



Canada-United States-Ontario-Michigan Border Transportation Partnership

Practical Alternatives Evaluation Working Paper

Cultural Heritage

August 2007

Executive Summary

As part of the impact assessment of the Detroit River International Crossing (DRIC) study, an assessment of built heritage features and cultural landscapes is being undertaken. As a means of determining the existence of previously identified built heritage features and cultural landscapes within the Area of Continued Analysis (ACA), contact was made with the City of Windsor's Heritage Planner. The Ministry of Culture's Ontario Heritage Properties Database and Parks Canada listing of National Historic Sites were also consulted. Additional information was sought from the residents of Sandwich with respect to locally identified sites of heritage significance.

Historical research was conducted to identify broad agents or themes of historical change and cultural landscape development in this area. Previously identified heritage resources were then categorized according to their heritage protection status and their inclusion on municipal, provincial and federal inventories and heritage designation lists.

In October 2006, a field review of the ACA was conducted and previously identified features were confirmed. Additional field investigations led to the identification of features of heritage interest, including Built Heritage Features (BHF) and Cultural Landscape Units (CLUs) that were then added to the inventory. An inventory page was prepared for each above-ground cultural heritage resource and all features of heritage interest were mapped using GIS data co-ordinates.

Within the ACA there are 20 BHF and three CLUs. Of these, one property is listed on the City of Windsor's heritage inventory and one monument was erected by the Historic Sites and Monuments Board of Canada to commemorate the Capture of Detroit. The majority of the field identified built heritage features were constructed between 1900 and 1930 and are residences of the same general building type and era. These houses represent the first suburban infill of rural agricultural lands in the early twentieth century. The heritage significance of these houses has not been determined but will be confirmed as part of the assessment of the Technically and Environmentally Preferred Alternative. At this time, it is known that only three BHF pre-date 1900. Also of interest is Branch 594 of the Royal Canadian Legion, which was constructed in the early 1960s.

Although no significant portion of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community.

For the remainder of resources within the ACA, the following general recommendations should apply.

Any proposed work through the study area should be suitably planned in a manner that avoids any identified, above ground, cultural heritage resource.

Encroachment of lands close to BHF or CLUs should be avoided wherever possible.

Where any identified, above ground, cultural heritage resource is to be affected by loss, displacement or disruption, further research should be undertaken to identify the specific heritage significance of the affected cultural heritage resource and appropriate mitigation measures adopted where appropriate.

In this regard to all the foregoing recommendations, provincial guidelines should be consulted for advice and further heritage assessment work undertaken as necessary.

Once a preliminary preferred alternative has been established, construction impacts will be assessed and mitigation measures will be recommended. Further recommendation will be made as required.

PREFACE

The Detroit River International Crossing (DRIC) Environmental Assessment Study is being conducted by a partnership of the federal, state and provincial governments in Canada and the United States in accordance with the requirements of the Canadian Environmental Assessment Act (CEAA), the Ontario Environmental Assessment Act (OEAA), and the U.S. National Environmental Policy Act (NEPA). In 2006, the Canadian and U.S. Study Teams completed an assessment of illustrative crossing, plaza and access road alternatives. This assessment is documented in two reports: *Generation and Assessment of Illustrative Alternatives Report - Draft November 2006* (Canadian side) and *Evaluation of Illustrative Alternatives Report (December 2006)* (U.S. side). The results of this assessment led to the identification of an ACA (ACA).

Within the ACA, practical alternatives were developed for the crossings, plazas and access routes alternatives. The evaluation of practical crossing, plaza and access road alternatives is based on the following seven factors:

- Changes to Air Quality
- Protection of Community and Neighbourhood Characteristics
- Consistency with Existing and Planned Land Use
- Protection of Cultural Resources
- Protection of the Natural Environment
- Improvements to Regional Mobility
- Cost and Constructability

This report pertains to the Built Heritage and Cultural Landscape factor and is one of several reports that will be used in support of the evaluation of practical alternatives and the selection of the technically and environmentally preferred alternative. This report will form a part of the environmental assessment documentation for this study.

Additional documentation pertaining to the evaluation of practical alternatives is available for viewing/downloading at the study website (www.partnershipborderstudy.com).

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1. INTRODUCTION

1.1 Background

The Canada-U.S. – Ontario – Michigan Border Transportation Partnership includes the Transportation Authorities from two federal governments and two provincial/state governments. The Federal Highway Administration (FHWA) and Transport Canada (TC) represent federal levels of government while the Ontario Ministry of Transportation (MTO) and the Michigan Department of Transportation (MDOT) are the provincial and state agencies with roadway jurisdictions on each side of the border. The purpose of the Partnership is to improve the movement of people, goods, and services across the United States and Canadian border within the region of Southeast Michigan and Southwestern Ontario.

This international transportation improvement project will require approvals from governments on both sides of the border. The Partnership has developed a coordinated process that will enable the joint selection of a recommended crossing location that meets the requirements of Ontario Environmental Assessment Act (OEAA), Canadian Environmental Assessment Act (CEAA), and National Environmental Policy Act (NEPA).

1.2 Purpose and Scope

Archaeological Services Inc. (ASI) was contracted by URS Canada Inc. of Markham, to conduct a Built Heritage and Cultural Landscape Impact Assessment within Western Essex County for the Detroit River International Crossing Study.

The assessment was conducted under the project direction of cultural heritage specialist Mary L. MacDonald, MA, CAPHC of ASI.

This report presents the results of background research, outlining aggregate areas and individual properties of heritage significance within the study area as a whole (the Initial Study Area), as well as describes the results of the field review and an impact assessment of practical alternatives within the ACA (Exhibit 1). These alternatives include access routes, plazas and crossings.

This cultural heritage assessment considers cultural heritage resources in the context of improvements to specified areas, pursuant to the provincial *Environmental Assessment Act*. This assessment addresses above ground cultural heritage resources over 50 years old.

Changes to transportation corridors have the potential to affect cultural heritage resources in a variety of ways. These include the loss or displacement of resources through removal or demolition and the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

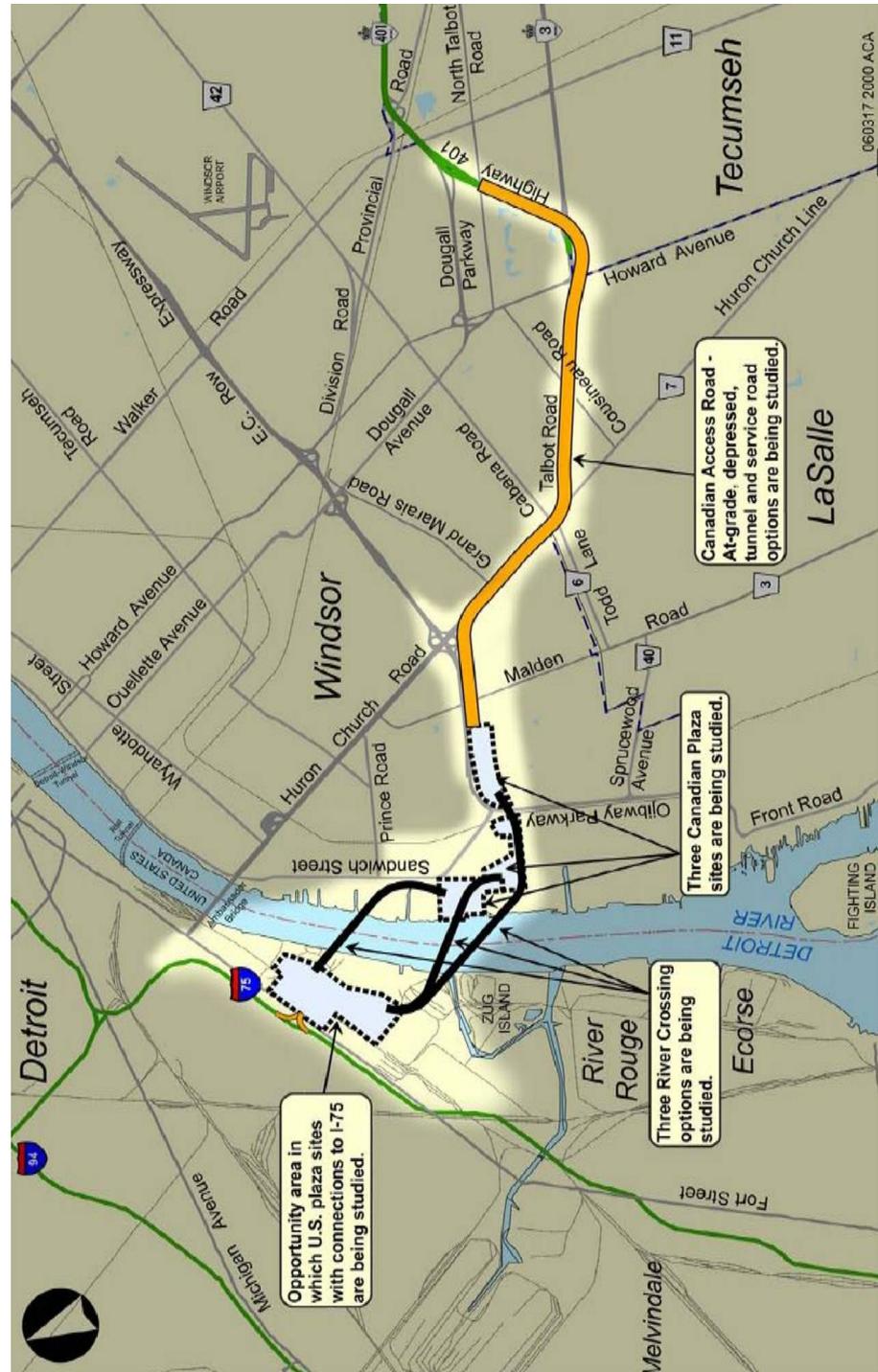


Exhibit 1: Key Plan of the Area of Continued Analysis

For the purposes of this assessment, the term cultural heritage resources was used to describe both cultural landscapes and built heritage features. A cultural landscape is perceived as a collection of individual built heritage features and other related features that together form farm complexes, roadscares and nucleated settlements. Built heritage features are typically individual buildings or structures that may be associated with a variety of human activities, such as historical settlement and patterns of architectural development.

The analysis throughout the study process addresses cultural heritage resources under various pieces of legislation and their supporting guidelines. Under the *Environmental Assessment Act*, environment is defined in subsection 1(c) to include:

Cultural conditions that influence the life of man or a community;

as well as,

Any building, structure, machine or other device or thing made by man.

The Minister of Culture is charged under Section 2 of the *Ontario Heritage Act* (2005) with the responsibility to determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario and has published two guidelines to assist in assessing cultural heritage resources as part of an environmental assessment: *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992) and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1980). Accordingly, both guidelines have been utilized in this assessment process.

The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* states the following:

When speaking of man-made heritage we are concerned with the works of man and the effects of his activities in the environment rather than with movable human artifacts or those environments that are natural and completely undisturbed by man.

In addition, environment may be interpreted to include the combination and interrelationships of human artifacts with all other aspects of the physical environment as well as with the social, economic and cultural conditions that influence the life of the people and communities in Ontario. The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1980) distinguish between two basic ways of visually experiencing this heritage in the environment, namely as cultural landscapes and as cultural features.

Within this document, cultural landscapes are defined as follows:

The use and physical appearance of the land as we see it now is a result of man's activities over time in modifying pristine landscapes for his own purposes. A cultural landscape is perceived as a collection of individual man-made features into a whole. Urban cultural landscapes are sometimes given special

names such as townscapes or streetscapes that describe various scales of perception from the general scene to the particular view. Cultural landscapes in the countryside are viewed in or adjacent to natural undisturbed landscapes, or waterscapes, and include such land-uses as agriculture, mining, forestry, recreation, and transportation. Like urban cultural landscapes, they too may be perceived at various scales: as a large area of homogenous character; or as an intermediate sized area of homogenous character or a collection of settings such as a group of farms; or as a discrete example of specific landscape character such as a single farm, or an individual village or hamlet.

A cultural feature is defined as the following:

...an individual part of a cultural landscape that may be focused upon as part of a broader scene, or viewed independently. The term refers to any man-made or modified object in or on the land or underwater such as buildings of various types, street furniture, engineering works, plantings and landscaping, archaeological sites, or a collection of such objects seen as a group because of close physical or social relationships.

