



**Canada-United States-Ontario-Michigan
Border Transportation Partnership**

DRAFT

**Practical Alternatives Evaluation
Working Paper**

Cultural Heritage

**March 2007
(Revised April 2008)**

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's 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. Most 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 (TEPA). 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.

All alternatives are considered to be low impact, therefore conclusions have been made based on the number of impacted cultural heritage resources in each alternative.

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 Area of Continued Analysis (ACA).

Within the ACA, practical alternatives were developed for the crossing, plaza and access route alternatives. The evaluation of practical crossing, plaza and access route 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 (TEPA). 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, CAHP, 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.

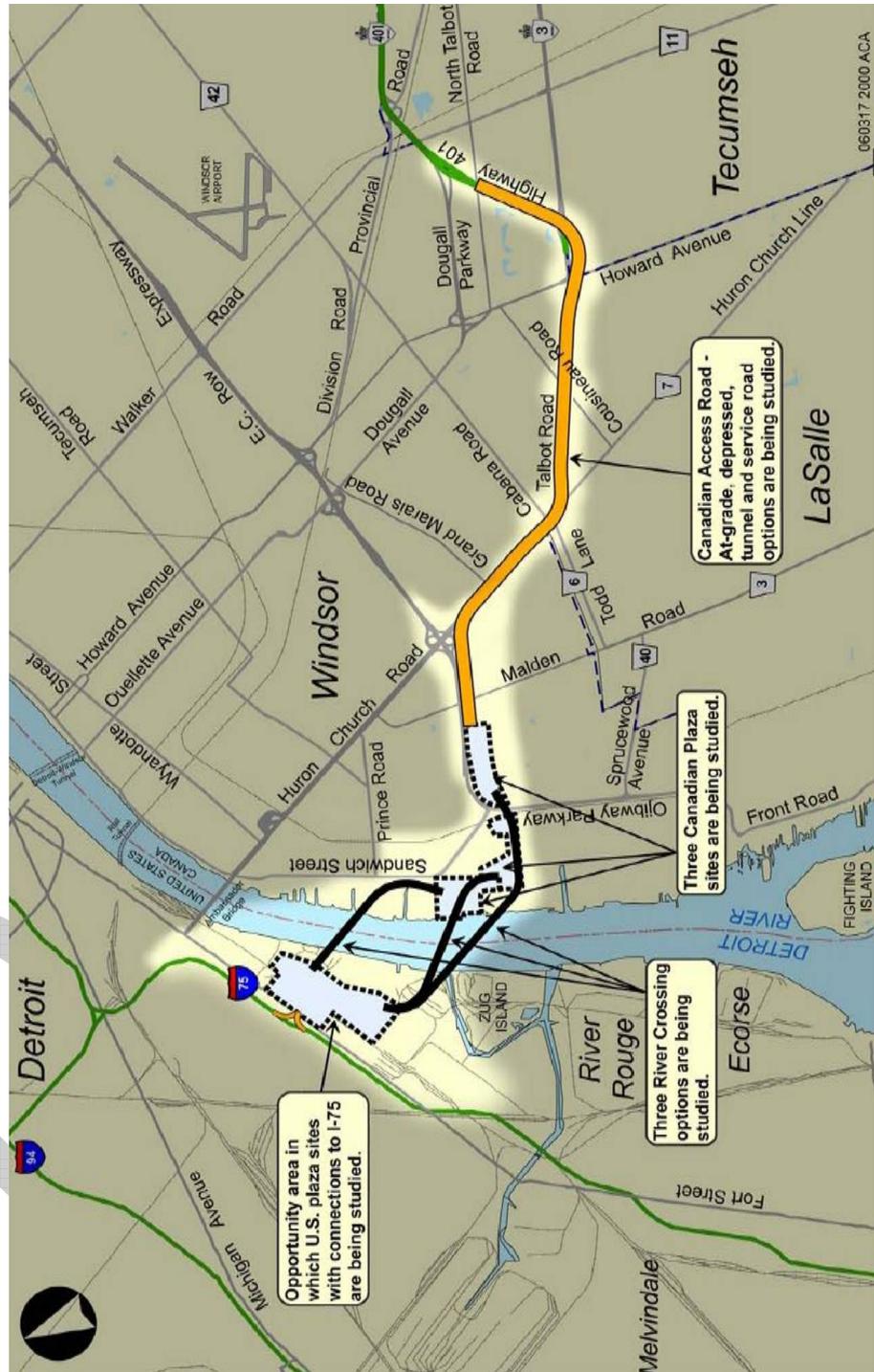


Exhibit 1: Key Plan of the Area of Continued Analysis

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: *Guidelines 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 has 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;

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

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 Street 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).

