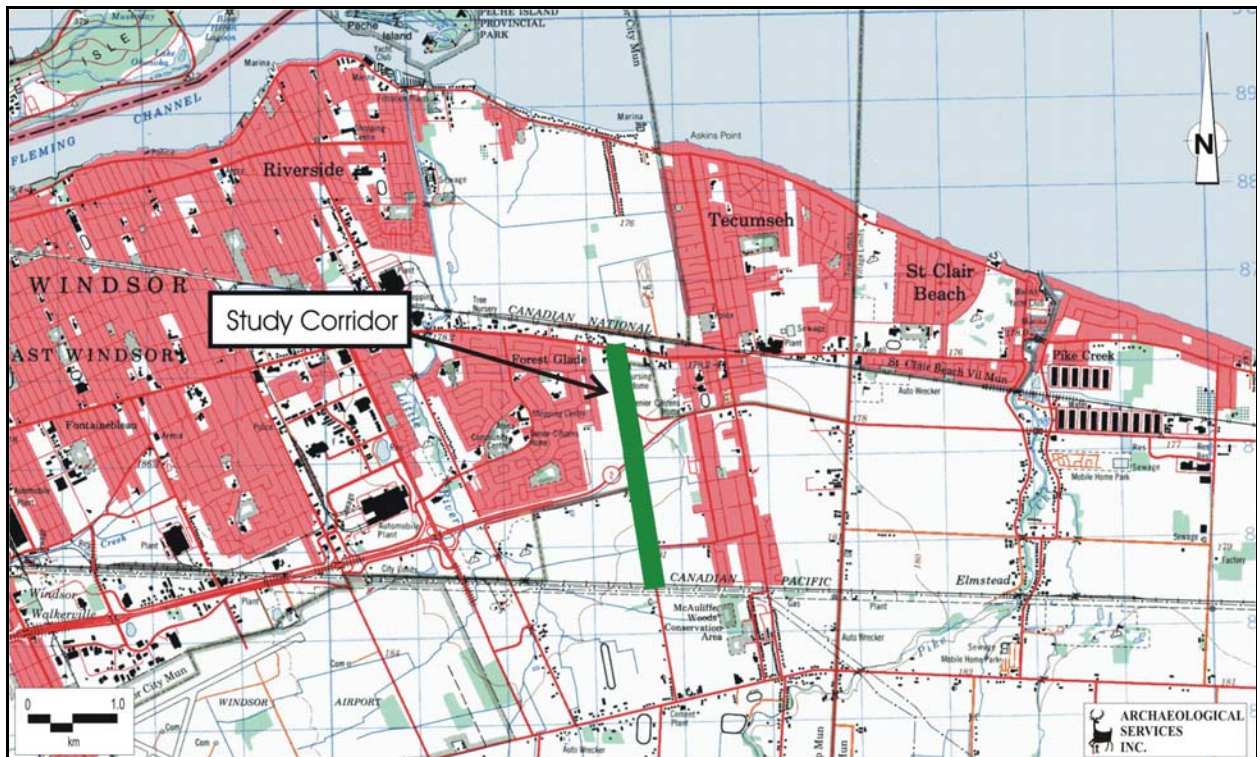


Figure 1: Location of the study corridor. (NTS map 40 J/6, Windsor)

2.0 STAGE 1 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the EA study corridor was conducted in accordance with the Ontario Ministry of Culture's archaeological assessment technical guidelines. A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within a study corridor. Such an assessment incorporates a review of previous archaeological research, physiography, and land use history for the property. Background research was completed to identify any archaeological sites in the study corridor and to assess the area's archaeological potential.

2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study corridor, three sources of information were consulted: registered archaeological site records kept by the Ontario Ministry of Culture; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the Ontario Ministry of Culture. This database contains archaeological sites registered according to 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 kilometres east to west, and approximately 18.5 kilometres 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 corridor under review is located in Borden Block *AbHr*.

According to the OASD, while no sites have been registered within the study corridor, one site has been registered within one kilometre. **Site AbHr-4** is located just south of the study corridor, approximately 250 metres east of Banwell Road under the centre hydro line paralleling the Canadian Pacific Rail line. The site consists of two components: a scatter of historic Euro-Canadian artifacts and an isolated side-notched chert projectile point of an undetermined affiliation. The site was registered in 1991 by Mr. Frank A. Dieterman.

In general, the study area lies within an area designated by the Windsor Archaeological Master Plan as having archaeological site potential (CRMGL et. al 2005: Figure 4).

