MEDIA RELEASE: Friday, December 2, 2011, 4:30 p.m.

REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA

Tuesday, December 6, 2011
1:00 P.M.
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. MOTION TO RECONVENE IN OPEN SESSION

2. DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

3. DELEGATIONS
   a) Rosemary McCormick, Re: E-11-115, Removal of Rumble Strips on Moser-Young Road (Regional Road 14) and Notre Dame Drive (Regional Road 12)

4. REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

   COMMUNITY PLANNING
   a) P-11-074, Region of Waterloo (King/Victoria) Transit Hub 1

   COMMUNITY SERVICES
   c) P-11-093, Scenic Roads and Special Character Streets Resource Document (staff presentation) (Resource Document distributed separately to Councillors only) 9

   TRANSPORTATION PLANNING
   d) P-11-069, Proposed Modifications to Regional Implementation Guideline for Road Allowance Dedications On and Adjacent to Known and Potentially Contaminated Sites 17
   e) P-11-094, GO Transit Rail Service Launch and Fare Integration Agreement 27
   f) P-11-095, TravelWise Progress 2011 38
REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

DESIGN AND CONSTRUCTION

  g) **E-11-117**, Bloomingdale Road Improvements, Kraft Drive to Bridge Street, City of Kitchener - Approval of Project

  h) **E-11-119**, Highland Road Improvements, Patricia Avenue to Westmount Road, City of Kitchener - Approval of Project

RAPID TRANSIT

  i) **E-11-097**, Preliminary Preferred Rapid Transit Procurement and Delivery Option (staff presentation)

TRANSPORTATION

  j) **E-11-109**, Lane Designation By-Law Amendment for Pinebush Road (Regional Road 39) at Smart Centres Entrance, City of Cambridge

  k) **E-11-115**, Removal of Rumble Strips on Moser-Young Road (Regional Road 14) and Notre Dame Drive (Regional Road 12)

  l) **E-11-116**, Safety Review of Fairway Road at Thaler Avenue, in the City of Kitchener and Floradale Road at Line 86/Church Street, in the Township of Woolwich

WASTE MANAGEMENT

  m) **E-11-111**, Proposed Waste Management User Fee Changes

WATER

  n) **E-11-110**, Extension of Consultant’s Assignment for the Surface Water Quality Monitoring Program

  o) Kitchener Pressure Zone 4 Trunk Watermain Study (Ottawa Street to future Strasburg Road) – Public Information Centre Information Package

5. INFORMATION/CORRESPONDENCE

  a) **Memo** Re: Highway 401 Improvements (Hespeler Road – Wellington County/Halton Region Boundary) – Public Information Centre #2

  b) **Memo** Re: Highway 7/8 Construction Staging – Fischer-Hallman Road to Courtland Avenue – 2011 to 2015
6. OTHER BUSINESS

a) Council Enquiries and Requests for Information Tracking List

7. NEXT MEETING – January 10, 2012

8. ADJOURN
# NEXT MEETINGS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning and Works Committee</strong></td>
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</tr>
<tr>
<td>January 10, 2012</td>
<td>9:00 A.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>January 31, 2012</td>
<td>9:00 A.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
</tr>
<tr>
<td><strong>Planning, Housing and Community Services</strong></td>
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<tr>
<td>December 6, 2011</td>
<td>3:00 P.M.</td>
<td>Highway 401 Improvements (Hespeler Road-Wellington Count/Halton Regional Boundary Public Information Centre #2)</td>
<td>Hespeler Memorial Arena 640 Ellis Road West Cambridge, Ontario</td>
</tr>
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<td>December 8, 2011</td>
<td>3:00 P.M.</td>
<td>Highway 401 Improvements (Hespeler Road-Wellington Count/Halton Regional Boundary Public Information Centre #2)</td>
<td>Puslinch Community Centre 29 Brock Road South Aberfoyle, Ontario</td>
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<tr>
<td><strong>Transportation and Environmental Services</strong></td>
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<tr>
<td>December 13, 2011</td>
<td>5:00 P.M.</td>
<td>Kitchener Zone 4 Trunk Watermain – Public Information Centre</td>
<td>Huron Heights Secondary School, 1825 Strasburg Road Kitchener, ON N2R1E3</td>
</tr>
</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D10-20

SUBJECT: REGION OF WATERLOO (KING/VICTORIA) TRANSIT HUB

RECOMMENDATION:

THAT Regional Council appoint a Regional Councillor to the Region of Waterloo's King/Victoria Transit Hub Project Team;

AND THAT Regional Council request City of Kitchener Council to appoint a City Councillor to the Region of Waterloo's King/Victoria Transit Hub Project Team.

SUMMARY:

Over the past several years, the Region has purchased a number of properties located at or near the intersection of King and Victoria Streets in the City of Kitchener for the purpose of development of a transit hub. The project is being undertaken in four phases, site preparation, determination of the form of development, determination of the procurement model and site construction. Phase 1 of the project is being undertaken by a multi-departmental team under the direction of the Commissioner of Planning Housing and Community Services. A Project Team consisting of Regional staff, City of Kitchener staff, political representatives, and agencies anticipated to use the transit hub once constructed, is recommended to be established to oversee Phases 2 and 3 of the project. Oversight of Phase 4 of the project (construction of the multi-model transit hub and associated private or public sector uses) will be dependant on the procurement model chosen as part of Phase 3.

Various studies are currently being undertaken to ready the site for future use as a transit hub. The site is also currently being prepared for use as a temporary parking area to facilitate the extension of GO Rail service to the Region in the near future.

REPORT:

Project Background

Over the past several years the Region has purchased a number of properties located at or near the intersection of King and Victoria Streets in the City of Kitchener for the purpose of development of a transit hub that could be constructed on the resulting parcel of land in order to connect the future rapid transit system and Grand River Transit to inter-city bus and rail systems serving the Region. As part of the process, the Region targeted a number of properties totaling approximately 1.6 hectares (four acres) of land for purchase, with the majority of these lands intended to play key roles in the development of the facility.

Project Description

Subject to future decisions by Regional Council, the proposed King/Victoria Transit Hub would be a facility designed to serve the intra- and inter-Regional transportation needs of the public by bringing together access to and interconnections between various forms of transportation into one centralized
facility. This project involves development of significant transportation infrastructure including: new train platforms to serve inter-city GO train and VIA Rail services; bus bays to support Grand River Transit (GRT) and intercity bus services such as GO bus and other private sector carriers; underground and at-grade connections to and from the new Regional rapid transit system (light rail); as well as the facilities necessary to support and integrate other transportation modes such as taxis, car share, cycling and pedestrians. The proposed King/Victoria Transit Hub will potentially be integrated into a combination of public and private sector higher density developments on the site, possibly including mixed use commercial/office development served by a large multi-level underground commercial parking structure.

**Project Phases / Management**

While there will be crossover among activities and particularly timing, the project breaks down into four relatively distinct components:

- **Phase 1** - acquisition and preparation of the site for development, including its temporary use as a site for parking associated with GO Rail service (this phase will include a public consultation process related to the future use of the property as part of the Planning Act process);

- **Phase 2** - determination of the form and scale of development of the site, including development of the associated business case and public consultation process;

- **Phase 3** - determination of the procurement model for the development (e.g.: public sector owned and operated, public private partnership (commonly known as a P3) or some alternative combination of the two; and

- **Phase 4** - construction through to opening of the facility.

Phase 1 is currently being undertaken under the direction of the Commissioner of Planning Housing and Community Services with Kevin Eby serving as the Project Director. A small team of representatives from Community Planning, Transportation Planning, Facilities Management and Legal are currently working on the completion of Phase 1. Completion of this phase of the project is being undertaken in coordination with four other projects affecting lands in the vicinity of the proposed hub, the King Street grade separation, the Weber Street grade separation, the rapid transit initiative and the extension of GO Rail service to the City of Kitchener.

Phases 2 and 3 are intended to be undertaken by the same group of Regional staff in consultation with a Project Team. It is intended that the first Project Team meeting will be held early in the new year. A draft Project Charter has been developed for consideration by the Project Team as part of the first meeting. It is a recommendation of this report that there be political representation from both Regional and City of Kitchener Council on the Project Team. In addition to the political representatives, the Project Team would include Regional staff representation from Transportation Planning, Transit Services, Facilities, Rapid Transit Engineering, the King Street Grade Separation Project Team, Legal Services, Financial Services, Marketing and Communications, and Cultural Heritage Planning, City of Kitchener representation from Planning, Engineering, and Economic Development as well as representatives from GO Transit, VIA Rail and CN Rail.

The process for completion and management of Phase 4 of the project is entirely dependent upon the procurement model selected in Phase 3.

**Progress to Date**

1) Planning Applications – Pre-consultation processes have been held with City staff and an application for site plan approval for temporary parking to support extension of GO rail into the
community has been submitted. In addition, a pre-consultation session has also been held with City staff regarding the submission of an Official Plan Amendment and Zoning By-Law Amendment for the site. Formal applications are being prepared and are expected to be submitted to the City of Kitchener early in the new year. The intent of these applications is to allow for the broadest range of uses and higher density appropriate for the site so as to eliminate constraints moving into the design and procurement processes. The GSP Group has been retained to assist with these Planning Act application processes. Regional Council will be kept apprised of these applications, and Regional staff will seek any required direction prior to key decision points occurring.

2) Environmental Assessment – The process for undertaking the required environmental assessments for the proposed transit hub is currently being investigated, with the resulting Environmental Assessment processes anticipated to be completed in 2012.

3) Soil / Groundwater Investigation and Remediation – Preliminary site investigations have been undertaken as part of the on-going activity on the site. Given the known contamination of the groundwater from a former industry in the area (which is currently the subject of on-going remediation efforts secured as part of the development of the former industrial site. lands), development of the property will require the completion of a Risk Assessment completed in accordance with Ministry of the Environment processes. It is currently anticipated that a consultant will be hired early in the new year to prepare and submit the risk assessment to the Ministry for approval.

4) Heritage Impact Assessment - The lands proposed for use as a transit hub are located within the centre of the historic industrial area of “Busy Berlin”, which has been identified as the Warehouse Design District by the City of Kitchener in their Downtown Strategic Plan. The lands contain the Rumpel Felt Co. building, which has been identified for its heritage value by the City of Kitchener and are adjacent to other listed and Ontario Heritage Act (OHA) designated properties (410 King St W., Kaufman Lofts (OHA Designated); 51 Breithaupt Street, Breithaupt Block (listed as Non-Designated on Municipal Heritage Register); and, 283 Duke Street West (Heritage Kitchener Inventory)). Consideration of cultural heritage conservation on the site is being carried out through two separate studies: a Heritage Inventory, Context Analysis and Concept Development undertaken on behalf of the Region of Waterloo; followed by a site specific Cultural Heritage Impact Assessment (CHIA) which will be required by the City of Kitchener as part of the development review process.

5) Preliminary Site Design and Pedestrian / Bicycle Movement Analysis – One of the key functions of the facility is the facilitation of the movement of people between various forms of transportation. Regional staff is currently drafting the terms of reference for a study, to be undertaken in consultation with City of Kitchener staff to help inform the design of the entrances and concourse levels of the transit hub, the pedestrian and cycling aspects associated with the King Street Grade separation, the location of bus stops near the transit hub, the development of cycling facilities to and around the facility, as well as the future operation of the Victoria Street intersection. This study is anticipated to be completed by the end of August 2012.

An architectural screening will also be completed as part of the process in order to determine the infrastructure requirements of each transportation service provider and to determine where overlap or points of conflict may occur. The potential users of the site requiring facility or infrastructure accommodation include:

- Grand River Transit (conventional)
- Regional Rapid Transit
- GO Transit (train and bus)
- VIA Rail
- CN Rail
- Intercity bus providers
- Local taxi companies
- Local bicycle user groups
6) Temporary Use for GO Parking - An application for site plan approval has been submitted to
the City to use the site temporarily to meet parking needs for GO Transit when GO Rail service begins
in December 2011 (please see Report No. P-11-094). GO Transit will be temporarily using the VIA
rail station currently located at Weber St. and Victoria to facilitate the extension of GO Rail service
until such time as the facility is constructed and ready for their use. The potential to change this
temporary surface parking to permanent underground parking in the future will be evaluated as part of
the studies noted above.

Next Steps

Regional staff will continue with the completion of Phase 1 of the project as described in this report.
The initial meeting of the Project Team struck to oversee Phases 2 and 3 of the project meeting will
be scheduled for late January 2012. The draft Project Charter and proposed timelines for the project
will be finalized through the Project Team process at that time.

Area Municipal Consultation/Coordination

City of Kitchener staff participated in a tour and workshop that explored ideas for development of the
site in July 2011, including possible uses in addition to transportation facilities. City of Kitchener staff
has and continues to be regularly consulted with at each stage of the process and is overseeing the
review and approval of the required Planning Act applications. The City of Kitchener will be
represented by on the Project Team by three staff members, one each from planning, engineering
and economic development.

CORPORATE STRATEGIC PLAN:

This initiative directly supports Strategic Action 3.4.1, “Implement the multimodal transportation
hub at Victoria and King Streets”.

FINANCIAL IMPLICATIONS:

Funding for the completion of Phase 1 of the transit hub project has been allocated to the project from
the $25 million funding previously approved by Regional Council for the implementation of the Rapid
Transit project and is funded through the 1.5% tax allocation to the RTMP.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Transportation Planning, Legal Services, Facilities Management, Finance and the Rapid
Transit Division of the Transportation and Environmental Services Department has been consulted in
the preparation of this report.

ATTACHMENTS:

Attachment 1 – Locational Map of the Transit Hub

PREPARED BY: Kevin Eby, Director, Multi-Modal Transit Hub

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR OCTOBER 2011

RECOMMENDATION:


SUMMARY:

In accordance with the Regional By-law 01-028, as amended, the Commissioner of Planning, Housing and Community Services has:

1. Draft approved the following plans of condominium; and
2. Released for registration the following plan of subdivision and plans of condominium.

REPORT:

City of Cambridge

1. **Registration of Draft Plan of Condominium 30CDM-10106**
   - Draft Approval Date: December 3, 2010
   - Phase: Phase 3
   - Applicant: Preston Meadows
   - Location: 505, 535 and 565 Margaret Street
   - Proposal: To permit the development of 16 townhouse units.
   - Processing Fee: Paid October 27, 2011

2. **Registration of Draft Plan of Condominium 30CDM-10104**
   - Draft Approval Date: June 30, 2011
   - Phase: Phase 1
   - Applicant: AAK Development Group Inc.
   - Location: 25 Concession Street
   - Proposal: To permit the development of 38 townhouse units.
   - Processing Fee: Paid October 25, 2011
   - Commissioner’s Release: October 31, 2011
City of Kitchener

1. Registration of Draft Plan of Subdivision 30T-94001

Draft Approval Date: July 5, 1996  
Phase: Entire Plan  
Applicant: York Nursery  
Location: Rauch Court  
Proposal: To permit the development of 14 semi-detached units.  
Processing Fee: Paid October 3, 2011  
Commissioner’s Release: October 12, 2011

City of Waterloo

1. Draft Approval of Plan of Condominium 30CDM-11405

Applicant: Waterloo Living 3 Inc.  
Location: 46-50 Marshall Street  
Proposal: To permit the development of 21 apartment condominium units.  
Processing Fee: September 21, 2011  
Commissioner’s Approval: October 5, 2011  
Came Into Effect: October 26, 2011

Residential Subdivision Activity January 1, 2011 to October 31, 2011

<table>
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<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
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<td>Wellesley</td>
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<tr>
<td>Region of Waterloo</td>
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<td>944</td>
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*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

For comparison, the following table has also been included:

Residential Subdivision Activity January 1, 2010 to October 31, 2010

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
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<td>*Kitchener</td>
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<td>Wellesley</td>
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<tr>
<td>Region of Waterloo</td>
<td>1,431</td>
<td>891</td>
<td>119</td>
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*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.
Area Municipal Consultation/Coordination

These planning approvals, including consultation with Area Municipalities, have been completed in accordance with the Planning Act. All approvals contained in this report were supported by the Area Municipal councils and/or staff.

CORPORATE STRATEGIC PLAN:

This report reflects actions taken by the commissioner in accordance with the Delegation By-law adopted by Council. The activities described in this report are operational activities with the objective of Focus Area 2: Growth Management and Prosperity.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

PREPARED BY: Andrea Banks, Program Assistant

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D25-05

SUBJECT: SCENIC ROADS AND SPECIAL CHARACTER STREETS RESOURCE DOCUMENT

RECOMMENDATION:

For information.