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

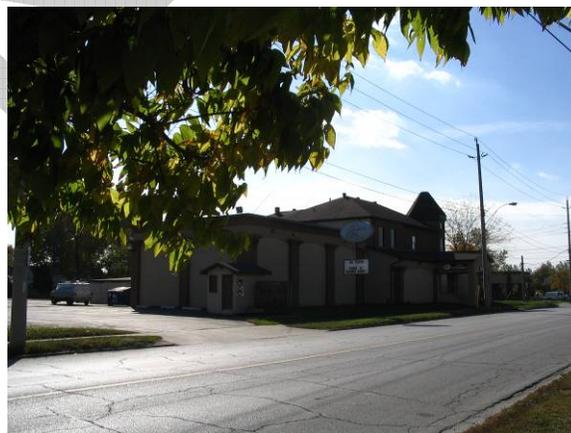


Plate 7: Lido Venice Tavern before the fire

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, with the exception of old Sandwich town (CLU 3), which, due to its close proximity, is an important issue with respect to choosing a crossing location. The remaining features are considered to be low in significance.

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

BHFs 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.

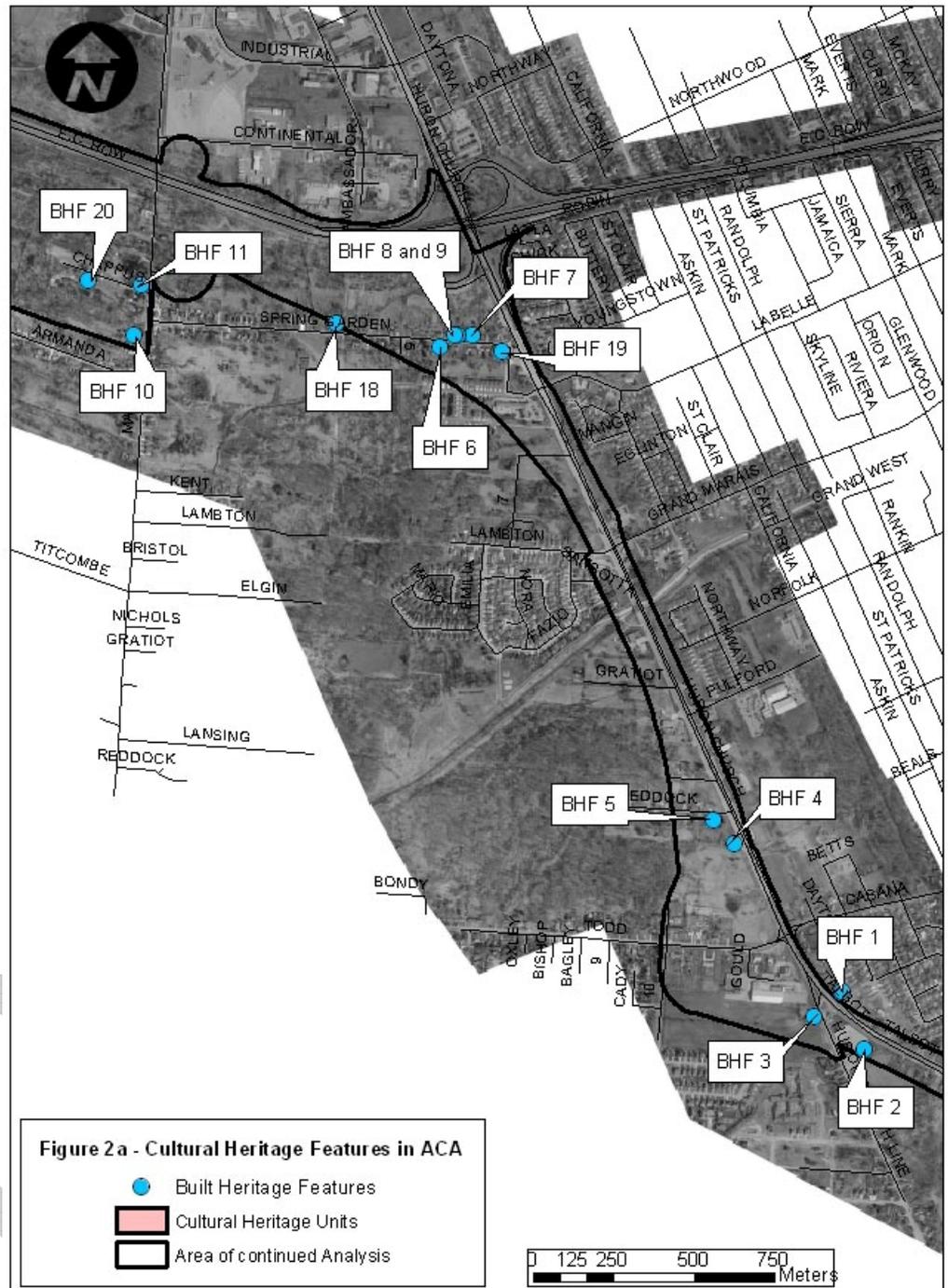
Table 1a
Identified Cultural Heritage Resources in the Area of Continued Analysis -- Cultural Landscape Units (CLU)