Additionally, the *Planning Act* (2005) and related Provincial Policy Statement make a number of provisions relating to heritage conservation. One of the purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions, and the wise use and management of cultural heritage resources over the long term is a key provincial interest. The *Planning Act* and related Provincial Policy Statement make a number of provisions relating to heritage conservation. In order to inform all those involved in planning activities of the scope of these matters of provincial interest, Section 2 of the *Planning Act* provides an extensive listing. These matters of provincial interest shall be regarded when certain authorities, including the council of a municipality, carry out their responsibilities under the *Act*. One of these provincial interests is directly concerned with

(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;...

This provides the context not only for discrete planning activities detailed in the *Act*. but also for the foundation of policy statements issued under Section 3 of the *Act*.

The Policy Statement indicates in Section IV. Implementation/Interpretation that:

4.5 The official plan is the most important vehicle for implementation of this Provincial Policy Statement. Comprehensive, integrated and long-term planning is best achieved through municipal official plans. Municipal official plans shall identify provincial interests and set out appropriate land use designations and policies. Municipal official plans should also coordinate cross-boundary matters to complement

the actions of other planning authorities and promote mutually beneficial solutions.

Municipal official plans shall provide clear, reasonable and attainable policies to protect provincial interests and direct development to suitable areas.

Those policies of particular relevance for the conservation of heritage features are contained in Section 2, *Wise Use and Management of Resources*, in which the preamble states that "Ontario's long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits."

Accordingly, in subsection 2.6, *Cultural Heritage and Archaeological Resources*, makes the following provisions:

2.6.1 Significant built heritage resources and cultural heritage landscapes shall be conserved.

A number of definitions that have specific meanings for use in a policy context accompany the policy statement. These definitions include, "Built heritage resources", and "cultural heritage landscapes".

Built heritage resources:

means one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to a community. These resources may be identified through designation or heritage conservation easement under the *Ontario Heritage Act* (2005) or listed by local, provincial or federal jurisdictions.

Cultural heritage landscape:

means a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the *Ontario Heritage Act*, and villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways and industrial complexes of cultural heritage value.

In addition, "Significant" is also more generally defined. It is assigned a specific meaning according to the subject matter or policy context, such as wetlands or ecologically important areas. In regard to cultural heritage and archaeological resources, resources of significance are those that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people.

Criteria for determining significance for the resources are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

Accordingly, the foregoing guidelines and relevant policy statement were used to guide the scope and methodology of the cultural heritage assessment within the study area.

1.3 Data Collection

For the purposes of determining the existence of previously identified built heritage features and cultural landscapes within the initial study area, historical research was conducted for the purposes of identifying broad agents or themes of historical change and cultural landscape development in this area. A summary of the Euro-Canadian history can be found in Appendix A.

Contact was made with the City of Windsor's Heritage Planner and with the Town of Amherstburg. The Ministry of Culture's Ontario Heritage Properties Database was also consulted as was the Parks Canada listing of National Historic Sites. Additional information was sought from the residents of the historic town of Sandwich with respect to locally identified sites of heritage significance. Previously identified heritage resources were then categorized according to their heritage protection status and their inclusion on municipal, provincial and federal inventories and heritage designation lists. All heritage sites and heritage sensitive areas were mapped using GIS data co-ordinates (see Appendix C, Figure 2). Results of this data collection can be found in Appendices B and C.

In October 2006 a field review within the ACA (see Exhibit 1) was conducted for an analysis envelope defined by the alternatives under consideration and the addresses of previously identified features were confirmed. Additional field identified features of heritage interest (including built heritage features and cultural landscapes) were added to the inventory and an inventory page was prepared for each above ground cultural heritage resource. All field identified features of heritage interest were mapped using GIS data co-ordinates. Results of this phase of data collection can be found in Section 2. Tables 1a and 1b provide a summary of identified heritage features while Exhibit 2a and 2b show their location. Appendix D comprises the cultural heritage inventory, including inventory pages.

2. HERITAGE PROPERTIES IN THE AREA OF CONTINUED ANALYSIS

2.1 Introduction

The Detroit River International Crossing Environmental Assessment has followed an assessment process of which the underlying principal was to start with a broad perspective and become more focused as the project progressed. The long list of alternatives that the project started with have been narrowed progressively during the study steps. As the

range of alternatives has narrowed the depth of analysis at each subsequent step has increased.

The process began with the identification of Illustrative alternatives for a new or expanded crossing with connections to the provincial highway network and interstate freeway system. The Illustrative alternatives¹ were assessed to determine Practical Alternatives²; based on additional study, and consultation. As Illustrative and Practical Alternatives were developed, information on area features was supplemented with field investigations and additional research, as required.

The results of the end-to-end evaluation of Illustrative Alternatives led to the identification of an ACA for possible practical crossings, plazas, and connecting route alternatives. This area, on the Canadian side of the river, extends along the river from Broadway Avenue to Brock Street in Sandwich. The area also includes the connecting route corridor along Huron Church Road, and Talbot Road/Highway 3 to Highway 401 (Exhibit 1).

Section 2 and Appendix D provide a detailed heritage inventory of resources found within the ACA, while Section 3 and Appendix E provide an assessment of potential impacts within each Practical Alternative, including access roads, plazas and crossings.

2.2 Area of Continued Analysis: Existing Conditions – Field Review Results

The majority of the land adjacent to the Detroit River is currently being used for industrial purposes (Plates 1 – 3), with the exception of Black Oak Heritage Park and the land to the north and northwest of the park, in the Brighton Beach area. This land, extending to the west from Ojibway Parkway south of Chappus Street, north and west of Black Oak Heritage Park, is generally overgrown or wooded, and, in the northern part of it, between Chappus St. and Broadway Street and between Chappus Street and Wright Street, there is a subdivision-like arrangement of dirt streets surrounded by regenerated vegetation (Plate 4.) This area, known locally as Brighton Beach (CLU 2), is an abandoned residential area that still contains a small concentration of nineteenth and early twentieth century heritage resources (BHF 15-17).

¹ Illustrative Alternatives represent the full set of alternative crossing locations/inspection plaza sites/connecting roadway alignments to be considered.

² Practical Alternatives represent the set of illustrative alternatives that, upon an evaluation of impacts and benefits, are carried forward for further consideration.



Plate 1: View of industrial land along the Detroit River, northwest of Maplewood Drive at the southern edge of the field review area (in the Ojibway area).



Plate 2: View south along the east side of Sandwich St. from the junction of Sandwich St. and Ojibway Parkway.



Plate 3: View north along Sandwich St. from the junction of Sandwich St. and Ojibway Parkway.



Plate 4: View to the east along Page St. in the Brighton Beach area.

Within the industrial-use area north of Brighton Beach and south of the old town of Sandwich, a cairn has been erected at the junction of Prospect Avenue and Sandwich Street / Ojibway Parkway by the Historic Sites and Monuments Board of Canada to commemorate a National Historic Event (BHF 12, Plate 5). The plaque on this cairn presents the following text:

THE CAPTURE OF DETROIT

LA PRISE DE DÉTROIT

Confident of victory, General Hull had invaded Canada in July 1812, but failed to take advantage of his early success and the demoralization of the defenders. Fear of the Indians then rallying to the British cause and an inability to maintain supply lines dictated Hull's withdrawal to Detroit. In a daring move on 16 August General Brock embarked his troops at McKee's Point, crossed the river and forced the surrender of the Americans. This important victory raised the spirits of the Canadians and ensured the continuing support of their Indian allies. [followed by the French translation]



Plate 5: Historic Sites and Monuments Board of Canada monument (BHF 12) at Ojibway Parkway / Sandwich St. and Prospect Ave

North of Ojibway Parkway, between Sandwich Street and the Essex Terminal Railway, and south of the old town of Sandwich lies the Lou Romano Water Reclamation Plant. North of this industrial area, the landscape is a mix of industrial properties; relatively open areas of lawn, park, or less-intensive commercial/institutional/residential land use; and dense residential development. The southernmost part of the old town of Sandwich is within the ACA, including two residential structures (BHF 13 and BHF 14) close to the shoreline and one of the proposed bridge crossing areas.

Adjacent to the ACA is the core of the old town of Sandwich (CLU 3) including the Sandwich First Baptist Church, a National Historic Site, at 3652 Peter Street, between Watkins Street and Prince Street (Plate 6). Two plaques have been placed at this site, one placed by the Historic Sites and Monuments Board of Canada and the other by the Ontario Heritage Foundation. The former Lido Venice Tavern at 3885 Sandwich Street (Plate 7) was destroyed by fire in the summer of 2006.



Plate 6: Sandwich First Baptist Church

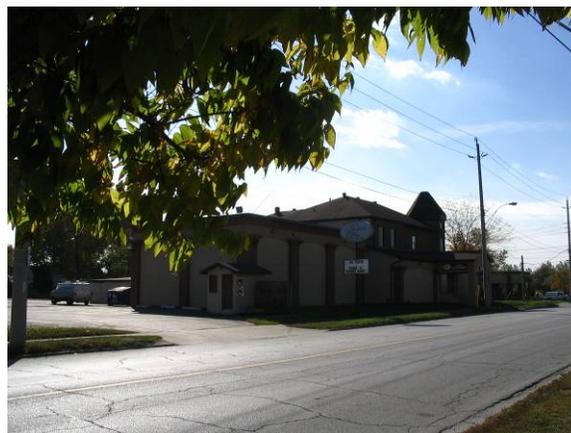


Plate 7: Lido Venice Tavern before the fire

East of the Essex Terminal Railway and west of Huron Church Road north of Ojibway Parkway and E.C. Row Expressway the field review area features a variety of land uses. The majority of the land immediately north of Ojibway Parkway and E.C. Row Expressway is currently used for industrial purposes and Malden Park, between Matchette Road and Malden Road south of Chappell Avenue is a former landfill site. East of Huron Church Road, south of E.C. Row Expressway, the land subject to field review is almost entirely an intensively-developed post 1960 residential area, with the exception of a number of small parks and institutional properties. Huron Church Road itself is, for the most part, flanked by small industrial and commercial properties. There are a small number of heritage resources along the corridor including a 1961 Royal Canadian Legion Branch (BHF 2, Plate 8) and an early farmhouse perched on a rise above the convergence of Talbot Road and Huron Church Line (BHF 1, Plate 9).



Plate 8: Royal Canadian Legion Branch 594



Plate 9: Mid-nineteenth century farmhouse on Talbot Road

The land south of E.C. Row Expressway and west of Huron Church Road is predominantly open space, although residential development is evident on Spring Garden Road (Plate 10), Malden Road and Armanda Street. Two of the Malden Road properties are dated to the nineteenth century settlement of the area (BHF 10 and BHF 11) and one of them is on the Windsor Heritage Inventory (Plate 11).



Plate 10: Spring Garden Road house (BHF 8) circa 1929



Plate 11: Malden Road house (BHF 11) on the Windsor Heritage Inventory

Within the relatively undeveloped area west of Huron Church Road and south of E.C. Row Expressway, and in many places remnant tree lines indicate the boundaries of long, narrow agricultural fields laid out according to the French *seigneurial* system.

2.3 Area of Continued Analysis: Existing Conditions – Identified Heritage Resources

The DRIC study ACA is largely free of significant cultural heritage resources, although the close proximity of old Sandwich town (CLU 3) is an important issue with respect to choosing a crossing location.

Within the ACA there are twenty (20) built heritage features and three (3) cultural landscapes. Tables 1a and 1b provide a summary of identified heritage features while Figures 4a and 4b show their location. Of these, one property (BHF 11) is listed on the City of Windsor's heritage inventory and one monument (BHF 12) was erected by the Historic

Sites and Monuments Board of Canada to commemorate the Capture of Detroit. Eight BHF's pre-date 1900 (BHF 1, BHF 10, BHF 11, BHF 14, BHF 17, BHF 18, BHF 19 and BHF 20) and are related to agricultural settlement. Eight field identified built heritage features were constructed in the first third of the twentieth century and are residences of the same general building type and era (BHF 3, BHF 4, BHF 5, BHF 6, BHF 7, BHF 8, BHF 9 and BHF 13). These houses represent the first suburban infill of rural agricultural lands in the early twentieth century. Also of interest is Branch 594 of the Royal Canadian Legion (BHF 2) which was constructed in the early 1960s.