SUMMARY:

In 2010, Regional Council adopted the Context Sensitive Regional Transportation Design Guidelines (P-10-051) for Regional transportation corridors, to provide design standards for planning and designing complete streets that include space for all modes of transportation. The Guidelines state that, "Historic downtowns, heritage buildings, and natural spaces are some of the most valued assets of any community" and that the design of Regional transportation corridors through such areas should reflect and protect the specific history and/or visual or natural character of each place.

To support this initiative, a Scenic Roads and Special Character Streets Resource Document has been prepared as a supplement to the Context Sensitive Regional Transportation Design Guidelines to provide additional guidance and support to Regional staff when planning, designing, constructing and maintaining sections of Regional transportation corridors that have been identified as Special Character Streets or Scenic Roads.

The Resource Document was prepared by Regional staff in Cultural Heritage, Transportation Planning, Transportation Engineering and Design and Construction, with the support of the Heritage Planning Advisory Committee (HPAC), and is based on earlier research, existing technical documents and current best practices within the Region.

The Resource Document includes:

- a list of Regional corridors that are Scenic Roads or Special Character Streets;
- information to assist with the identification of scenic and special features during the corridor design process; and
- recommendations to conserve identified scenic and special character features.

This Resource Document references only Regional roads. However, Area Municipalities may make use of this information as they develop Official Plan policies in support of Regional Official Plan policies 3.G.28 and 3.G.29, which encourage Area Municipalities to establish policies protecting the value of scenic roads in their Official Plans.

REPORT:

In 2010, Regional Council adopted the Context Sensitive Regional Transportation Design Guidelines (P-10-051, June 8, 2010) to provide design standards for planning and designing
complete streets that include space for all modes of transportation. Scenic roads and special character streets were recognized within these Guidelines, which stated that historic downtowns, heritage buildings and natural spaces are some of the most valued assets of any community. The Guidelines recommend that the design of Regional transportation corridors through such areas should reflect and protect the specific history and/or visual or natural character of each place.

The Regional Official Plan (ROP) policy 3.G.27 states that many Regional Roads are characterized by natural, cultural heritage and recreational features that contribute to the scenic value of Regional Roads. During any construction or upgrades, the Region will, wherever feasible, endeavour to protect and/or enhance the scenic value of such features along Regional Roads. The ROP also states that Area Municipalities are encouraged to establish policies in their Official Plans to protect the scenic value of both Regional Roads and roads under their jurisdiction.

**Resource Document**

A *Scenic Roads and Special Character Streets Resource Document* has been developed to be used in conjunction with the *Context Sensitive Regional Transportation Design Guidelines*. The Resource Document provides additional guidance to Regional staff when planning, designing, constructing, and maintaining sections of Regional Transportation Corridors that have been identified as Special Character Streets or Scenic Roads. The document was prepared by Regional staff in Cultural Heritage, Transportation Planning, Transportation Engineering and Design and Construction, with the support of the Heritage Planning Advisory Committee (HPAC), and is based on earlier research, existing technical documents and current best practices within the Region.

The terms “scenic road” and “special character street” refer to those Regional transportation corridors which are characterized by natural, cultural heritage and recreational features that contribute to their scenic value or special character. Rural corridors are referred to as roads; built-up corridors and crossroads located in both rural and urban settlement areas are referred to as streets.

The document identifies and provides recommendations for the treatment of Scenic Roads and Special Character Streets that are part of the Regional road system within the Region of Waterloo. Area municipal roads, private roads and Provincial highways may also be found to be scenic or of special character, but are not addressed specifically in this document.

The Resource Document is organized into four sections:
1. Background Information
2. Identification of Scenic Roads and Special Character Streets
3. Policy and Planning Framework
4. Recommendations for the Conservation of Scenic Roads and Special Character Streets

**Scenic Road and Special Character Street Identification**

The identification of Scenic Road and Special Character Street segments was undertaken by the Heritage Planning Advisory Committee (HPAC) and was based on the identification process developed and tested for the *Region of Waterloo Scenic Roads Handbook* in 1995.

The three step identification process included:
1. Establishment of an initial list of potential scenic roads and special character streets;
2. Physical assessment of each individual corridor section; and
3. Evaluation of each corridor segment in terms of the eight categories of scenic attributes set out in the Scenic Roads Handbook - vegetation, road segment, landform/relief, water, cultural built environment, cultural landscape, traffic and context.
During this process, HPAC members drove, documented and photographed each corridor segment. A full copy of this documentation is on record with the Regional Cultural Heritage Planner.

It was found that: thirteen sections of Regional road corridor are extremely scenic; thirteen sections are very scenic; fourteen sections are scenic; and sixteen sections have some scenic qualities. The identified scenic roads and special character streets are listed and mapped as part of Section 4.0 and in Appendix A of the Resource Document, and are shown in Attachment 1 to this report.

With respect to the Context Sensitive Regional Transportation Design Guidelines corridor classifications: eleven of the scenic roads and special character streets identified are classified as Neighbourhood Connectors – Main Streets; sixteen as Rural Village Main Streets; and the remainder as Rural Connectors.

**Use of the Resource Document**

The Resource Document provides recommendations for the conservation of the scenic qualities of the identified Regional corridors, and is intended to be used by Regional staff involved in transportation corridor design, land use planning, and maintenance and operations. The document contains both general recommendations, and recommendations based on corridor classification.

The recommendations within the Resource Document do not override established design criteria or engineering judgment in regards to safety, capacity or other engineering requirements. Some of the recommendations have budget implications beyond the usual roads budget, and would, if identified as a priority, need to be taken to Regional Council for consideration and/or be considered by the appropriate Area Municipality or service provider.

Although the document does not deal with lands outside of the corridor right of way, it is noted that the scenic qualities of a transportation corridor should be considered by Regional and Area Municipal land-use planners when designing new urban areas and in the development of Official Plan policies, zoning by-law regulations and site plan control guidelines in order to better conserve the scenic attributes of the identified corridors.

The document may also be of interest to citizens and elected officials involved in transportation and land use decisions, and private developers, consultants, architects, landscape architects, planners and engineers involved in corridor design and land use planning.

The Scenic Roads and Special Character Streets Resource Document has been distributed to Councillors and Senior Staff. The document is also available in hard copy in the Councillors’ library and in Planning, Housing and Community Services.

**Area Municipal Consultation/Coordination**

This report and a copy of the Scenic Roads and Special Character Streets Resource Document has been circulated to the cultural heritage staff of the Area Municipalities and may be useful in developing Official Plan Policies, considering heritage properties along Regional roads, and where Regional and local roads intersect.

**CORPORATE STRATEGIC PLAN:**

The development of this Resource Document supports the Region’s 2011-14 Strategic Plan priority 2.4 “Promote and enhance arts, culture and heritage”, and directly contributes to the related action 2.4.3 “Establish a Regional Heritage Conservation Toolbox”.
FINANCIAL IMPLICATIONS:

This resource document consolidates existing practice related to the conservation of scenic corridors, and through its implementation will result in increased staff efficiency. Some of the recommendations in the document could result in additional costs that would need to be accommodated in specific Regional road projects.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation Planning staff and Design and Construction staff were consulted and provided valuable input during the creation of this document. The conservation of scenic roads through the recommendations included within the Resource Document supports the Greenlands Network Implementation Guideline (ROP 7.B.3).

ATTACHMENTS:

Attachment 1 - Regional Transportation Corridors Identified as Scenic Roads and Special Character Streets

PREPARED BY:  Kate Hagerman, Cultural Heritage Principal Planner

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
<table>
<thead>
<tr>
<th>Region</th>
<th>Neighbourhood Connectors – Main Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Scenic</td>
<td>Galt – Main St. (George St. to Water St. (including Queen’s Square))</td>
</tr>
<tr>
<td></td>
<td>St. Jacobs – King St. N.</td>
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<td>New Hamburg – Waterloo St., Huron St. and Peel St</td>
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<td>Ayr – Northumberland St. and Stanley St.</td>
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<tr>
<td>Rural Village Main Streets</td>
<td>Philipsburg – Erb’s Rd.</td>
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<td>Wellesley – Queens Bush Rd. and Nafziger Rd.</td>
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<td>Rural Connectors</td>
<td>Waterloo St. (Nafziger Rd. to New Hamburg (including Luxemburg))</td>
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<td>Weimar Ln. (Kressler Rd. to Bamberg)</td>
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<td>Hawkesville Rd. (Three Bridges Area - Kressler Rd. to St. Jacobs)</td>
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<td>Blair Rd. (Blair Village)</td>
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<td>Ament Ln. (Kressler Rd. to Linwood)</td>
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<td>Sprague’s Rd. (Cambridge to Brant-Waterloo Rd.)</td>
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<td>Very Scenic</td>
<td>Neighbourhood Connectors – Main Street</td>
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<td>Waterloo – King St. (Marshall St. to Union St.)</td>
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<td>Preston – King St. (Rogers St. to Chestnut St.)</td>
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<td>Galt – Water St. (Parkhill Rd. to Concession St., Grand Ave. S. (St. Andrew St. to Cedar St.)</td>
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<tr>
<td>Rural Village Main Streets</td>
<td>Maryhill – St. Charles St. W. and Maryhill Rd.</td>
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<td>Conestogo – Sawmill Rd. (Northfield Dr. to east settlement boundary)</td>
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<td>Winterbourne – Katherine St. (Holmwood St. to Meadowbrook Pl.)</td>
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<td>Rural Connectors</td>
<td>Lobsinger Ln. (Crosshill to St. Clements)</td>
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<td>Wrigley Rd. (Ayr to Spragues Rd. (including Wrigley))</td>
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<td>Trussler Rd. (New Dundee Rd. To Brant-Waterloo Rd.)</td>
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<td>Ebycrest Rd. (Sawmill Rd. to Breslaw)</td>
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<td>Sawmill Rd. (Bloomingley to Conestogo)</td>
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<td>Hutchison Rd. (Perth Ln. to Crosshill)</td>
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<td>Gerber Rd. (Moser-Young Rd. to Wellesley)</td>
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<tr>
<td>Scenic</td>
<td>Neigh. Con.– Main Street</td>
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<td>Galt – Ainslie St. (Valour St. to Thorne St.)</td>
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<td>Baden – Snyder’s Rd. and Foundry St.</td>
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<td>Rural Village Main Streets</td>
<td>Bloomingley – Sawmill Rd. and St. Charles St. W.</td>
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<td>Ayr – Northumberland, Main St., Scott St. and Wrigley Rd.</td>
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<td>Mannhiem – Bleams Rd.</td>
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<td>Bamberg – Weimer Ln. and Moser-Young Rd.</td>
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<td>Perth Ln. (Hutchison Rd to Road 116)</td>
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<td>Bloomingley Rd. (Kitchener to Ebycrest Rd.)</td>
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<td>Sawmill Rd. (Ebycrest Rd. to Bloomingley)</td>
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<td>Some Scenic Qualities</td>
<td>Neigh. Con.– Main St</td>
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<td>Elmira – Arthur St. and Church St.</td>
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<td>Rural Village Main Streets</td>
<td>Ayr – Swan St.</td>
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<td>Petersburg – Snyder’s Rd. and Notre Dame Dr.</td>
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<td>St. Clements – Lobsinger Ln. and Hergott Rd.</td>
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<td>Heidelberg – Kressler Rd. and Lobsinger Ln.</td>
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<td>Linwood – Ament Ln. and Manser Rd.</td>
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<td>Crosshill – William Hastings Ln. and Hutchison Rd.</td>
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<td>Rural Connectors</td>
<td>Hergott Rd. (Ament Ln. to Wallenstein)</td>
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<td>William Hastings Ln (Crosshill to Rd 116)</td>
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<td>Notre Dame Dr. (St Agatha to Gerber Rd.)</td>
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Scenic Road and Special Character Streets Rankings Maps

Please note: These Scenic Roads and Special Character Street rankings maps have been included in this document as a quick reference tool only. A map of the full Region is included on page 31 of the resource document. Hard copies of the map, unless in colour and at an appropriate scale will be hard to decipher. If you are viewing the document digitally, you may zoom in on the map image for increased clarity and detail.

For planning purposes, the Scenic Roads and Special Character Streets ranking information is mapped in an ArcGIS layer file “Scenic Roads.lyr” which is available in K:\GIS\Cultural Resources.

Wellesley Township

Scenic Ranking
- Extremely Scenic
- Very Scenic
- Scenic
- Some Scenic Qualities
Woolwich Township & City of Waterloo

Scenic Ranking
- Extremely Scenic
- Very Scenic
- Scenic
- Some Scenic Qualities
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1.0 Background

1.1 Purpose of the Resource Document

In 2010, Regional Council adopted the *Context Sensitive Regional Transportation Design Guidelines* (P-10-051). The document states, in section 4.4.5 Special Character Streets/Scenic Roads, that “Historic downtowns, heritage buildings, and natural spaces are some of the most valued assets of any community”, and indicates that the design of Regional transportation corridors through such areas should reflect and protect the specific history and/or visual or natural character of each place.

This document, the *Scenic Roads and Special Character Streets Resource Document* is a supplement to the *Context Sensitive Regional Transportation Design Guidelines*. With the support of the Heritage Planning Advisory Committee (HPAC), it has been prepared by Regional staff in Cultural Heritage, Transportation Planning, Transportation Engineering and Design and Construction, and is based on earlier research, existing technical documents and current best practices within the Region.

The purpose of this document is to:
- Identify Regional transportation corridors that are Scenic Roads or Special Character Streets (listed as part of Section 4.0 and in Appendix A); and
- Provide a resource for Regional staff to assist with the planning, design, construction, and maintenance of the sections of identified scenic corridors.

The document is organized into four sections:
1. Background Information
2. Identification of Scenic Roads and Special Character Streets
3. Using this Document
4. Recommendations for the Conservation of Scenic Roads and Special Character Streets

The development of this Resource Document supports the Region’s 2011-14 Strategic Plan priority 2.4 to promote and enhance arts, culture and heritage, and directly contributes to the related action of establishing a Regional Heritage Conservation Toolbox.

1.2 Parameters of the Resource Document

The document pertains only to transportation corridors that are part of the Regional road system within the Region of Waterloo. Area municipal roads, private roads and Provincial highways may also be found to be scenic or of special character, but have not been considered in this document. However, Area Municipalities may make use of this information as they develop Official Plan policies in support of Regional Official Plan policies 3.G.28 and 3.G.29, which encourage Area Municipalities to establish policies protecting the value of scenic roads in their Official Plans.

As a supplemental tool to help project teams and staff, the recommendations within the Resource Document do not override established design criteria or engineering judgment in regards to safety, capacity or other engineering requirements. The recommendations are for use during major/significant construction or upgrades, and will not impact minor work such as spot resurfacing, ditch clean out, driveway culverts, etc.
Some of the recommendations in the document could result in additional costs and would, if identified as a priority, need to be considered at the discretion of the Region and/or, Area Municipality in relation to project-specific budgets. There are also some recommendations that would be undertaken by Regional Cultural Heritage Planning staff at the request of Transportation and Environmental Services staff.

The recommendations within the document do not deal with lands outside of the corridor right of way. It is however noted that the scenic qualities of a transportation corridor should be considered by Regional and Area Municipal land-use planners when making land-use decisions (i.e. designing new urban areas, and developing Official Plan policies, zoning by-law regulations and site plan control guidelines) in order to better conserve the scenic attributes of the identified corridors.

The Resource Document may be of interest to citizens and elected officials involved in transportation and land-use decisions, and to private developers, architects, landscape architects, planners and engineers involved in corridor design and land-use planning.

### 1.3 Importance of Scenic Roads and Special Character Streets

Scenic roads and special character streets are transportation corridors which have been recognized for the quality and quantity of natural, cultural heritage and recreational features that contribute to their scenic value or special character. Recognized rural corridors and crossroads are referred to as scenic roads; built-up corridors located in both rural and urban settlement areas are referred to as special character streets.

Conservation of scenic roads and special character streets improves quality of life through the protection of biodiversity and native habitats, the enhancement of cultural heritage resources, an increase in recreational opportunities and the provision of economic benefits through tourism opportunities.

