







Canada-United States-Ontario-Michigan Border Transportation Partnership



Existing and Planned Land Use



Executive Summary

As part of the impact assessment of the Detroit River International Crossing (DRIC) study, an assessment of the "Consistency with Existing and Planned Land Use" was undertaken as one of seven major evaluation factors to be used throughout the DRIC study. Accordingly, an analysis was conducted to determine what land uses currently exist in this area, what uses are planned and what impacts the Practical Alternatives may have on the existing and planned land use.

The generation and assessment of the Practical Alternatives for the access road, inspection plaza and river crossing considered the Provincial Policy Statement, as well as information provided in the *City of Windsor Official Plan* (April 2000), zoning bylaws for the City of Windsor, the *Huron Church Road Urban Design Master Plan & Development Guidelines* (February 2006), the *Olde Sandwich Towne Community Planning Study Report* (October 2006), the Town of LaSalle and Town of Tecumseh Official Plans and zoning bylaws. Field reviews were also conducted to verify current land uses.

Practical Alternatives

All of the access road alternatives represent a widening of the existing highway/high order roadway serving as the access road to an international crossing. The extent of possible impacts of the alternatives on land uses adjacent to the corridor were considered in this analysis. In addition, consideration was given to opportunities to reduce effects through access features, aesthetics and other treatments to reduce the intrusiveness of the freeway, and allow flexibility for the planning of uses for remnant properties or parcels. Context sensitive options were explored through workshops held with the community.

Although the existing roadway carries high traffic volumes and serves as the primary connection to the Ambassador Bridge for long-distance international traffic, introducing a six-lane freeway with service roads and widening the transportation corridor will have localized influences on land use resulting in changes to land use, rezoning requirements or official plan amendments for certain parcels of land.

Impacts to the various types of land uses along the corridor are considered to be similar for all alternatives. This is primarily due to the similarity in the property requirements associated with each of the alternatives. Overall, it is anticipated that the majority of land uses within Windsor, LaSalle and Tecumseh displaced by the access road alternatives can be re-established in other areas of their respective municipalities. Open space and recreational lands proposed with the Parkway Alternative will introduce additional greenspaces in the City of Windsor and Town of LaSalle which will add to the existing open space inventories for these municipalities.

The Parkway alternative with its provision of buffer space between the roadway and sensitive land uses, and the opportunities for various recreational land uses such as trails and greenspace is more consistent with local municipal planning policies, and is therefore preferred from a land use perspective.

Plaza and Crossing Alternatives

The Plaza A alternative is located between the E.C. Row Expressway between Malden Road and Ojibway Parkway. The site is located adjacent to existing residential areas. An inspection plaza is not consistent with the existing land uses located in this area. It has the potential to conflict with the neighbourhood characteristics of the area and may disrupt the manner in which this area functions as a cohesive neighbourhood.

The Plaza B, B1 and C alternatives and Crossing A and B alternatives are situated primarily in the industrial and portland areas of west Windsor and are considered to be more consistent with existing and planned land use in this area. Plaza activities are considered more compatible with industrial land uses. Plaza C displaces a water-dependant industrial land use (Southwest Sales). Relocation of such a use to other waterfront property may be difficult. Overall, the preferred plaza from a land use perspective is Plaza B or B1, due to their location near industrial areas and away from residential neighbourhoods,

Plaza C and Crossing C are also located closest to the Sandwich residential community. Recently, the City of Windsor adopted the *Olde Sandwich Towne Community Planning Study*, which provides direction for residents and business owners to actively participate in the plan-making and priority-setting process for the community. According to this study, Crossing C would be located on lands designated for waterfront industrial uses. Crossing A only connects with Plaza A, and from a land use perspective it is not preferred since Plaza A is located in a predominately residential area. The preferred crossing location from a land use perspective is Crossing B due it its proximity to industrial lands and its compatibility to existing land use polices.

In short, the preferred plaza crossing alternative from a land use perspective is Plaza B1 and Crossing B, due to the compatibility of the existing industrial land use in the Plaza B1 and Crossing B locations.

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) as shown in Exhibit 1.

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 Consistency with Existing and Planned Land Use factor and is one of several reports that are used in support of the evaluation of practical alternatives and the selection of the technically and environmentally preferred alternative. This report is 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).

Table of Contents

1.	Introduction	
1.1	Area of Investigation	2
1.2	Area of Continued Analysis	2
1.3	Access Road Alternatives	2
1.4	Plaza Crossing Alternatives	
2.	Data Collection	
2.1	General Land Use Trends	
2.2	Existing Policy Framework	
2.2.1	Provincial Policy Statement	6
2.2.2	City of Windsor Official Plan	
2.2.3	City of Windsor Special Policy Areas	8
2.2.4	Sandwich Street and Chappell Avenue	8
2.2.5	Sandwich Street and Chappell Avenue	9
2.2.6	South Street and Wilkinson Street	9
2.2.7 2.2.8	Huron Church Road CorridorSpring Garden Planning Area	
2.2.9		
2.2.10		
2.2.1		
2.2.12		
2.2.13		
2.2.1	4 Town of Tecumseh Zoning Bylaws	16
2.3	Existing and Future Land Uses along Access Road Corridor	
2.3.1	Highway 401 from North Talbot Road to Highway 3	
2.3.2	Highway 3 from Outer Drive to Howard Avenue	
2.3.3 2.3.4	Highway 3 from Howard Avenue to Cousineau Road	
2.3.4		
2.3.6	Huron Church Road from Pulford Street to E.C. Row Expressway	
2.4	Malden Road to Ojibway Parkway	
2.4.1	Brighton Beach Industrial Area	
2.4.2	Sandwich Portlands	
3.	Evaluation of Land Use Impacts	34
3.1.1	Access Road Alternatives-Land Use Impacts	
3.1.2	Access Road Alternatives-Assessment of Consistency	
3.1.3	Plaza and Crossing Alternatives-Land Use Impacts	40
3.1.4	Plaza and Crossing Alternatives-Assessment of Consistency	41
4.	Summary	43

Appendix A – Practical Alternatives Access Roads and Plazas and Crossings

List of Exhibits

Exhibit 1: Key Plan of the Area of Continued Analysis	1
Exhibit 2: Windsor, LaSalle and Tecumseh Municipal Boundaries	5
Exhibit 3: Planning Policy Areas	10
Exhibit 4: Old Sandwich Towne Land Use Map	15
Exhibit 5: Highway 401 from North Talbot Road to Highway 3	17
Exhibit 6: Highway 3 from Outer Drive to Howard Avenue	19
Exhibit 7: Highway 3 from Howard Avenue to Cousineau Road	21
Exhibit 8: Highway 3 from Cousineau Road to Lennon Drain	23
Exhibit 9: Highway 3/Huron Church Road from Lennon Drain to Pulford Street	25
Exhibit 10: Huron Church Road from Pulford Street to Malden Road	27
Exhibit 11: Malden Road to Ojibway Parkway	29
Exhibit 12: Brighton Beach Industrial Area	31
Exhibit 13: Sandwich Portlands	33
Link of Tables	
List of Tables	
Table 1: Preliminary Analysis of Access Road Alternatives – Draft February 2008	
Table 2: Preliminary Analysis of Plaza and Crossing Alternatives – Draft February 2008	36

Introduction

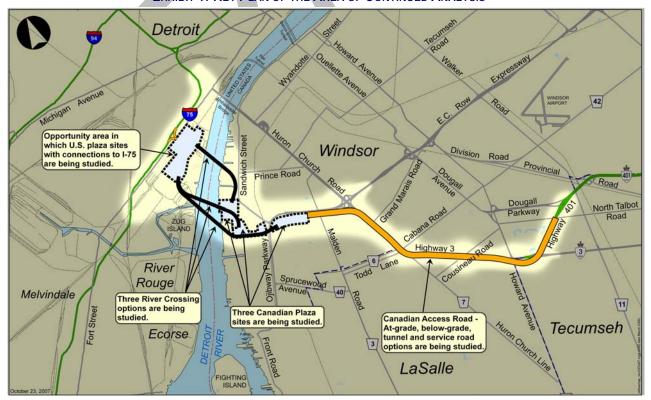
This working paper documents the factors considered in evaluating the potential impacts to land uses of the practical crossing, plaza and access road alternatives in the Area of Continued Analysis (ACA) (refer to Exhibit 1). The objective of this working paper is to examine existing and planned land uses of the communities within the ACA to assess the degree of consistency that the improvements proposed in the Practical Alternatives would have. An overview of the policies that govern the manner in which development occurs in the City of Windsor, the Town of LaSalle, and Town of Tecumseh, Ontario, descriptions of the Practical Alternatives and a preliminary assessment of the potential land use impacts associated with the Practical Alternatives is included in this document.

Other Related Documents

An evaluation of the commercial and agricultural land use impacts is found in the Practical Alternatives Evaluation Working Paper-Economic Impact report. Other related documents include:

- Practical Alternatives Evaluation Working Paper-Social Impact Assessment Report
- Practical Alternatives Evaluation Working Paper-Waste and Contamination Technical Report
- Practical Alternatives Evaluation Working Paper-Natural Heritage
- Practical Alternatives Evaluation Working Paper-Cultural Heritage.

EXHIBIT 1: KEY PLAN OF THE AREA OF CONTINUED ANALYSIS



1.1 Area of Investigation

Land uses affected by the practical access route alternatives and the plaza and crossing alternatives are those that in some instances are within the right of way of the practical alternatives and those that are located immediately adjacent it. Land uses within the proposed right of way are considered directly affected, and land uses immediately adjacent to the proposed right of way may be indirectly affected by the alternatives.

1.2 Area of Continued Analysis

The Area of Continued Analysis (ACA) is the geographic envelope within which practical crossing, plaza and connecting route alternatives were developed and where more intensive technical and environmental investigations were undertaken to support the generation and assessment of practical alternatives. Exhibit 1 depicts the ACA.

The western portion of the ACA on the Canadian side of the Detroit River encompasses a portion of the west Windsor industrial area at the south end of the Sandwich community and along the riverfront. East of the west Windsor industrial area, the ACA includes a continuous corridor, comprising of E.C. Row Expressway, Huron Church Road, Highway 3 and Highway 401. On the U.S. side of the Detroit River, the Area of Continued Analysis extends from Zug Island to the vicinity of the Ambassador Bridge and from the I-75 to the Detroit River.

1.3 Access Road Alternatives

There are six potential alternatives for the proposed access road and seven different combinations for plaza-crossing locations. Each of the five access road alternatives (1A, 1B, 2A, 2B & 3) has differing road alignments in certain segments of the access road, which results in slightly different impacts. The five alternatives for the proposed access road differ based on the built-form of highway and/or access roads.

Alternative 1A is an at-grade six-lane freeway with one-way service roads on either side.

Alternative 1B is a below grade six-lane freeway with one-way service roads on either side.