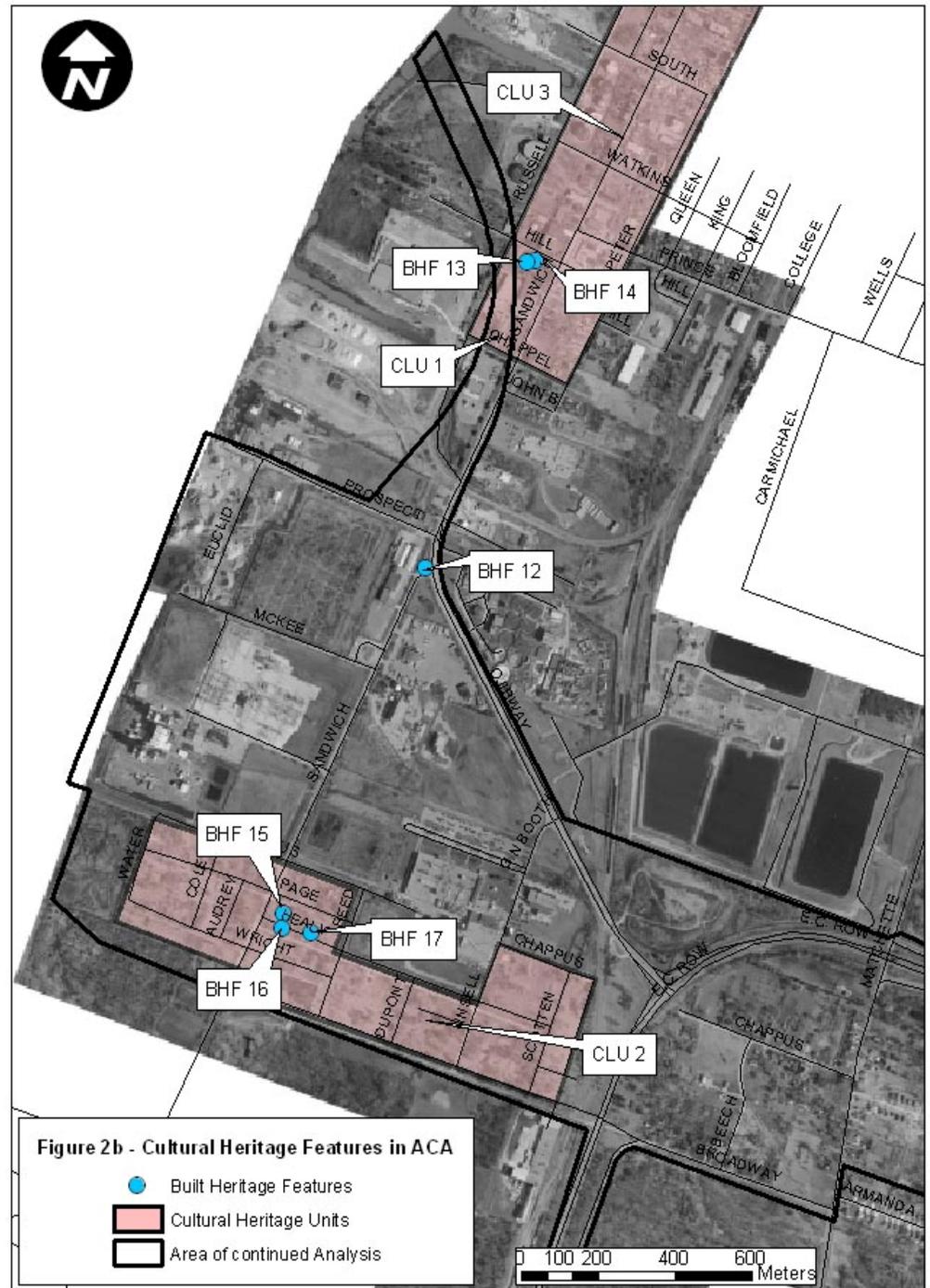
The three cultural landscapes identified within the ACA comprise an unconfirmed tunnel associated with the underground railway in the Town of Sandwich (CLU 1), the abandoned Brighton Beach subdivision (CLU 2) and the historic town of Sandwich (CLU 3). Although no significant portion of the historic town of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community. These impacts may include the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

**Table 1a
Identified Cultural Heritage Resources in the Area of Continued Analysis -- Cultural Landscape Units (CLU)**

Feature	Address	Feature Type	Status	Approx. Age
CLU 1	Chappel Street and Russell Street	Tunnels – unconfirmed oral report	Local lore	Pre-1900
CLU 2	Water Street to the west, Chappus to the north, Scotten to the east and Broadway/Wright to the south	Brighton Beach housing subdivision	Field	Abandoned
CLU 3	Town of Sandwich	Historic settlement	Field	Pre-1900

Table 1b
Identified Cultural Heritage Resources in the Area of Continued Analysis -- Built Heritage Features (BHF)

Feature	Address	Feature Type	Status	Approx. Age
BHF 1	2746 Talbot Road	Farmhouse	Field	1860-1880
BHF 2	3920 Huron Church Line	Legion	Field	1961
BHF 3	3905 Huron Church Line	House	Field	1901-1939
BHF 4	3495 Huron Church Road	House	Field	1901-1939
BHF 5	2765 Reddeck Avenue	House	Field	1901-1939
BHF 6	2261 Spring Garden Road	House	Field	1901-1939
BHF 7	2310 Spring Garden Road	House	Field	1901-1939
BHF 8	2290 Spring Garden Road	House	Field	1901-1939
BHF 9	2284 Spring Garden Road	House	Field	1901-1939
BHF 10	4784 Malden Road	House	Field	Pre-1900
BHF 11	4688 Malden Road	House	Windsor Inventory	Pre-1900
BHF 12	Ojibway Parkway at Sandwich Street	Monument	Federal	Plaqued in 1927
BHF 13	261 Hill Street	House	Field	1901-1939
BHF 14	3769 Russell Street	House	Field	Pre-1900
BHF 15	325 Page Street	House	Field	1901-1939
BHF 16	332 Healy Street	House	Field	1901-1939
BHF 17	354 Healey Street	House	Field	Pre-1900
BHF 18	2090 Spring Garden Road (moved from another location)	House	Field	Pre-1900
BHF 19	2369 Spring Garden Road (unconfirmed log structure)	House	Field	Likely pre-1900
BHF 20	1649 Chappus Road (original house integrated)	House	Field	Pre-1900



2.4

Conclusions

For the purposes of an impact assessment of proposed Practical Alternatives, a smaller study area was defined (the ACA). Within the ACA there are twenty (20) built heritage features and three (3) cultural landscapes. Of these, one property is listed on the City of Windsor's heritage inventory and one monument was erected by the Historic Sites and Monuments Board of Canada. Eight BHF's are residences that pre-date 1900 and are related to agricultural settlement. Another ten built heritage features were constructed in the first third of the twentieth century. Also of interest is Branch 594 of the Royal Canadian Legion.

The three cultural landscapes identified within the ACA comprise an unconfirmed tunnel associated with the underground railway in the Town of Sandwich, the abandoned Brighton Beach subdivision and the historic town of Sandwich. Although no significant portion of the historic town of Sandwich is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community.

3.

HERITAGE IMPACT ASSESSMENT

3.1

Introduction

The construction of a new bridge crossing, associated access route alternatives and a plaza may have a variety of impacts upon built heritage features and cultural landscapes. MOE guidelines do not address "nuisance" impacts to cultural heritage resources but Ministry of Culture guidelines and advisory notes advise that an adverse effect upon cultural heritage may be defined as one or more of the following conditions:

- "destruction or unsympathetic alteration of all or part of a cultural property;
- isolation of a cultural property from its surrounding environment; or
- introduction of physical, visual, audible or atmospheric elements that are not in character with a cultural property and its setting."

For the purposes of this assessment, a heritage feature was considered to be displaced if the proposed right-of-way for the new crossing, plaza or access road passed through the property limits of the heritage feature. A feature was considered disrupted (indirectly affected) if the edge of the proposed right-of-way was within 50 metres of the heritage feature. Section 3.3 summarizes the results and provides the impact of each alternative in tabular form.

To view a complete set of Practical Alternatives mapping see the Ministry of Transportation's Detroit River International Crossing Study, Practical Alternatives Mapping (November 2006).

3.2

Methodology

In assessing the significance of impacts to heritage resources, the following regulatory acts were considered:

- *Ontario Heritage Act* (2005) and associated Provincial Policy Statement (2005)
- *Ontario Planning Act* (2005)
- *Ontario Environmental Assessment Act* (1990)

The following information sources were also consulted in assessing the significance of identified heritage features:

- Parks Canada list of National Historic Sites
- Ontario Heritage Bridge Program (MCL and Ministry of Transportation)
- Ontario Heritage Properties Database (MCL)
- City of Windsor Heritage Inventory
- Local identification and field review

Heritage features were then ranked according to hierarchy of significance.

Heritage Feature Ranking:

- 1: **National Historic sites; score as 100:** Features that are recognized as being of national significance have cultural heritage value beyond the immediate study area and they contribute to the understanding of our nation's history. Therefore, they scored the highest within a comparative framework.
- 1: **Heritage District and/or significant Cultural Heritage Landscapes; score as 100:** Heritage Districts or significant cultural heritage landscapes exhibit aggregate heritage resources of local, provincial or national significance and in their concentration assume a high heritage value.
- 1: **Heritage Bridge; score as 100:** Heritage bridges have a unique character with a context outside the local area and they are provincially significant.
- 2: **Heritage Easements; score as 75:** Properties on which heritage easements are held are of both local and provincial significance.
- 2: **Heritage Designation (Provincial); score as 75:** Properties designated under Part IV of the Ontario Heritage Act are of both local and provincial significance.
- 3: **Windsor Heritage Inventory; score as 25:** Properties on the heritage inventory are recognized by the city as being of local interest.
- 4: **Field Review Siting; score as 25:** Properties identified during the field review are considered to be representative of local historical trends and are of potential local heritage interest.
- 4: **Locally identified heritage resource; score as 25:** Properties identified by individuals within the Windsor heritage community are considered to be of local heritage interest.

- 4: **Cultural Landscape; score as 25:** Cultural landscapes identified during the field review are representative of local historical trends and are of potential local heritage interest.

Areas of Impact

In order to assess the potential for disruption or displacement of identified heritage features, the following buffers were added to the proposed route segments, plazas and crossings:

Route segments: 100 m wide ROW plus 250 m buffer on either side

Plazas: 250 m buffer around plaza perimeter

Crossings: 100 m wide ROW plus 250 m buffer on either side

Impact Evaluation

Displacement or disruption of built heritage features within each study area (route segment, plaza or crossing) was evaluated based on the cumulative score of all heritage features mapped within it:

Scores of 100+ are considered to have **High Impact** and given a *factor score* of 1

Scores of 50-99 are considered to have **Medium Impact** and given a *factor score* of 2

Scores of 25-49 are considered to have **Low Impact** and given a *factor score* of 3

Score of 0 are considered to have **No Impact** and given a *factor score* of 4

The relative impact of each alternative was determined by calculating the overall magnitude of potential displacements and disruptions. The magnitude was arrived at by adding the rank score of each affected feature.

3.3

Results

A complete tabular analysis of potential impacts within each alternative (access roads, plazas and crossing alternatives) can be found in Appendix E and a summary table is provided at the end of this section.

Access road alternatives

In total, eleven built heritage features are potentially displaced by access road alternatives. Of these, two features (a pre-1900 farmhouse and the Royal Canadian Legion) are of potential heritage significance. All of the alternatives affect these two features. With respect to those access road alternatives associated with Plaza A, Alternatives 1A and 1B, will displace seven and six field identified features respectively while Alternative 3 displaces five. The remaining routes to Plaza A will displace four field-identified features. Alternative 2A (both options) and Alternative 2B (both options) are not considered to have a significant impact on built heritage features with a relatively equal number of field identified features. Of higher impact are the alternatives associated with Plazas B and C. Alternatives 1A and 1B displace nine and eight field identified features respectively while Alternatives 2A and 2B (both options) displace five field identified built heritage features.

Access road alternatives that displace six or more features will, based on the quantity of their displacements, have an adverse impact on the study area. In all cases, however, displaced features are without any recognized heritage status.