All transportation corridors have a varying degree of scenic value. As stated in report P-10-035, “the function of transportation corridors is shifting from being a pure capacity conduit for motor vehicles to serving as a part of the community identity and fabric.” The understanding of the road as a “place” and as a contributing element in the character of its surroundings provides the foundation for the planning, development and conservation of special character streets and scenic roads.

### 2.0 Identification of Scenic Roads and Special Character Streets

The identification of Waterloo Regional transportation corridors that are scenic roads and special character streets has been undertaken by the Heritage Planning Advisory Committee and is based on the identification process developed and tested for the Region of Waterloo Scenic Roads Handbook in 1995. The identified scenic roads and special character streets are listed as part of Section 4.4 and listed and mapped in Appendix A.

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2. Scenic Roads Handbook, p.1
The three step scenic corridor identification process included the:

1. Establishment of an initial list of Regional corridors that were potential scenic roads and special character streets;
2. Physical assessment of each individual corridor section; and
3. Evaluation of each corridor segment in terms of the eight categories of scenic attributes set out in the Scenic Roads Handbook (see Appendix E).

To establish the initial listing of potential scenic roads and special character streets the following resources were consulted:
- Scenic road studies undertaken by the Waterloo Regional Heritage Foundation in 1979 and 1986;
- Historical Driving Tours (2002) developed by the Heritage Planning Advisory Committee; and
- Environmentally Sensitive Landscape (ESL), Cultural Heritage Landscape (CHL) and Heritage Conservation District (HCD) planning documents, as corridors in these areas have a high potential for being scenic or having special character.

During the physical assessment, HPAC members drove, documented and photographed each potentially scenic corridor segment. The corridor was documented using the Scenic Roads Evaluation Tool (see appendix E) which records and evaluates information based on a set of eight categories of scenic attributes: vegetation; road segment; landform/relief; water; cultural built environment; cultural landscape; traffic; and context. Complete documentation of the corridor evaluations is available from the Cultural Heritage Principal Planner.

The evaluation of the corridor segments resulted in a scenic ranking. Corridor that ranked 70% or higher were listed within a range of identified scenic roads and special character streets. Identified Regionally-owned scenic corridors include a number of rural connectors located within the region’s most scenic county-side, several rural crossroads, and many of the region’s urban and rural main streets.

Fifty-seven (57) sections of Regional road corridor were found to be scenic to some degree (approximately 27% of all Regional road corridors by length), and of those: thirteen sections ranked as extremely scenic; fourteen sections ranked as very scenic; fourteen sections ranked as scenic; and sixteen sections ranked as having some scenic qualities.

With respect to the corridor classifications used in the Context Sensitive Regional Transportation Design Guidelines, the scenic roads and special character streets identified are classified as follows: eleven as Neighbourhood Connectors – Main Streets; sixteen as Rural Village Main Streets; and the remainder, thirty as Rural Connectors. None of the Regional corridors that are classified as “Neighbourhood Connectors – Avenues” or “Residential Connectors” were ranked as scenic.

Whenever possible corridor sections were evaluated and mapped using existing corridor classification boundaries. Special character streets and scenic crossroads are listed as “Village name – Street name and Street name”. Scenic roads are listed as “Road name (Crossroad name to Crossroad name).”

A complete list and map of the identified scenic roads and special character streets is attached in Appendix A. For planning purposes, the Scenic Roads and Special Character Streets ranking information is mapped in an ArcGIS layer file “Scenic Roads.lyr” which is available in K:\GIS\Cultural Resources.
3.0 Using this Document

As outlined in the *Context Sensitive Regional Transportation Corridor Design Guidelines* (2010), the initial stage of the corridor design process determines the planning framework and the policy and physical context of the corridor segment. This stage is followed by confirming the corridor classification, producing high level objectives for the corridor, identifying street priorities, and finally building the corridor section. The following section outlines what additional actions should be undertaken during this process when dealing with an identified scenic road or special character street.

3.1 Scenic Roads and the Corridor Design Process

The following steps align with the overall Corridor Design Process outlined in the *Context Sensitive Regional Transportation Corridor Design Guidelines*, in section 5.2, pages 122 - 125.

**Step 1**  **Context**

As part of determining the planning / policy context and the physical context of the corridor, determine if any part of the corridor segment is identified as scenic or of special character (refer to Appendix A).

If the section of corridor that is being planned, designed, constructed or maintained is a scenic road or special character street, refer to the sections of this document listed below for additional information.

If the section of corridor is not identified as a scenic road or special character street, no further consideration of the recommendations within this document is required.

**Part A**  **Planning Framework & Policy Context** – Refer to section 3.2 for further information on the planning framework and policy context for scenic roads and special character streets.

**Part B**  **Physical Context** – Refer to section 3.3 for a list of additional questions that can be used for determining the physical context of a scenic road or special character street.

**Step 2**  **Confirm Classification** – no change in process

**Step 3**  **Produce Objectives**

Determine the high level objectives for the corridor by considering the information collected through Steps 1 and 2. For corridor segments identified as scenic or of special character, the conservation of scenic and special character features should be considered for inclusion as one of the high level objectives.

In order to assess the potential opportunities and constraints related to scenic corridor conservation, refer to the appropriate subsection of *section 4.0* which includes recommendations for the conservation of scenic and special quality features. These recommendations can be used to assist with decision making throughout the process.
Recommendations are subdivided as follows:

4.2 General Recommendations for Scenic Roads and Special Character Streets
4.3 General Recommendations for the Conservation of Heritage Bridges
4.4 Specific Recommendations by Corridor Classification  
   4.4.1 Neighbourhood Connectors – Main St.
   4.4.2 Rural Village Main Streets
   4.4.3 Rural Connectors

All recommendations for the conservation of scenic roads and special character streets would be considered during the development of the corridor design, in the context of other design requirements, engineering standards, community consultation and overall budget.

3.2 Planning Framework & Policy Context

Scenic road policies are included in the Regional Official Plan (ROP) as well as several of the Area Municipal Official Plans. In addition, Area municipalities have developed a variety of planning tools (e.g. Urban Design guidelines, secondary plans, Heritage Conservation District Plans) that speak to the treatment of transportation corridors in specific planning areas.

3.2.1 Regional Official Plan

Regional Official Plan policies address scenic roads, calling for the identification of scenic roads and the enhancement of the scenic qualities of Regional Transportation Corridors as noted below.

Identification of Cultural Heritage Resources

3.G.2 The Region will prepare and update a Regional Implementation Guideline for the Conservation of Regionally Significant Cultural Heritage Resources. In accordance with the Ontario Heritage Act, this guideline will outline the criteria and process the Region will follow to identify and conserve cultural heritage resources of regional interest including regional roads that have cultural heritage value or interest.

Scenic Roads

3.G.27 The Region recognizes that many Regional Roads are characterized by natural, cultural heritage and recreational features that contribute to the scenic value of Regional Roads. During any construction or upgrades, the Region will, wherever feasible, endeavour to protect and/or enhance the scenic value of such features along Regional Roads.

3.G.28 Area Municipalities are encouraged to establish policies in their official plans to protect the scenic values of Regional Roads, including the view from the road to prominent heritage buildings or natural landscape features.

The Greenlands Network - Landscape Level Systems

7.B.3 The Region will maintain, enhance or, wherever feasible, restore the scenic qualities of Regional Roads within Landscape Level Systems and Area Municipalities are encouraged to do the same for Area Municipal roads.
3.2.2 Area Municipal Official Plans

ROP Policy 3.G.28 encourages Area Municipalities to protect the scenic values of roads under their jurisdiction. Several Area Municipalities within Waterloo Region have policies regarding the identification and preservation of scenic roads in their current Official Plans. A limited number of Area Municipal roads have been designated as scenic roads. As Area Municipal Official Plans are brought into conformity with the Regional Official Plan (2009) additional policies with regard to scenic roads may be established by Area Municipalities.

Area Municipal scenic road policies may impact the design of Regional road corridors. During corridor design and construction it will be important to assess whether the Regional transportation corridor intersects with any scenic roads identified by Area Municipalities.

Current Area Municipal scenic roads policies are outlined in the following paragraphs.

The City of Kitchener has an extensive scenic roads policy (Appendix C) that includes criteria for identification of scenic-heritage roads, designates scenic-heritage roads, lists roads under study and provides guidelines for the treatment of scenic-heritage roads.

The City of Waterloo has general policies for the conservation of natural and built heritage resources including scenic natural landscapes and the riverbank, and policies that dictate that when undertaking a public works project the impact on heritage resources must be considered. In certain special policy areas, scenic vistas, trails and roads are to be conserved.

The City of Cambridge currently has no policy on scenic roads. At a public meeting in 2005, “The protection of scenic roads” was identified as a priority. The Cambridge Heritage Master Plan (2008) lists Black Bridge Road, Riverbend Drive, Blair Road and Avenue Road as Scenic Routes.

The Townships of Wellesley and Wilmot both have official plan policies that include criteria for the identification of scenic roads and direction for scenic road preservation, but neither Township has identified any scenic road segments. The Township of North Dumfries and Woolwich have general policies on the management of heritage resources. North Dumfries has identified two sections of road as being “of scenic interest” but they have not been formerly recognized.

3.2.3 Additional Planning Tools

Transportation corridor design considerations can only partially conserve a scenic corridor. Many of the attributes that make a corridor scenic are beyond the road right-of-way, within the viewshed of the corridor. Transportation corridors can be designed to protect or enhance views from the corridor, but in order to conserve the scenic viewsheds connected with a transportation corridor, Area Municipal land-use plans need to support the conservation of the scenic features connected to the corridor.

The management of land uses within a viewshed is not within the jurisdiction of transportation planning, design or construction. Area municipalities are able to direct the form and character of development within a specific area through the use of planning tools such as Urban Design Guidelines, Community Plans, Heritage Conservation District Plans and Secondary Plans (see Appendix D for a partial listing of existing plans and guidelines).
These planning tools can be used to maintain or enhance the character of a scenic corridor through requirements such as: sympathetic design for new development that would fit with the scale and character of the existing landscape; protection of views and landmarks; and/or conservation of landscape features (built heritage, vernacular buildings, vegetation, hedgerows/ windbreaks, etc.). The Region will ensure that Area Municipalities are aware of the identified Scenic Roads and Special Character Streets within this document and encourage their consideration as part of future land use planning decisions.

In addition, prior to undertaking corridor improvements, Regional staff may need to consult with Area Municipal planners to make sure that they are aware of all planning documents that make recommendations for the treatment of and/or outline the physical context of the section of corridor to be improved.

### 3.3 Physical Context

Determining the physical context of a transportation corridor is done through answering a series of questions. For scenic roads and special character streets, in addition to the questions listed in the *Context Sensitive Regional Transportation Corridor Design Guidelines* page 123, the following questions should be answered:

**Existing Regional Transportation Corridor**
- Is the road an historic road (e.g. historic alignment, association with an historic person, location or event)?
- What access does the corridor provide the public to views, interpretive information or recreation opportunities?

**Open Space and Natural Features / Built Form**
- What is the existing character of the surrounding landscape?
- Does the corridor travel through a Cultural Heritage Landscape, Environmentally Sensitive Landscape or Heritage Conservation District?
- What *scenic and special character features* have been listed as part of the corridor’s identification as a scenic road or special character street (views, built heritage, landforms, landscapes, vegetation, water features, etc.)?
- Are there additional scenic and special character features not previously identified that should be conserved?

The existing character and scenic features of each identified Scenic Road or Special Character Street have been documented as part of the scenic road evaluations undertaken by the Heritage Planning Advisory Committee (see section 2.0). This information will be made available by the Cultural Heritage Planner for each identified corridor segment as part of the *Preliminary Design Report* (PDR) connected to the corridor improvement project.

### 3.3.1 Existing Character

Existing character refers to the nature of the landscape or community through which the corridor passes. The landscape may be rural, suburban or urban in nature. It may be local—a historic rural cross-road—or it may be regional, such as a commercial street with businesses catering to the wider community. The character of a landscape is reinforced
through common or repeating elements that create identifiable or unique, patterns, colors, and styles along the corridor. The physical qualities of a scenic transportation corridor usually correspond to the character of the surrounding landscape. The existing character of each corridor classification type has been described in section 4.4 of this document.

3.3.2 Scenic and Special Character Features

The *Context Sensitive Regional Transportation Design Guidelines* calls for the identification and preservation of the key characteristics or scenic features of scenic corridors. During the identification of scenic roads and special character streets within Waterloo Region, specific elements and their scenic attributes were evaluated. These elements included: Vegetation; Road Cross Section; Landforms and Waterways; Cultural Built Environment; Bridges; Cultural Landscape; and Traffic.

The following section describes in general terms the scenic attributes of each element. This information can be used to assist with and support the identification of scenic and special character features within a particular corridor segment.

Vegetation

A scenic corridor typically has a diversity of vegetation alongside and within sight of the road. The visual texture provided by the vegetation is created by ensuring: species richness; a variety of height and structure (e.g. trees, shrubs, perennials, grasses); a range of colour; and seasonal variations. Rural connectors are typified by naturalized vegetation (forest, meadows, wetlands) and agricultural plantings (crops, woodlots, windbreaks); urban connectors have more designed landscape plantings (street trees, lawns, gardens, planters, parkettes). Roads traveling through mature forest vegetation, along a forest edge, or that are tree-lined producing a canopied effect, are considered highly scenic.

Road Cross Section

The character of a scenic transportation corridor usually corresponds to the character of the surrounding landscape, be it rural or urban, natural or designed. A scenic road corridor is built at an appropriate scale so that it harmonizes with the landscape and does not appear to be over-built or to dominate the landscape. A scenic road complements the landscape using appropriate road surface treatment; road width; use of barriers, ditches, banks and curbs; lighting; road signage; and vegetation.

Additional amenities such as decorative lighting, benches, stylized concrete, widened sidewalks, etc. may be used to add to the scenic nature of a corridor. Facilities that allow the public to enjoy the scenic corridor and learn about the area such as lookouts, trail connections, parkettes and interpretive signage may be made available when opportunities exist.

Landform/Relief

Scenic corridors allow users to appreciate the local terrain (landforms and waterways) through which they are traveling. Local topography that can be seen from or physically experienced on a transportation corridor includes such landscape features as hills, valleys, lakes and rivers. A road may cut through a landform to create an attractive rocky outcrop. Roads that travel through a variety of landforms or follow the natural contours of the landscape are highly attractive.

---

3 Anatomy of an Historic Road
In built-up areas the relief of the adjoining streetscape is measured in terms of the street wall, rhythm, proportion and scale of the structures adjacent to the corridor. A traditional small town main street lined with appropriately scaled and massed commercial businesses is considered scenic, as is a tree lined residential street in an historic neighbourhood.

Water
Water creates scenic interest and is measured by evaluating the quality, movement, size and shoreline of the existing water feature. Views of and access to water features enhance the scenic nature of a corridor.

Bridges
Historically significant bridges contribute to the character of a scenic corridor. Within the Region of Waterloo, over 100 bridges have been inventoried and ranked according to their heritage significance. Corridor rehabilitation projects that have the potential to impact an historical bridge should make every effort to conserve these Regionally significant heritage resources. Detailed information on specific bridges and recommendations for their treatment can be found in Spanning the Generations: A Study of Old Bridges in Waterloo Region (2004).4

Cultural Built Environment
Scenic transportation corridors can provide access to and views of significant cultural heritage resources. Built heritage resources located alongside scenic corridors that increase the scenic nature of the corridor include: local architecture that reflects the character of the rural landscape, town, historic district, commercial area or residential neighbourhood; historic bridges (see previous section) and other engineered structures; monuments and cemeteries; and vernacular signage.

A number of built elements within the landscape can be unsightly (e.g. utility poles, pipelines, cell towers, signage) or not blend with the rest of the landscape (e.g. non-farm residence, industrial uses). Minimizing or altering the visual impact of these built elements may increase the scenic nature of the corridor.

Cultural Heritage Landscapes
Cultural heritage landscapes (CHLs) are geographically defined areas of heritage significance which have been modified by human activities and are valued by the community. They contain groupings of cultural heritage resources and attributes which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. CHLs provide an understanding of how an area’s residents relate to the land and a sense of place for local residents and visitors.