Alternative 2A is an at-grade six-lane freeway with two-way services roads located south of the freeway.

Alternative 2B is a below grade six-lane freeway with two-way service roads located south of the freeway.

Alternative 3 is a cut and cover tunnelled six-lane freeway underneath Huron Church/Highway 3 corridor. Huron Church/Highway 3 would remain and be used as service roads.

Parkway Alternative is primarily a below-grade alternative, consisting of 11 tunnelled sections, comprising of 1.8 km of tunnels in total. Two-way service roads will be located adjacent to but separate from the freeway.

An exhibit of the access road alternatives is found in Appendix A.

1.4 Plaza Crossing Alternatives

There are three different proposed locations for a new border crossing in the west Windsor area and four plaza alternatives. Seven plaza/crossing combinations have been proposed:

Crossing A-Plaza A is a bridge crossing south of the Brighton Beach Power Generation Station and plaza located south of E.C. Row Expressway, east of Ojibway Parkway. The approach road between the plaza and crossing generally runs along side Broadway Street.

Crossing B-Plaza A is a bridge crossing north of the Brighton Beach Power Generation Station and plaza located south of E.C. Row Expressway, east of Ojibway Parkway. The approach road runs alongside Sandwich and Broadway Streets.

Crossing C-Plaza A is a bridge crossing in the industrial portlands near Russell Street/Sandwich Street and plaza located south of E.C. Row Expressway, east of Ojibway Parkway. There are two possible connecting road options, one runs alongside Sandwich Street and Broadway Street through Brighton Beach, while the other is along Sandwich Street and the western extension of Ojibway Parkway.

Crossing B-Plaza B1 is a bridge crossing north of the Brighton Beach Power Generation Station directly connected to a plaza located at the southern end of Sandwich Street, connecting to the new crossing via Broadway Street.

Crossing C-Plaza B is a bridge crossing in the industrial portlands near Russell Street/Sandwich Street and plaza located at the southern end of Sandwich Street, north of Broadway Street. The approach road runs generally alongside Sandwich Street.

Crossing C-Plaza C is a bridge crossing in the industrial portlands near Russell Street and Sandwich Street and plaza located west of Sandwich Street, south of Prospect Avenue. The approach road runs alongside Sandwich Street.

An exhibit of the plaza-crossing alternatives is found in Appendix A.



Data Collection

A review of land use policies and current zoning bylaws for each of the municipalities within the ACA has been conducted as part of the land use analysis. Various planning documents have been consulted and reviewed from the City of Windsor, including the City of Windsor Official Plan (April 2000), City of Windsor Zoning Bylaws, the Huron Church Road Urban Design Master Plan & Development Guidelines (February 2006), and the Olde Sandwich Towne Community Planning Study Report (October 2006). In addition, planning documents have been reviewed from the Town of LaSalle, including the Town of LaSalle Official Plan (2003) and zoning bylaws. The Town of Tecumseh Official Plan (2006) and zoning bylaws were also reviewed.

An Official Plan provides guidance for the physical development of the municipality over a 20-year period while taking into consideration important social, economic and environmental matters and goals. The Plan may be used as a guide to adopt more detailed planning policies such as secondary plans and community improvements to specific neighbourhoods.

A zoning bylaw contains provisions that regulate the use, size, height, density and location of buildings on properties within a municipality. The basic purpose of a zoning bylaw is to regulate what can be built and how big the building can be on a property.

Discussions with planning officials from each municipality were also conducted as part of this evaluation. Field reconnaissance was conducted to verify certain land uses.

2.1 General Land Use Trends

The ACA is not primarily dominated by one type of land use; it is comprised of a number of land uses, ranging from single and multi family residential, commercial, highway commercial, open space, industrial (light, heavy) and institutional. The total land area of the City of Windsor is 12,063 hectares, or 120.63 sq km. The City of Windsor had approximately 2,058 hectares (17%) of undeveloped land in 1996 (most recent calculation) which includes both small and large parcels of undeveloped land. Of this, 1,214 hectares were designated for future residential land use, 606 hectares for industrial use, and the remaining 238 hectares for open space use. Windsor has had modest population, housing and employment growth over the past 10 years, and therefore the availability of developable land has decreased as a result.¹ In December 2002, the Province of Ontario approved the transfer of approximately 2,600 hectares of land from the Town of Tecumseh and the County of Essex to the City of Windsor. A Boundary Adjustment Agreement was approved by the Minister of Municipal Affairs and Housing on December 2002 between the Town of Tecumseh, County of Essex and City of Windsor for the Annexed Area, initiating the process for its eventual designation within the City of Windsor Official Plan. The lands were annexed by the City of Windsor to accommodate future growth, particularly employment growth, as a portion of these lands are zoned for industrial land uses. As a result of this annexation, the City acquired 2,532 hectares of land from the Town of Tecumseh in an area formally known as the South Sandwich area of Tecumseh.

The Town of LaSalle is a fast growing municipality located south of the City of Windsor in the County of Essex. The Town of LaSalle experienced an annual growth rate of almost

¹ City of Windsor website (www.citywindsor.ca)

5% over the past 10 years, higher than both the national and provincial averages. As of 2003, approximately 14 percent of the town's total land area of 6,500 hectares is being used for residential, commercial and other forms of urban land uses. (LaSalle Official Plan, 2003) As of December 1996 (most recent calculation), a potential supply of approximately 1,300 hectares of residentially-designed and vacant land existed with the Town's existing urban areas.

The southeastern end of the ACA is located in the Town of Tecumseh. Tecumseh is an actively growing municipality, growing approximately 2% per year, with a diverse residential and industrial land use base. Tecumseh continues to be one of the fastest growing municipalities in Essex County. Exhibit 2 depicts the municipal boundaries of the City of Windsor, Town of LaSalle, and Town of Tecumseh.



EXHIBIT 2: WINDSOR, LASALLE AND TECUMSEH MUNICIPAL BOUNDARIES

2.2 Existing Policy Framework

2.2.1 Provincial Policy Statement

The assessment of impacts to land use for the DRIC Practical Alternatives requires consideration of provincial and local municipal policies and objectives pertaining to land use, as well as types of land uses impacted directly by the project.

The Detroit River International Crossing (DRIC) study is a transportation infrastructure project undergoing an Environmental Assessment. An Environmental Assessment looks at a broad range of legislative policies, including those that relate to the Provincial Policy Statement (PPS). The PPS was consulted throughout the illustrative alternatives and practical alternatives phase of the DRIC study, to ensure that alternatives being considered were in agreement with the policies developed in the PPS.

The PPS provides policy direction on matters of provincial interest related to land use planning and development. The Provincial Policy Statement is issued under the authority of Section 3 of the *Planning Act*. The most recent Provincial Policy Statement came into effect March 1, 2005. The Provincial Policy Statement focuses growth within settlement areas and away from significant or sensitive resources and areas which may pose a risk to public health and safety.

Several policies within the Provincial Policy Statement are applicable to the DRIC study, and were taken into consideration during the development of the illustrative and practical alternatives. Policies related to healthy, liveable and safe communities; public space, park and open space; infrastructure and public service facilities; transportation systems; transportation, infrastructure corridors; natural heritage and cultural heritage and archaeology. These policies were taken into account in several other reports prepared by the DRIC study team, including the Natural Heritage report, the Archaeology and Cultural Heritage Report, and the Mobility Report.

The policies of the Provincial Policy Statement are intended to be used in conjunction with locally-generated policies regarding matters of municipal interest. Provincial plans and municipal official plans provide a framework for comprehensive, integrated and long-term planning that supports and integrates the principles of strong communities, a clean and healthy environment and economic growth, for the long term. Listed below are the various municipal plans and policies from the City of Windsor, the Town of LaSalle, and the Town of Tecumseh that pertain to this study.

2.2.2 City of Windsor Official Plan

The City of Windsor Official Plan was adopted on October 25, 1999 by By-law 350-1999. The Plan was approved by the Ontario Ministry of Municipal Affairs and Housing, in part, on March 28, 2000. The remainder of the Plan was approved by an Ontario Municipal Board decision on November 1, 2002. Currently, the City of Windsor is reviewing the goals, objectives and polices stated in the official plan and is undergoing a public consultation process to update the various sections of the plan.

In considering the City of Windsor Official Plan during the development of the illustrative and practical alternatives, a number of policy areas outlined in the Official Plan were considered. Each policy area is discussed separately.

Development Strategy

Pertains to the vision, and growth concept envisioned for the next 10-20 years for the city. Recognizing that a new border crossing and access road could significantly influence future growth in the Windsor and Essex County region, the DRIC study team considered the vision and principles during the development of the illustrative and practical alternatives for the access road, plaza and crossing alternatives.

Sustainable, Healthy Environment

The sustainable, healthy environment policies pertain to achieving a sustainable transportation system where all modes of transportation play more of a balanced role. Providing greater opportunities to walk, cycle and take public transit are part of the goals for the sustainable, healthy environment policy section. Continuing to enhance the waterfront area, along with providing a Greenway System aimed to connect Windsor's neighbourhoods and creating a greater harmony between human activities and natural systems.

Healthy Community

The Healthy Community section of the City of Windsor Official Plan centres on policies related to Healthy Communities. As stated in the Official Plan, the healthy community philosophy is rooted in the belief that people's social, economic, cultural and psychological well being is influenced by the physical environment in which they live, work and play. Land use planning actions should provide for activities and facilities which will foster lifestyle habits that improve community health.

Environment

Some of the objectives of the Environmental policies of the City of Windsor Official Plan include protecting, conserving and improving the quality and quantity of Windsor's natural features and functions; to establish recreational and natural linkages between open space areas and natural areas, and to improve atmospheric air quality.

Land Use

Land use policies outlined in the Official Plan promote an environmentally sustainable urban development, a variety of open spaces, protection and conservation of environmentally significant and sensitive heritage features, and polices pertaining to the development of residential, industrial, business park, commercial, major institutional, open space, natural heritage, mixed use, waterfront residential, waterfront recreational, and waterfront port.

Infrastructure

Transportation policies outlined in the official plan call for a sustainable, effective, and efficient transportation system that meets the needs of all users in a manner consistent with a healthy environment and vibrant economy. Objectives outlined in this area of the official plan relevant to the DRIC study include:

- Protect long term transportation corridors
- Safe and efficient truck routes within and through Windsor
- Maintain a city-wide walking and cycling network

Windsor's role as Canada's foremost international gateway.

In addition, the City of Windsor Official Plan speaks to Recreationways which are defined as a network of multi-use pedestrian and cycling trails designed to serve recreational movements.

Urban Design

Urban Design policies are outlined in Section 8 of the Official Plan, and include policies and objectives aimed to:

- o Achieve comfortable conditions along roads and in public spaces
- Achieve an attractive network of public spaces
- Encouraging infrastructure undertakings to retain and incorporate natural features and functions

Heritage Conservation

Heritage conservation policies outlined in the City of Windsor Official Plan centre on identifying, recognizing, protecting, enhancing and managing the existing heritage resources that exist within the city.