Plazas

Plaza A will displace one field-identified feature, which represents a very minor impact. Plaza B, Plaza B1 and C will each displace three houses in the former Brighton Beach area; these features have no recognized heritage status although one is likely a sole surviving pre-1900 farmhouse in the immediate area. The impacts of Plazas B, B1 and C are considered to be minimal and mitigation of these features is probable.

Crossing alternatives

Depending on which crossing alternative is selected, between two and five homes constructed before 1954 will be disrupted or displaced and three cultural heritage landscapes will be affected. Of these features, the town of Sandwich is considered the most significant given its proposed designation as a heritage district and its recognized cultural heritage value. The tunnel crossing is considered the least significant because of its unconfirmed status while Brighton Beach is of limited local interest.

In general, crossing alternatives associated with Plaza A have the least amount of impact while Crossing C represents the worst of the three options due to its proximity to the historic town of Sandwich. From Plaza A, Crossing Alternative A doesn't displace any BHF's but it disrupts three, crossing Alternative B displaces one BHF, crossing Alternative C1 will displace five BHF's (including a historic monument) and crossing Alternative C2 will displace three BHF's (including a historic monument). Crossing C from Plaza B will displace three field identified BHF's as will Crossing B and C from Plaza B1.

In addition, the three crossings have the potential to disrupt identified cultural landscapes in this area of the City. Portions of the Brighton Beach area will be affected by all crossing alternatives (although this is not considered to be a significant impact), while Crossing C will disrupt two additional CLUs: the underground tunnels reported to be in the Chappell/Russell area, and the town of Sandwich vista. Potential impacts associated with the reported tunnels are difficult to assess given the lack of information and the inability to confirm their location and/or existence. Therefore, until further information can be obtained, the rumored tunnels cannot form a significant part of this impact assessment. The greatest potential for a visual impact to cultural landscapes occurs in association with Crossing C because of its proximity to Sandwich. Although it is recognized that mitigation could be addressed through a compatible bridge design, placing the crossing as far away from the historic core as possible is the preferred course of action from the outset.

All other impacts are considered to be minor.

Table 2. Summary of Evaluation Matrices – Access Roads

<i>PRACTICAL ALTERNATIVE EVALUATION</i>			<i>Factor: Protect Cultural</i>								
<i>Performance Measure</i>	<i>Criteria Indicator</i>	<i>Measurement/Units</i>	<i>Alternative 1A</i>		<i>Alternative 1B</i>		<i>Alternative 2A</i>		<i>Alternative 2B</i>		
			<i>Option 1</i>	<i>Option 2</i>	<i>Option 1</i>	<i>Option 2</i>	<i>Option 1</i>	<i>Option 2</i>	<i>Option 1</i>	<i>Option 2</i>	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0	0	0	0	0	0	0	0	0
		b) Number of provincially designated properties displaced	0	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements displaced	0	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features displaced	0	0	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features displaced	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features displaced	7 to 9	7 to 9	6 to 8	6 to 8	4 to 5	4 to 5	4 to 5	4 to 5	4 to 5
	Disruption of built heritage features	a) Number of national historic sites disrupted	0	0	0	0	0	0	0	0	0
		b) Number of provincially designated properties disrupted	0	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements disrupted	0	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features disrupted	0	0	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features disrupted	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features disrupted	1 to 2	1 to 2	2	2	4 to 5	5 to 6	3 to 5	3 to 5	3 to 5
		g) Subjective assessment	Alt 1a and 1b are similar in the number of Built Heritage features present in the alternative footprints.				Alt 2a and 2b are similar in the number of Built Heritage features present in the alternative footprints.				

Table 2 Continued. Summary of Evaluation Matrices – Plaza and Crossing Alternatives

<i>ALTERNATIVE EVALUATION</i>			Plaza Segments-Crossings to Malden Rd							
<i>Factor: Protect Cultural Resources</i>			Plaza A		Plaza B		Plaza B1		Plaza C	
Performance Measure	Criteria Indicator	Measurement Units	From Crossing A	From Crossing B	From Crossing C	From Crossing C	From Crossing C	From Crossing B	From Crossing C	From Crossing C
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0	0	0	0	0	0	0	0
		b) Number of provincially designated properties	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements displaced	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features	0	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features displaced	0	0	0	1	0	0	0	0
		f) Number of field review identified built heritage features	0	1	1	0	3	3	3	0
BUILT HERITAGE FEATURES	Disruption of built heritage features	a) Number of national historic sites disrupted	0	0	0	0	0	0	0	0
		b) Number of provincially designated properties disturbed	0	0	0	0	0	0	0	0
		c) Number of features with heritage easements disturbed	0	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features	0	0	0	1	0	0	0	0
		e) Number of locally identified built heritage features disturbed	0	0	0	0	1	0	1	1
		f) Number of field review identified built heritage features	3	2	4	2	2	0	2	2
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	1	1	2	1	2	1	2	1
		a) Number of cultural landscapes disrupted	0	0	0	2	0	0	0	1

3.4

Most and Least Preferred Alternatives

The following discusses the preference of alternatives based on the number of built heritage features and cultural landscape units potentially displaced and/or disturbed.

Plazas

Of the possible plaza alternatives examined, Plaza A has the lowest impact with the least number of potentially displaced field identified features. Only one field identified feature will be potentially displaced by Plaza A. Plazas B, B1, and C, on the other hand, have higher impacts to field identified features and are considered to be least preferred. All three plazas potentially displace three field identified features and one cultural landscape unit.

Access Alternatives

To Plaza A

With respect to all access road alternatives leading to Plaza A, Alternatives 2A and 2B are considered the most preferred because they have the lowest impact to identified built heritage features with a total of four built heritage features potentially displaced. Alternative 3 is considered the next preferred access road alternative with a total of five built heritage features potentially displaced. Alternatives 1A and 1B are considered to be the least preferred alternatives because of their greater impacts to built heritage features. A total of seven features are potentially displaced by Alternative 1A and six features are potentially displaced by Alternative 1B.

To Plaza B or C

In considering access road alternatives leading to Plazas B, or C, Alternatives 2A and 2B are the most preferred because they have the least impacts to known heritage features. A total of five features are potentially displaced. Alternatives 1B and 3 potentially displace eight built heritage features. Alternative 1A is the least preferred, potentially displacing nine features.

Plaza Crossings

Plaza Crossings: Plaza A

Four crossing alternatives are proposed for Plaza A. Crossing A is the most preferred alternative in that only one cultural landscape unit is potentially displaced and three field identified built heritage units are potentially disturbed by this alternative. Crossing B has the potential to displace one cultural landscape unit and one field identified feature, but also has the potential to disrupt two field identified features. Crossing C has the potential to displace up to two cultural landscape units and one field identified feature, but also has the potential to disrupt one municipally designated feature and up to four field identified features.

Plaza Crossings: Plaza B

Only one crossing is proposed for Plaza B. Crossing C potentially displaced three field identified features and two cultural landscape units (one being the historic town of Sandwich) and has the potential to disrupt one municipally listed feature and two field identified features.

Plaza Crossings: Plaza B1

Two crossings are considered for Plaza B1. Crossing B is preferred over Crossing C. Crossing B potentially displaces three field identified features and one cultural landscape units while Crossing C potentially displaces three field identified features and two cultural landscape units. Crossing C also potentially disrupts one locally identified and two field identified features as well as disruption, or visual impact, to the Town of Sandwich.

Plaza Crossings: Plaza C

One crossing is proposed for Plaza C. Crossing C potentially displaced two field identified features and two cultural landscape units and has the potential to disrupt one locally identified feature and two field identified features.

3.5

Conclusions: Most and Least Preferred Alternatives

Based on the assessment of all Plaza, Crossing and Access road alternatives, it is possible to conclude that there are preferred alternatives based on cultural heritage considerations.

Plaza A is preferred over all other plaza alternatives. Plaza B, B1, and C are considered equal. In terms of crossing alternatives, Crossing A to Plaza A is the most preferred with Crossing C to Plaza B, B1, and C the least preferred.

With respect to access road alternatives, Alternatives 2A and 2B to Plaza A are the most preferred routes. Access Alternatives 1A and 1B are the least preferred, regardless of Plaza Alternative.

4.

RECOMMENDATIONS

The DRIC study ACA is largely free of significant cultural heritage resources, although the close proximity of old Sandwich town is an important issue with respect to choosing a crossing location. Therefore the following recommendation applies:

1. Although no significant portion of the historic town of Sandwich (CLU 3) is within the ACA, Sandwich as a whole is a heritage sensitive area and thus the selection of a bridge crossing location must take into account any direct or indirect impacts on the adjacent historic community.

For the remainder of resources within the ACA, the following general recommendations should apply.

2. Any proposed work through the study area should be suitably planned in a manner that avoids any identified, above ground, cultural heritage resource.
3. Encroachment of lands close to BHF's or CLUs should be avoided wherever possible.
4. Where any identified, above ground, cultural heritage resource is to be affected by loss, displacement or disruption, further research should be undertaken to identify the specific heritage significance of the affected cultural heritage resource and appropriate mitigation measures adopted where appropriate.

In this regard to all the foregoing recommendations, provincial guidelines should be consulted for advice and further heritage assessment work undertaken as necessary.

5. FURTHER WORK

Once a Technically and Environmentally Preferred Alternative has been established, construction impacts will be assessed and mitigation measures will be recommended. Further recommendation will be made as required.

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APPENDIX A

SUMMARY EURO-CANADIAN HISTORY

Thematic Overview of the Focused Analysis Area

The first European settlement in the Detroit-Windsor area occurred in the year 1701 when the Sieur De Lamothe Cadillac and approximately 100 military and civilian personnel arrived to found Fort Pontchartrain on the Detroit side of the river.

European settlement remained largely on the Detroit side until 1748 when the Jesuit mission to the Huron Indians was established on the south shore near the foot of the present Huron Church Road and the Ambassador Bridge. From 1748 to 1760, a French agricultural settlement developed in this area paralleling a similar settlement across the water.

Although Fort Pontchartrain surrendered to the British in 1760 and the Detroit side of the river was again officially surrendered to the United States in 1783, both sides remained under British control until 1796, when U.S. forces took up actual occupation of Detroit. During this period, the settlement continued to grow but remained predominantly French in population. Few buildings from the period of French settlement have survived, although the street pattern of the City still reflects the French method of agricultural land division i.e. long narrow farms fronting the river. In 1797, the original townsite of *Sandwich* was established to accommodate persons of both French and British origin from the U.S. who wished to remain under British rule following American occupation of Detroit. This constituted the first urban settlement in what is now the City of Windsor, and also the first significant migration of English speaking people into the Windsor area. Sandwich developed over the following decades as the seat of government and the courts for the County of Essex. The surrounding area remained largely rural until the early twentieth century when a variety of housing subdivisions were registered.

As the chief port-of-entry to the region opposite Detroit, the *Town of Windsor* (now the downtown area) was already catching up to Sandwich, in terms of population, when the Great Western Railway chose Windsor as its termination point in 1854. The arrival of the railway also marked the beginning of significant industrial development in Windsor. The railway also sparked the foundation of the third of Windsor's oldest settlements, *Walkerville*. In 1857, Hiram Walker established his distillery at the point east of downtown, where the Great Western Railway first met the waterfront. On his lands running south of the river, Walker planned a complete town including provisions for industry, commerce, residences and agriculture (Walker Farms). The housing, a large part of which was built by Walker's own contractors, ranged from E. Chandler Walker's estate of Willistead (1906), built in the style of a Tudor manor house, to blocks of row housing for his industrial workers (1880s).

Although the Ford Motor Car Company was established in Windsor as early as 1904 to

gain the benefit of Imperial trade preferences, it was the period during and following World War I that saw the auto industry assume predominance in the city. An area known as **Ford City** was developed around the industrial complex. Numerous large residences were built overlooking the river at that time although most have since been demolished.

The automotive industry changed Windsor from a relatively slow growing collection of border communities to a rapidly growing, modern, industrial city. By the early 1930s, the separate Border Cities of Windsor, East Windsor (Ford City), Walkerville and Sandwich amalgamated politically into a single community with a population of over 100,000. During World War II, industrial production increased dramatically attracting many new workers and resulting in substantial residential growth within the city and in the surrounding townships. In 1966 the City annexed the *Towns of Riverside* and *Ojibway*, and parts of *Sandwich East*, *Sandwich South* and *Sandwich West* Townships.