A transportation corridor may be an important vantage point from which to experience a CHL. Scenic corridors can highlight the CHLs which they travel through by providing scenic views and supporting the character of the area; and by conserving the individual features of the CHL (i.e. built heritage features (previously addressed), structures, archaeological sites, street patterns, gardens and lawns, topographical features, vegetation, cropping patterns, farming methods, hedgerows and fences). Cultural landscapes that have

4 Spanning the Generations: A Study of Old Bridges in Waterloo Region was published by the Region’s Heritage Planning Advisory Committee in 2004. Phase I of the study is an inventory and ranking of more than 100 bridges based on their heritage attributes. Phase 2 documents the 10 most historically significant bridges. Phase 3 focuses on steel truss bridges.
naturally evolved into a diverse, multi-layered form of development are often scenic; as are aesthetically designed landscapes.

**Traffic**
Scenic corridors attract a variety of users including commuters, leisurely ‘tourist’ drivers, cyclists, farm vehicles, horse and buggies, public transit, goods transportation and pedestrians, and must be designed to balance the broad and diverse needs of the existing range of corridor users. Corridors must also be designed to realistically respond to the speed and volume of existing traffic, bearing in mind that scenic roads have natural traffic calming qualities and overbuilding a corridor may encourage higher traffic volumes and speeds. Traffic speed and volume on a scenic corridor reflects the character of the surrounding development. For example a main street may have a slow moving constant stream of traffic, while a rural road may have fewer faster moving vehicles.

**Context**
The visual context of a corridor is defined by the views experienced as it is travelled along. A viewshed refers to the “view” from a particular place. Viewsheds may be very large, such as the view across a valley from a ridge road; very narrow such as the view from a city street, no wider than the sidewalk and terminated by the façade of an adjacent building; or very limited such as the view along a road in a densely wooded area.

Views are evaluated in terms of the quality of foreground (adjacent to the corridor), middle ground and distant vistas, and on the experience of enclosure. Narrow, rhythmic urban streets, valleylands and tree lined corridors are highly scenic due to the sense of enclosure they provide. High vantage points where long views are available, views that are framed by attractive foreground elements and corridors that provide a series of changing views are also considered scenic.
4.0 Conserving Scenic Roads and Special Character Streets

The scenic attributes and existing character of a transportation corridor are important considerations in corridor design, construction and maintenance. The following section outlines recommendations for conserving identified Scenic Roads and Special Character Streets.

As some corridor design considerations only make sense for use on either rural roads, village streets or urban streets, the Scenic Roads and Special Character Streets conservation recommendations are listed in two sections.

1. General recommendations suited to all corridors; and
2. Specific recommendations listed by corridor classification as defined in the Context Sensitive Regional Transportation Corridor Design Guidelines. Regional road classifications used within this document included Neighbourhood Connectors – Main Streets, Rural Village Main Streets and Rural Connectors.

As a supplemental tool to help project teams and staff, the recommendations within the Resource Document do not override established design criteria or engineering judgment in regards to safety, capacity or other engineering requirements.

Some of the recommendations in the document could result in additional costs and would need to be considered at the discretion of the Region and/or Area Municipality in relation to project-specific budgets.

There are also some recommendations that would be undertaken by Regional Cultural Heritage planning staff at the request of Transportation and Environmental Services staff.

4.1 Guidelines for Scenic Roads and Special Character Streets

The recommendations in this document augment the Special Character Street/Scenic Roads Guidelines that were included in the Context Sensitive Regional Transportation Corridor Design Guidelines, as follows:

- Priority should be given to maintaining those features which are special or scenic and preserve the character of the street. This includes, built form, heritage planting, scenic road configurations such as bends or valleys, and open space connectivity.
- Priority should be given to maintaining scenic or special features on all Regional Transportation Corridors, or Regional Transportation Corridor segments. Conserve the historic urban fabric along the road corridor to maintain diversity and enrich the experience of corridor users. This will often require specific and idiosyncratic design approaches to building setbacks and the width of the road corridor;
- Avoid narrowing sidewalks and removing on-street parking and/or landscaping. The presence of slow moving through-traffic, on-street parking and a quality public realm are all required to preserve and enhance existing retail uses;
- Only consider a by-pass of a hamlet or village after market feasibility study, which can be included within the Environmental Assessment process, having regard for the provisions of the Regional Official Plan. The creation of by-pass roads around settlements can deaden the retail environment along historic main streets by removing much of the through traffic;
- Examine unique design initiatives, such as higher order landscaping and streetscaping, for places of historic, cultural, or natural importance, in consultation with the public; and
- Integrate the design of the road edge with that of the adjacent open spaces, where arterial roads cross or are adjacent to significant natural areas and open spaces. The design of the road edge should be consistent aesthetically and uphold the same environmental standards.

### 4.2 General Recommendations for Scenic Roads and Special Character Streets

<table>
<thead>
<tr>
<th>Long-term Corridor Planning</th>
<th>Proactively identify Regional corridors that are scenic roads or special character streets. When possible, provide input on secondary plans, community plans and/or urban design guidelines for the lands adjacent to identified scenic corridors, and when warranted, develop a corridor management plan in consultation with area municipal land-use planners.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Built Heritage</td>
<td>Consult the Waterloo Regional Heritage Inventory to locate cultural heritage resources along the corridor. Information from the digitally mapped inventory will be provided as part of Preliminary Design Reports (PDRs) and can be accessed at any time through the Regional Cultural Heritage Planner. Conserve properties designated under the Ontario Heritage Act, Heritage Bridges and properties listed on a Municipal Heritage Register. Consult the Heritage Conservation District (HCD) Plan and Guidelines if a scenic corridor passes though an HCD designated by the area municipality under Part V of the Ontario Heritage Act (OHA). Consideration of additional plans and guidelines may also be required for scenic corridors within Environmentally Sensitive Landscapes (ESLs) and Cultural Heritage Landscapes (CHLs). Consider directional signage for heritage sites (monuments, museums, historic sites) on route so that they are visible and/or easy to locate.</td>
</tr>
<tr>
<td>Vernacular Architecture</td>
<td>Whenever possible, conserve the historic built fabric along the corridor. Allow for and enhance views of built heritage resources that are characteristic of the area (e.g. stone cottages, commercial buildings, factories, mills, barns).</td>
</tr>
<tr>
<td>Historic Buildings adjacent to the Right of Way</td>
<td>Minimize temporary and permanent negative impacts to historic buildings during and following corridor improvements. Potential negative impacts include, but are not limited to: demolition, alteration, encroachment, isolation, visual disturbances, shadows, and changes in noise and/or air emissions. Restrict access to vacant heritage resources during construction. Cultural heritage planning staff are available to develop a stewardship and re-use plan</td>
</tr>
</tbody>
</table>
for Region-owned heritage resources left unoccupied during or following a road improvement project.

Consult with cultural heritage staff if a built heritage resource must be removed. It may be recommended that the Region try to relocate the building. If relocation is not possible, it may be recommended that prior to demolition specific building materials be salvaged and/or that the Region collect and preserve documentation describing the interior and exterior of the resource including photographs, measured drawings and historical records. Following demolition, the site may warrant commemoration with interpretive signage.

**Historic Road Attributes And Alignments**

When possible, maintain the existing historical road patterns and alignment. Historic road alignments are important for understanding how homes, commercial, industrial and institutional buildings were originally situated in relation to each other. Many Regional roads have been in use since the area was settled in the early 1800s (see Appendix B – County of Waterloo Map (1885)).

Cultural heritage staff are available to assist with the research, recognition and to provide interpretation of the corridor if it or any of its structural features are associated with:
- the development of an important construction technique or technology;
- a significant period of transportation or community development; and/or
- a prominent person, location or event.

**Archaeological Resources**

Consult with the Region’s Cultural Heritage Planner to ask if an archaeological assessment is required prior to road improvements.

The Region’s Archaeological Master Plan has determined the potential for discovering pre-contact and historic archaeological resources on lands within the region based on a set of standard variables.

Regional corridors may have high archaeological potential due to the fact that:
- many Regional roads have been in use since the region was first settled in the early 1800s (see Appendix B);
- some early roads were originally used as first nations trails;
- early commercial development occurred at road intersections creating settlements which have now disappeared but may have left underground remnants; and
- the earliest homes in the region were often located close to road allowances.

**Corridor Width**

The character of an area may be enhanced by maintaining a road width and speed that corresponds to the scale and massing of the adjacent buildings and landscape (e.g. narrower, slower road where buildings are close to the street).

Existing features of scenic roads and special character streets may provide traffic calming measures.

When necessary, undertake selective widening by determining the scope of
improvements needed, identifying where improvements will be most effective, and then blending the improvements into the surrounding landscape.

The *Regional Transportation Master Plan* includes a Road Network Plan that has been developed to assist in prioritizing road network improvements, and has taken into consideration the impacts of road widening on cultural heritage resources, mature neighbourhoods and the natural environment.

| Views | Identify and when possible, conserve views from the roadway. Take note of different types of views such as:  
- axial views that are linear and may terminate at a significant feature;  
- areas of closure where one is surrounded by structural features or vegetation;  
- vistas or viewsheds where one can see over a large area from one (often elevated) vantage point; and  
- serial vision where there is a change from one type of visual subject to another along a linear progression over a short period of time. |
| Water | When feasible, plan corridor alignments to parallel or have views of streams, rivers, ponds or lakes. Bridge crossings can also be scenic opportunities. Where possible, provide lookouts and/or railing designs that allows for appreciation of the water feature. See section 4.3 for bridge related recommendations. |
| Public Art & Gateways | When feasible, encourage the installation of public art or gateway features (including sculptures, wall murals, fountains, decorative walls, custom designed furnishings) that reflect the character and/or interpret the history of the surrounding area. |
| Trees | When possible, preserve mature trees and replant appropriate roadside or street trees where mature trees must be or have been removed. Consider planting and maintaining a variety of species and differently aged trees. A list of appropriate tree species is available from Environmental Planning staff. Consider conserving or recreating tree-lined streets that produce a canopied effect by ensuring the eventual mature tree canopy is tall and broad enough to create a natural canopy over the new road width. |
| Lighting | Lighting that enhances the character of an area (e.g. heritage lighting at Bridgeport Bridge and on Queen St.) may be considered in consultation with the local Area Municipality. Decorative lighting has been addressed in section 4.2.6 of the *Context Sensitive Regional Transportation Corridor Design Guidelines*. |
Utilities

It may be possible to minimize the visual impact of utilities by partnering with utility providers to:
- bury utilities where practical;
- minimize overhead road crossings;
- minimize the number of poles by maximizing joint use of utility poles (eg. Queen St. New Dundee);
- encourage the full use of existing infrastructure such as pedestals and underground vaults or by co-locating utilities within existing poles; and
- work to eliminate areas that may attract graffiti and have a maintenance and removal plan in place.

4.3 General Recommendations for the Conservation of Heritage Bridges

Heritage Bridge Rehabilitation & Conservation

Preserve bridges that are designated under the Ontario Heritage Act and listed on Municipal Heritage Registers. These include the West Montrose Bridge in Woolwich, the Freeport Bridge in Kitchener and the Black Bridge Road Bridge in Cambridge.

Conserve other heritage bridges whenever feasible. Information on historically significant bridges within the Region can be found in *Spanning the Generations: A Study of Old Bridges in Waterloo Region* (2004).5

Protection Strategies for the Region’s top 10 historic bridges and collection of steel truss bridges are listed in Phase 2 and 3 of the Bridge Study.

Maintenance

Whenever feasible, heritage bridges should be maintained and kept in regular use. Follow industry standards and known best practices to maintain, with an aim to preserve the heritage bridge.

Alterations/ Railing Design

Consider using open style railings on bridges in high pedestrian areas to allow for views of the waterway. The Region has research available on railing options available from Transportation Engineering staff.

Recognition

When possible, provide access for people to visit old bridges, tunnels and overpasses. Refer to Regional *Policies and Procedures for Access onto Regional Roads* for guidance on appropriate points of access.

Cultural heritage staff is available to provide interpretation and to recognize heritage bridges owned by the Region through the Region’s Heritage Bridge Recognition Program, Ontario Heritage Act designations, heritage easements or Provincial plaques.

The Region is installing interpretive plaques at the top ten historically significant bridges in the Region. Currently there are plaques at the

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5 *Spanning the Generations: A Study of Old Bridges in Waterloo Region* was published by the Region’s Heritage Planning Advisory Committee in 2004. Phase I of the study is an inventory and ranking of more than 100 bridges based on their heritage attributes. Phase 2 documents the 10 most historically significant bridges. Phase 3 focuses on steel truss bridges.
<table>
<thead>
<tr>
<th>Decommissioned Bridges</th>
<th>Hartman Bridge in New Hamburg, the Freeport Bridge and the Bridgeport Bridge in Kitchener, and the Mill Creek Bridge, Main Street Bridge and Black Bridge Road Bridge in Cambridge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of Load Limit and By-pass Creation</td>
<td>Ideally, when regular use is no longer feasible, a bridge should be kept in use in its original location with a reduced load limit and/or for pedestrians only, with traffic being re-routed to an alternate route or by-pass. As this may not be feasible on a Regional corridor, the bridge may need to be relocated or dismantled. Removing the bridge from its original location reduces its heritage value but is preferred over permanent dismantling. Contact cultural heritage staff prior to relocation or demolition, of an historic bridge. It may be recommended that the Region collect and preserve documentation, measured drawings and photographs of the historic bridge; incorporate resources from a demolished historic bridge into a new bridge structure; and/or provide interpretation of the heritage resource on a plaque.</td>
</tr>
</tbody>
</table>
4.4 Specific Recommendations by Corridor Classification

The Scenic Roads and Special Character Streets within the Region of Waterloo are found within three of the Context Sensitive Regional Transportation Corridor Design Guideline corridor classifications:

- Neighbourhood Connectors - Main Streets,
- Rural Village Main Streets; and
- Rural Connectors.

Recommendations for the conservation of the scenic attributes for each corridor type have been made based on the unique characteristics of each of the corridor classifications.

The following corridor classifications have not been included in this document:

- Community Connectors - high capacity conduits focused on moving vehicles;
- Residential Connectors - well established corridors not expected to undergo design changes that would impact their character; and
- Neighbourhood Connector – Avenues - not currently considered scenic or special character, but may provide opportunities for scenic enhancement as they are reurbanized and transition to transit supportive and pedestrian friendly streets.

This section contains the following information for each corridor classification:

1. A listing of identified Scenic Road sections and Special Character Street sections;
2. A description of the typical existing character including the adjacent landscape qualities, natural and built heritage features, and the right of way; and
3. Recommendations for the conservation of the scenic attributes of that specific classification of scenic corridor.

As with the general recommendations in the previous section, the recommendations in this section: do not override established design criteria or engineering judgment; may have budget implications; and where noted the recommendation would be undertaken by Regional Cultural Heritage planning staff.
4.4.1 Neighbourhood Connectors – Main St.

4.4.1.1 Identified Special Character Streets

**Extremely Scenic**
Galt – Main St. (George St. to Water St. (including Queen’s Square))
St. Jacobs – King St. N.
New Hamburg – Waterloo St., Huron St. and Peel St
Ayr – Northumberland St. and Stanley St.

**Very Scenic**
Waterloo – King St. (Marshall St. to Union St.)
Preston – King St. (Rogers St. to Chestnut St.)
Galt – Water St. (Parkhill Rd. to Concession St.), Grand Ave. S. (St. Andrew St. to Cedar St.)

**Scenic**
Galt – Ainslie St. (Valour St. to Thorne St.)
Baden – Snyder’s Rd. and Foundry St.

**Some Scenic Qualities**
Elmira – Arthur St. and Church St.

4.4.1.2 Existing Character

**Adjacent landscape**
These historic main streets are characterized by a mix of old and new buildings that address the street with little or no setback. Many of the original commercial buildings date from the early 1900s and have housed the community’s evolving commercial activities. With the exception of sections of Uptown Waterloo, buildings and lot sizes are small. Intensification and redevelopment that complements the scale and character of the area is encouraged.

**Natural and Built Heritage Features**
May include: Commercial blocks, churches, inns, parkettes, decorative lighting, street trees, municipal buildings, libraries, post offices, heritage homes, public squares, fountains, bridges, banks, public art, plaques, bridges, etc.