These policies were reviewed during throughout the development of the illustrative and practical alternatives

Exhibit 3 shows the planning policy areas and districts that are defined within the Windsor Official Plan. The City of Windsor is currently divided into a total of 19 planning districts, which are used to help facilitate future planning within the city. The 19 planning districts range in size from slightly more than 200 hectares to almost 1,135 hectares in size. These planning districts are established to provide a basis for developing more detailed planning policies. Only those planning districts that contain special policy areas that maybe impacted by the practical alternatives are discussed in this report.

2.2.3 City of Windsor Special Policy Areas

Special Policy Areas are defined as areas where detailed policies are created for land use, infrastructure, transportation, environment, urban design or other areas are required beyond those that are provided within the Official Plan. In certain instances, where there is a conflict between a Special Policy Area provision and the Official Plan, the Special Policy Area will take precedence over the policies of an Official Plan.

The ACA includes all or a portion of four Special Policy Areas as defined in the Windsor Official Plan: Sandwich Neighbourhood Waterfront District, Sandwich Street at Chappell Avenue and South Street at Wilkinson Avenue and the Huron Church Road Corridor. One Secondary Plan is affected by the ACA, the Spring Garden Planning Area. These Special Policy Areas and Secondary Plan areas are shown in Exhibit 3.

2.2.4 Sandwich Neighbourhood Waterfront

The Sandwich Neighbourhood Waterfront is comprised of the area bounded by Chewitt Street on the north, Russell Street on the east, Brock Street on the south and the Detroit River on the west. This special policy area allows for the development of Waterfront Recreation land uses, as well as residential development no greater to fifteen storeys in height, on lands located at the south west corner of Mill Street and Russell Street. In addition, residential development is permitted no greater than three storeys in height on

the south west corner of Chewitt Street and Russell Street. As a condition of planning approval, lands will be required to be conveyed to the city for public open space purposes, where preference will be made for lands extending along the Detroit River for the continuation of the waterfront linear park system.

None of the practical crossing alternatives impact the Sandwich Neighbourhood Waterfront district, as defined in the Windsor Official Plan.

2.2.5 Sandwich Street and Chappell Avenue

The Sandwich Street and Chappell Avenue Special Policy Area is comprised of a property known as Lot 28, on the south side of Sandwich Street and part of Lot 28 on the north side of Peter Street, located on the southeast corner of Sandwich Street and Chappell Avenue. This Special Policy Area allows for the development of Adult Entertainment Parlours, in particular the building located at 3885 Sandwich Street. The building located at 3885 Sandwich Street was destroyed by fire in the fall of 2006, and the site is presently vacant.

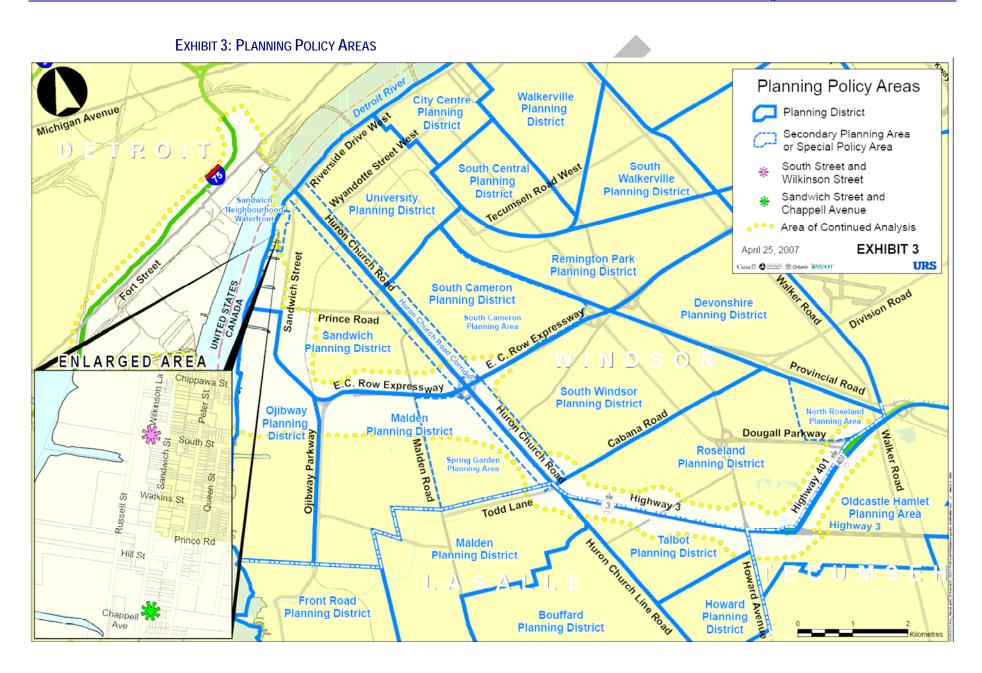
2.2.6 South Street and Wilkinson Street

The South Street and Wilkinson Street Special Policy Area is located on the northeast corner of South Street and Wilkinson Street. This area is designated as a business park, however the only business park use that is permitted on these lands is a warehouse. This district will not be impacted by any of the plaza crossing alternatives.

2.2.7 Huron Church Road Corridor

The Huron Church Road Corridor includes an area along the east and west sides of Huron Church Road from the Ambassador Bridge to Highway # 3, as depicted in Exhibit 3. The Huron Church Road Corridor states that development along Huron Church Road must have specific landscaping setbacks for new residential uses and it guides the location for new commercial uses along the corridor. The landscaping setback requirements are as follows:

- where non-residential development fronts Huron Church Road there shall be a minimum landscaped setback of ten (10) metres parallel to the road;
- where residential development is proposed adjacent to Huron Church Road an open space corridor having a minimum width of 30 metres shall be provided;



 where lands are proposed for redesignation to commercial centre or commercial corridor, the lands shall be located at signalized intersection or be contiguous to lands already designated commercial centre or commercial corridor with access to a signalized intersection by means of a service road.

This special policy area allows for development on the Huron Church Road Corridor to be uniform in appearance and in keeping with its status as an international gateway route, through the use of a landscaped setback abutting the road. (Volume 2: Special Policy Areas and Secondary Plan, City of Windsor Official Plan)

The City of Windsor Official Plan has designated Huron Church Road as a Class I Arterial. The Official Plan states that a Class I Arterial Road:

- shall be designed to carry high volumes of both passenger and commercial traffic for intra-city travel at moderate speeds;
- usually consist of four or more divided or undivided travel lanes, with right of way widths no more than 36 metres;
- Intersections with major roads are permitted but local roads are discouraged;
- Direct access to abutting properties along Class I Arterial Roads is not permitted where other alternatives exist.
- Commuter cycling lanes or bikeways are not permitted along the paved travel lanes, but may be permitted within the right-of-way.

Recently, an urban design master plan was developed for Huron Church Road. The *Huron Church Road Urban Design Master Plan and Development Guidelines* (February 2006) was developed to provide a design vision and framework for implementing design concepts on Huron Church Road between Cabana Road and College Avenue. The scope and analysis of the report focuses on the Primary Study Area, between College Avenue and Tecumseh Road. Design elements, streetscape installations and guidelines developed within this report are also meant to be implemented in the Secondary Study Area which is between Tecumseh Road and Cabana Road. This report presents design guidelines for lighting, planting, walkways, signage, public art, street furniture and property development.

As part of the Detroit River International Crossing Study, the Study Team incorporated some of the design guidelines and features suggested in this report into the Context Sensitive Solutions (CSS) concepts for the access roads landscape treatments including noise attuation wall treatments and various types of plantings including Carolinian plantings. In addition, the setback and landscaping policies put forth for the Huron Church Road Corridor will be taken into consideration when the preferred access road alternative is carried forward to detailed design.

2.2.8 Spring Garden Planning Area

The Spring Garden Planning Area (Official Plan Area #5) is bounded by E.C. Row Expressway on the north, Malden Road to the west, Todd Lane to the south, and Huron Church Road on the east (See Exhibit 3). It is approximately 283 hectares in size, and is largely a residential community integrating an expansive natural area feature. The natural area was designated as an Area of Natural and Scientific Interest (ANSI) by the Ministry of Natural Resources in 1984. As a result, the Spring Garden Planning Area has development restrictions placed upon it. The Secondary Plan allows for residential development only along the periphery of the natural area. The plan provides primarily for

future residential development that complements the development that has already occurred within this planning area. Other land uses are permitted, in a limited capacity, as discussed below.

Permitted land uses in the Spring Garden Planning Area as defined by the Spring Garden Secondary Plan are as follows:

- a) Low profile residential development in designated areas; comprised of single detached, semi-detached, duplex and multiple units up to 8 units; maximum density permitted is 30 units per gross hectare;
- b) Single detached residences are the primary residential type allowed;
- c) Low profile multiple use residences (e.g. semi-detached, row housing) are encouraged near E.C. Row Expressway and Huron Church Road;
- d) Neighbourhood commercial uses are permitted in residential areas:
- e) Minor institutional uses are permitted within residential areas; and
- f) Light industrial uses; restricted to the Grand Marais Drain area.

The Secondary Plan requires that a buffer be placed between the right-of-way on Huron Church Road, Malden Road, and E.C. Row Expressway and future permitted land uses in order to mitigate for potential noise impacts. In addition, any future roadway network would have to follow the grid patterns prescribed within the Secondary Plan in order to prevent any impacts to the adjacent ANSI areas. The access road alternatives will consider the specific setback requirements as outlined in the Spring Garden Planning Area.

2.2.9 City of Windsor Zoning Bylaws

A municipality regulates the use and development of land, buildings and other structured through the provisions of zoning bylaws under the Ontario Planning Act. The purpose of a zoning bylaw is to regulate different land uses and development standards, to ensure that development takes place in conformity with policies set forth in the City of Windsor Official Plan.

The City of Windsor has developed a comprehensive listing of zoning bylaws that apply to the entire city. Within the ACA, the zoning bylaw designations vary from low, medium, and high residential districts, commercial and industrial districts, and institutional and green districts. A cross section of all types of zoning is represented within the ACA. Each zoning bylaw dictates what type of land use is permitted within a particular area of the city, the units allowed to be developed, the setback requirements, and it prescribes the infrastructure requirements needed to develop the land uses.

It is important to note the current zoning for various parcels found within the ACA that are currently vacant or open. Often parcels that are vacant or open and that are zoned for either residential, commercial, or industrial land uses will be developed once favourable market conditions exist. Within the ACA, lands that are currently vacant in the Brighton Beach Industrial Area are zoned for industrial land uses. These lands could be occupied by industrial uses if the economic market in Windsor requires such a use. Also, lands that are currently open or vacant in the Spring Garden Planning Area, are zoned for residential land use, with a hold provision which places a hold on the issuance of a building permit until specific development preconditions have been satisfied. Future residential demands would potentially require that residential development occur in this part of Windsor,

pending the stipulation as dictated in the zoning.