South of Windsor along the Detroit River is the *Town of Amherstburg*. Amherstburg came into being around 1796 when a portion of the *Fort Malden* military reserve was laid out as a town site and settled by United Empire Loyalists from Detroit. However, the region's European history can be traced even earlier to the early French explorers, the days of French rule and the arrival of French traders and settlers in the 1730's. By 1763, when France surrendered Canada to the British, several hundred French settlers were scattered along the Detroit River. The French colony continued to flourish under British rule, and few British settlers came to the area until the American Revolution brought an influx of Loyalists. The first to take up land grants in the vicinity of Amherstburg were members of Butler's Rangers who came in 1784.

By 1851 the settlement of Amherstburg was separated from the *Township of Malden* and was incorporated as a village with town powers. Amherstburg was incorporated as a town in 1878 and by the 1880s it had become a thriving mercantile and manufacturing centre. Amherstburg is also known as an important stop along the Underground Railway that helped black slaves escape from their servitude south of the border. By the 1840s, Amherstburg had become the centre of Ontario's Black population.

Amherstburg amalgamated with the neighbouring Townships of *Anderdon* and *Malden* in January of 1999 to create the *Town of Amherstburg*. *Anderdon Township* was surveyed as a part of Essex County in 1839, but the settlement had already begun prior to that date in the northern portion around the River Canard by French people coming south from *Sandwich Township* and in the southern portion by United Empire Loyalists. By 1850 there were 774 settlers in the township, concentrated in two main settlements, *Gordon* on the shore of the Detroit River, and *McGregor* on the eastern boundary. In the 1860's the Canada Southern Railway was built through the township and this encouraged growth in the largely agricultural township. There remains only three small communities of any size within the original historic boundary: *Auld*, *River Canard* and *McGregor*.

Malden Township was surveyed as part of Essex County in the early nineteenth century and it likewise contained a mix of early French and Loyalist settlers. Like *Anderdon*, *Malden's* rural economy benefited greatly from the construction of the Canada Southern Railway, which constructed a branch line from Amherstburg to Essex.

Summary Review of Historic Mapping

A survey of selected historical sources and a review of historical mapping were conducted in order to provide location information with respect to land use following the arrival of Europeans in the area, and to clarify the history of settlement in the vicinity from the late seventeenth century through the late nineteenth century.

The French Regime (Late 17th Century to 1760)

The earliest maps showing the south-western portion of the province of Ontario pre-date the actual settlement of the Detroit area by the French by nearly half a century. The first reference to a map of what was to become Essex County was drawn by the Jesuit Father Chaumont in 1641. This map referred to an Aboriginal village named "Khioetoa," which the missionaries renamed St. Michel. There is no known copy of that map today, although it may have served as the basis for two subsequent maps. The first extant map which showed this region was published by Pierre Mariette for geographer Sanson d'Abbeville in Paris in 1656, and was entitled "*Le Canada, ou Nouvelle France &c.*" The map reflects with some degree of accuracy the early understanding of the position of the Great Lakes and the major watersheds which flowed into them. The re-named Aboriginal village of St. Michel was shown. This was followed shortly thereafter by a map published in 1660 by the Jesuit historian Du Creux which did not differ significantly in detail from the previous Sanson map.

The next map produced was in 1670 following a voyage undertaken by Casson and Galinee who were ordered to follow the Ohio River in order to determine whether it entered the South Sea and provided a route to China. This map does not provide a significant amount of detail about the south-western peninsula with the exception of the remark "grandes prairies."

The first European settlement in the area was in 1701, when Sieur De Lamothe Cadillac and approximately 100 civilians and military personnel established Fort Pontchartrain on what is now the Michigan side of the Detroit River (ASI 2002). Sometime thereafter, Black and Aboriginal slaves were first brought into the area, the importation of Black slave labourers to New France having been authorized by King Louis XIV in 1701 (Hill 1981: 4; Winks 1971: 5).

In 1730, a map was published by DeBoishebert entitled "*Carte du Detroit Erie montent jusqu'au Lac Huron*" which showed the "village des 8aouacs (Outaouais)" in the vicinity of Windsor.

French settlement remained largely on the Michigan side of the Detroit River until 1748, when a Jesuit mission was established on what is now the Ontario shore, near the foot of present-day Huron Church Road and the Ambassador Bridge. From 1748 to 1760, a French agricultural settlement developed in this area paralleling a similar settlement across the water (ASI 2002).

The first detailed French map of the south (Ontario) shore was not produced until 1749. Entitled "*Carte de la Riviere Du Detroit*" this map was published by Chaussegros De Lery in Paris in 1749. It showed the first "nouvelle habitation française de 1749" with the land

divided along the river into the long, narrow "seigneurial" allotments characteristic of the French *ancien regime*. A few farms were somewhat larger, such as the tract of 12 arpans in width occupied by Mr. Le Chevalier de Longueuil. The main area of the "nouvelle habitation" was situated along the Detroit River south of the area that would later become the old town of Sandwich. This area was known as Petite Côte.

On the same 1749 map, Aboriginal settlements include a "village outa8ois," "village huron," and a "village huron abandonne en 1748." The European presence is shown by "ruisseau de la Parise," "emplacement du forgeron des Hurons" and "emplacement des R.P. Jesuites missionnaire ou est une Eglise."

In 1754 a "*Plan Topographique du Detroit*" was published by De Lery. This map showed that the limits of the French settlement within a five year period had extended south of Turkey Creek. The map also indicates the "Village et Culture des Hurons" on the site of present day Windsor, as well as the "Cimetière des Ottawas."

In 1709, the government of New France formally established the institution of slavery with the legal ruling that Black and Aboriginal people who had been purchased were the property of their purchasers (Winks 1971: 6), removing any vestiges of doubt with respect to the legality of slavery following the royal authorization of 1701. Slaves remained a part of the French settler society in the area, although the absolute number of slaves was relatively small in comparison to the British colonies to the south. Most slaves were domestic workers, although many worked as field labourers (Winks 1971: 12; Hill 1981: 4).

The British Regime (1760 to 1867)

Fort Pontchartrain surrendered to the British in 1760. Perhaps the first detailed British map for the Windsor border area was published by John Montresor shortly after the conquest and Pontiac's uprising in 1763. Entitled "Plan of Detroit with its Environs," this map showed the layout of the cultivated fields directly opposite Detroit as well as the Aboriginal villages.

Following the end of the American Revolutionary War, a number of Loyalists, including Black Loyalists, and disbanded troops settled around Detroit on the American side of the river. Black Loyalists also settled on the opposite (Sandwich/Windsor) side of the river in the 1780s (Hill 1981: 46). The settlement at Detroit continued to grow but remained predominantly French in population (ASI 2002). The growing requirements for land in the area, and the recognition that the Michigan area was to be transferred to the United States, prompted the British to begin acquiring Aboriginal land on the Canadian side of the river. By 1791, the first surveys of this territory were undertaken by Patrick McNiff. Newcomers to the area, including slaves and perhaps free Black people, began to settle on the land around what would become Sandwich, and around Fort Malden to the south (Amherstberg) (Hill 1981: 13).

Few buildings from the period of French settlement have survived, although the street pattern of Detroit and the pattern of lots along the waterfront in Windsor and south of the town of Sandwich still reflect the French method of "seigneurial" agricultural land division, i.e. long narrow farms fronting the river.

McNiff's survey showed details not included on the earlier French maps such as the position of six windmills, two labelled as "Battishaw" and "Maisonville." His map of 1791 also showed the "Huron Church" and "land reserved for Indians."

Following the 1763 Treaty of Paris, by which the French territory in Canada became British, the institution of slavery in former French land was protected and governed by British law, and the importation of slaves was re-invigorated (Hill 1981: 6; Silverman 1985: 2). However, until the end of the American Revolutionary War in 1783, the actual use of slaves continued in the previously established fashion, i.e., comparatively few slaves, many or most of whom are domestic workers (the remainder largely put to work in the fields) (Silverman 1985: 5; Winks 1971: 24-29). During the American Revolutionary War, slaves who volunteered to join the British forces were offered freedom; however, slaves captured during the war were treated as booty. A number of free Black people in areas of troop movement were captured and enslaved as well (Winks 1971: 29-30). Free and enslaved Black people arriving after 1783 included skilled labourers and tradespeople, and slaves began to work at a far greater variety of jobs, rather than just performing domestic work and field work.

During the American Revolutionary War and after, various American states began passing anti-slavery legislation. An enactment of 1787 applied to the Northwest Territory and therefore, theoretically, to the lands on the American side of the Detroit River (Hill 1981: 13). The British continued to occupy and govern this area for several years, and slavery remained in practice there as well as in the rest of British North America, yet several slaves from the Canadian side of the river escaped across the water, encouraged by the promise of freedom.

In 1793, Upper Canada's first Legislative assembly passed a bill that prohibited the importation of slaves. The bill also provided that children of those currently enslaved would be free at age 25 (Winks 1971: 96-99; Hill 1981: 16-17). Although no slaves were freed by this bill, the decline of the slave population and of slavery as an institution began once the importation of new slaves was prevented (Winks 1971: 99). Manumission (freeing) of slaves was also promoted and the freeing of slaves increased thereafter, spurred on by the new legislation, the rise of abolitionist feeling, and the fact that slave-owning was relatively unprofitable in Upper Canada (Hill 1981: 18; Silverman 1985: 13; Winks 1971: 112). This bill also had the effect of encouraging slaves to escape to free territories such as the American Northwest Territory.

After Jay's Treaty was ratified and implemented in 1796, the British transferred governance of Detroit to the Americans, and British subjects in the Detroit area were resettled in Upper Canada. Slaves from Upper Canada continued to escape into the Michigan area, even forming a militia in Detroit (Winks 1971: 99).

In 1797, the original town site of Sandwich was established (ASI 2002). This constituted the first urban settlement in what is now the City of Windsor, and Sandwich developed over the following decades as the seat of government and the courts for the County of Essex.

It is important to note that during the War of 1812, the Essex County area was the scene of several battles. The Windsor/Sandwich area and the area along the Detroit River down to Fort Malden (Amherstberg) formed a contested zone through which several significant

troop movements (both American and British-allied) were carried out and in which several battles or skirmishes were fought.

In 1815, after the war ended, the number of Black people entering Upper Canada increased as Black veterans were offered land grants and Black refugees from the war made their way north as well (Winks 1971: 113; Hill 1981: 18). Fugitives from slavery in America also began to arrive in Upper Canada, including many who settled in the Windsor and Sandwich area between 1817 and 1822 (Hill 1981: 18, 48). By the 1820s, significant numbers of freedom-seekers were crossing the Detroit River and settling on the Canadian side, most notably in the Amherstberg area (Winks 1971: 144-145), perhaps encouraged by the 1819 pronouncement of the Attorney General of Upper Canada that Black people taking up residence in Canada were free and legally protected by British law, regardless of their status in their former country of residence (Hill 1981: 25; Silverman 1985: 36).

The escape of fugitive slaves into Canada was becoming organized as part of a developing system known as the Underground Railroad, by means of which freedom-seekers were assisted in escaping to northern American states (that had abolished slavery) and to Canada (Hill 1985: 25-28). The extension of the Underground Railroad into Canada, and the migration of free Black people from northern states into Canada as well, was motivated by harshly discriminatory laws in those northern states (Silverman 1971: 22). Meanwhile, as manumission continued, the institution of slavery in Upper Canada was dying and, by the end of the 1820s, was effectively dead in the province (Silverman 1985: 12; Winks 1971: 110). Slavery was not, however, illegal in Upper Canada until 1833, when it was abolished throughout the British Empire by the Imperial Act (Silverman 1985: 13; Winks 1971: 111).

Throughout the 1830s and 1840s, freedom-seekers came in increasing numbers to settle in the Sandwich area and in many parts of Upper Canada—Canada West after 1840 (Winks 1971: 145). This was accompanied by a rise in racial tension in many places, the beginnings of unofficial racial segregation, and the *de facto* exclusion of Black people from many churches and schools (Hill 1981: 91-102; Winks 1971: 148).