**Right of Way**
The right of way is relatively narrow and highly animated. Pedestrian, vehicles, transit and cyclists must all share the road. Street design in encouraged to enable activities within the right of way including cafes, parades, festivals, buskers, etc. Streets may be decorated seasonally (horticultural displays, Christmas lights) and/or for special events (banners). On street parking is usually available to support the commercial activity.
### 4.4.1.3 Conservation Recommendations – Neighbourhood Connectors – Main Street

| **Street Vitality** | People are part of the landscape and provide visual interest. Encourage the animation of the streetscape by allowing for interesting and comfortable places for people to be along the corridor (sidewalks, patios/cafes, seating, space for window shopping, parkettes, benches, shaded areas, etc.)
Conserving cultural heritage includes encouraging cultural traditions and ways of life. When possible, ensure the corridor is designed to be functional for community events that may be held adjacent to or within the right of way (festivals, parades, open-air markets, etc.) |
| **Lighting** | Area municipalities may be interested in considering the use of:
- pedestrian-scale or decorative lighting to add to the visual character and pedestrian appeal of the streetscape; and/or
- light poles that accommodate banners, signs, flower baskets, electrical outlets and festival lighting, along main streets, downtown roads or important commercial or institutional roads.
Decorative lighting has been addressed in section 4.2.6 of the *Regional Transportation Corridor Design Guidelines.* |
| **Amenities** | Consider incorporating fountains, waterfalls and reflective pools into urban streetscapes.
When a corridor contains gathering spaces and/or resting spots that would benefit from seating, encourage the area municipality to provide street furniture that is reflective of the character of the corridor.
Existing encroachments (awnings, at-grade signs, overhead signs, plantings, public art, etc.) may add to the character of the corridor, but would require an agreement to be reached in accordance with the Region of Waterloo Sign By-law 10-030.
When feasible, design transit shelters and bike parking to blend with the character of the corridor. |
| **Landscaping** | Consider incorporating designed landscape plantings to add visual interest such as street trees, lawns, gardens, planters, landscaped medians, etc.
When choosing vegetation consider:
- variety in height, colour and structure;
- seasonal variations;
- maintenance requirements;
- existing structural elements; and
- the provision of shelter and shade on the street (i.e. street trees). |
| Sidewalks and retaining walls | Sidewalk treatments and retaining walls may provide opportunities to enhance the scenic qualities of a corridor. Consider current best practices to enhance the character of an area. |
| Parking | On-street parking on main streets may contribute to the economic viability and continued vitality of a commercial area. Consider the inclusion of parking based on the community’s parking needs, including horse tie-ups, and the character of the landscape. |
4.4.2 Rural Village Main Streets

4.4.2.1 Identified Special Character Streets

**Extremely Scenic**
- Philipsburg – Erb’s Rd.
- St. Agatha – Notre Dame Dr. and Erb’s Rd.
- Wellesley – Queens Bush Rd. and Nafziger Rd.

**Very Scenic**
- Maryhill – St. Charles St. W. and Maryhill Rd.
- Conestogo – Sawmill Rd. (Northfield Dr. to east village boundary)
- Winterbourne – Katherine St. (Holmwood St. to Meadowbrook Pl.)

**Scenic**
- Bloomingdale – Sawmill Rd. and St. Charles St. W.
- Ayr – Northumberland, Main St., Scott St. and Wrigley Rd.
- Mannheim – Bleams Rd.
- Bamberg – Weimer Ln. and Moser-Young Rd.

**Some Scenic Qualities**
- Ayr – Swan St.
- Petersburg – Snyder’s Rd. and Notre Dame Dr.
- St. Clements – Lobsinger Ln. and Hergott Rd.
- Heidelberg – Kressler Rd. and Lobsinger Ln.
- Linwood – Ament Ln. and Manser Rd.
- Crosshill – William Hastings Ln. and Hutchison Rd.

4.4.2.2 Existing Character

**Adjacent Landscape**
These historic crossroads, hamlets and villages are some of the earliest settlements within the region. At one time many of these settlements were complete communities with bustling shops, community institutions and homes. Today, Rural Village Main Streets are the location of groupings of built heritage resources (churches, cemeteries, commercial buildings, restaurants, early industries, libraries, inns, schools, early homes, etc.). Lot sizes and buildings are small. Buildings are close to and address the street.

**Natural and Built Heritage Features**
May contain – Commercial buildings, churches, inns, cemeteries, parkettes, decorative lighting, street trees, municipal buildings, schools, libraries, historic homes, public squares, fountains, bridges, banks, etc.
Right of Way
The right of way is often narrow and may need to accommodate vehicles, farm machinery, horse and buggies and pedestrians. The corridor may follow an historic road alignment and/or the community may be located in proximity to a particular landform. Traffic speed should be slow. People may use the main street as a gathering place. People may park on the street to shop and to visit homes in the area. The street may be used for parades, festivals, etc. There is often mature vegetation. Sidewalks and curbs, when present, are in character with a rural village.

4.4.2.3 Conservation Recommendations – Rural Village Main Streets

| Community Vitality | People are part of the landscape and provide visual interest. Support the vitality of the village or hamlet by limiting the vehicular traffic speed, designing the corridor at a pedestrian scale and encouraging interesting and comfortable places for people to be along the corridor (sidewalks, patios/cafe seating, space for window shopping, parkettes, benches, shaded areas, etc.)
Conserving cultural heritage includes encouraging cultural traditions and ways of life. Ensure the corridor is designed to allow for community events that may be held within the right of way (festivals, parades, open-air markets, street sales, etc.) |
|---|---|
| Lighting | Area municipalities may be interested in considering the use of:
- pedestrian-scale or decorative lighting to add to the visual character and pedestrian appeal of the streetscape; and/or
- light poles that accommodate banners, signs, flower baskets, electrical outlets and festival lighting, along main streets, downtown roads or important commercial or institutional roads.
Decorative lighting has been addressed in section 4.2.6 of the Regional Transportation Corridor Design Guidelines. |
| Amenities | When a corridor contains gathering spaces and/or resting spots that would benefit from seating, encourage the area municipality to provide street furniture that is reflective of the character of the corridor.
Existing encroachments (awnings, at-grade signs, overhead signs, plantings, public art, etc.) may add to the character of the corridor, but would require an agreement to be reached in accordance with the Region of Waterloo Sign By-law 10-030. |
| Landscaping | Consider incorporating vernacular landscape plantings that are in character with the corridor including street trees, lawns, gardens, planters, etc.
When choosing vegetation consider:
- variety in height, colour and structure;
- seasonal variations; |
- maintenance requirements;
- existing structural elements; and
- the provision of shelter and shade on the street (i.e. street trees).

| Sidewalks and Retaining Walls | Sidewalk treatments and retaining walls may provide opportunities to enhance the scenic qualities of a corridor. Consider current best practices to enhance the character of an area. |
| Parking | On-street parking on main streets may contribute to the economic viability and continued vitality of a commercial area. Consider the inclusion of parking based on the community’s parking needs, including horse tie-ups, and the character of the landscape. |
4.4.3 Rural Connectors

4.4.3.1 Identified Scenic Roads

**Extremely Scenic**
- Waterloo St. (Nafziger Rd. to New Hamburg (including Luxemburg))
- Weimar Ln. (Kressler Rd. to Bamberg)
- Hawkesville Rd. (Three Bridges Area - Kressler Rd. to St. Jacobs)
- Blair Rd. (Blair Village)
- Ament Ln. (Kressler Rd. to Linwood)
- Sprague’s Rd. (Cambridge to Brant-Waterloo Rd.)

**Very Scenic**
- Lobsinger Ln. (Crosshill to St. Clements)
- Wrigley Rd. (Ayr to Spragues Rd. (including Wrigley))
- Trussler Rd. (New Dundee Rd. To Brant-Waterloo Rd.)
- Ebycrest Rd. (Sawmill Rd. to Breslau)
- Sawmill Rd. (Bloomington to Conestogo)
- Hutchison Rd. (Perth Ln. to Crosshill)
- Gerber Rd. (Moser-Young Rd. to Wellesley)

**Scenic**
- *New Dundee Rd. (Dodge Dr. to Trussler Rd.)
  (* Classified as a Neighbourhood Connector - Avenue)
- Bridge St. (Trussler Rd to New Dundee)
- Blair Rd. (Blair to Cambridge)
- Erb’s Rd. (St. Agatha to Sandhills Rd.)
- Bleams Rd. (New Hamburg to Mannheim (including Shingletown))
- Perth Ln. (Hutchison Rd to Road 116)
- Bloomington Rd. (Kitchener to Ebycrest Rd.)
- Sawmill Rd. (Ebycrest Rd. to Bloomington)

**Some Scenic Qualities**
- Hergott Rd. (Ament Ln. to Wallenstein)
- Katherine St. N. (Weisenburg Rd. to Winterbourne)
- Snyder’s Rd. (Baden to Petersburg)
- Roseville Rd. (Brown’s to Cambridge)
- Moser-Young Rd. (Bamberg to Gerber Rd.)
- William Hastings Ln (Crosshill to Rd 116)
- Kressler Rd. (Weimer Ln. to Hawkesville Rd.)
- Nafziger Rd. (Snyder’s Rd. to Wellesley)
- Notre Dame Dr. (St Agatha to Gerber Rd.)
4.4.3.2 Existing Character

Adjacent Landscape
The Region’s rural connectors travel through the area’s scenic countryside. Scenic rural roads are flanked by farms, woodlots, natural areas and other rural land uses. Many of these scenic roads provide long views of the expansive countryside, travel through valleylands, and follow historically travelled routes; allowing users to appreciate regional topography and landforms.

The Scenic Roads Study (1979) noted the following areas of scenic value within the Region:

- **North Dumfries** - the southern kame and kettle topography with small lakes and ponds, the roads paralleling the Grand River’s deep winding valley, and the Scottish stone masonry and tree-lined road-ways in the central and west;
- **Wellesley and Woolwich** - the Conestoga and Grand River valleys and the conservative Mennonite farmsteads;
- **Wellesley and Wilmot** - the Waterloo/Baden Sand Hills;
- **Wilmot** - the Nith River and its floodplain and the transitional Scottish and Mennonite settlements;
- **Cambridge** - the glacial upland topography and the panoramic views of the Grand River; and
- **Kitchener and Waterloo** - the rolling hills, views of the Grand River and the tree-lined roads.

Natural and Built Heritage Features
Landscape features may include farmsteads (barns, out buildings, lanes, fences, windmills, silos, farm houses, gardens), agricultural plantings (crops, woodlots, windbreaks, pastures), churches, cemeteries, schools, bridges, natural landforms, valleylands, forests, meadows, rivers, ponds, wetlands, etc.

Right of Way
Rural Connectors must accommodate all forms of vehicles, large trucks, farm machinery, horse and buggies and cyclists, and in some cases transit. Corridors that are narrow and undulating enhance the experience of the local topography and add to the rural character of the area. There are often scenic views from the road that can be protected and enhanced. In some instances roads travel through mature forest vegetation, along a forest edge, near a water feature or are tree lined producing a canopied effect. Most of the Rural Connectors are old roads, first developed during pioneer times (see Appendix B – County of Waterloo Map (1885)). Maintaining the historic road alignment is important.

4.4.3.3 Conservation Recommendations – Rural Connectors

| Long Term Planning | Consider the broad range of potential impacts prior to the reclassification of roads (i.e. from Rural Connectors to Neighbourhood Connectors). The *Regional Transportation Master Plan* includes a Road Network Plan that has been developed to assist in prioritizing road network improvements, and has taken into consideration the impacts of road widening on cultural heritage resources, mature neighbourhoods and the natural environment. |

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Encourage the continuation of working farms and conservative Mennonite traditions by ensuring that roads continue to meet the farming community and buggy user’s needs.

Consider requiring a Scenic Corridor dedication on lands being developed along the road in order to ensure an adequate vegetative buffer (a 5m scenic road dedication is currently required for local scenic roadways in Kitchener).

<table>
<thead>
<tr>
<th>Rural Landscape Features</th>
<th>When possible, conserve rural landscape features by.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Minimizing alteration, isolation and encroachment upon built heritage features;</td>
</tr>
<tr>
<td></td>
<td>• Retaining or recreating roadside fencerows, hedgerows and windbreaks. Replacement fences should retain rural character (e.g. page wire); and</td>
</tr>
<tr>
<td></td>
<td>• Protecting significant natural features such as wetlands, woodlots, meadows, streams, etc.</td>
</tr>
</tbody>
</table>

Consult with Cultural Heritage staff for assistance with planning for the protection of rural landscape features.

<table>
<thead>
<tr>
<th>Roadside Vegetation</th>
<th>When possible, establish and maintain a diversity of vegetation alongside the road using an appropriate range of natural and traditional rural species. A listing of preferred species is available from the Region’s Environmental Planning staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Next to natural areas, consider:</td>
</tr>
<tr>
<td></td>
<td>- Maintaining and/or replanting native meadow species (grasses and wildflowers) on roadsides;</td>
</tr>
<tr>
<td></td>
<td>- Planting trees in clusters, using a mix of coniferous and deciduous trees;</td>
</tr>
<tr>
<td></td>
<td>- Avoiding invasive species and monoculture;</td>
</tr>
<tr>
<td></td>
<td>- Feathering the edges of clearings; and</td>
</tr>
<tr>
<td></td>
<td>- Leaving stands of trees in the median.</td>
</tr>
</tbody>
</table>

Next to agricultural lands, consider:
- Lining the road with trees. Norway spruce, maple and elm were traditionally used. Refer to Environmental Planning staff for current recommendations.
- Mimicking agricultural plantings by re-establishing hedgerows, treed lanes, woodlots and meadows.

<table>
<thead>
<tr>
<th>Views</th>
<th>When possible, sightlines to scenic road-side resources should be maintained and enhanced so that views from the road may be appreciated while driving. This can be accomplished by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Careful road alignment to focus a tangent on a particular landmark or view;</td>
</tr>
<tr>
<td></td>
<td>- Selective vegetation removal and/or occasional pruning;</td>
</tr>
<tr>
<td></td>
<td>- Establishing setbacks from the road to protect scenic vistas; and</td>
</tr>
<tr>
<td></td>
<td>- Retaining views and vistas from significant hill crests.</td>
</tr>
<tr>
<td>Vegetation screens and/or naturalized embankments can be used to block unsympathetic views such as development that does not complement the character of the corridor (e.g. industrial lands, utilities, parking lots).</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Waysides and Overlooks</strong></td>
<td></td>
</tr>
<tr>
<td>In order to increase public access and enjoyment of the scenic road, when feasible, provide pull off point(s) or rest areas for people to access significant vistas, historical plaques and/or interpretation of the route, and provide direct access to roadside trails, bikeways, parks and picnic areas. Refer to Regional Policies and Procedures for Access onto Regional Roads for guidance on appropriate points of access.</td>
<td></td>
</tr>
<tr>
<td><strong>Road Alignment &amp; Terrain Changes</strong></td>
<td></td>
</tr>
</tbody>
</table>
| A road with significant hill crests, valleys and curves can:  
  - Highlight the areas existing topography;  
  - Reveal the landscape incrementally;  
  - Allow road users views in many directions;  
  - Take road users by historic sites or landscape features; and  
  - Avoid undesirable features or features that need protection.  
While following established design criteria, attempt to minimize the straightening, cutting and filling of roads.  
When a corridor requires cutting and filling, consider:  
  - Exposing the underlying geology of the area; and  
  - Mimicking the natural terrain by using irregular forms, variation in design, irregular benching, planting pockets, rounding the top of the slope, rock staining and seeding with native plants. |
| **Water** |
| Moving water, shorelines and large bodies of water are all highly aesthetic. Consider opportunities to provide public access to water features through views, an overlook, lookout or trails/pathways when possible. |
| **Utilities** |
| Consider coordinating the provision of utilities to allow for roadside trees, by locating utilities on the opposite side of the corridor or behind trees, and/or choosing smaller tree species. |
| **Signage** |
| Consider developing signage for scenic road identification, way finding and visitor attractions. Unofficial signage should suit the character of the road (e.g. colour, size, placement and type of sign). All signs must be in accordance with the Region of Waterloo Sign By-law 10-030.  
Backs of signs can be painted dark brown or green to blend with the landscape.  
Encourage area municipalities to prohibit bill board signage and regulate other forms of commercial signage (flashing, animated, pulsating, rotating or otherwise moving components, temporary or |

---

675554 27
<table>
<thead>
<tr>
<th><strong>Noise</strong></th>
<th>portable signs) to ensure they do not detract from the road’s scenic qualities. Consider alternatives to noise walls, such as well landscaped berms that could also provide open spaces, trails and connect natural features. Where noise walls are used, plant vines, shrubs or trees and/or use public art to visually break up the fence and to avoid a blank wall.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lighting</strong></td>
<td>The rural area’s dark night sky is an important scenic feature of a rural corridor. Consult the <em>Regional Illumination Policy</em> for design standards for lighting that minimizes obtrusive light (e.g. full cut-off luminaries).</td>
</tr>
<tr>
<td><strong>Surface Treatment</strong></td>
<td>Consider using a road surface treatment that complements the existing character of the surrounding landscape.</td>
</tr>
<tr>
<td><strong>Barriers and Fencing</strong></td>
<td>Explore the full range of options for fences, barriers and retaining walls and consider choosing a design that complements the character of the landscape.</td>
</tr>
<tr>
<td><strong>Curb, Gutters, Shoulders, Ditches and Banks</strong></td>
<td>Consider maintaining natural ditch and bank contours that complement the existing topography rural landscape. In order to minimize right of way width, steeper embankments may be considered, as well as the use of appropriate vegetation for slope stabilization. Paved shoulders and mountable curbs may be advantageous for cyclists, buggies and farm vehicles.</td>
</tr>
</tbody>
</table>
References


Great Streets - http://www.planning.org/greatplaces/streets/characteristics.htm


Related Scenic Roads and Special Character Streets Data

The Scenic Roads and Special Character Streets ranking information is mapped in an ArcGIS layer file “Scenic Roads.lyr” which is available at K:\GIS\Cultural Resources.