2.2.10 Olde Sandwich Towne Community Planning Study Report

The Olde Sandwich Towne Community Planning Study Report was completed and adopted by Windsor City Council in the fall of 2006. The Community Planning Study Report was developed with cooperation and input from Sandwich Towne residents along with business, government and other civic leaders. Participants formed task force subcommittees, which focused on six areas:

- Appearance and community image;
- Commercial development;
- Health care, education and community needs;
- Parks and open space and neighbourhood land use;
- Safety and crime; and
- Communications.

The Olde Sandwich Towne Community Planning Study Report was designed to provide direction for residents and business owners to actively participate in the plan making and priority setting process for the community. The Planning Study Report was adopted as the municipality's guide for future planning, capital budgeting and community improvement efforts in Sandwich. The Planning Study Report was the result of an 18-month process that contains 29 recommendations to the community. Task Force members identified geographic realities, such as barriers, vacant lots, anchors of activity, connectors etc., that later were used to identify target areas within the study area to concentrate resources. The plan outlines which organization should take the lead on each recommendation develop an achievable timeframe and identify what resources are needed to achieve each recommendation.

The plan outlines the continuation of industrial land uses in the waterfront area south of Watkins Road, as shown in Exhibit 4. The plan identified that the area south of Prince Road be changed to industrial from its current mix of residential and industrial land uses. It also suggests waterfront port improvements be made to existing industrial land uses to help facilitate and foster continued industrial viability within this area. The location of Crossing C is in the vicinity of the waterfront port area as identified in the *Olde Sandwich Towne Community Planning Study Report*. Placing a new crossing within the waterfront port/industrial area of Sandwich is consistent with the prescribed land use of that area of Sandwich Town, which comprises of mostly industrial land uses.

2.2.11 Town of LaSalle Official Plan

The "Town of LaSalle Official Plan –LaSalle 2016- Healthy, Vibrant and Caring" was adopted on October 14, 1997. The Plan was approved by the Ontario Ministry of Municipal Affairs and Housing (MMAH) on May 18, 1998. The document used for this report is the November 4, 2003 Office Consolidation, which incorporates Official Plan Amendment No. 1, provincially approved on November 4, 2003.

Within the ACA, the Town of LaSalle Official Plan has designated the Highway 3 area as one of five planning districts developed for the town, called the Talbot Planning District

(See Exhibit 3). The planning districts are designed to provide a framework for the implementation and administration of the Official Plan. The Talbot Planning District consists of mostly residential land uses, with two distinct areas of commercial land use along Talbot Road southeast and northwest of Sandwich Parkway. There are recreational land uses located throughout this district, along with a community facility.

As growth continues within the Town of LaSalle, plans for future roadway expansions are included in the Official Plan. In particular, the Official Plan includes a proposed expansion of Laurier Drive from Malden Road to Howard Avenue. The proposed interchange designs for the access road alternatives would enhance the connections to, from, and between Howard Avenue, Laurier Drive, Highway 3 and Highway 401.

As stated in the Town of LaSalle Official Plan, the 'greenway system' is a cornerstone of the Official Plan, and represents a major new land use planning and resource management approach for the Town of LaSalle, to be implemented over a 10 to 20 year planning horizon. The essence of the Town of LaSalle 'greenway system' approach is providing linkages, areas to connect wildlife habitat areas to each other, human settlements to other human settlements, urban and rural areas, waterfront to non-waterfront lands, and people to nature. All new developments within the Town of LaSalle will be required to incorporate the 'greenway system' elements within their respective development plans to the greatest degree possible.

The LaSalle Official Plan acknowledges that a Bi-National Transportation Study has been underway since 2003, and that in the event that a route will be located in the Town of LaSalle is approved in accordance with all applicable Environmental Assessment legislation, additional transportation policies may be required to amend the Town's Official Plan. Highway 3 is classified as a Provincial highway in the Town of LaSalle Official Plan.

2.2.12 Town of LaSalle Zoning Bylaws

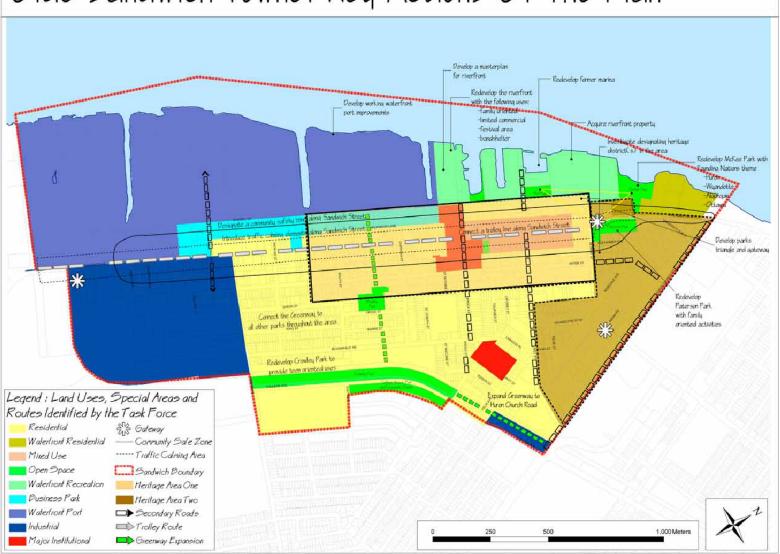
The Town of LaSalle has developed a comprehensive zoning bylaw for the entire town. The Talbot Planning District area of LaSalle is zoned residential, with a few parcels zoned commercial.

2.2.13 Town of Tecumseh Official Plan

The Town of Tecumseh is governed by three separate official plans. The three official plans represent the three former municipalities, which include Tecumseh, St. Clair Beach, and Sandwich South. These three municipalities existed separately prior to the January 1st, 1999 amalgamation of the three areas into the current Town of Tecumseh municipality. At present, the three official plans have not yet been consolidated into a single official plan and still govern their respective lands prior to amalgamation.

EXHIBIT 4: OLD SANDWICH TOWNE LAND USE MAP

Olde Sandwich Towne: Key Actions Of The Plan



The purpose of the Official Plan is to set forth the general policies concerned with the shaping and guiding of the physical growth and arrangement of the Tecumseh Planning Areas. The general polices are developed being mindful of the social and economic needs of the community in order to obtain the most desirable physical environment for the present and future inhabitants of the Town of Tecumseh.

The southeastern end of the ACA is located within the Town of Tecumseh. (See Exhibit 3). Land uses found within this area of Tecumseh include several manufacturing and business parks, including the Del Duca Industrial Park, located adjacent to Highway 401. This industrial park contains businesses that manufacture a variety of goods, including automotive stampings, plastic injection molding, dies, fixtures, automation systems, custom machining, custom fabrication, automotive seating systems, capsule machines and capsules, vinyl doors and windows, commercial printing, canned vegetables and frozen foods, breads and rolls.

2.2.14 Town of Tecumseh Zoning Bylaws

The Town of Tecumseh is governed by three separate zoning bylaws, in addition to the three separate Official Plans, representing the three municipalities that existed separately prior to the January 1st, 1999 amalgamation of the three areas. Currently, the three bylaws have not yet been consolidated into a single bylaw for the town and still govern their respective lands prior to amalgamation. The zoning for the lands located within the ACA in Tecumseh is industrial.

2.3 Existing and Future Land Uses along Access Road Corridor

The following is a discussion of the land uses that are found within the ACA.

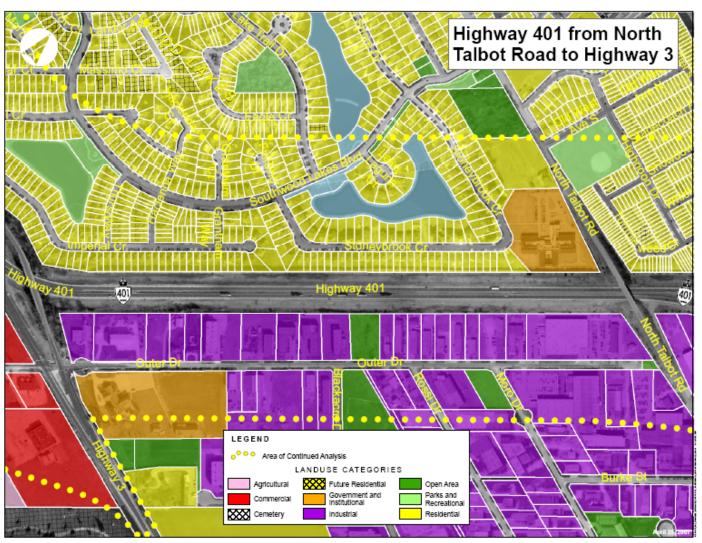
The Highway 3/Huron Church Road corridor has served as an access road to the Ambassador Bridge for over 75 years. The land uses along this corridor vary, ranging from commercial and industrial to residential and recreational. Commercial uses include fast food restaurants, speciality stores, hotels and motels, shopping centres and convenience stores. Residential land uses include single-family residences and multifamily residences. In order to facilitate an accurate description of the land uses along the entire ACA, the corridor has been divided into six sections. A description of each follows.

2.3.1 Highway 401 from North Talbot Road to Highway 3

Land uses located along the north portion of this segment includes a portion of residential subdivision, called Southwood Lakes, which was constructed in 1997 as a single family residential community that surrounds four small lakes and features several parks. There is one institutional land use, the Extendicare Southwood Lakes Long Term Care Facility, located at the northwest corner of North Talbot Road and Highway 401. There are a number of parcels that are proposed for future residential development, located north of North Talbot Road along Highway 401. Land uses along the south side of Highway 401 include the Del Duca Industrial Park area in the Town of Tecumseh, where several automotive manufacturing related businesses operate (see Exhibit 5).

EXHIBIT 5: HIGHWAY 401 FROM NORTH TALBOT ROAD TO HIGHWAY 3





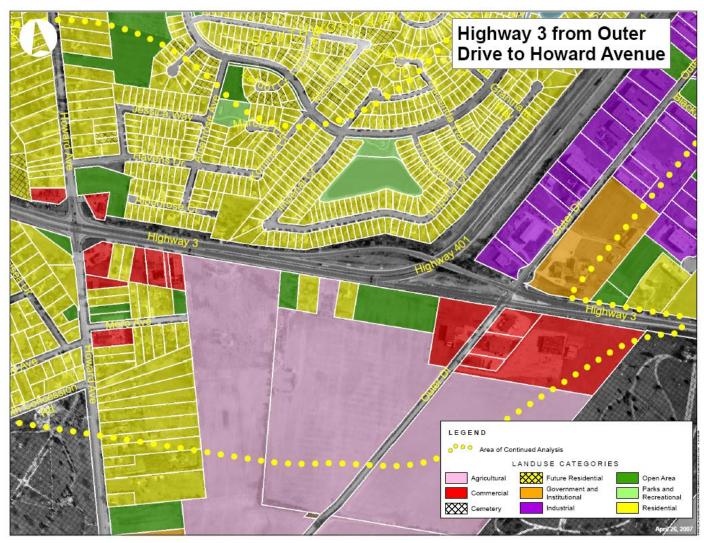
2.3.2 Highway 3 from Outer Drive to Howard Avenue

This segment contains a mixture of residential, industrial, vacant institutional and commercial land uses. On the north side of Highway 3, the majority of land uses are single-family residential units, with the exception of a vacant and commercial land use located on the northeast corner of Highway 3 and Howard Avenue. On the south side of Highway 3, land uses consist of vacant lands, commercial land uses, and some single-family residential land uses. South of Highway 3 is a large vacant area owned by the Ontario government.