In 1826, a church congregation was formed in Amherstburg to meet the needs of a growing community of Black refugees, and in 1828, the African Methodist Episcopal Nazrey Church was organized in the same community (Hill 1981: 132; Silverman 1985: 89). A church building was constructed by this congregation in 1839. Amherstburg's First Baptist Church was founded between 1838 and 1841 (Hill 1981: 140). The First Baptist Church in Sandwich was founded in 1840 as The Close Communion of Baptists, by 11 ex-slaves who met, according to D.G. Hill (1981: 141), "at the foot of Huron Road." It is unclear if Hill is referring to Huron Church Road or Brock Street (former Huron Street), although Brock Street seems more likely. The congregation gathered outside or in homes until 1848, when the members (who numbered 29 in 1847) built a small log structure (Hill 1981: 141-142). A patent was given to Henry Brown allowing him to use a half-hectare of land for a church and graveyard and, by 1851, the congregation had built a brick church, by their own labour, on Lot 22, West Peter Street (Hill 1981: 142). This church is still standing today at 3652 Peter Street, and is designated a National Historic Site of Canada.

In 1846, a Black convention was held in Windsor to address the issue of Black unemployment in the region, due to the concentration of approximately four thousand poor Black people living in the area around Amherstburg (Silverman 1985: 58; Hill 1981: 74).

The convention formed the Sandwich Mission with the intention of buying up a large tract of land north of Amherstburg, some of it already owned by Blacks, for re-sale to the freedom-seekers (Silverman 1985: 58; Hill 1981: 74). The plan was to create a Black community, and by 1851, T. Willis, a Black, Methodist preacher, had purchased 80 hectares for the Mission (Hill 1981: 74). In 1852, the Sandwich Mission, having already been re-named the Fugitives Union Society, merged with the Refugee Home Society from Michigan (Silverman 1985: 205). The Refugee Home Society planned to undertake community-building on a much larger scale and set about purchasing land in a number of places in northwest Essex County (Hill 1981: 74-75; Silverman 1985: 58-59; Winks 1971: 205). Freedom-seekers did buy land and a community was begun, but it ultimately failed to develop and the settlers disbanded in the 1860s (Hill 1981: 76; Winks 1971: 208).

Many of the British-produced maps of the Windsor area are concerned with administrative and defensive matters. Other surveys laid out new county towns, confirmed previously granted lands held by French settlers, and allocated new lands for Loyalists and disbanded soldiers. Other maps show details of the early infrastructure important to provincial administrators and the land board. These include features such as the location of saw and grist mills, wind mills, wharves and water lots, roads and bridges. Other maps attempt to demarcate the boundaries of British settlement and establish the limits of the Aboriginal reserve. One map, produced by the Baron de Rottenburg around 1850, consolidated many of these features and included a final important feature—taverns and inns situated upon the Front Road.

As the chief port-of-entry to the region opposite Detroit, the Town of Windsor (now the downtown area of the City of Windsor) was already catching up to Sandwich, in terms of population, when the Great Western Railway (now part of the CN Rail network) chose Windsor as its termination point in 1854 (ASI 2002). The arrival of the railway marked the beginning of significant industrial development in Windsor.

The Fugitive Slave Act, passed in 1850, caused widespread fear and dismay by giving legal authority to slave-hunters tracking down fugitives anywhere in the U.S. and led to both an increase in the danger to freedom-seekers and their helpers in the Underground Railroad movement and to the numbers of freedom-seekers arriving in the Windsor and Sandwich area via the Underground Railroad (Hill 1981: 32, 53). The majority of these freedom-seekers settled in Essex and Kent Counties, and the Black populations of centres such as Windsor and Sandwich came to account for a quarter of the total populations of these towns (Silverman 1985: 151). In 1855, 21 Black families were counted in the town of Sandwich by Benjamin Drew (1856), who estimated a Black population of 100 based on this figure. Drew also visited Windsor and counted 50 families, some boarding freedom-seekers in their homes. Drew records an estimate of approximately 500 Black people living within the town of Amherstburg (Drew 1856: 321-348).

The Black population of these areas declined in the 1860s due to enlistment in the American Union Army and to a return migration of many freedom-seekers after the abolition of slavery in the U.S. When President Abraham Lincoln proclaimed emancipation in 1863 and in the same year announced that Black people could join the Union Army, many Blacks from Canada West moved quickly to enlist (Silverman 1985: 158). Following the end of the war in 1865, the freedom-seekers began to return to the U.S. in large numbers, such that by 1871, less than half of the freedom-seekers remained in Canada

West (Silverman 1985: 159).

Post-Confederation (After 1867)

The late nineteenth century and early-to-mid twentieth century saw significant development in the Windsor area and by the early 1930s, the separate border cities of Windsor, East Windsor (Ford City), Walkerville, and Sandwich amalgamated politically into a single community with a population of over 100,000. During World War II, industrial production increased dramatically, attracting many new workers and resulting in substantial residential growth within the city and in the surrounding townships.

In 1966, the City of Windsor annexed the Towns of Riverside and Ojibway, and parts of Sandwich East, Sandwich South, and Sandwich West Townships (ASI 2002).

APPENDIX B

HERITAGE SENSITIVE AREAS WITHIN THE INITIAL STUDY AREA

Introduction

The following areas have been identified through various data sources and are considered to be of special heritage significance. They represent aggregate areas of historic activity and resources within the initial study area.

Results were mapped using GIS data co-ordinates (see Figure 2).

Heritage Sensitive Areas

Ambassador Bridge

The Ambassador Bridge, built in 1929, is listed on the Ontario Heritage Bridge List. This list includes approximately 90 heritage bridges of provincial significance. It helps ensure that the significance of these bridges is taken into account when municipalities undertake construction projects covered by the *Environmental Assessment Act*. Alterations to the bridge are subject to a heritage impact assessment and to the approval of the Ontario Ministry of Culture.

Sandwich

The original town of Sandwich retains a number of buildings of the pre-confederation era that are of historical significance and/or which exemplify the Neo-classical and Georgian styles of architecture, which were in vogue during the first half of the nineteenth century. A number of designated heritage properties can be found along the following streets: Russell Street, Sandwich Street, Peter Street, Detroit Street, Mill Street, Brock Street, Chippewa Street, South Street, Watkins Street and Prince Road.

Highway 18

King's Highway 18, between Amherstburg and Leamington, is a heritage highway and is generally considered to be the oldest road in Ontario. Portions of Highway 18 between Amherstburg and Windsor have been altered from their original alignment, particularly within the Windsor City Limits.

Huron Church Road

Between University Avenue and Wyandotte St. W., Huron Church Road has several properties of heritage interest.

Town of Windsor

Due to numerous fires and the continuous redevelopment of the area over the decades, few of the early buildings in downtown Windsor still exist, but a number of late nineteenth century and early twentieth century buildings remain, including in particular a number of larger, upper income houses in areas immediately adjacent to the downtown area. Of particular heritage interest is Victoria Avenue, along which several designated properties are situated.

Highway 3 (The Talbot Road)

First surveyed by Colonel John Talbot beginning in 1809, the Talbot Road (the old Indian trail and now Highway 3) was interrupted by the War of 1812, but reached Essex County in 1818. The Talbot Road was surveyed to follow a natural ridge of glacial moraine which stretched from Windsor to Point Pelee. It was termed a corduroy road for in areas of swampy land, three inch planks, flattened on the upward side, were laid down side by side across the road. Highway 3 (the Talbot Road) is celebrated with a provincial plaque west of St. Thomas that attests to its heritage interest and value. Significant villages along the route include *Oldcastle* and *Maidstone*.

Highway 46 (The Middle Road)

Also surveyed by Colonel Talbot (and incorporating a native trail), the settlers along the Middle Road were largely emigrants from Ireland who came to escape the potato famine of the 1840s. Along the Middle Road and up toward Lake St. Clair the "Irish Settlement" grew and fourth and fifth generation descendants remain today. The village of Maidstone was the centre of the Irish community.

Amherstburg

Bounded by the Detroit River to the west, Alma Street to the north, the Lowes Side Road to the south and Meloche Road to the east, and situated approximately 32 km southwest of Windsor across from Boblo Island (Bois Blanc), Amherstburg is one of the oldest towns in the province. As early as 1640, French explorers, Jesuit and Recollect missionaries, are known to have paddled the river past the site where Amherstburg now stands. In 1796, the British military post was re-established and the area played a major role in the War of 1812 with the Capture of Fort Detroit and the Canadian Rebellion of 1837-38. In 1851 when the Municipal Act was passed, Amherstburg was one of the first towns to be incorporated as a "village with town powers", thus entering into its independent existence. Being the nearest British town, Amherstburg served as a launching point into Canada for fugitive slaves fleeing from American states. The North American Black Historical Museum is located here as is Fort Malden National Historic Park. Restoration architect Peter J. Stokes completed a preliminary inventory of heritage properties in 1976 and it has not been updated. However, the following streets have the highest concentration of heritage structures and are therefore considered to be of particular heritage interest: Brock Street, George Street, King Street, Seymour Street, Sandwich Street, Bathurst Street, Ramsay Street, Dalhousie Street, North Road, Rankin Avenue, Richmond Street, Murray Street, Gore Street, Simcoe Street, Park Street.

Despite its modern business establishment and plants, Amherstburg retains its historic atmosphere. In the older section of town the streets are narrow and houses front directly on the sidewalk.

Fort Malden National Historic Park

Located on Laird Avenue in Amherstburg, Fort Malden preserves elements of the second fort built by the British on the eastern bank of the Detroit River to defend the Canadian border from American attack in the first half of the 19th century. The first post, known as Fort Amherstburg, was constructed in 1796 near the mouth of the Detroit River where it empties into Lake Erie. This post was the headquarters for the British forces in southwestern Upper Canada during the War of 1812. Fort Malden was erected after the war and rebuilt in 1838-40 and served once again as a centre for the British defence during the Upper Canada Rebellion of 1837-39. Today the 4.5 hectare site includes remains of the 1840-period earthworks and four buildings, including a restored and furnished 1819 brick barracks.

APPENDIX C

HERITAGE PROPERTIES IN THE INITIAL STUDY AREA

Introduction

The following properties have been previously identified as being of heritage significance. They have been grouped according to the status and protection conferred upon them by various easements and government designations. Results were mapped using GIS data co-ordinates (see Exhibit 3).

National Historic Sites of Canada

On the advice of the Historic Sites and Monuments Board of Canada, the Minister of the Environment has designated the following properties as *National Historic Sites of Canada*. These sites are administered by Parks Canada.

<u>3652 Peter St</u>	Windsor	Sandwich First Baptist Church	1851
<u>254 Pitt St W</u>	Windsor	Francois Baby House	1811
<u>Boblo Island</u>	Amherstburg	Bois Blanc (Boblo) Lighthouse	1837
<u>Boblo Island</u>	Amherstburg	Bois Blanc (Boblo) Blockhouse	1839
<u>240-250 Dalhousie Street</u>	Amherstburg	Amherstburg Naval Yard	1831
<u>525 Dalhousie Street</u>	Amherstburg	Bellevue House	1816
<u>277 King Street</u>	Amherstburg	Nazrey A. M. E. Church (museum)	1848
<u>100 Laird Avenue</u>	Amherstburg	Fort Malden Barracks	1819
<u>100 Laird Avenue</u>	Amherstburg	Fort Malden Earthworks	1838

Heritage Easements

The following properties have heritage easements held on them in perpetuity by either the local municipality or the Ontario Heritage Foundation

<u>350 Huron Church Rd</u>	Windsor	Assumption R.C. Church	1843
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<u>Riverside Dr W near Huron Church Rd</u>		Windsor -- Assumption Park	n/a
<u>3277 Sandwich St</u>	Windsor	Mackenzie Hall - Court House	1855
<u>350 Devonshire Rd</u>	Windsor	Walkerville Town Hall (relocated)	1904
<u>420 Devonshire Rd</u>	Windsor	Walkerville post office	1914
<u>546 Devonshire Rd</u>	Windsor	Semi-detached house	1889
<u>548 Devonshire Rd</u>	Windsor	Semi-detached house	1889
<u>606-610 Devonshire Rd</u>	Windsor	Bank building	n/a
<u>650 Devonshire Rd</u>	Windsor	Semi-detached house	n/a
<u>3203 Peter St</u>	Windsor	Mason-Girardot House	1877
<u>224 Sunset Ave</u>	Windsor	Jasperson-Appel House	n/a
<u>694 Victoria Ave</u>	Windsor	Abner F. Nash House	n/a
<u>1900-42 Wyandotte St E</u>	Windsor	Imperial Building	n/a
<u>317 Ramsay Street</u>	Amherstburg	Christ Anglican Church	1818

Designated Under Part IV of the *Ontario Heritage Act*

The following properties are protected under Part IV of the *Ontario Heritage Act*.