Additional Background Data is stored in the following locations.
   - I:\HERITAGE\Heritage Mapping\Scenic Roads
   - I:\HERITAGE\DrivingTours
   - I:\HERITAGE\DrivingTours\Research
     o This has the findings from the 1975 study mapped and includes the roads ranking (beautiful, attractive etc…)
   - I:\GIS_WORK\Archaeology\Historic Roads
## Appendix A – Scenic Roads and Special Character Streets

| Neighbourhood Connectors – Main Street | Galt – Main St. (George St. to Water St. (including Queen’s Square)) St. Jacobs – King St. N. New Hamburg – Waterloo St., Huron St. and Peel St Ayr – Northumberland St. and Stanley St. |
| Rural Connectors | Waterloo St. (Nafziger Rd. to New Hamburg (including Luxemburg)) Weimar Ln. (Kressler Rd. to Bamberg) Hawkesville Rd. (Three Bridges Area - Kressler Rd. to St. Jacobs) Blair Rd. (Blair Village) Ament Ln. (Kressler Rd. to Linwood) Sprague’s Rd. (Cambridge to Brant-Waterloo Rd.) |

### Extremely Scenic Neighbourhood Connectors – Main Street
Galt – Main St. (George St. to Water St. (including Queen’s Square)) St. Jacobs – King St. N. New Hamburg – Waterloo St., Huron St. and Peel St Ayr – Northumberland St. and Stanley St.

### Rural Village Main Streets

### Rural Connectors
Waterloo St. (Nafziger Rd. to New Hamburg (including Luxemburg)) Weimar Ln. (Kressler Rd. to Bamberg) Hawkesville Rd. (Three Bridges Area - Kressler Rd. to St. Jacobs) Blair Rd. (Blair Village) Ament Ln. (Kressler Rd. to Linwood) Sprague’s Rd. (Cambridge to Brant-Waterloo Rd.)

### Very Scenic Neighbourhood Connectors – Main Street
Waterloo – King St. (Marshall St. to Union St.) Preston – King St. (Rogers St. to Chestnut St.) Galt – Water St. (Parkhill Rd. to Concession St.), Grand Ave. S. (St. Andrew St. to Cedar St.)

### Rural Village Main Streets
Maryhill – St. Charles St. W. and Maryhill Rd. Conestogo – Sawmill Rd. (Northfield Dr. to east settlement boundary) Winterbourne – Katherine St. (Holmwood St. to Meadowbrook Pl.)

### Rural Connectors
Lobsinger Ln. (Crosshill to St. Clements) Wrigley Rd. (Ayr to Spragues Rd. (including Wrigley)) Trussler Rd. (New Dundee Rd. To Brant-Waterloo Rd.) Ebycrest Rd. (Sawmill Rd. to Breslau) Sawmill Rd. (Bloomingdale to Conestogo) Hutchison Rd. (Perth Ln. to Crosshill) Gerber Rd. (Moser-Young Rd. to Wellesley)

### Scenic Neighbourhood Connectors – Main Street
Waterloo – King St. (Marshall St. to Union St.) Preston – King St. (Rogers St. to Chestnut St.) Galt – Water St. (Parkhill Rd. to Concession St.), Grand Ave. S. (St. Andrew St. to Cedar St.)

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### Neigh. Con.– Main Street
Galt – Ainslie St. (Valour St. to Thorne St.) Baden – Snyder’s Rd. and Foundry St.

### Rural Village Main Streets
Bloomingdale – Sawmill Rd. and St. Charles St. W. Ayr – Northumberland, Main St., Scott St. and Wrigley Rd. Mannheim – Bleams Rd. Bamberg – Weimer Ln. and Moser-Young Rd.

### Rural Connectors
Lobsinger Ln. (Crosshill to St. Clements) Wrigley Rd. (Ayr to Spragues Rd. (including Wrigley)) Trussler Rd. (New Dundee Rd. To Brant-Waterloo Rd.) Ebycrest Rd. (Sawmill Rd. to Breslau) Sawmill Rd. (Bloomingdale to Conestogo) Hutchison Rd. (Perth Ln. to Crosshill) Gerber Rd. (Moser-Young Rd. to Wellesley)

### Neigh. Con.– Main St
Elmira – Arthur St. and Church St.

### Rural Village Main Streets

### Rural Connectors
Hergott Rd. (Ament Ln. to Wallenstein) Katherine St. N. (Weisenburg Rd. to Winterbourne) Snyder’s Rd. (Baden to Peters burg) Roseville Rd. (Brown’s to Cambridge) Moser-Young Rd. (Bamberg to Gerber Rd.) William Hastings Ln. (Crosshill to Rd 116) Kressler Rd. (Weimer Ln. to Hawkesville Rd.) Nafziger Rd. (Snyder’s Rd. to Wellesley) Notre Dame Dr. (St Agatha to Gerber Rd.)

### Some Scenic Qualities

### Rural Connectors
Hergott Rd. (Ament Ln. to Wallenstein) Katherine St. N. (Weisenburg Rd. to Winterbourne) Snyder’s Rd. (Baden to Peters burg) Roseville Rd. (Brown’s to Cambridge) Moser-Young Rd. (Bamberg to Gerber Rd.) William Hastings Ln. (Crosshill to Rd 116) Kressler Rd. (Weimer Ln. to Hawkesville Rd.) Nafziger Rd. (Snyder’s Rd. to Wellesley) Notre Dame Dr. (St Agatha to Gerber Rd.)

### Rural Connectors
Lobsinger Ln. (Crosshill to St. Clements) Wrigley Rd. (Ayr to Spragues Rd. (including Wrigley)) Trussler Rd. (New Dundee Rd. To Brant-Waterloo Rd.) Ebycrest Rd. (Sawmill Rd. to Breslau) Sawmill Rd. (Bloomingdale to Conestogo) Hutchison Rd. (Perth Ln. to Crosshill) Gerber Rd. (Moser-Young Rd. to Wellesley)
Appendix A – Scenic Road and Special Character Streets Rankings Map

Please note:
The Scenic Roads and Special Character Street rankings map has been included in this document as a quick reference tool only. Hard copies of the map, unless in colour and at an appropriate scale will be hard to decipher.

If you are viewing the document digitally, you may zoom in on the map image for increased clarity and detail.

For planning purposes, the Scenic Roads and Special Character Streets ranking information is mapped in an ArcGIS layer file “Scenic Roads.lyr” which is available at K:\GIS\Cultural Resources.
Appendix B – County of Waterloo Map (1885)
Appendix C - City of Kitchener Scenic-Heritage Road Policy

From the City of Kitchener Official Plan (1995)

8.3.3 Scenic-Heritage Roads

1. The City in consultation with its Municipal Heritage Committee shall, in identifying those streets and roads for designation as Scenic-Heritage Roads, have regard for all or some of the following criteria:

   i) They have unique structural, topographic and visual features compared to most other roads in the municipality;
   ii) They have unique abutting vegetation including mature tree cover or enclosure;
   iii) They are located within or abut a quality woodlot or significant environmental area;
   iv) They function as a wildlife corridor;
   v) The abutting built environment and cultural landscape or road segment itself is of heritage or historical significance; and
   vi) They are located within an approved or proposed Heritage Conservation District. While Scenic-Heritage Roads may be designated in accordance with the provisions of the Ontario Heritage Act, the term ‘designation’ as utilized within the context of the policies in Section 8.3.3 implies the classification of road and should not be interpreted as meaning designation under the Ontario Heritage Act.

2. In designating Scenic-Heritage Roads, assessment of the structural, topographic, vegetation and overall visual character of the road right-of-way and immediate abutting lands shall be considered and not areas extending beyond to include distant vistas and visual viewsheds. The extent of such designation in the Official Plan shall be restricted to the road right-of-way.

3. The Scenic-Heritage Road designation can be applied to both rural and urban roads; as well as to roads in areas designated in the Regional Official Policies Plan and Official Plan for future urban development. The Scenic-Heritage Road designation can also be applied to streets and roads within an approved or proposed Heritage Conservation District Plan. In designating Scenic-Heritage Roads in existing or future urban areas recognition is given to the fundamental difference with respect to overall visual character between rural and urban designated Scenic-Heritage Roads.

4. In cases where Council has designated existing streets and roads as Scenic-Heritage Roads, no widenings to the carriage way or changes to the surface treatment or other changes are to be made to such roads and access to abutting lands shall be regulated. The City shall permit maintenance required to ensure the safety of the roads and the ongoing operation of any municipal services located within the road right-of-way. Where proven unavoidable in planning, transportation or traffic studies accepted by the City, new roads may be permitted to cross proposed or existing Scenic-Heritage Roads subject to the preparation and approval of a Heritage Impact Assessment as outlined in Part 2, Policy 5.3.15. Notwithstanding the above, where a road has been designated a Scenic-Heritage Road purely on historical grounds, widening of the carriage way, changes to the surface treatment and other changes may be permitted.

5. The City shall, prior to designating a Scenic-Heritage Road, undertake the necessary planning, transportation and traffic studies to identify and put into place alternative routes capable of off-loading higher speed traffic and future increases in traffic volumes from the proposed Scenic-Heritage Road segment.

6. The City shall encourage the formulation and use of community and other plans and special land use guidelines and development controls on and in the vicinity of Scenic-Heritage Roads to maintain the overall visual character of such roads and their functional operation.
7. The City shall prepare corridor specific plans for designated Scenic-Heritage Roads. Such corridor specific plans should include land use plans, tree management plans, landscape plans, development controls, traffic studies and urban design guidelines. Where possible, such corridor specific plans should be prepared as part of, or in conjunction with, a Heritage District Conservation Plan, Secondary Plan or Community Plan.

8. While not forming part of the criteria for the designation of Scenic-Heritage Roads, the City shall, where practical and feasible, identify and formulate plans and development controls for the retention of vistas and visual viewsheds associated with Scenic-Heritage Roads.

9. **Roads designated as Scenic-Heritage Roads include:**
   i) **Doon Village Road** from its terminus at Doon Mills Drive to its terminus at Homer Watson Boulevard. Doon Village Road is a Scenic-Heritage Road within the Heritage Conservation District of Upper Doon. The policies of the Upper Doon Heritage Conservation District Plan shall also apply.
   ii) **Mill Park Drive** from Huron Road to Old Mill Road and Old Mill Road from Mill Park Drive to Doon Valley Drive. While designated a Scenic-Heritage Road, this Plan recognizes the Minor Collector Road function of Mill Park Drive and Old Mill Road.
   iii) **Tilt Drive** from Doon Village Road to Stauffer Drive. Tilt Drive is a Scenic-Heritage Road within the Heritage Conservation District of Upper Doon and is intended for limited vehicular use. The policies of the Upper Doon Heritage Conservation District Plan shall also apply. Every effort shall be made to maintain and conserve existing trees and hedgerows within its existing right-of-way. Notwithstanding the above, local road crossings shall be permitted to provide access to the abutting lands on the west side of Tilt Drive. As part of the design of such local road crossings, every effort will be made to minimize both the number of crossings and their impact on the scenic value of Tilt Drive.
   iv) **Union Street** from Margaret Avenue to Sunset Place.
   v) **Pioneer Tower Road** between Marquette Drive and the Grand River. It is acknowledged that the Scenic-Heritage designation of Pioneer Tower Road is based purely on historical grounds, and as such, widening of the carriage way, changes to the surface treatment and other changes may be permitted.
   vi) **Lookout Lane** from Pioneer Tower Road to its terminus at the Pioneer Memorial Tower.
   vii) **Jubilee Drive** from David Street to Devon Street
   viii) **Huron Road** between Trussler Road and Fischer Hallman Road. It is acknowledged that the scenic-heritage designation of Huron Road is based purely on historic grounds and as such, widening of the carriage way, changes to the surface treatment, and other changes may be permitted. This plan recognizes the present Secondary Arterial function of Huron Road until such time as plans for future urban development abutting the roadway are proposed, at which time the necessary planning, transportation or traffic studies shall be undertaken to re-examine the functional operation of the road and the impact of development on its historic significance. Further, every effort shall be made to maintain the existing road profile (rolling/undulating topographical characteristics) in recognition of the historic significance of the road.
   ix) **Groh Drive** from Stauffer Drive to Thomas Slee Drive.
   x) **Stauffer Drive** from Tilt Drive to Reidel Drive.

10. **Roads presently under study for potential designation as Scenic-Heritage Roads include:**
   i) Reidel Drive;
   ii) Deleted (MPA 59);
   iii) Groh Drive;
   iv) Dodge Drive between New Dundee Road and Groh Drive;
   v) Trussler Road between Bleams Road and New Dundee Road (Deferral No. 1, MPA 19)
   vi) Hidden Valley Road;
   vii) Pinnacle Drive between the northerly leg of New Dundee Road and Pine Hill Place;
   viii) Old Chicopee Trail between Fairway Road and Daimler Drive;
   ix) Patricia Avenue between Queen’s Boulevard and Highland Road; and
   x) Plains Road between Fischer Hallman Road and Trussler Road.
Appendix D – Related Planning Tools

This is a partial listing of the existing planning tools that may impact or provide recommendations for identified Regional Scenic Roads and Special Character Streets.