EXHIBIT 6: HIGHWAY 3 FROM OUTER DRIVE TO HOWARD AVENUE





2.3.3 Highway 3 from Howard Avenue to Cousineau Road

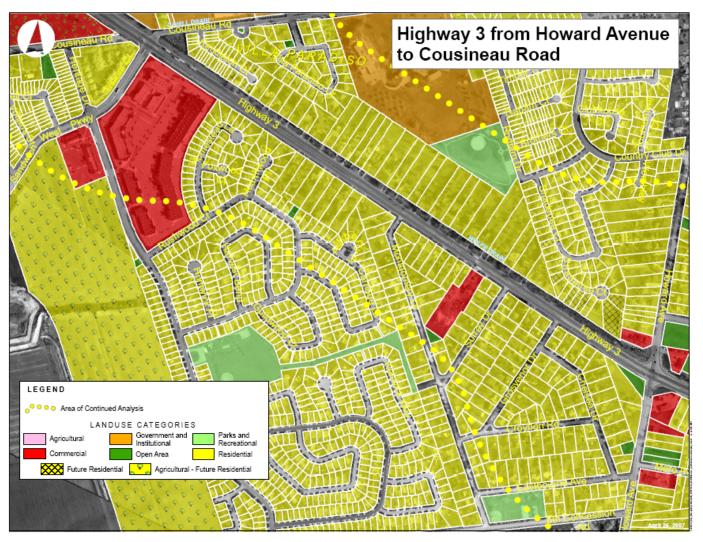
This segment contains a mixture of residential and commercial land uses. Land uses found along the north side consist mostly of single-family residential units either fronting onto Highway 3 with direct highway access or backing onto Highway 3 without direct highway access. Land uses on the south side of Highway 3 between Howard Avenue and Cousineau Road consist mostly of single-family residential uses, with a few multi-family units, with driveways that connect directly to Highway 3. There is no buffer between the residential land uses that exists in this section and Highway 3. This segment also contains the Windsor Crossing Outlet Mall, situated in the southeast corner of Sandwich West Parkway in the Town of LaSalle. The Windsor Crossing Outlet Mall is a 255,000 square foot open air mall that opened in 1999. It is a highway oriented commercial destination, catering to both local shoppers, and the traveling public.

There is no buffer between the residential land uses that exist in this section and Highway 3. Included in this section is the Villa Paradiso residential subdivisions, consisting of mature and recently developed neighbourhoods surrounding the campuses of Acadamie Ste. Cecile Private School and Our Lady of Mount Carmel Separate School.



EXHIBIT 7: HIGHWAY 3 FROM HOWARD AVENUE TO COUSINEAU ROAD





2.3.4 Highway 3 from Cousineau Road to Lennon Drain

This segment contains residential, institutional, vacant and undeveloped land uses. St. Clair College opened in 1967 with 300 full time students enrolled in applied arts and technology courses. Over the past 40 years, the college has grown and is an important community resource. Today, over 20,000 students are enrolled in programs ranging from business programs, early childhood education, journalism, manufacturing engineering technology, and veterinary technologist. In 2004 the college completed construction on a 408 bed student residence.

St. Clair College features numerous athletic facilities such as sports fields (soccer, baseball, football) and fitness trails for joggers as part of their campus in the area of Cousineau Road and Highway 3. These athletic facilities are offered for rent the general public and community organizations.

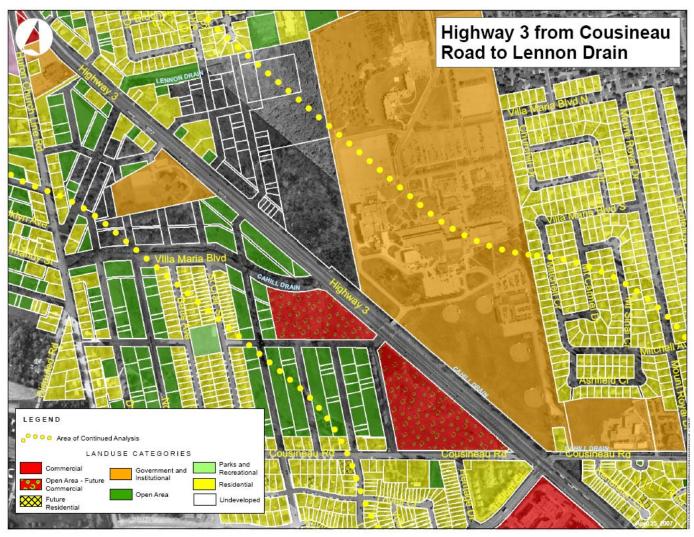
Immediately to the west of St. Clair College are undeveloped parcels that are designated as an environmentally significant area (ESA). Land uses found on the south side of Highway 3 consist of mostly vacant, undeveloped areas, with a few single-family residences with direct access to Highway 3 east of the Lennon Drain. There is one parcel located within this segment that is undeveloped and currently for sale; it is zoned for commercial land uses. The Heritage Park Alliance Church is an institutional use located on the south side of Highway 3. The church has approximately 1,000 worshippers that attend from LaSalle, Windsor, and the surrounding region. The Heritage Park Alliance Church is also surrounded by undeveloped lands.

Lands south of Highway 3 are located in the Town of LaSalle. A portion of these lands are currently undergoing development to residential subdivisions. In the Town of LaSalle's Official Plan, Highway 3 is identified as the major transportation corridor serving this area of the Town. In addition, the Town's plan is to connect Normandy Street to Highway 3 at the St. Clair College main entrance, as outlined in the Town of LaSalle Official Plan Transportation Plan.



EXHIBIT 8: HIGHWAY 3 FROM COUSINEAU ROAD TO LENNON DRAIN





2.3.5 Highway 3/Huron Church Road from Lennon Drain to Pulford Street

The land uses within this segment contain a mixture of single-family residential, open areas, commercial and governmental land uses. Land uses that dominate the northeast side of Highway 3/Huron Church Road include residential land uses, including the Villa Borghese residential subdivision, which consists of single-family residential homes constructed in the early 1990's. The primary intersection in this area is the Todd Lane-Cabana Road West intersection, which provides an important connection between LaSalle and southwest Windsor.

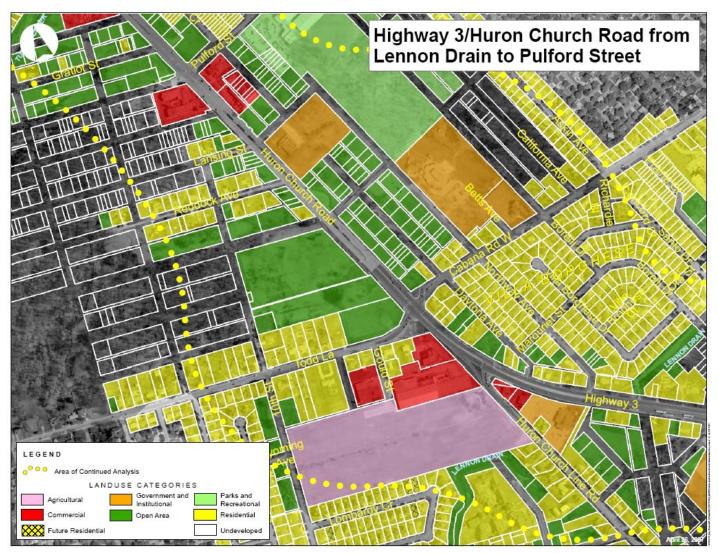
This segment also contains open, undeveloped parcels, an institutional land use (Ministry of Ontario Public Health Laboratory), and some commercial land uses. Located east of Huron Church Road and north of Cabana Road West is the Oakwood Public Elementary School, Oakwood Community Centre, and Oakwood Woods, a natural area that is used by the students and community to observe nature.

Land uses on the south side on Highway 3/Huron Church Road includes an institutional use (Royal Canadian Legion), commercial uses, open lands, and a hotel. North of Todd Lane on the west side of Huron Church Road is the Spring Garden Planning Area as defined in Section 2.2.8. Reddock Street, Lansing Street, Gratiot Street are all predominately residential streets that are located adjacent to Huron Church Road as part of the Spring Garden Planning Area.



EXHIBIT 9: HIGHWAY 3/HURON CHURCH ROAD FROM LENNON DRAIN TO PULFORD STREET





2.3.6 Huron Church Road from Pulford Street to E.C. Row Expressway

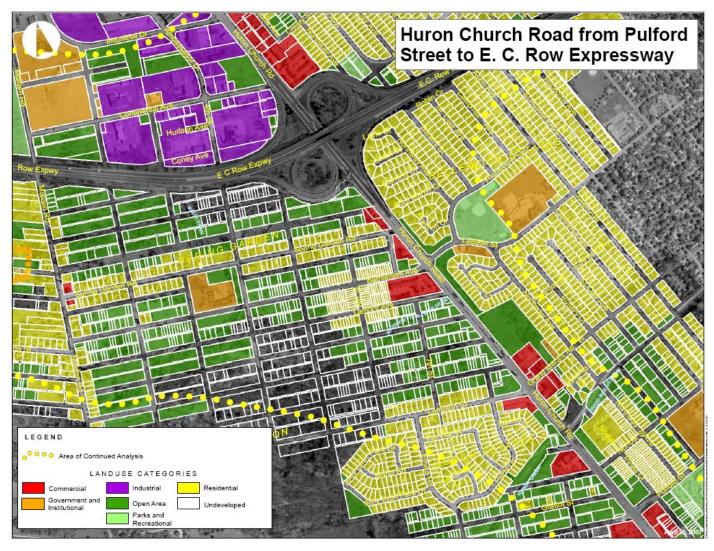
Land uses that exist on the east side of Huron Church Road consist of vacant areas between Pulford Street and Grand Marais Drain. On the east side of Huron Church Road, from north of the Grand Marais Drain to E.C. Row Expressway, there is a large residential subdivision constructed in the 1990's called Bellewood Estates, which consists of single family homes. Also located in the Bellewood Estates subdivision is the Bellewood Elementary School. In addition, the Children's House Montessori Pre-School is located in this area. Other land uses located between Grand Marais Drain and E.C. Row Expressway include open space and some commercial uses. Land uses on the west side of Huron Church Road between Pulford Street and Grand Marais Drain include vacant areas and commercial land uses. From south of Grand Marais Drain to E.C. Row Expressway, land uses include vacant areas, commercial land uses, including a hotel, and the Huron Estates residential subdivision, a single family residential subdivision constructed in the 1990's.