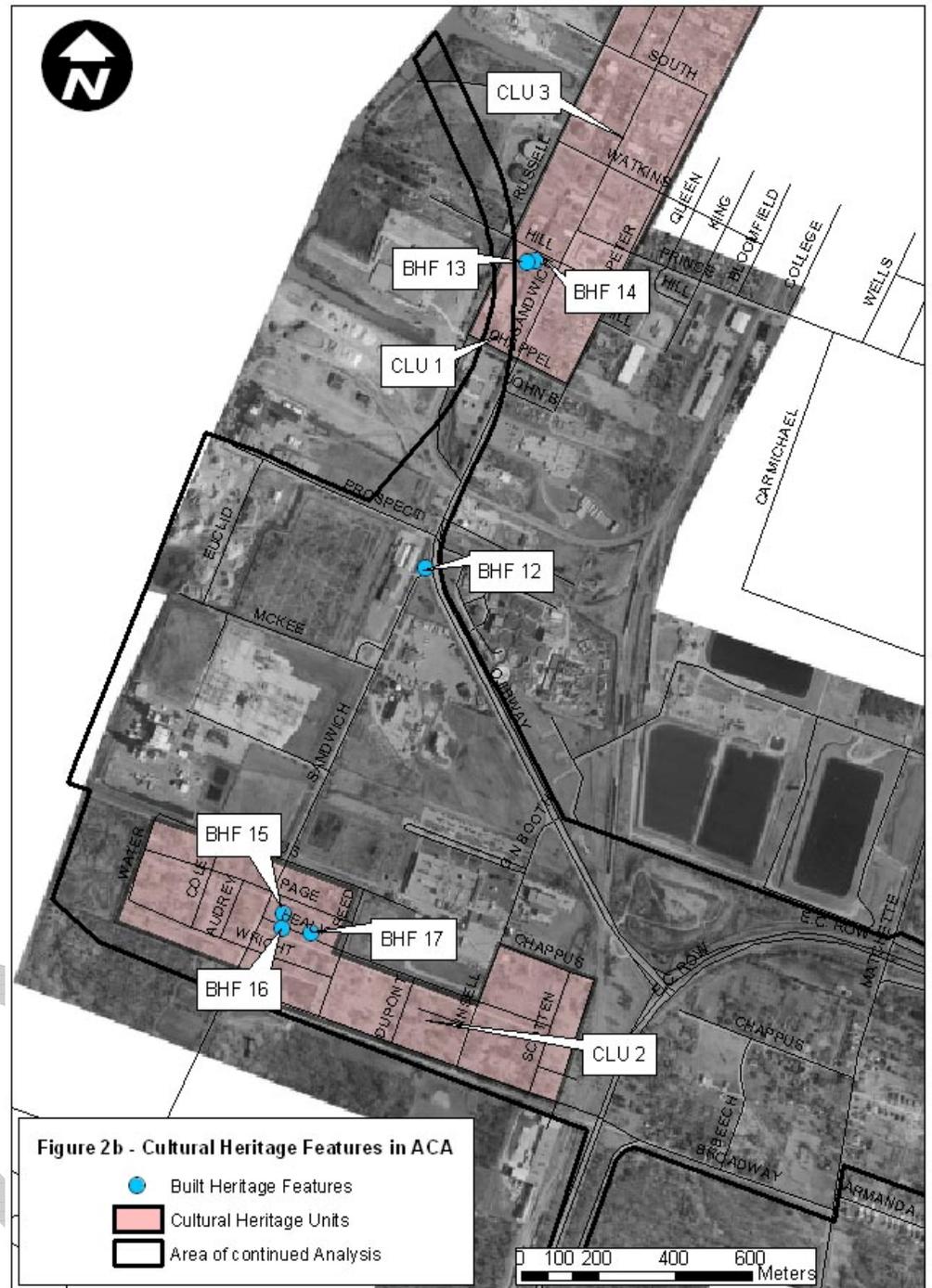
Feature	Address	Feature Type	Status	Approx. Age
CLU 1	Chappel Street and Russell Street	Tunnels – unconfirmed oral report	Local lore	Pre-1900
CLU 2	Water Street to the west, Chappus to the north, Scotten to the east and Broadway/Wright to the south	Brighton Beach housing subdivision	Field	Abandoned
CLU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