Townships

- New Hamburg Heritage Conservation District Plan

City of Kitchener

  - Downtown Design Guidelines
  - Mixed Use Corridors

- Victoria Park Area Heritage Conservation District Plan
- St. Mary’s Heritage Conservation District Plan
- Civic District Heritage Conservation District Plan

- Block Plan (Bloomingdale Road, Stanley Avenue, Schweitzer Street, Grand Avenue)
- Block Plan 58 - Lower Doon
- Block Plan 65 - Lower Doon
- Bridgeport East Community (Secondary) Plan
- Brigadoon Community Plan
- Doon South Community Plan
- Grand River South Community Plan
- Hidden Valley Industrial Community (Secondary) Plan
- Hidden Valley Residential Community Plan
- Highland West Community Plan
- Huron Community Plan
- Laurentian West Community Plan
- Lower Doon Community (Secondary) Plan
- Pioneer Tower West Service Commercial Community (Secondary) Plan
- Upper Doon Community Plan
- Valleyview Road - Howe Drive Community Plan

City of Cambridge

- Heritage Master Plan (2008)
  - Character Areas – Scenic Routes
- Core Areas Revitalization
  - Annual Updates

City of Waterloo

- Uptown Streetscape Improvement Project (2010)
- Height and Density Study Policy (2003/2005)
- Albert-MacGregor Heritage Conservation District Plan
### Appendix E – Scenic Roads Evaluation Tool

#### Figure 2: Scenic Roads Data Sheet (Rural)

<table>
<thead>
<tr>
<th>Region of Waterloo Scenic Roads Data Sheet</th>
<th>Rural Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date:</strong> / /</td>
<td></td>
</tr>
<tr>
<td><strong>Distance:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Length:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Road:</strong></th>
<th><strong>Township/City:</strong></th>
<th><strong>Observer:</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>1. Vegetation</strong></th>
<th><strong>2. Road Segment</strong></th>
<th><strong>3. Landform/Relief</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity</td>
<td>Structural Changes</td>
<td>L M H</td>
</tr>
<tr>
<td>Maturity</td>
<td>Ditches &amp; Banks</td>
<td>L M H</td>
</tr>
<tr>
<td>Varietal Streets</td>
<td>Surf. Conditions</td>
<td>L M H</td>
</tr>
<tr>
<td>Colour</td>
<td>Official Signage</td>
<td>L M H</td>
</tr>
<tr>
<td>Street, Edge</td>
<td>Rshield Vegetation</td>
<td>L M H</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4. Water</strong></th>
<th><strong>5. Cultural Landscape</strong></th>
<th><strong>6. Cultural Built Env</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Quality</td>
<td>Gardens/Lawns</td>
<td>L M H</td>
</tr>
<tr>
<td>Water Movement</td>
<td>Climbing Patterns</td>
<td>L M H</td>
</tr>
<tr>
<td>Water Body Size</td>
<td>Hedgerows, Fences, Field Edges</td>
<td>L M H</td>
</tr>
<tr>
<td>Shoreline</td>
<td>Other Buildings</td>
<td>L M H</td>
</tr>
<tr>
<td></td>
<td>Domestic Arch.</td>
<td>L M H</td>
</tr>
<tr>
<td></td>
<td>Other Structures</td>
<td>L M H</td>
</tr>
<tr>
<td></td>
<td>Unofficial Signage</td>
<td>L M H</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7. Traffic</strong></th>
<th><strong>8. Context</strong></th>
<th><strong>Score</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lane Highway</td>
<td>Foreground</td>
<td>L M H</td>
</tr>
<tr>
<td>2 Lane Highway</td>
<td>Middleground</td>
<td>L M H</td>
</tr>
<tr>
<td>Unpaved Highway</td>
<td>Vista</td>
<td>L M H</td>
</tr>
</tbody>
</table>

**Score**

- **Segment score:**
  - **Sum of element scores:** 180
  - **Total score:** 5

---

**Better Travel Direction:**

- **Roads:**
  - **Photos:**
  - **Frames:**
# REGION OF WATERLOO SCENIC ROADS DATA SHEET

## URBAN DATA

<table>
<thead>
<tr>
<th>Road:</th>
<th>Segment: A:</th>
<th>Location</th>
<th>Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B:</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Township / City:</th>
<th>Date:</th>
<th>Observer:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1. VEGETATION
- Diversity
- Maturity
- Var. Ht. / Struct.
- Colour
- Visual Continuity

**SCORE**

### 2. ROAD SEGMENT
- Structural Char.
- Surface Condition
- Official Signage
- Street Furniture
- Lighting
- Utility Poles

**SCORE**

### 3. LANDFORM / RELIEF
- Street Wall
- Rhythm
- Proportion
- Scale

**SCORE**

### 4. WATER
- Movement
- Formal Feature
- Informal Feature

**SCORE**

### 5. CULTURAL BUILT ENV'T
- Contextuality
- Heritage
- Monument
- People

**SCORE**

### 6. CULTURAL LANDSCAPE
- Civic Squares
- Urban Parkettes
- Formal Parks
- Informal / Natural Parks

**SCORE**

### 7. TRAFFIC
- 1. 4 Lane Highway
- 2. 2 Lane Highway
- 3. Regional Paved
- 4. Unpaved Highway

**SCORE**

### 8. CONTEXT
- A - B
  - Axial Open
  - Axial Terminated
  - Sig. View Line / Vista
  - Closure
  - Serial Vision
- B - A
  - Axial Open
  - Axial Terminated
  - Sig. View Line / Vista
  - Closure
  - Serial Vision

**SCORE**

---

**Better Travel Direction:**

**Photos:**

**Roll:**

**Frames:**
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D07-00

SUBJECT: PROPOSED MODIFICATIONS TO REGIONAL IMPLEMENTATION GUIDELINE FOR ROAD ALLOWANCE DEDICATIONS ON AND ADJACENT TO KNOWN AND POTENTIALLY CONTAMINATED SITES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following action with respect to the proposed modifications to the Regional Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites pursuant to the provisions of the Regional Official Policies Plan and the Regional Official Plan as detailed in Report P-11-069, dated December 6, 2011:

a) Authorize a Public Meeting of the Planning and Works Committee early in 2012 to receive comments from agencies and interested members of the public; and

b) Direct staff to circulate a draft of the proposed modifications for comment to the Area Municipalities and other parties having an interest in this implementation guideline, including posting on the Regional website.

SUMMARY:

As part of the development review process, the Region of Waterloo can require lands to be dedicated for Regional road allowances at no expense, pursuant to Sections 41, 51 and 53 of the Planning Act. The Regional Official Policies Plan (ROPP) and the Regional Official Plan (ROP) make provisions for the dedication of road widenings to secure the designated Regional Road Allowance as identified in the ROPP and the ROP. In addition, the ROP includes the requirement that the dedications be included in accordance with the Regional Implementation Guideline for Road Allowance Dedications on or Adjacent to Known or Potentially Contaminated Sites (Guideline). Regional Council approved the Guideline on June 10, 2009. This Guideline was intended to provide clarity to the Region’s planning requirements for road allowance dedications. The two key objectives of the Guideline were first to restore contaminated land to an environmental condition suitable for its proposed use as a public right-of-way without creating a barrier to development, and second to mitigate the risk to the Region of acquiring contaminated road allowance dedications. In the absence of guidelines to inform staff decisions, the complexities involved with providing road allowance dedications on and adjacent to potentially contaminated sites add to the uncertainty and affordability of brownfield redevelopment. The Guideline specifically acknowledged the challenges associated with brownfield redevelopment and intensification, and offered a variety of options for these and other development conditions. This Guideline generally works effectively in greenfield areas; however, Regional staff is increasingly challenged in applying the Guideline to development applications on contaminated properties, particularly in existing built-up areas. After two years of experience with the Guideline, Regional staff is now recommending a modification by replacing a section in order:

- To further facilitate brownfield remediation and intensification in built-up areas, particularly in the interests of supporting compact growth and the optimal use of existing infrastructure;
- To recognize the ability to manage contaminated properties in more economical ways; and
- To proactively plan for the numerous instances where road dedications may involve the conveyance of different, but manageable risks to the Region of Waterloo (corporately).

As required in Sections 10.B.11 to 10.B.14 of the Council Adopted ROP dated June 16, 2009, and Sections 12.2.2.4 to 12.2.2.6 of the September 2006 Consolidated ROPP, staff recommend that the Regional Municipality of Waterloo direct staff to circulate a draft of the proposed modifications to the current Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites to the Area Municipalities and other parties having an interest in this implementation guideline including posting on the Regional website.

In addition, staff recommend that the Regional Municipality of Waterloo authorize a public meeting of the Planning and Works Committee in early 2012 to receive comments from agencies and interested members of the public.

Following the Public Meeting and the close of the comment period, staff will take public input received under consideration and bring a report with the final draft of the Guidelines back to the Planning and Works Committee for consideration.

**REPORT:**

Intensification within the Region is continuing to increase. In 2010, over 55% of new residential development occurred within existing built-up areas of the Region. This is a significant shift, considering that in 2008, new residential development outside of built-up areas (i.e. in greenfields) was about 67%. Similarly, the percentage of new residential units built within the Central Transit Corridor increased from 10% in 2003 to over 40% in 2010.

Industrial commercial and institutional (ICI) development has occurred at significant levels within built-up areas as well. Examples include the Lang Tannery, the Centre for International Governance Innovation (CIGI), the Waterscape condominiums, and the Schools of Pharmacy and Medicine. In 2010 alone, over $400M in new ICI development occurred inside the built-up area.

New development prospects and proposals within existing built-up areas remain at a high level. This can mean the re-use of existing buildings, the remediation of contaminated sites, and full redevelopment with new buildings. These properties also front on road allowances that have been used for decades to move people and goods, and have been subjected to a variety of uses on adjacent properties.

New development on properties in built-up areas can represent the second, third (or more) generations of property use, a stark contrast to greenfield development, which does not generally involve dealing with pre-existing urban development. Consequently, greenfield lands are typically “clean” from an environment perspective, while “next generation” urban uses in built-up areas often contain a variety of contaminants at varying levels.

When development applications are made to the Region of Waterloo and the seven Area Municipalities, road dedications can be required. In the case of the Region of Waterloo, requirements for Regional road dedications are established in the Regional Official Plan. These dedications are used for such purposes as road widening, lane additions, day lighting triangles (to protect sight lines at intersections), utilities under and above ground, transit related amenities and to establish curbs, gutters, sidewalks and street lighting.

In addition to establishing road dedication requirements, Regional Council has established an “Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites”. A copy of this Guideline is appended as Attachment 1. This
Guideline generally works effectively in greenfield areas; however, Regional staff is increasingly challenged in applying the Guideline to development applications on contaminated properties, particularly in existing built-up areas. The following examples demonstrate the challenges:

- Lands to be conveyed for road dedications are frequently contaminated and may not be readily rehabilitated economically;
- Contaminants may continue to migrate from adjacent properties; and
- Contaminants may exist but remain stable if left undisturbed.

Objectives of Proposed Implementation Guideline Modifications

As the Region of Waterloo is expected to grow by an additional 200,000 people and 80,000 jobs in the next twenty years, at least 40% of development is mandated by the Province to occur within existing built-up areas. This recommendation is being made to address the following objectives:

- To further facilitate brownfield remediation and intensification in built-up areas, particularly in the interests of supporting compact growth and the optimal use of existing infrastructure;
- To recognize the ability to manage contaminated properties in more economical ways;
- To proactively plan for the numerous instances where road dedications may involve the conveyance of different, but manageable risks to the Region of Waterloo (corporately); and
- To clarify that the authority of the Commissioner of Planning, Housing and Community Services pursuant to By-Law No. 01-028, to impose conditions to the approval of various applications under the Planning Act, in respect of the requirement for the dedication of a road widening shall be exercised in accordance with the Implementation Guideline.

Consequently, Regional staff is now recommending amendments to the current Implementation Guideline (appended as Attachment 1) to add under the heading “Legal Authority” a new Section 2.4, and, under the heading “Determination of Final Requirements” to replace Option 4 in Section 5.1 with the following new Option 4:

“2.4 Pursuant to Regional Municipality of Waterloo By-law No. 01-028, Council has delegated to the Commissioner of Planning, Housing and Community Services (the “Commissioner”) its authority under the Planning Act in respect of various development applications, including the authority to impose conditions provided the exercise of such authority substantially conforms with the Region’s then current policies, standards and regulations.,”

“OPTION 4 – CONVEY As - is

Accept conveyance of land as – is.

This option is considered in cases where Options 1, 2, and 3 are not appropriate, as determined by the Commissioner, and where the Region’s liability risk is low, both of encountering contamination during construction and of third party liability. Typically, this would include lands that are not environmentally impaired or lands where contamination impacts multiple properties. The Region may elect to take impacted land where it considers it necessary.

Site conditions where lands will be considered for dedication as-is, with the Region a reliant party to all supporting documentation, include, but are not limited to, sites:

a) where the Region requires the property for strategic purposes and is willing to accept environmental risk on a case by case basis, and the applicant may be an innocent third party and is not considered the source of contamination; and
b) where contamination is considered to be of lower environmental risk, including but not limited to circumstances of low, stable and/or declining concentration; low potential for migration; low potential to affect human health; low threat potential for potable groundwater; is located at significant depth; or other circumstances where the risk and potential liability to the Region of Waterloo is considered to be lower as determined on a case by case basis, and the applicant may be an innocent third party and is not considered the source of contamination.

Regional road dedications (in both greenfield and built-up areas) may be accepted in an “as-is” condition, at the discretion of the Commissioner, with the Region a reliant party to all supporting documentation, under the above circumstances.

In instances where a higher level of risk or potential liability is expected than described in this Implementation Guideline, the Commissioner shall seek direction from Regional Council, if no other options are viable under this Guideline.”

Implementation and Next Steps

The ROPP and the ROP make provisions for the dedication of road widenings to secure the designated Regional Road Allowance as identified in the ROPP and the ROP. In addition, the ROP includes the requirement that the dedications be included in accordance with the Regional Implementation Guideline for Road Allowance Dedications on or Adjacent to Known or Potentially Contaminated Sites.

Sections 10.B.11 to 10.B.14 of the Council Adopted Regional Official Plan (ROP) dated June 16, 2009, requires the Regional Municipality of Waterloo to provide public and agency notification for proposed modifications to Implementation Guidelines. The previous Regional Official Policies Plan had similar requirements. Accordingly, staff recommend that notification of 20 days be provided to the public and agencies and that the draft of the proposed modifications to the current Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites be circulated to the Area Municipalities and other interested parties, including posting on the Regional website.

In addition to the public and agency notification, staff recommends that a public meeting of the Planning and Works Committee be held in early 2012 to receive comments from agencies and interested members of the public.

Following the Public Meeting and the close of the comment period, staff will revise the Draft as necessary and bring the Second Draft to the Planning and Works Committee for consideration as a revised Regional Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites.

Area Municipal Consultation/Coordination

Area municipalities within the Region of Waterloo were canvassed to determine their current practices or policies for acquiring road widenings on and adjacent to potentially contaminated sites.

Townships of North Dumfries, Wellesley and Wilmot do not have formal policies however, the Township of Wilmot requires demonstration that the lands are not contaminated if township staff is aware of, or suspect contamination to exist. The Township of Woolwich evaluates each situation where a road widening is required adjacent to a potentially contaminated site to determine if the need for the widening outweighs the risk. For road widenings adjacent to known contaminated lands, the township does not accept the lands until they are remediated or alternatively, the lands could be accepted with an indemnity agreement subject to review by the township’s legal counsel.
City of Kitchener requires a Phase I Environmental Site Assessment for all road allowance widenings regardless of known or unknown contamination on the property or surrounding lands. A Phase II ESA is required if recommended by the Phase I ESA. If a site is found to be contaminated, it would need to be remediated and a Record of Site Condition completed prior to conveying the road widening to the city.

The City of Cambridge may require evidence, as a condition of the transfer of the road widening that no environmental contamination has occurred on the lands, that the lands have been satisfactorily restored, or that a record of on-site contaminants is provided.

In addition, Region staff canvassed other nearby municipalities outside of Waterloo Region for their practices and policies.

City of London has no written policy. If there is no knowledge that the site is contaminated, no environmental work such as a Phase I, Phase II or Record of Site Condition is requested and the road widening is accepted. For gas station sites, or lands that are known to be contaminated, staff will discuss with Legal Department and may not accept the road widening.

City of Hamilton has no written policy. Through the development process, if the widening is suspected of being contaminated, developer would be asked to do a study (Phase I and Phase II ESA) to prove the land is not contaminated. The road widening is to be conveyed "free and clear of encumbrances". If the property is not suspected of being contaminated, no environmental work would need to be completed to facilitate the widening.

Peel Region has no written policy. Phase I and Phase II required on Regional Roads only for suspected and known contaminated sites. They may require a Risk Assessment or RSC. No environmental report required for lands not suspected of being contaminated.

City of Mississauga has a policy that states sites such as gas stations/industrial sites, will require submission of at least a Phase I ESA and possible Phase II ESA. Sites that are adjacent to residential or have been residential in the past do not require any environmental analysis. City is getting more diligent in requesting environmental reports.

CORPORATE STRATEGIC PLAN:

Clarifying Regional requirements for road allowance dedications adjacent to known and potentially contaminated land supports Strategic Focus Areas 1 and 2. As prioritized in Focus Area 1, this Guideline supports the Region’s Source Water Protection Plan and ensures reliance to all supporting documentation as to the environmental condition of dedicated lands. Consistent with Focus Area 2, this guideline also ensures that Regional policies and procedures support the redevelopment of brownfield sites.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Guideline has been reviewed by Legal Services, Facilities and Transportation and Environmental Services staff.
ATTACHMENTS:

Attachment 1  -  Regional Council’s Implementation Guideline for Road Allowance Dedications on and Adjacent to Known and Potentially Contaminated Sites

PREPARED BY:  Bruce Erb, Supervisor, Corridor Management

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
IMPLEMENTATION GUIDELINE FOR ROAD ALLOWANCE DEDICATIONS ON AND ADJACENT TO KNOWN AND POTENTIALLY CONTAMINATED SITES

1.0 DEFINITIONS

1.1 For the purposes of this Guideline, definitions and requirements for environmental site assessments are adopted by reference to Part XV.1 of the Environmental Protection Act, R.S.O. 1990, c. E.19 (the “EPA”) and Parts I and II of associated O. Reg. 153/04 (the “Regulation”). Where definitions and requirements of the Guideline differ from definitions and requirements of the EPA and the Regulation, the definitions and requirements of the EPA and the Regulation shall govern.