North of the Huron Estates residential subdivision is a recently constructed new residential neighbourhood in the Lamont Avenue and Bethlehem Avenue neighbourhood. The majority of these homes are semi-detached and are constructed on approved lots in the Spring Garden Planning Area (See Section 2.2.8). Other single and multi family homes are located on Spring Garden Road, located between Huron Church Road and Malden Road. This area contains homes that were constructed over several decades, with some that were built in the 1930's and 1940's.



EXHIBIT 10: HURON CHURCH ROAD FROM PULFORD STREET TO MALDEN ROAD





2.4 Malden Road to Ojibway Parkway

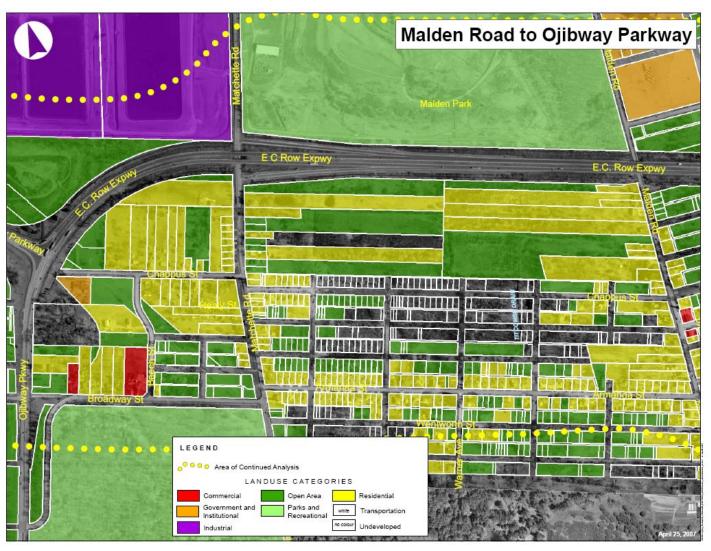
Land uses in this area include natural areas and single-family residential units. Armanda Street is an established residential neighbourhood that consists of mostly older, single family homes. In recent years, additional single-family residences have been constructed at the east end Armanda Street towards Matchette Road. Approximately 20 homes have been constructed between 2004 to 2006. A bed and breakfast business is located on Chappus Street.

North of E.C. Row Expressway is Malden Park, a 70-hectare park, originally a former city landfill consisting of a 90 metre hill that contains paved and wood chipped hiking and bicycle trails. The park also features a reception centre with enclosed patio, naturalized concert center, additional hiking and walking trails and ponds and a toboggan hill. There are also picnic areas with tables and barbeques. The park features the highest elevation in Essex County.



EXHIBIT 11: MALDEN ROAD TO OJIBWAY PARKWAY



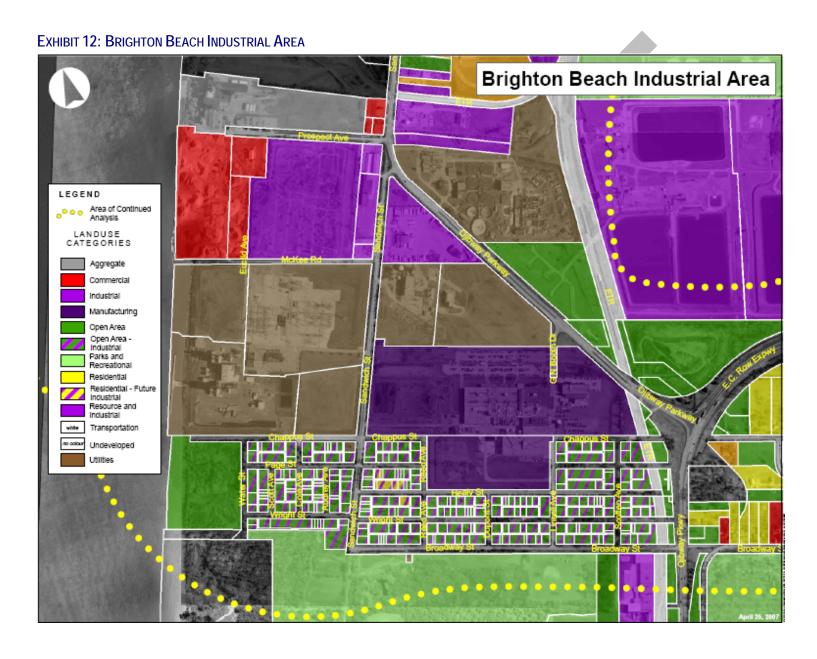


2.4.1 Brighton Beach Industrial Area

The Brighton Beach Industrial area is generally defined as the area bounded by Ojibway Parkway to the east, Broadway Street to the south, the Detroit River to the west, and Chappus Street to the north. The Brighton Beach area was a former residential neighbourhood, comprised of approximately 100 single-family homes surrounded by various industrial land uses. Beginning in the 1970's, the City of Windsor began purchasing the homes in the Brighton Beach area to assemble the land for a future industrial park. The Brighton Beach area is mostly vacant; however approximately half a dozen occupied homes and the original residential street network remains. The Brighton Beach area has been rezoned to allow for industrial uses.

North of the Brighton Beach area is the Nemak Plant, an automotive parts manufacturing facility, and the Windsor Power Plant. Northwest of Brighton Beach is the Ontario Power Generation Brighton Beach Power Station and Hydro One Keith Transformer Station. To the south is the Ojibway Black Oak Prairie, an Area of Natural or Scientific Interest (ANSI) that is protected from development.





2.4.2 Sandwich Portlands

The Sandwich Portlands is located west of Sandwich Street, south of Brock Street, north of Prospect Avenue and adjacent to the Detroit River. The Portlands are adjacent to Sandwich Towne, a largely residential and historic area in the City of Windsor that was originally established in the early 1700s. The historic centre of Sandwich Towne is the intersection of Bedford and Brock Streets, where St. John's Church and Cemetery and Mackenzie Hall, built in 1796, are still located. The retail core area of Sandwich Towne (Mill Street and Sandwich Street) is an area identified within the *Olde Sandwich Towne Community Planning Study* as a priority area for heritage-compatible infill development. It is seen as an area where historic design guidelines could be developed to protect views and vistas, facades, streetscapes, and other features that area unique to Sandwich Towne.

Sandwich Towne is also surrounded by industrial land uses including the Nemak Plant, the Windsor Power Plant, Ontario Power Generation Brighton Beach Power Station, and Southwestern Sales, an aggregate storage company. Located along the waterfront is the Sandwich Portlands, an industrial area that contains several water-dependant businesses. The Sandwich Portlands is designated industrial area that allows for industrial and business uses that require direct water access, multi-modal transportation facilities, docking facilities or dry docks.



EXHIBIT 13: SANDWICH PORTLANDS





3. Evaluation of Land Use Impacts

The following section contains an evaluation of the land use impacts as they relate to the access road, and plaza and crossing alternatives. A detailed discussion impact assessment is included in this section.

Table 1 is the evaluation table for the existing and planned land use have been created to determine whether an alternative is consistent or less consistent with established local land use and zoning regulations. The following is a discussion of the data completed within those tables.



Table 1: Preliminary Analysis of Access Road Alternatives – Draft February 2008

PRACTICAL ALTERNATIVE EVALUATION

Factor: Maintain Consistency with Existing and Planned Land Use

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		
LAND USE (Existing and Planned)	Type of land use impacted: residential	Hectares	16	16	16	17	21	18	21	25	13	26
	Type of land use impacted: commercial	Hectares	9	9	9	10	9	10	9	10	8	12
	Type of land use impacted: industrial	Hectares	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Type of land use impacted: recreational	Hectares	0	0	0	0	0	0	0	0	0	<1
	Type of land use impacted: government and institutional	Hectares	5	1	3	1	3	2	3	3	1	4
	Type of land use impacted: vacant	Hectares	37	38	37	40	37	37	36	36	34	39
	Type of land use impacted: agricultural	Hectares	10	9	9	9	10	10	10	10	8	17
	Availability of vacant/developable land in vicinity of project area	Subjective assessment	Vacant land located near Spring Garden Road and adjacent to Huron Estates residential devleopment is zoned for residential development, with a hold provision which places a hold on the issuance of a building permit until specific development preconditions have been satisfied. Future residential and highway commercial development is planned in the Town of LaSalle on lands opposite St. Clair College.									
	Special Policy Areas		New access route impacts Windsor Special Policy Area for Huron Church Road Corridor; this special policy identifies setbacks to roadway for new residential uses and guides location for new commercial uses along corridor. New access route impacts City of Windsor Spring Garden Planning Area (OPA #5); the policies of this planning area include identifying setback distances for residential and commercial development along Huron Church Road, restrictions on direct access to Huron Church Road for commercial uses and offsets to designated sensitive natural features.									
	Consistency with Land Use	Subjective assessment based on existing and future land use designations	transportation corridor (Highway 3 and Huron Church Road) is	Church Road) is generally consistent with official plan policies for the City of Windsor	Use of existing transportation corridor (Highway 3 and Huron Church Road) is generally consistent with official plan policies for the City of Windsor (infrastructure, land use) and Town of LaSalle (land use).	official plan policies for the City of Windsor	official plan policies for the City of Windsor	Use of existing transportation corridor (Highway 3 and Huron Church Road) is generally consistent with official plan policies for the City of Windsor (infrastructure, land use and Town of LaSalle (land use).	official plan policies for the City of Windsor	Use of existing transportation corridor (Highway 3 and Huron Church Road) is h generally consistent with official plan policies for the City of Windsor (infrastructure, land use) and Town of LaSalle (land use).	official plan policies for the City of Windsor	Use of existing transportation corridor (Highway 3 and Huron Church Road) is generally consistent with official plan policies related to the development strategy; sustainable healthy environment preemway system policies; natural heritage policies; land use; infrastructure; urban design and heritage conservation; greater impact to residential land uses located south of Hwy 3 between Howard Ave and Cousineau Road; impacts to vacant (undeveloped) land located south of Highway 3 between Cousineau and Huron Church Line.
DEVELOPMENT PLANS	Impact to present and approved development applications in the project area	Qualitative and quantitative assessment; number and type		Impact to one large resi	dential development (Mat	chette Rd. and E.C. Row E	Expressway). Residential	development has been h	alted due to the uncertain	nty of the location of the pro	oposed plaza and crossin	g location.