<u>253 Freedom Way/ 37 University Ave E</u>	Windsor	Property	n/a
<u>401 Sunset Avenue</u>	Windsor	The University of Windsor	1857
<u>3069 Alexander Blvd</u>	Windsor	Masson-Deck House	1924
<u>819 Argyle Rd</u>	Windsor	Wallmay Carriage House	n/a
<u>823 Argyle Rd</u>	Windsor	Elmscroft Carriage House	n/a
<u>378 Brock St</u>	Windsor	Windsor Jail MBS-ORC	1925
<u>356 Brock St</u>	Windsor	Registry Office - Windsor Jail	1876

<u>567 Church St</u>	Windsor	Revell-D'Avignon House	n/a
<u>City Hall Square</u>	Windsor	All Saints Anglican Church	1855
<u>204 Curry St</u>	Windsor	Robert Gordon House	n/a
<u>908 Dawson</u>	Windsor	fieldstone & stucco bungalow	1925
<u>378-396 Devonshire Rd</u>	Windsor	Crown Inn	1892
<u>982 Devonshire Rd</u>	Windsor	Foxley	1924
<u>415 Devonshire Rd</u>	Windsor	Bank of Commerce	1907
<u>656 Devonshire Rd</u>	Windsor	Semi-detached house	n/a
<u>325 Devonshire Rd</u>	Windsor	Walker Power Building	1911
<u>1094 Drouillard St</u>	Windsor	St. John the Divine Church	1950
<u>705 Erie St E</u>	Windsor	St. Angela Merici Church	1939
<u>Farm Lot 108</u>	Windsor	Property/Building	n/a
<u>167 Ferry St</u>	Windsor	Windsor Star Building	1926
<u>115 Giles St E</u>	Windsor	Shaar Hashomayim Congregation	1929
<u>400 Huron Church Line</u>	Windsor	Assumption University	1875
<u>849 Kildare Rd</u>	Windsor	The Cobbles	1906
<u>889 Kildare Rd</u>	Windsor	Griggs House	n/a
<u>904 Lawrence Rd</u>	Windsor	property/building	1920
<u>711 McEwan St</u>	Windsor	Holy Name of Mary Church	1928
<u>1960 Meldrum</u>	Windsor	Grachanica Serbian Church	1951
<u>363 Mill St</u>	Windsor	Sandwich Fire Hall & Stable	1921
<u>351 Mill St</u>	Windsor	Langlois house	1888
<u>245 Mill St</u>	Windsor	Queen Anne Revival style house	1895
<u>221 Mill St</u>	Windsor	Duff-Baby House	1798

<u>245 Mill St</u>	Windsor	Property	n/a
<u>716 Monmouth Rd</u>	Windsor	Semi-detached house	n/a
<u>704 Monmouth Rd</u>	Windsor	Semi-detached house	n/a
<u>756 Monmouth Rd</u>	Windsor	Semi-detached house	n/a
<u>744 Monmouth Rd</u>	Windsor	Semi-detached house	n/a
<u>1899 Niagara St</u>	Windsor	Willistead Manor	1906
<u>1899 Niagara St</u>	Windsor	Willistead Manor gatehouse	1906
<u>1899 Niagara St</u>	Windsor	Queen Victoria Fountain	1897
<u>1899 Niagara St</u>	Windsor	Willistead Manor coach house	1906
<u>2021 Ontario St</u>	Windsor	Low-Martin house	1928
<u>374 Ouellette</u>	Windsor	Canada Building	1930
<u>986 Ouellette Ave</u>	Windsor	Border Masonic Temple	n/a
<u>1011 Ouellette Ave</u>	Windsor	Medical Arts Building	n/a
<u>Park St E</u>	Windsor	St. Alphonsus RC Church	1871
<u>280 Park St W</u>	Windsor	Royal Windsor Apartments	1929
<u>511 Pelissier St</u>	Windsor	YMCA	1925
<u>Pelletier St</u>	Windsor	Windsor CN railway station	1910
<u>3281 Peter St</u>	Windsor	Gauthier House 1	1895
<u>2100 Richmond St</u>	Windsor	Walkerville High School	1922
<u>Riverside Drive</u>	Windsor	Our Lady of the Rosary Church	1909
<u>4371 Riverside Dr E</u>	Windsor	Patrice Parent House	n/a
<u>2072 Riverside Dr E</u>	Windsor	Hiram Walker & Sons Building	1892
<u>5325 Riverside Dr E</u>	Windsor	property/building	1928

<u>3200-04 Sandwich St</u>	Windsor	Robinet Winery	1895
<u>3118 Sandwich St</u>	Windsor	McGregor-Cowan House	1809
<u>3201 Sandwich St</u>	Windsor	Sandwich post office	1905
<u>3164 Sandwich St</u>	Windsor	Wigle-Nanaka house	1890
<u>3140 Sandwich St</u>	Windsor	Dominion House	1880
<u>3199 Sandwich St</u>	Windsor	John Spiers' general store	1880
<u>3402 Sandwich St</u>	Windsor	Baby-Lajeunese house	1855
<u>3305 Sandwich St</u>	Windsor	St. John's Church & cemetery	1871
<u>1983 St. Mary's Gate</u>	Windsor	St. Mary's Church & rectory	1904
<u>Sunset St</u>	Windsor	Dillon Hall - University of Windsor	1928
<u>166 Tecumseh Rd W</u>	Windsor	St. Clare of Assisi church	1931
<u>245 Tecumseh St E</u>	Windsor	W. C. Kennedy High School	1929
<u>37 University Ave E</u>	Windsor	Windsor Armoury	1900
<u>101 University Ave W</u>	Windsor	The Capitol Theatre	n/a
<u>719 Victoria Ave</u>	Windsor	Treble-Large House	1895
<u>803 Victoria Ave</u>	Windsor	Henderson House	1900
<u>742 Victoria Ave</u>	Windsor	Taylor-Growe House	n/a
<u>1148 Victoria Ave</u>	Windsor	property/building	n/a
<u>916-918 Victoria Ave</u>	Windsor	William McGregor House	1917
<u>Victoria Ave & Park St W</u>	Windsor	St. Andrew's Presbyterian Church	1895
<u>739 Walker Rd</u>	Windsor	Semi-detached house	n/a
<u>753 Walker Rd</u>	Windsor	Semi-detached house	n/a
<u>731 Walker Rd</u>	Windsor	Semi-detached house	n/a
<u>749 Walker Rd</u>	Windsor	Semi-detached house	n/a

<u>721 Walker Rd</u>	Windsor	Semi-detached house	n/a
<u>763 Walker Rd</u>	Windsor	Semi-detached house	n/a
<u>2011 Willistead Cres</u>	Windsor	Easton House	n/a
<u>2086 Willistead Cres</u>	Windsor	Dr. Charles Hoare Residence	n/a
<u>1799 Wyandotte St E</u>	Windsor	Bank of Montreal building	1912
<u>1495 Wyandotte St W</u>	Windsor	John Richardson Library	n/a
<u>225 Brock Street</u>	Amherstburg	St. John the Baptist RC Church	1844
<u>214 Dalhousie Street</u>	Amherstburg	Pensioner's Cottage	n/a
<u>214 Dalhousie Street</u>	Amherstburg	Park House Museum	1796
<u>240-250 Dalhousie Street</u>	Amherstburg	Callam Residence – Commissariat	1831
<u>252 Dalhousie Street</u>	Amherstburg	Salmoni Building	1849
<u>262 Dalhousie Street</u>	Amherstburg	Gordon House	1798
<u>267 Dalhousie Street</u>	Amherstburg	Bullock's Tavern	1836
<u>273 Dalhousie Street</u>	Amherstburg	Jones China Shop	1849
<u>449 Dalhousie Street</u>	Amherstburg	Murray Smith Residence	1870
<u>455 Dalhousie Street</u>	Amherstburg	Robertson Residence	n/a
<u>459 Dalhousie Street</u>	Amherstburg	Fox Residence	1875
<u>232 George Street</u>	Amherstburg	First Baptist Church	1849
<u>109 Gore Street</u>	Amherstburg	Lloyd Brown Residence	1865
<u>193 Gore Street</u>	Amherstburg	Gibb House	1837
<u>197 Gore Street</u>	Amherstburg	Blacksmith Shop	n/a
<u>207 Gore Street</u>	Amherstburg	Bondy Residence	1837
<u>217 Gore Street</u>	Amherstburg	Ralph Jimmerfield saltbox house	n/a

<u>246 King Street</u>	Amherstburg	Church of God in Christ	n/a
<u>266 King Street</u>	Amherstburg	St. John the Baptiste Parish Hall	1875
<u>277 King Street</u>	Amherstburg	North American Black Historical Museum Taylor Log Cabin	1860
<u>281 King Street</u>	Amherstburg	Melvin Simpson residence	n/a
<u>187 Murray Street</u>	Amherstburg	Adriano Tonon residence	n/a
<u>273 Ramsay Street</u>	Amherstburg	Dunbar residence	1849
<u>284 Ramsay Street</u>	Amherstburg	Frank Kehl residence	1840
<u>296 Ramsay Street</u>	Amherstburg	Chittendon House	1840
<u>298 Ramsay Street</u>	Amherstburg	John Askin residence	n/a
<u>140 Richmond Street</u>	Amherstburg	Michigan Central Railway Station	1892
<u>259 Richmond Street</u>	Amherstburg	Roman Catholic Convent	1850
<u>232 Sandwich Street</u>	Amherstburg	Carnegie Public Library	1911
<u>129 Simcoe Street</u>	Amherstburg	St. Andrew's Presbyterian Church	n/a
<u>9399 Townline Road</u>	Amherstburg	St. Joseph's Church	1910

Ontario Heritage Bridge List

The following sites have been placed on the Ontario Heritage Bridge List compiled by the Ministry of Culture.

Windsor	Ambassador Bridge	1929
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Municipal Heritage Inventories

The City of Windsor and Town of Amherstburg Heritage Inventories contain listings of over 700 properties with heritage structures. These sites may be worthy of designation under Part IV of the *Ontario Heritage Act*, or they may simply contribute to the character of the street through their surviving heritage features. Regardless of their provincial status, all identified heritage resources are subject to survey when municipalities undertake road projects covered by the *Environmental Assessment Act*. Appropriate mitigation measures must be municipally approved (in consultation with the Windsor or Amherstburg Architectural Conservation Advisory Committees—advisory bodies to City Councils and

municipalities on matters pertaining to built heritage in the City of Windsor and the Town of Amherstburg) when disruptions or displacement are anticipated for inventoried properties.

The City of Windsor's inventory is updated on an on-going basis and the current listing as at April 2005 was been mapped using GIS co-ordinates (see Exhibit 3).

The Town of Amherstburg's inventory was compiled in 1976 by restoration architect Peter J. Stokes and has not been updated since that time. Given the age of the document, the Amherstburg inventory needs to be field checked to confirm accuracy. However, Section 3.2 lists streets of particular heritage interest within the town centre. These streets were chosen because they contain a high concentration of previously inventoried structures. The boundary of this heritage sensitive area has been mapped using GIS co-ordinates (see Exhibit 3).