2.2 Physiography

The study corridor is located within the St. Clair Clay Plains physiographic region of southern Ontario, an area of extensive clay plains which is surrounded by Lake St. Clair, the St. Clair River and Lake Erie (Chapman and Putnam 1984). The region is characterized by little relief, as well as a deep cover of overburden on limestone bedrock within Essex County. The area was once covered by glacial Lake Whittlesey followed by Lake Warren. However, with the exception of a few specific areas within Essex County, both lakes failed to leave deep stratified beds on the underlying clay. Generally, knolls within the till plains were lowered by wave action and smoothed by shallow deposits of lacustrine clay which settled in the depressions.

Soils in the area are characterized by dark gleysolic soil known as Brookston clay loam (Chapman and Putnam 1984). Surface drainage within the St. Clair Clay Plain is mostly northward toward Lake

St. Clair, though drainage in Essex County is generally imperfect. According to the 1:50,000 NTS mapping, two tributaries of Little River intersect the study corridor.

Water is arguably the single most important resource necessary for any extended human occupation or settlement and proximity to water can be regarded as the primary indicator of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modelling of archaeological site location.

The Ministry of Culture primer on archaeology, land use planning and development in Ontario (1997) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.), are considered to have archaeological potential.

Based on the presence of the Little River tributaries, the study corridor may be characterized as having potential for the presence of archaeological sites.

2.3 Assessment of Historic Site Potential

The Essex County supplement found in the *1881 Illustrated Atlas of the Dominion of Canada* was reviewed to determine the potential for the presence of nineteenth century archaeological remains within the study corridor (Figure 2).

The study corridor forms part of the side road allowance between Lots 143 and 144, Concessions II and III in the former Township of Sandwich, County of Essex. No residents or structures are specified on the map. Furthermore, no historical features are illustrated within, or adjacent to, the study corridor. It should 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 1881 *Atlas*.

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 captured by the basic proximity to the water model outlined in Section 2.2, since these occupations were subject to similar environmental constraints. An added factor, however is the development of the network of concession roads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road, such as Banwell Road south of E.C. Row Expressway, Intersection Road, South Service Road (former E.C. Row Avenue), and Tecumseh Road are also considered to have potential for the presence of Euro-Canadian archaeological sites. It should be noted that north of the E.C. Row Expressway Banwell Road has been relocated approximately 60 metres to the east of its original route.