Detroit River International Crossing Study

Table 2: Preliminary Analysis of Plaza and Crossing Alternatives – Draft February 2008

PRACTICAL ALTERNATIVES
EVALUATION

Factor: Maintain Consistency with Existing and Planned Land Use

			Segments-Crossings to Malden Road							
				Pla	za A	Plaza B Plaza B1		Plaza C		
Performance Measure	Criteria/Indicator	Measurement/Units	From Crossing A	From Crossing B	From Crossing C via Ojibway Parkway	From Crossing C via Brighton Beach	From Crossing C	From Crossing B	From Crossing C	
LAND USE (Existing and	Type of land use impacted: residential	Hectares	19	19	19	19	12	12	12	
Planned)	Type of land use impacted: commercial	Hectares	0	1	<1	<1	<1	1	9	
	Type of land use impacted: industrial	Hectares	<1	3	10	10	<1	8	39	
	Type of land use impacted: recreational	Hectares	<1	0	0	0	1	0	0	
	Type of land use impacted: government and institutional	Hectares	<1	<1	<1	4	<1	<1	<1	
	Type of land use impacted: vacant	Hectares	25	23	20	23	26	28	17	
	Type of land use impacted: agricultural	Hectares	0	0	0	0	0	0	0	
	Availability of developable land in vicinity of project area	Qualitative assessment		Availability of vacant land within this area is limited as this area of Windsor is nearly at full buildout. The Brighton Beach area is currently zoned for industrial land uses, and is currently vacant. Non water dependant industrial use could relocate to this area. Vacant industrial lands are also available near the Windsor Airport, located outside the Area of Continued Analysis.	building permit until specific	currently zoned for industrial land uses. Vacant land is also available to the east of the proposed Plaza A location, near the Spring Garden area. These lands have a hold provision whereby a hold is placed on the issuance of a building permit until specific development	combination. Lands that are zoned for industrial uses are located in the proposed Plaza B footprint. Vacant land is available in the vicinity of the access road to Plaza B, south of E.C. Row Expressway. This land is	and the Detroit River shoreline. Vacant land is also located south of the approach road to Plaza B1, in the Spring Garden area. Vacant lands are zoned for future residential development until specific development	Detroit River shoreline. Vacant land is also located south of the approach road to Plaza B1, in the Spring	
	Special Policy Areas Consistency with Land Use	Subjective assessment based on	offsets to designated to protect sen Plaza A is located in a developmen land uses are permitted.	planning area include identifying dommercial development along and E.C. Row Expressway. These sitive natural features. t reserve district where only exisiting	impacts land under planning review Community Planning Report.	planning area include identifying and commercial development along and E.C. Row Expressway. The ensitive natural features. Crossing C v as part of Olde Sandwich Towne at reserve district where only existing	natural features. Crossing C impacts land under planning review as part of Olde Sandwich Towne	Windsor Spring Garden Planning Area (OPA #5); the policies of this planning area include identifying offsets to designated sensitive natural features.	planning area include identifying offsets to designated sensitive natural features. Crossing C impacts lands under planning review as part of Olde Sandwich Towne Community Planning Report.	
DEVELOPMENT PLANS	Impact to present and approved development applications in the project area	existing and future land use designations	consistent with existing land uses. Crossings are located in portland industrial areas and are considered to be consistent with this land use. Plaza location impacts planned residential area west of Matchette Road				alternatives are more consistent with existing land uses. Crossings are located in portland industrial areas and are considered to be consistent with this land use. Access road impacts planned residential area west of Matchette Road.			

Detroit River International Crossing Study

3.1.1 Access Road Alternatives-Land Use Impacts

The access road alternatives vary in right of way width, ranging from approximately 80 metres to 135 metres. Each alternative will impact adjacent land uses in different degrees.

As shown in Table 1, the Parkway Alternative to Plaza A impacts the greatest area of lands currently used for residential land uses, with approximately 26 hectares impacted. Alternative 3 impacts the least amount of residential lands, with approximately 13 hectares impacted. The remaining options impact between 16-26 hectares of residential land uses. This loss in residential land use results in numerous residential properties being acquired. It is anticipated that the displaced homeowners will find other residential properties currently available in Windsor and LaSalle. Highway 3/Huron Church Road has evolved over the years into a major highway. Existing residential land uses along Highway 3/Huron Church Road are not a compatible land use due to the volume of traffic experienced on Highway 3/Huron Church Road, and the numerous curb cuts that allow for direct access to these residential properties. The effect of this loss of residential land use on the neighbourhoods impacted are discussed in the *Practical Alternatives Evaluation Working Paper-Social Impact Assessment*, February 2008.

All the access road alternatives impact similar amounts of commercial land uses, between 8 and 12 hectares. Commercial land uses vary greatly along the study corridor, ranging from highway oriented food establishments, hotels, speciality shops, and an outlet mall. This change in commercial land use presents opportunities for new commercial establishments to relocate to areas along the corridor, including available land located north of E.C. Row Expressway. Commercial land uses could also relocate to existing established commercial areas, thereby intensifying the retail/commercial areas of the city through relocation and redevelopment. A discussion and analysis of the economic impacts of the loss of commercial land uses are discussed in the *Practical Alternatives Evaluation Working Paper-Economic Impact Assessment*.

The industrial land use impacts are similar for each of the various access road alternatives, with less than one hectare being impacted. The recreational land uses impacted by the Parkway Alternative amounts to less than one hectare of impact. In addition, the Parkway Alternative will create over 240 acres of new open space and recreational land. Alternative 1A Option 1 impacts approximately 5 hectares of government/institutional lands, with the majority of the impacts found at the playing fields of St. Clair College. The other access road alternatives impact between one to four hectares of government/institutional land.

Vacant land uses are defined as land that does not currently have any development, and is often mostly vegetated and open. These lands often have a zoning designation attached it that states what its future land use should be. There are between 34 to 40 hectares of land that are vacant and impacted by each of the access road alternatives. Lands that are currently vacant are found along the access road alternatives near Spring Garden Road and adjacent to Huron Estates residential development. These lands are currently undeveloped, and are zoned for future residential development with a hold provision. A hold provision places a hold on the issuance of a building permit until specific development preconditions have been satisfied. Additional vacant land is found along Highway 3 in the Town of LaSalle, where future residential and highway commercial development is planned in the vicinity of Huron Church Line (Cousineau) Heritage to Concession Road 6. Several parcels of land along the access road corridor are currently vacant but zoned for future commercial land use.

Land use impacts for the access road alternatives for agricultural lands were very similar, with between 8 to 17 hectares of land being impacted for each access road alternative.

In summary, the reconstruction of Highway 3 and Huron Church Road within the ACA as a new freeway with service roads will require the widening of the current right of way size. On an end to end basis, the type of land use that would be required for the access road alternatives is mostly residential or vacant in use. Residential land use impacts range from 13 hectares to 26 hectares. This amount of land use that will be required represents a small percentage of the existing land use within each municipality affected. It is anticipated that available residential and commercial land in Windsor and LaSalle will be suitable to accommodate the residential and commercial land uses that will be acquired for this project.

3.1.2 Access Road Alternatives-Assessment of Consistency

Within the ACA, Highway 3 was assumed by the province in 1929 as part of the provincial roadway network. Huron Church Road is under the City of Windsor jurisdiction. The corridor has served as the main access route to the Ambassador Bridge for the past 70+ years. The access road alternatives are consistent with provincial and municipal planning policies by using the existing transportation corridor (Highway 3 and Huron Church Road) as the new extension of Highway 401.

All alternatives promote healthy cities by getting trucks off local streets and separating international and local traffic. All alternatives provide some benefit to the western area of the City of Windsor and the Town of LaSalle in this way.

When reviewing other existing policies outlined within the Provincial Policy Statement (2005), the Parkway alternative is more consistent with the healthy, liveable and safe communities policies than the other alternatives, by accommodating an appropriate range and mix of recreational and open space uses to meet long-term needs, and by ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs. With its additional buffer area, open spaces and opportunities for parks and pathway connections, the Parkway alternative is also consistent with the Public Space, Park, and Open Space policy in that "healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, and facilitate pedestrian and non-motorized movement, including but not limited to, walking and cycling, and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, and open space areas".

When reviewing various goals, objectives and polices stated within the City of Windsor Official Plan, the Parkway Alternative is more consistent with a number of established policies than the other access road alternatives. The Parkway alternative is more consistent with the following policy areas identified by the City of Windsor Official Plan in that it:

- Promotes sustainable and healthy lifestyles
- Provides for development of recreationways and continuous linear open space
- Incorporates natural features
- Provides opportunities for unique open space.

When reviewing the infrastructure policies of the Official Plan, all of the access road alternatives are consistent in that they all provide a "sustainable, effective and efficient transportation system that meets the needs of all users in a manner consistent with a healthy environment and vibrant economy." The Official Plan states that the objective of the infrastructure policy is to protect long term transportation corridors, and establish safe and efficient truck routes within and through Windsor. The infrastructure sections continues by stating that the city should establish and maintain a city-wide walking and cycling network, and the transportation objective should be to uphold and advance Windsor's role as Canada's foremost international gateway. The Parkway Alternative is consistent with this policy in that it protects the long term transpiration corridor, establishes a safe and efficient truck route within and through Windsor, by separating international and local traffic, and by establishing a walking and cycling network on the Parkway alternative, and will advance Windsor's role as Canada's foremost international gateway by creating a state of the art transpiration facility.

The City of Windsor Official Plan also states that the Council shall provide for the development of a "recreationway" which is a planned network of multi-use pedestrian and cycling trails designed to serve recreational movements." The Parkway alternative meets this objective by providing multi-use pedestrian and cycling trails alongside the transportation facility. The policy also states that Council shall provide for the development of the Recreationway by ensuring that the design of the Recreationway complements and connects with the Greenway System and other areas of the city; and that new development proposals and infrastructure undertakings include extensions and improvements to the Recreationway as part of the upfront stages of construction. The Parkway alternative provides a connection to the Recreationway and Greenway System.

Urban design goals outlined within the Official Plan that are consistent with the Parkway alternative include those that strive for development to "achieve comfortable conditions along roads and in public spaces." The proposed design of the Parkway alternative strives to achieve pedestrian friendly spaces along the local access road, and an attractive network of public spaces through the park development on top of the short tunnelled sections. Other policies outlined in the Urban Design section pertain to designing with nature, which stipulates that an infrastructure undertaking retain and incorporate natural features and functions with regard to its function as part of a larger vegetated area, its potential to adapt to post-construction conditions, and its contribution to shading and screening on site and for adjacent properties. The Parkway alternative conforms to these policies in that it connects larger vegetated areas through the naturalized areas above the short tunnelled sections, and the landscaping proposed for the Parkway will shade and screen the transportation facility from adjacent properties.