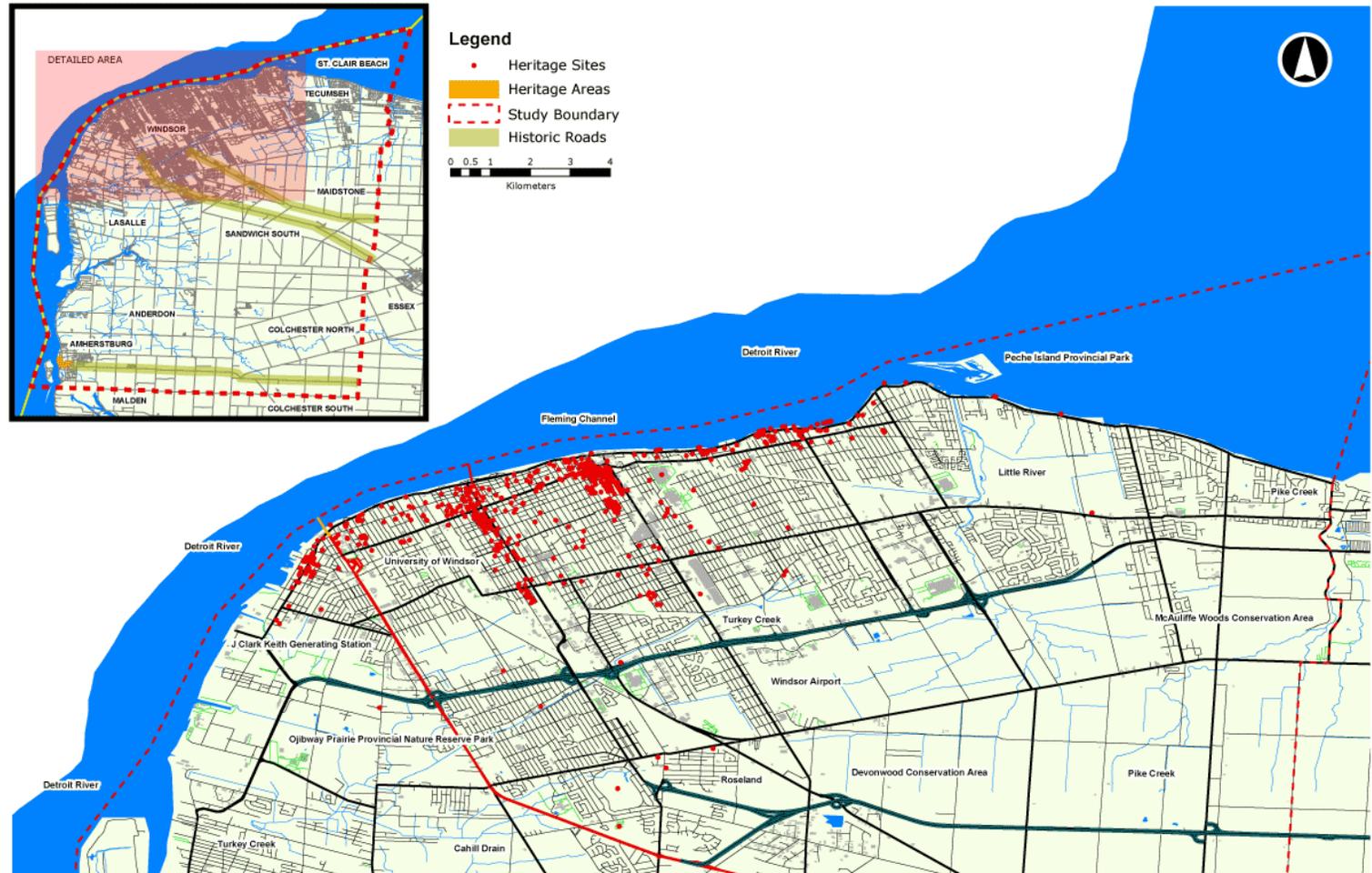


Exhibit 3. Heritage Features within the Initial Study Area

APPENDIX D

CULTURAL HERITAGE RESOURCE INVENTORY WITHIN THE AREA OF CONTINUED ANALYSIS

DRAFT

APPENDIX E

EVALUATION OF THE PRACTICAL ALTERNATIVES WITHIN THE AREA OF CONTINUED ANALYSIS

DRAFT

ALT 1A to Plaza A

PRACTICAL ALTERNATIVE EVALUATION		Factor: Protect Cultural Resources							
			Segments-Malden Road to North Talbot Rd						
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	3 (BHF 6, 18, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted		1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			75	100					175 Factor Score 1

ALT 1A to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources								
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	5 (BHF 6, 7, 8, 9, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	1 (BHF 18)	1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			125	100					225 Factor Score 1

ALT 1A Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources								
	Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd					Comments
				Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	
G-H	H-I	I-J	J-K	K-L	L-M				
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	3 (BHF 6, 18, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted		1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			75	100				175 Factor Score 1	

ALT 1A Option 2 to Plaza B or C

Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford G-H	Pulford north of Lennon Drain H-I	North of Lennon Drain to Cousineau Rd I-J	Cousineau Rd to Howard Ave J-K	Howard Ave to Highway 401 K-L	Highway 3 to North Talbot Rd L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	5 (BHF 6, 7, 8, 9, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	1 (BHF 18)	1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			125	100				225 Factor Score 1	

ALT 1B to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 19)	4 (BHF 2, 3, 4, 5)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	1 (BHF 18)	1 (BHF 1)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	100					150 Factor Score 1	

ALT 1B to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources								
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	4 (BHF 7, 8, 9, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	1 (BHF 6)	1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			100	100					200 Factor Score 1

ALT 1B Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources		Segments-Malden Road to North Talbot Rd						Comments	
	Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401		Highway 3 to North Talbot Rd
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 19)	4 (BHF 2, 3, 4, 5)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	1 (BHF 18)	1 (BHF 1)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	100					150 Factor Score 1	

ALT 1B Option 2 to Plaza B and C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources								
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	4 (BHF 7, 8, 9, 19)	4 (BHF 2, 3, 4, 5)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	1 (BHF 6)	1 (BHF 1)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							Total Factor Score
		b) Number of cultural landscapes disrupted							
Factor Score			100	100					200 Factor Score 1

ALT 2A to Plaza A

ALT 2A to Plaza A										
PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 7)	2 (BHF 2, 3)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	3 (BHF 8, 9, 19)	3 (BHF 1, 4, 5)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	50					100 Factor Score 1	

ALT 2A to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources								
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	3 (BHF 7, 8, 9)	2 (BHF 2, 3)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	2 (BHF 6, 19)	3 (BHF 1, 4, 5)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			75	50					125 Factor Score 1

ALT 2A Option 2 to Plaza A

Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 7)	2 (BHF 2, 3)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	3 (BHF 8, 9, 19)	3 (BHF 1, 4, 5)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	50					100 Factor Score 1	

ALT 2A Option 2 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	3 (BHF 7, 8, 9)	2 (BHF 2, 3)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	2 (BHF 6, 19)	3 (BHF 1, 4, 5)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			75	50					125 Factor Score 1	

ALT 2B to Plaza A

PRACTICAL ALTERNATIVE EVALUATION		Factor: Protect Cultural Resources								
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 7)	2 (BHF 2, 3)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	4 (BHF 8, 9, 18, 19)	1 (BHF 5)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	50					100 Factor Score 1	

ALT 2B to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION		Factor: Protect Cultural Resources							
		Segments-Malden Road to North Talbot Rd							
Performance Measure	Criteria/Indicator	Measurement/Units	Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	Comments
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	3 (BHF 7, 8, 9)	2 (BHF 2, 3)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	2 (BHF 6, 19)	1 (BHF 5)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			75	50					125 Factor Score 1

ALT 2B Option 2 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	2 (BHF 6, 7)	2 (BHF 2, 3)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	4 (BHF 8, 9, 18, 19)	1 (BHF 5)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			50	50					100 Factor Score 1	

ALT 2B Option 2 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION									
Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd	
			G-H	H-I	I-J	J-K	K-L	L-M	
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced							
		b) Number of provincially designated properties displaced							
		c) Number of features with heritage easements displaced							
		d) Number of municipally listed built heritage features displaced							
		e) Number of locally identified built heritage features displaced							
		f) Number of field review identified built heritage features displaced	3 (BHF 7, 8, 9)	2 (BHF 2, 3)					
	Disruption of built heritage features	a) Number of national historic sites disrupted							Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted							
		c) Number of features with heritage easements disrupted							
		d) Number of municipally listed built heritage features disrupted							
		e) Number of locally identified built heritage features disrupted							
		f) Number of field review identified built heritage features disrupted	2 (BHF 6, 19)	1 (BHF 5)					
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced							
		b) Number of cultural landscapes disrupted						Total Factor Score	
Factor Score			75	50					125 Factor Score 1

ALT 3 to Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	1 (BHF 6)	4 (BHF 2, 3, 4, 5)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	2 (BHF 8, 9)	1 (BHF 1)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			25	100					125 Factor Score 1	

ALT 3 to Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources									
Performance Measure	Criteria/Indicator	Measurement/Units	Segments-Malden Road to North Talbot Rd						Comments	
			Malden Rd to Pulford	Pulford north of Lennon Drain	North of Lennon Drain to Cousineau Rd	Cousineau Rd to Howard Ave	Howard Ave to Highway 401	Highway 3 to North Talbot Rd		
			G-H	H-I	I-J	J-K	K-L	L-M		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced								
		b) Number of provincially designated properties displaced								
		c) Number of features with heritage easements displaced								
		d) Number of municipally listed built heritage features displaced								
		e) Number of locally identified built heritage features displaced								
		f) Number of field review identified built heritage features displaced	4 (BHF 7, 8, 9, 19)	4 (BHF 2, 3, 4, 5)						
	Disruption of built heritage features	a) Number of national historic sites disrupted								Disruption is defined as the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.
		b) Number of provincially designated properties disrupted								
		c) Number of features with heritage easements disrupted								
		d) Number of municipally listed built heritage features disrupted								
		e) Number of locally identified built heritage features disrupted								
		f) Number of field review identified built heritage features disrupted	1 (BHF 6)	1 (BHF 1)						
CULTURAL LANDSCAPE UNITS	Displacement or disruption of built cultural landscape features	a) Number of cultural landscapes displaced								
		b) Number of cultural landscapes disrupted							Total Factor Score	
Factor Score			100	100					200 Factor Score 1	

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect Cultural Resources		Plaza Segments-Crossings to Malden Rd																	
			Plaza A				Plaza B			Plaza B1				Plaza C						
	Performance Measure	Criteria/Indicator	Measurement/Units	From Crossing A	From Crossing B	From Crossing C	From Crossing C	From Crossing C			From Crossing B		From Crossing C		From Crossing C					
			A-G	B-G	C-G	C-E-G	C-E	E-F	F-G	B-F	F-G	C-F	F-G	C-D	D-E	E-F	F-G			
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced																		
		b) Number of provincially designated properties displaced																		
		c) Number of features with heritage easements displaced																		
		d) Number of municipally listed built heritage features displaced																		
		e) Number of locally identified built heritage features displaced																		
		f) Number of field review identified built heritage features displaced			1 BHF 17	1 BHF 17			3 BHF 15,16,17			3 BHF 15,16,17		3 BHF 15,16,17			2 BHF 15,16			
BUILT HERITAGE FEATURES	Disruption of built heritage features	a) Number of national historic sites disturbed																		
		b) Number of provincially designated properties disturbed																		
		c) Number of features with heritage easements disturbed																		
		d) Number of municipally listed built heritage features disturbed					1 BHF 11													
		e) Number of locally identified built heritage features disturbed						1 BHF 12					1 BHF 12		1 BHF 12					
		f) Number of field review identified built heritage features disturbed			3 BHF 15,16,17	2 BHF 15,16	4 BHF 12,13,15,16	2 BHF 13,14	2 BHF 13,14					2 BHF 13,14		2 BHF 13,14				
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	1 CLU 2	1 CLU 2	2 CLU 1,2	1 CLU 1, 2	2 CLU 1,2	1 CLU 2		1 CLU 2		2 CLU 1,2		1 CLU 1	1 CLU 2	1 CLU 2				
		a) Number of cultural landscapes disturbed													1 CLU 2					
Factor Score			25	50	150	100	200	25	0	100	0	200	0	125	75	25	0			

Plazas	Factor: Changes in Social Environment	PLAZAS				
Performance Measure	Criteria/Indicator	Measurement/Units	Plaza A	Plaza B	Plaza B1	Plaza C
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced				
		b) Number of provincially designated properties displaced				
		c) Number of features with heritage easements displaced				
		d) Number of municipally listed built heritage features displaced				
		e) Number of locally identified built heritage features displaced				
		f) Number of field review identified built heritage features displaced	1 BHF 20	3 BHF 15,16,17	3 BHF 15,16,17	3 BHF 15,16,17
BUILT HERITAGE FEATURES	Disruption of built heritage features	a) Number of national historic sites disturbed				
		b) Number of provincially designated properties disturbed				
		c) Number of features with heritage easements disturbed				
		d) Number of municipally listed built heritage features disturbed				
		e) Number of locally identified built heritage features disturbed				
		f) Number of field review identified built heritage features disturbed				
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced		1 CLU 2	1 CLU 2	1 CLU 2
		a) Number of cultural landscapes disturbed				
Factor Scores			25	100	100	100