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

³ Note: None of these features is currently designated in national, provincial or municipal registries and all are considered to be low significance.





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 BHF's were constructed in the first third of the twentieth century. Also of interest is Branch 594 of the Royal Canadian Legion. All BHF's are considered to be low significance.

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 plaza/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, the Parkway alternative and Alternatives 1A and 1B (both options) will each displace seven field-identified features, while Alternative 3 displaces six. Alternatives 2A and 2B (both options), will each displace five field-identified features. Of higher impact are the alternatives associated with Plazas B and C. The Parkway alternative, Alternatives 1A and 1B (both options) and Alternative 3 will each displace eight field-identified features, while Alternatives 2A and 2B (both options) displace only five field-identified built heritage features.

Access road alternatives that displace four 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 and Plaza B1 will both displace three features, and Plaza C will displace two features and disrupt one feature 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. Plaza B, B1 and C will also displace one cultural landscape unit.

Crossing alternatives

Depending on which crossing alternative is selected, between three and eight homes constructed before 1954 will be disrupted or displaced and three cultural heritage landscapes will potentially 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. From Plaza A, Crossing Alternative A displaces only one field-identified BHF and disrupts three, Crossing Alternative B and C both displace two field-identified BHFs and disrupt two, Crossing Alternative C1 will displace two field-identified BHFs and disrupt six (including a historic monument). Crossing C from Plaza B will displace three field-identified BHFs and disrupt three. Crossing B from Plaza B1 will displace three field-identified BHFs. Crossing C from Plaza C will displace two field-identified BHFs and disrupt four.

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 also disrupt the underground tunnels reported to be in the Chappell/Russell area. 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 the historic town of 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 the crossing alternatives are considered to have low to no impact.

Table 2. Summary of Evaluation Matrices – Access Roads

Performance Measure	Criteria Indicator	Measurement/Units	Alternative 1A		Alternative 1B		Alternative 2A		Alternative 2B		Alternative 3	Parkway
			Option 1	Option 2	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2		
BUILT HERITAGE FEATURES	Displacement of built heritage features	a) Number of national historic sites displaced	0	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	0
		c) Number of features with heritage easements displaced	0	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	0
		e) Number of locally identified built heritage features displaced	0	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features displaced	7 to 8	7 to 8	7 to 8	7 to 8	5	5	5	5	6 to 8	7 to 8
	Disruption of built heritage features	a) Number of national historic sites disrupted	0	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	0
		c) Number of features with heritage easements disrupted	0	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	0
		e) Number of locally identified built heritage features disrupted	0	0	0	0	0	0	0	0	0	0
		f) Number of field review identified built heritage features disrupted	1 to 3	1 to 3	1 to 3	3 to 4	6	6	6	6	3 to 5	3 to 4
		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 Cont'd. Summary of Evaluation Matrices – Plaza and Crossing Alternatives