The City of Windsor Official Plan also contains policies regarding the development of public space within the city. Polices contained within this section state that the use of public space should enhance the image of Windsor, boundaries and edges of pubic space and their access points should be defined, and should form an identifiable, safe and inviting space, and public spaces should be developed to accommodate a broad range of activities. The Parkway alternative will provide new public space through the development of new recreational spaces above the short tunnel sections, and through the development of pedestrian/bicycle trails located alongside the new freeway. Other policies associated with the Urban Design goals in the Official Plan centre on promoting the design of public spaces to define and complement the image of Windsor and its neighbourhoods and creating public spaces which accommodate a range of human social contact. The Parkway alternative supports that goal through the landscape design of its public spaces, which connect neighbourhoods and help define and complement the image of Windsor as

the gateway to Canada.

When reviewing the Official Plan policies for the Town of LaSalle, the Parkway alternative is more consistent with the Recreational land use policies in that this alternative allows for the "design, creation and maintenance of a continuous linear open space system, as part of a comprehensive "greenway system".

Impacts to Land Use

For each of the access road alternatives and options, there are slight variations in the manner in which the new proposed freeway impacts adjacent land uses. Impacts to residential, institutional, and commercial land uses are expected for most of the access road alternatives, due to the urban development that exists along Highway 3/Huron Church Road and the right of way that is needed for the new freeway.

These impacts would result in land use being changed from either residential, commercial, open space, industrial, or vacant to a transportation-related use.

3.1.3 Plaza and Crossing Alternatives-Land Use Impacts

Each of the plaza/crossing alternatives impact between 35 to 45 hectares of existing and planned land use. Residential land uses found within the plaza and crossing alternatives include single family and multi-family residences. Commercial land uses include aggregate supply companies and a fuel supply company. Industrial uses include power generation facilities, transportation carriers, and automotive parts manufacturing facilities. Recreational land uses include neighbourhood parks. Government and institutional land uses include the armoury and police training facility, and an environmental interpretation centre. Vacant land uses are those that are undeveloped; or have recently been developed but do not contain any structures, and agricultural land uses are those that are contain crops grown annually.

As shown in Table 2, Plaza C from Crossing C impacts the least amount of residential land uses, approximately 12 hectares, while plaza and crossing alternatives Plaza A from Crossings A, B and C impact the most amount of residential lands, averaging approximately 19 hectares. In addition, Plaza A is located within the zoning district called the development reserve district, where the permitted uses for this area include existing dwellings or any accessory use to the existing dwelling. Therefore, only existing uses are permitted. The development of a new customs plaza in this will be highly inconsistent with the existing zoning. However, these lands will be owned in the future by the provincial and federal governments, and therefore a new zoning category will apply. The majority of commercial land uses were impacted in the Plaza C Crossing C alternative, with approximately nine hectares impacted. For each of the other plaza-crossing alternatives, there was approximately one hectare of impact of commercial land uses.

Impacts to industrial land uses were determined to be the highest in the Plaza C Crossing C alternative (39 hectares), while industrial land use impacts were less than one hectare with the Plaza A Crossing A alternative. Impacts to recreational land uses were similar in all the plaza crossing combinations, with Plaza A Crossing A, and Plaza B Crossing C impacting approximately one hectare of recreational lands. Government and institutional land use impacts are similar for all the plaza crossing options, with less than one hectare of impacts. Vacant land use impacts are similarly reported across the majority of the plaza and crossing alternatives, with the exception of Plaza B1 and Crossing B, with approximately 28 hectares impacted, and with Plaza C Crossing C with approximately 17 hectares impacted. As stated previously, lands that are currently vacant often have zoning

attached to them that allow for the development of industrial parks, or commercial businesses.

There are no agricultural land uses in the vicinity of the plaza crossing alternatives.

Crossing C impacts lands under planning review as part of the *Olde Sandwich Towne Community Planning Report* (2006). The *Olde Sandwich Towne Community Planning Report* identified the Sandwich industrial portlands as important industrial lands that is to be targeted for future development for industrial uses. The presence of Crossing C would not exclude these lands from being developed as industrial, however, this crossing will impact a portion of the lands beneath the bridge structure and potentially limit the ability of those lands to be developed.

In summary, land use impacts in the plaza locations range from developing on mostly vacant, vegetated lands surrounding residential uses to developing on lands that are currently occupied by various industrial land uses. The development of a new customs plaza in the vicinity of Plaza A, which currently contains a mixture of vacant and residential land uses, is not considered compatible with the existing land uses. The development of a new customs plaza and crossing in vacant or industrial areas is viewed as compatible with the existing land use types. An evaluation of industrial-related land use impacts for the plaza and crossing alternatives is found in the *Practical Alternatives Evaluation Working Paper-Economic Impact report*.

3.1.4 Plaza and Crossing Alternatives-Assessment of Consistency

For the plaza/crossing options, the Plaza A is less consistent with existing land use policy, due to the close proximity of the residential areas of Armanda Street, Malden Road, and Matchette Road. The location of Plaza A is not compatible with the current land use policies and zoning for this area. An inspection plaza and access road has the potential to conflict with the neighbourhood characteristics of the Armanda/Chappus/Matchette Road neighbourhoods and may disrupt the manner in which this area functions as a cohesive neighbourhood.

Plazas B and B1 are located in the former Brighton Beach residential neighbourhood, which is currently zoned for industrial land uses. Heavy industrial land uses such as Nemak Automotive and Brighton Beach Power surround these sites and are considered more compatible with the activities that are associated with an inspection plaza.

Plaza C from Crossing C is located the closest of the three crossing alternatives to the community of Sandwich Towne, a historic area of Windsor. Sandwich is an area that contains a variety of historic housing types, in addition to historically significant churches and other public buildings. Sandwich is a densely settled residential area, and also contains large industrial properties, mostly found along the Detroit River. Plaza C from Crossing C impacts the most industrial land out of all the plaza/crossing combinations; approximately 38 hectares. Plaza C is located adjacent to the Brighton Beach Industrial Park, and the Detroit River. Plaza C disrupts water-dependant industrial land uses, namely those that rely on their operations, deliveries, and product transport on the ships that traverse the Great Lakes.

In addition, Crossing B also impacts water dependant industrial land uses. Water dependant industrial land uses are often hard to relocate; due to the lack of available industrial waterfront property. Therefore, Plaza C from Crossing C is compatible with existing land use policies, however, relocating water-dependant industrial land uses may

be challenging.

Impacts to Land Use

Plaza A will introduce a change in land use from the current natural/residential area to a plaza area with vehicular and truck traffic parking and driving through an area that currently does not experience such traffic movements. It will also impact areas that are currently undeveloped and open, disrupting the park-like rural settling that currently exists.

Crossings located in the Sandwich Portland areas are considered to be consistent with this land use. Crossings and plazas located in proximity to industrial uses and away from residential areas are more consistent with established land uses.

The impacts related to changes in land use as a result of the implementation of a new access road, inspection plaza, and crossing would include locating land uses in a different parts of the city or county that would not expect to see development in the immediate future. New development may occur in areas that were previously vacant, and changes in current zoning may need to occur to accommodate the new development.

Currently, with the exception of water-dependant industrial land uses, there is developable industrial land in the City of Windsor that could accommodate the displaced industrial land uses. The loss of residential land uses would result in the need to house individuals and families in other areas of the city, or in some cases, neighbouring towns and cities where residential development can occur. Currently, Windsor has available residential property and the Town of LaSalle is undergoing new residential development that includes single and multi family residential units.



4. Summary

Access Road Alternatives

Land use impacts for the access road alternatives are generally very similar, with the exception of impacts to residential land uses, which vary from impacting 13 hectares (Alternative 3) to 26 hectares (Parkway to Plazas A).

When comparing the impacts to the remaining land uses found along the access road corridor (commercial, industrial, recreational, governmental and institutional, vacant and agricultural land uses), similar land use impacts exist among the alternatives, with the exception of residential and vacant land uses. Residential land use impacts range from 13 to 26 hectares, and impacts to vacant land uses vary by six hectares. Losses to vacant lands are viewed as less of an impact, since there is no land use that would have to be replaced elsewhere in the municipality, and no building or structure would have to be removed from the property.

The loss of commercial land uses along the access corridor for all the alternatives is comparable, with a difference among the alternatives of only four hectares impacted. The loss of commercial land uses along the corridor could be replaced elsewhere in the corridor, at key intersections or where land is available and zoning permits. Where available, commercial land uses displaced by the access road alternatives may opt to relocate to available commercial land found north of E.C. Row Expressway on Huron Church Road. This will intensity to the commercial uses that exist there.

From a land use perspective, for the access road alternatives, Alternatives 1A, 1B and 3 impact the least amount of land uses overall. However, when examining the various Official Plan policies, the Parkway alternative is more consistent with the development strategy, healthy communities, environment, land use, infrastructure, urban design and heritage conservation Official Plan policies of the City of Windsor and greenway land use policies of the Town of LaSalle. The Parkway alternative provides greater opportunities to connect communities and provide new open space and parklands in areas that previously did not have such land uses. In addition, the Parkway alternative provides opportunities to create new recreationway land uses, as supported in the town of LaSalle Official Plan. In summary, the Parkway alternative is preferred from a land use perspective since it provides greater opportunities to develop new recreation and open space land uses for both the city of Windsor and Town of LaSalle, which is more consistent with the existing official plan policies for both municipalities.

Plaza Crossing Alternatives

Land use impacts to the plaza and crossing alternatives vary, based on what the current and the adjacent land uses are. Land use impacts for each of the plaza crossing alternatives impact between 17 to 28 hectares of vacant and undeveloped land uses. The Plaza A site is not consistent with the existing residential land uses in this area.

Crossings B and C combined with Plaza B and B1 impact eight hectares of industrial land, which is significantly lower when compared to Plaza C from Crossing C, which impacts 39 hectares of industrial land. Although there are impacts to lands that are currently used for industrial purposes, these land uses could be relocated to other areas of Windsor where current zoning permits. With the exception of water-dependant industrial land uses, there is developable industrial land in Windsor and surrounding municipalities that could

accommodate the displaced industrial land uses created by the plaza crossing alternatives.

Plazas B, B1 and C are more preferred than Plaza A in that they are located in a predominately industrial area, and away from residential areas, and are therefore considered to be more consistent with current land use policies. Lands at the Plaza B site are currently vacant; however, this area is zoned for future industrial land uses and is therefore a compatible land use for a future customs plaza.

Crossings A, B and C are located in primarily industrial and vacant areas and are therefore equally preferred from a land use perspective. However, Crossing C is located closer to residential land uses, and is less compatible with current land uses.

Crossing B combined with Plaza B and B1 are preferred from a land use perspective. They are located in predominately industrial areas which is a compatible land use to a new plaza and crossing, and they are not located adjacent to residential areas.

In conclusion, among the plaza-crossing combinations, Plaza B1/Crossing B is preferred over the Crossing C alternatives. The Plaza A alternatives are the least preferred.



APPENDIX A