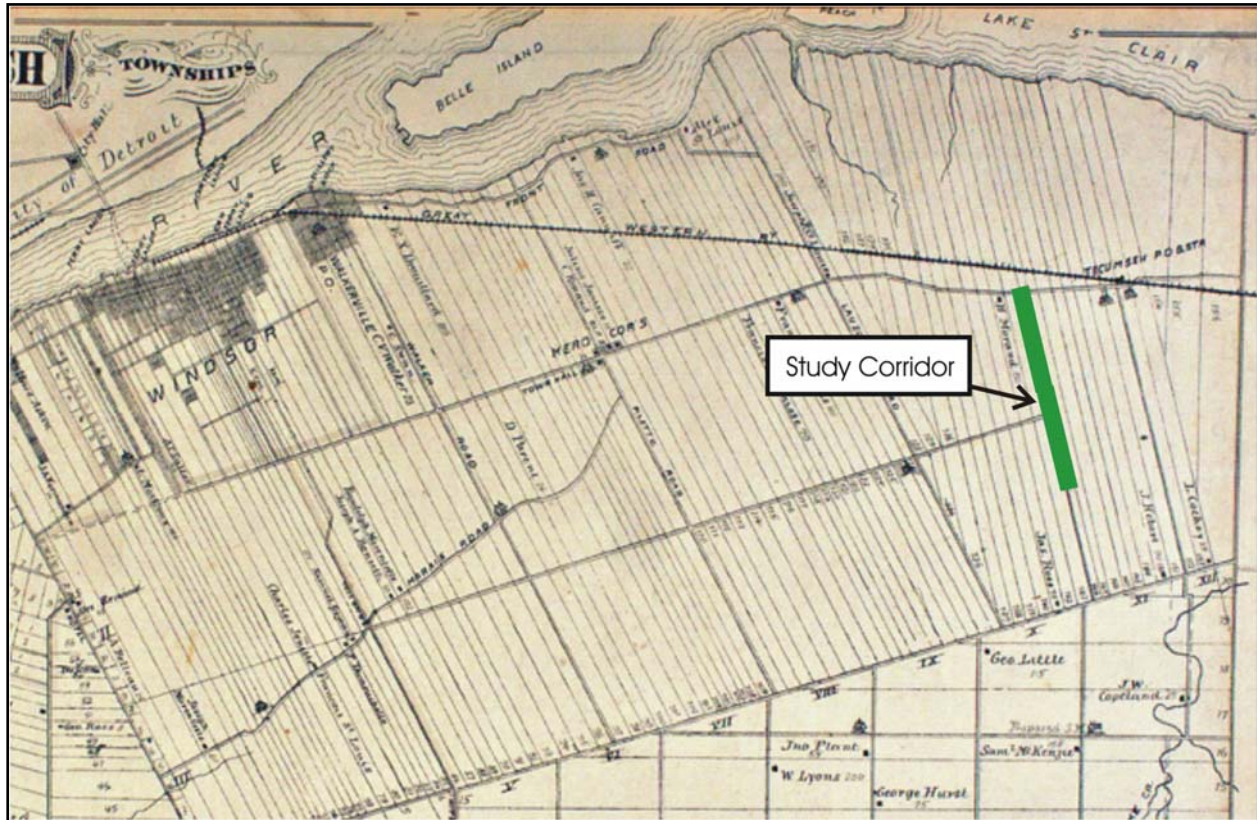


Figure 2: Study corridor superimposed on the map of the Township of Sandwich in the Essex County supplement of the 1881 *Illustrated Atlas of the Dominion of Canada*.

3.0 FIELD REVIEW

A field review of the study corridor was carried out by Ms. Deborah Pihl (P130), ASI, on September 18, 2006 in order to confirm the assessment of archaeological potential and to determine the degree to which development and landscape alteration may have affected that potential. The weather on that day was rainy and cool. Additional photos were taken on September 22 in sunny weather.

The study corridor focuses on lands along Banwell Road. South of the E.C. Row Expressway (Figures 3-1 and 3-2) the road is a narrow two lane road, elevated on fill with narrow gravel shoulders, and deep roadside ditches (Plates 2 and 4). The typically disturbed rural right-of-way (ROW) is quite narrow and almost entirely disturbed. The Intersection Road (Plate 3) and South Service Road (former E.C. Row Avenue) ROWs are similar to that of Banwell Road.

North of the expressway (Figures 3-3 and 3-4), Banwell Road has been rerouted to the east of its former location. In the north portion of the study corridor Banwell Road has a wide disturbed ROW with wide shoulders and large roadside ditches (Plate 12). The E.C. Row Expressway and Tecumseh Road ROWs are similar.

In general the study corridor is comprised of a mix of agricultural lands, residential properties and commercial properties. South of the E.C. Row Expressway, the lands adjacent to the road ROWs are largely agricultural with scattered residential development (Plate 4). The residential properties include a

possible historic structure (Plate 6) as well as possible former farm sites (Plate 1). The agricultural lands are largely undisturbed with the exception of the various ditches dug to facilitate drainage through the level land. Some of these ditches are small channelized streams so all are regarded as approximations of the former stream courses (Plates 6 and 3).

North of the expressway, lands adjacent to the relocated Banwell Road are almost entirely disturbed. The west side of the road between the existing road and the original route has been disturbed by on-going residential development (Plates 14 and 16). On the east side, one field appears to be undisturbed (Plates 11 and 13), but most of the adjacent lands have been disturbed by road construction or development (Plates 15). The intersection with Tecumseh Road at the north end of the study corridor has been entirely disturbed by commercial development (Plates 17 and 18).

In general, there is much potential for archaeological sites along Banwell Road south of E.C. Row Expressway on the agricultural fields. Also, historic structures and possible former homesteads are visible. North of the expressway, there is potential only on the northeast corner of the E.C. Row Expressway/Banwell Road intersection.

4.0 SUMMARY AND CONCLUSIONS

The Stage 1 archaeological assessment of Banwell Road Extension Improvements Class EA and Preliminary Design, northerly from the Canadian Pacific Railway line to Tecumseh Road, City of Windsor, County of Essex, Ontario, revealed that while no archaeological sites have previously been registered within the study corridor, one site has been registered within a one kilometre radius of the limits of the study corridor. Additionally, a review of the general physiography and local nineteenth century land use suggested that the study corridor exhibits archaeological site potential.

The study corridor (Figures 3-1 to 3-4) is comprised of mixed use lands, and there is potential for archaeological sites within 100 metres of the historic roads. The north portion of the study corridor has been disturbed by adjacent residential and commercial development and by previous road construction.

In view of these results, the following recommendation is made:

1. A Stage 2 archaeological assessment should be conducted on any lands with archaeological potential that will be impacted by the proposed Banwell Road improvements (see Figure 3-1 to 3-4: green areas; see also Windsor Archaeological Master Plan: Figure 4), in accordance with the Ministry of Culture's *Standards and Guidelines for Consulting Archaeologists* (2006 final draft). This work is required prior to any land disturbing activities in order to identify any archaeological remains that may be present;

The above recommendation is subject to Ministry of Culture approval, and it is an offence to alter any archaeological site without Ministry of Culture concurrence. No grading or other activities that may result in the destruction or disturbance of an archaeological site are permitted until notice of Ministry of Culture approval has been received. Ministry regulations also require:

The following conditions also apply:

- Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.
- In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, Consumer Protection Branch at (416) 326-8404 or toll-free at 1-800-889-9768.