PRACTICAL ALTERNATIVE Factor: Protect Cultural Resources EVALUATION			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 C1	From Crossing C	From Crossing B	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
		b) Number of provincially designated properties displaced	0	0	0	0	0	0	0
		c) Number of features with heritage easements displaced	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features displaced	0	0	0	0	0	0	0
		e) Number of locally identified built heritage features displaced	0	0	1	0	0	0	0
		f) Number of field review identified built heritage features displaced	1	2	1	2	3	3	2
BUILT HERITAGE FEATURES	Disruption of built heritage features	a) Number of national historic sites disrupted	0	0	0	0	0	0	0
		b) Number of provincially designated properties disturbed	0	0	0	0	0	0	0
		c) Number of features with heritage easements disturbed	0	0	0	0	0	0	0
		d) Number of municipally listed built heritage features disturbed	0	0	0	1	0	0	0
		e) Number of locally identified built heritage features disturbed	0	0	0	1	1	0	1
		f) Number of field review identified built heritage features disturbed	3	2	2	4	2	0	3
CULTURAL LANDSCAPE UNITS	Displacement or disruption of cultural landscapes	a) Number of cultural landscapes displaced	1	1	2	2	2	1	2
		a) Number of cultural landscapes disrupted	0	0	0	0	0	0	1

3.4

Most and Least Preferred Alternatives

All of the alternatives are considered to have low to no impact. The following discusses the preference of alternatives based solely 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, have higher impacts to field-identified features and are considered to be least preferred. Both plazas potentially displace three field-identified features and one cultural landscape unit. Plaza C potentially displaces two field-identified features and one cultural landscape unit, and also potentially disrupts one field-identified feature.

Access Road Alternatives

To Plaza A

If we look at the total number of heritage features that will be displaced or disrupted in all access road alternatives leading to Plaza A, Alternative 1A (Options 1 and 2) and Alternative 1B (Option 1) will affect the least number of features (eight), and will therefore have the lowest impact to identified built heritage features. All remaining alternatives will affect a total of 11 features.

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. Only five features are potentially displaced. Alternatives 1A, 1B, 3, and the Parkway to Plaza B or C potentially displace eight built heritage features. All alternatives will impact a total of 11 features, including features that will be both displaced and disrupted.

Plaza / Crossing Combinations

Plaza Crossings: Plaza A

Four crossing alternatives are proposed for Plaza A. Crossing A and Crossing B are the most preferred alternatives, displacing one and two field-identified features and disrupting three and two field-identified features, respectively. They will both also displace one cultural landscape unit. For Crossing C, two field-identified built heritage features and two cultural landscape units will be potentially displaced while two field-identified built heritage features will be potentially disrupted. Crossing C1 has the potential to displace two field-identified built heritage features and two cultural landscape units, as well as the potential to disrupt one municipally designated feature, one locally identified feature and four field-identified built heritage features.

Plaza Crossings: Plaza B

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

Plaza Crossings: Plaza B1

One crossing is proposed for Plaza B1. Crossing B will potentially displace three field-identified features and one cultural landscape unit.

Plaza Crossings: Plaza C

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

3.5**Conclusions: Most and Least Preferred Alternatives**

Based on the assessment of all Plaza, Plaza/Crossing and Access Road alternatives, it is possible to conclude that there are preferred alternatives based on cultural heritage considerations. All alternatives are considered to have low to no impact, therefore conclusions are based on the number of cultural heritage features that will be affected.

Plaza A is preferred over all other Plaza Alternatives, followed by Plaza B and B1, and finally Plaza C.

In terms of Plaza/Crossing Alternatives, the Plaza A Crossings are the most preferred (Crossing C1, followed by Crossing B and C, followed by Crossing A), followed by the Plaza B and C Crossings, with the Plaza B1 Crossing being the least preferred.

With respect to Access Road Alternatives, Alternative 1A (Options 1 and 2) and Alternative 1B (Option 1) are the most preferred routes to Plaza A, followed by Alternatives 2A, 2B, 3 and the Parkway (all equal). Alternatives 2A and 2B are the most preferred routes to Plaza B or C, with Alternatives 1A, 1B, 3, and the Parkway being the least preferred (all equal).

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.

1. Any proposed work through the study area should be suitably planned in a manner that avoids any identified, above ground, cultural heritage resource.
2. Encroachment of lands close to BHF's or CLUs should be avoided wherever possible.
3. 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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