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 City of Windsor, the Ontario Ministry of Culture, and any other legitimate interest groups.

5.0 REFERENCES CITED

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

1984 *The Physiography of Southern Ontario*. Second Edition. Toronto.

H. Belden & Co.

1881 Essex Supplement in Illustrated Atlas of the Dominion of Canada. H. Belden & Co.

Ministry of Culture

1997 *Conserving a Future for our Past: Archaeology, Land Use Planning & Development in Ontario*. Archaeology & Heritage Planning Unit, Cultural Programs Branch, Ministry of Culture, Toronto

2006 *Standards and Guidelines for Consulting Archaeologists* (final draft 2006). Archaeology & Heritage Planning Unit, Cultural Programs Branch, Ministry of Culture, Toronto.

6.0 OVERSIZED GRAPHICS

Figure 3.1 Banwell Road/County Road 43 Extension Improvements, CP Rail Line to Tecumseh Road Class EA and Preliminary Design – Results of Stage 1 Archaeological Assessment (South Portion of Study Corridor)

Figure 3.2 Banwell Road/County Road 43 Extension Improvements, CP Rail Line to Tecumseh Road Class EA and Preliminary Design – Results of Stage 1 Archaeological Assessment (South-central Portion of Study Corridor)

Figure 3.3 Banwell Road/County Road 43 Extension Improvements, CP Rail Line to Tecumseh Road Class EA and Preliminary Design – Results of Stage 1 Archaeological Assessment (North-central Portion of Study Corridor)

Figure 3.4 Banwell Road/County Road 43 Extension Improvements, CP Rail Line to Tecumseh Road Class EA and Preliminary Design – Results of Stage 1 Archaeological Assessment (North Portion of Study Corridor)



Plate 1: View to southwest showing typical disturbed ROW.



Plate 2: View to north, new residences at Intersection Road. Note narrow shoulder and ROW.



Plate 3: View to west along Intersection Road. Vegetation at left & across Banwell Rd associated with channelized stream.



Plate 4: View to south, vegetation at right is along channelized stream. Residences at left. Note narrow elevated shoulder.



Plate 5: View to north, residential property disturbance at right. Fields at left and in distance.

Sheet 3 of 6

Figure 3-1: Banwell Road / County Road 43 Extension Improvements, CP Rail Line to Tecumseh Road, Class EA and Preliminary Design - Results of Stage 1 Archaeological Assessment: South Portion of Study Corridor.



Plate 6: View to south, older residence on south side of channelized tributary.

Plate 7: View to south, channelized stream on south side of South Side Road. Deep roadside ditch.

Plate 8: View to north, field on southwest corner may be disturbed. Note narrow elevated shoulder.



Plate 9: View to south, channelized stream extends eastward at car.



Plate 10: View to north, berms and disturbance, and trees on undisturbed ground to east of road.



Plate 11: View to north, berm at right. Narrow shoulder and deep ditch.

Sheet 4 of 6

Archaeological Services Inc.

- No potential for archaeological sites; disturbed
- Potential for archaeological sites

LEGEND

- Water source
- Existing roadbeds and typically disturbed ROW: disturbed



DATE: August 25, 2006
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Figure 3-2: Banwell Road / County Road 43 Improvements, CP Rail Line to Tecumseh Road, Class EA and Preliminary Design - Results of Stage 1 Archaeological Assessment: South-Central Portion of Study Corridor.



Plate 15: View to south, broad ditch and wide disturbed ROW.



Plate 12: View to south, trees at left are on south side of expressway. Field is on northeast corner of intersection.



Plate 13: View to south west, broad ditch in disturbed ROW.



Plate 14: View to north, broad ditch in disturbed ROW. Level field is adjacent.



Plate 16: view to north, low berm and striped field adjacent to ROW.

Figure 3-3: Banwell Road / County Road 43 Improvements, CP Rail Line to Tecumseh Road, Class EA and Preliminary Design - Results of Stage 1 Archaeological Assessment: North-Central Portion of Study Area.



Plate 17: View to south, broad ditch and stripped land between existing and former Banwell Road ROW.



Plate 18: View to north, commercial development at intersection of Banwell Road and Tecumseh Road.

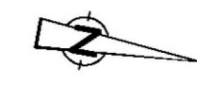


Plate 19: View to north, commercial development Banwell Road and Tecumseh Road intersection.

LEGEND

Figure 3-4: Banwell Road / County Road 43 Improvements, CP Rail Line to Tecumseh Road, Class EA and Preliminary Design - Results of Stage 1 Archaeological Assessment: North Portion of Study Corridor.