1.2 For the purposes of this Guideline, definitions and requirements for Regional source water protection and environmental and human health protection are adopted by reference to the Guideline for the Review of Development Applications Involving Known and Potentially Contaminated Sites, 2009, and to any subsequent documents that supersede the aforementioned Guideline.

2.0 LEGAL AUTHORITY

2.1 Consistent with section 41(8)(a)(i) of the Planning Act, R.S.O. 1990, c. P.13 (the “Planning Act”), as amended, site plans shall not be approved until the Region of Waterloo (the “Region”) has been advised of the development and afforded a reasonable opportunity to require the land owner to provide to the satisfaction of and at no expense to the Region, widenings of highways that are under the jurisdiction of the Region and that abut on the land.

2.2 Consistent with section 51(25)(b) and (b.1) of the Planning Act, the Region has the legal authority to require, as a condition of approval for plans of subdivision, plans of condominium and consents, road widenings that the Region considers necessary.

2.3 Consistent with Policy 11.6.7 of the Regional Official Plan, the Region may obtain road dedications through development applications.

3.0 IDENTIFICATION OF PROPERTIES SUBJECT TO THIS GUIDELINE

3.1 IDENTIFICATION OF KNOWN AND POTENTIALLY CONTAMINATED SITES SUBJECT TO ROAD ALLOWANCE DEDICATIONS

3.1.1 Sites subject to an official plan amendment, zoning by-law amendment, consent, plan of subdivision, or plan of condominium may be identified in the Region of Waterloo’s Threats Inventory Database (TID) as high and medium potentially contaminated and known contaminated sites through the development application review process. Sites identified during this process that abut a Regional road where a road allowance dedication is required will be subject to this Guideline.

3.1.2 Sites subject to site plan approval may be identified in the Region of Waterloo’s TID as high and medium potentially contaminated sites and known contaminated sites through the site plan review process. Sites identified during this process that abut a Regional where a road allowance dedication is required will be subject to this Guideline.
3.1.2 Sites subject to an official plan amendment, zoning by-law amendment, consent, plan of subdivision, plan of condominium, and site plan that are identified in the Region’s TID as low potential contaminated sites will not be subject to this Guideline.

3.2 IDENTIFICATION OF ROAD WIDENING REQUIREMENTS

3.2.1 For official plan amendments, zoning by-law amendments, plans of subdivision, and plans of condominium the potential requirements for road allowance widening will be identified through the pre-submission consultation meeting. For consent applications and where the pre-submission consultation meeting is waived for an application, the need for a road allowance widening will be identified as early as possible through the application review process.

3.2.2 For site plan applications, the potential requirements for a regional road allowance dedication will be identified through the site plan review process.

4.0 PRELIMINARY REQUIREMENTS

Where the Region requires a road allowance widening as a requirement/condition of approval for official plan amendments, zoning by-law amendments, plans of subdivision, plans of condominium, consent and site plan review on lands known or potentially contaminated, the Region will require that lands to be dedicated be subject to a Phase I Environmental Site Assessment (an “ESA”). If warranted by the Phase I ESA a Phase II ESA will be requested. For Regional due diligence purposes, a letter of reliance must be obtained for all supporting documentation related to the environmental condition of the lands to be dedicated. The final requirements to address the site condition of lands to be dedicated will be determined in consultation with the Region’s Transportation Planning Division.

4.1 To meet the requirements of Section 4.0, lands to be dedicated may be included in any Phase I ESA or Phase II ESA conducted for the lands subject to the Planning Act application or site plan.

4.2 Subject to Section 4.0, where lands subject to a Planning Act application have a Record of Site Condition (RSC) requirement under Ontario Regulation 153/04 of the EPA as a condition of approval for the Region.

a. that portion subject to a road allowance dedication should be excluded from the RSC requirement and thereby excluded from the requirements of any Certificate of Property Use (CPU) imposed on the subject parcel.

b. Where a CPU is already registered for the subject property (including the lands to be dedicated), the proponent will provide satisfactory assurance from the Ministry of the Environment (MOE) limiting the Region’s potential liability for CPU obligations. Assurance may include a discretionary letter of clarification from the MOE District Office.

5.0 DETERMINING FINAL REQUIREMENTS

Applicants subject to this Guideline will enter a consultation process with the Region’s Transportation Planning Division to finalize requirements for road allowance dedications on known or potentially contaminated sites.
5.1 FOUR OPTIONS

There are four options that may be considered when addressing contamination on lands to be dedicated. These are: requiring the applicant to remediate the dedicated lands; accepting the conveyance of lands with a risk assessment addressing any remaining environmental impacts; accepting conveyance of lands with suitable security; and finally, accepting the conveyance of lands as-is. The options available under various site conditions are explained below.

OPTION 1 – Remediation

*Require the development proponent to remediate the dedication lands to Provincial standards for non-sensitive land uses prior to conveyance to the Region, thereby resolving the environmental impact at no cost to the Region.*

There may be circumstances where the Region requires remediation to a more stringent standard, such as for the installation of water mains. No RSC is required for the dedicated lands after confirmatory testing by a Qualified Person, as defined in Ontario Regulation 153/04.

Factors where remediation is the preferred alternative with the Region a reliant party to all supporting documentation include, but are not limited to, sites:

a) where remediation of the subject parcel is required prior to development;

b) where the site exposes the Region to certain liability risk; and

c) where road construction and/or utility installation will cause the migration of contaminants.

Notwithstanding a, b, and c of this option, remediation and other alternatives may be required by the Region for the purposes of clean dedication. The Region recognizes that some site conditions make remediation an impractical option. Under these circumstances the following three options apply.

OPTION 2 – Convey with Risk Assessment

*Accept conveyance of lands with a risk assessment that is completed by a Qualified Person and which details the remaining contaminants, potential exposure pathways and an assessment health and safety.* The Risk Assessment option will require the consent of the Region and may also require a form of security. The risk assessment must confirm that any remaining contamination is deeper than will be encountered during road construction or utility installation, or that such construction will not pose a risk to worker health and safety or the environment.

Site conditions where a risk assessment is considered with the Region a reliant party to all supporting documentation include, but are not limited to, sites:

a) where the property is the source of contamination;

b) where removal of contaminants is impractical or undesirable (buildings or utilities interfere, road work planned or just completed);


c) where road work is planned or recently completed;

d) where contaminants are deep and will not be disturbed; and

e) where remaining contaminants are inert.
OPTION 3 – Convey with Security

Accept conveyance of the lands, with an acceptable form of security. An acceptable form of security will provide the Region with full compensation for contamination associated costs, provide the Region with protection from third party claims, and from any costs related to Ministry of Environment (MOE) actions. Option 3 will only be considered in cases where the proponent has the wherewithal to meet its contractual obligations.

Site conditions requiring lands dedicated to be covered by an acceptable form of security, whereby the Region can recover costs related to contaminants encountered, be protected from third party claims, and from any costs related to MOE actions include, but are not limited to, sites:

a) where there are restrictive site conditions or remediation would be disruptive to existing buildings or infrastructure; and

b) the Region is satisfied that the risk of Regional liability is low for the dedicated lands.

OPTION 4 – Convey As-is

Accept conveyance of land as-is.

This option is considered where the Region’s liability risk is low, both of encountering contamination during construction and of third party liability. Typically, this would include lands that are not environmentally impaired or lands where contamination impacts multiple properties. The Region may elect to take an impacted property where it considers it necessary.

Site conditions where lands will be considered for dedication as-is, with the Region a reliant party to all supporting documentation, include, but are not limited to, sites:

a) where the applicant may be an innocent third party and is not considered the source of contamination;

b) where the Region requires the property for strategic purposes and is willing to accept environmental risk on a case by case basis.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D28-60

SUBJECT: GO TRANSIT RAIL SERVICE LAUNCH AND FARE INTEGRATION AGREEMENT

RECOMMENDATION:

That the Regional Municipality of Waterloo take the following action with respect to the implementation of GO Transit rail service as described in Report P-11-094, dated December 6, 2011:

a) approve the establishment and operation of a temporary parking lot for GO Transit riders on the properties acquired to develop the Region of Waterloo (King/Victoria) Transit Hub, namely 510 King Street West and 16, 50 and 60 Victoria Street North;

b) approve the implementation of a GO Station shuttle service from the Charles Street Terminal, effective December 19, 2011;

c) enter into a fare integration agreement with Metrolinx, the operator of GO Transit, with the form and content of such agreement to be to the satisfaction of the Regional Solicitor;

d) amend the Region’s Fees and Charges By-law (By-law 11-015) to:
   i) accommodate the proposed fare integration agreement with Metrolinx with such amendments to take effect on December 15, 2011 provided the proposed agreement is signed by the parties on or before that date;
   ii) provide free parking until 7:10 AM and charge $2.00 per hour to a daily maximum of $12.00 to use the temporary parking lot at the Region of Waterloo (King/Victoria) Transit Hub lands, namely 510 King Street West and 16, 50 and 60 Victoria Street North with such amendments to take effect on January 19, 2012.

SUMMARY:

The first GO Transit rail service to Waterloo Region will begin on December 19, 2011. Passengers travelling from Waterloo Region will be able to travel to Guelph, Georgetown, Mount Pleasant, Brampton, Bramalea, Malton, Etobicoke North, Weston, Bloor and Toronto Union Station. GO Transit rail trips departing Waterloo Region in the morning will leave from the VIA Rail station at the intersection of Weber Street West and Victoria Street North in Kitchener at 5:52 AM and 7:10 AM. These trips are scheduled to arrive at Toronto Union Station at 7:53 AM and 9:08 AM respectively. Trips departing from Toronto Union Station at 4:45 PM and 5:45 PM in the afternoon are scheduled to arrive in Waterloo Region at 6:42 PM and 7:42 PM respectively. GO Transit plans to provide express bus trips between Waterloo Region and off-peak trains at the Bramalea GO Station. The fare for an adult one way trip by GO Transit between Kitchener and Toronto Union Station will be $14.60.

The development of the Region of Waterloo (King/Victoria) Transit Hub will provide an opportunity to locate the GO train platform adjacent to a future LRT station and nearby bus stops. The Region can undertake a number of initiatives to encourage GO Transit ridership and integrate transit service in the interim before the development of the King/Victoria Transit Hub. It is recommended that the King/Victoria Transit Hub land be used as a temporary parking lot and that a shuttle service connecting the Charles Street Terminal, stops at the intersection of King Street and Victoria Street, and the rail station be scheduled to coordinate GRT service with GO Transit rail trips.
It is recommended that the Region enter into a fare integration agreement with Metrolinx, the operator of GO Transit. The coordination of GRT and GO Transit fares would reduce the overall cost of travelling by transit, provide an incentive to encourage ridership, increase convenience, and reduce parking demand at the rail station. The terms of such an agreement would define the obligations of the Region and GO Transit in executing the agreement. Such a fare integration agreement would enable GRT passengers to present a valid GO Transit fare when boarding GRT service to travel to or from the rail station and pay a reduced fare for the GRT portion of their trip. The implementation of a new coordinated fare requires an amendment to the Region’s Fees and Charges By-law. This report recommends setting a new GRT fare for GO Transit customers at $0.50 per ride, effective December 15, 2011. GO Transit would provide a subsidy of $1.45 for each eligible ride. It should also be noted that GO is continuing discussions with the Region of Waterloo on other potential arrangements, which will be forwarded to Regional Council for consideration as required.

REPORT:

The first GO Transit rail service to Waterloo Region will begin on December 19, 2011. The schedule will include two trips to Toronto Union Station in the morning and two return trips to Waterloo Region in the afternoon. Rail service will be provided as an extension of the Georgetown line, which will now be known as the Kitchener line. Passengers travelling from Waterloo Region will be able to travel to Guelph, Georgetown, Mount Pleasant, Brampton, Bramalea, Malton, Etobicoke North, Weston, Bloor and Toronto Union Station.

GO Transit rail trips departing Waterloo Region in the morning will leave from the VIA Rail station at the intersection of Weber Street West and Victoria Street North in Kitchener at 5:52 AM and 7:10 AM. These trips are scheduled to arrive at Toronto Union Station at 7:53 AM and 9:08 AM respectively. Trips departing from Toronto Union Station at 4:45 PM and 5:45 PM in the afternoon are scheduled to arrive in Waterloo Region at 6:42 PM and 7:42 PM respectively. With a travel time of two hours, these rail trips are competitive with peak period auto driving times from Waterloo Region to downtown Toronto. The scheduled arrival and departure times of VIA and GO trains which serve Waterloo Region are described in Appendix 1.

GO Transit replaces rail service with bus service to connect to partial length train trips during non-peak periods. GO Transit plans to provide express bus trips between Waterloo Region and trains at the Bramalea GO Station. One trip is tentatively scheduled to travel eastbound in the morning and three trips are tentatively scheduled to travel westbound in the afternoon. GO Transit will soon confirm the schedule details of this supplemental GO Transit bus service (known as “train-bus” because of the connection to rail service). This service is expected to begin in early 2012.

The fare for an adult one way trip by GO Transit between Kitchener and Toronto Union Station will be $14.60. Discounted fares are available for seniors, students and children. Regular riders will have the option of purchasing discounted multiple ride tickets and monthly passes. Applicable GO Transit fares between Waterloo Region and Toronto Union Station are described in Appendix 2.

VIA Rail operates three round trips per day between Kitchener and Toronto. The fare for an adult one way trip ranges from $25.99 to $35.03 depending on an advanced purchase discount. Discount fares are available for those over the age of 60, youths (age 12-25) and children (age 2-11). In some locations, VIA Rail offers a “GO VIA Pak” of discount coupons valid for ten one-way trips on VIA trains between Toronto Union Station and rail stations in the Greater Toronto Area for GO Transit passengers with a monthly pass or 10-ride ticket. Each use of the GO VIA Pak costs the difference between a regular GO Transit fare and a VIA Rail fare. VIA Rail is currently reviewing its fare structure and will advise if they will offer the GO VIA Pak to Waterloo Region passengers in the spring of 2012.
The integration of GO Transit service with Grand River Transit and future Light Rail Transit service is critical. Transit integration includes coordinating the physical location of stops, the coordination of schedules and the coordination of fares. The development of the Region of Waterloo (King/Victoria) Transit Hub will provide an opportunity to locate the GO train platform adjacent to a future LRT station. Locating an LRT station and the GO platform adjacent to one another reduces the walk distance involved in making a transfer from one mode to the other. This increases the convenience of using each mode to access the other and encourages ridership. The development of the King/Victoria Transit Hub will also create an opportunity to provide on-site parking near the future relocated GO train platform. It should also be noted that GO is continuing discussions with the Region of Waterloo on other potential arrangements, which will be forwarded to Regional Council for consideration as required.

Parking

The Region has developed a temporary parking facility on the King/Victoria Transit Hub lands in the interim before the new transit facility is developed. At 510 King Street West, the site of the former Korean grocery store at the corner of King Street West and Victoria Street, up to 83 parking spots will be accommodated by the start of GO train service. An additional 40 spots will be accommodated on 16 Victoria Street North for a total of up to 123 spots. Up to an additional 139 spots will be developed on 50 and 60 Victoria Street North in 2012. Discussions with GO Transit regarding the usage of these sites are ongoing. There are approximately 70 paid parking spots available at the rail station and GO Transit is pursuing additional parking in the area.

GO Transit has typically made parking available for free at each of its rail stations to reduce the cost of commuting. It is recommended that parking at the temporary parking facility on the King/Victoria Transit Hub lands be free of charge to those who arrive before 7:10 AM. Pay and Display machines would be used to control parking at other times of day in order to ensure that parking spaces are used primarily by those commuting with GO Transit. Any revenue generated by this new parking facility would be applied towards recovering the costs of site conversion as well as parking lot operation and maintenance costs. Regional security contractors and the City of Kitchener would enforce parking control. The City of Kitchener would receive revenue generated by parking violations at the site.

In order to implement a parking fee at the temporary parking lot, an amendment to the Region’s Fees and Charges By-law is required. It is recommended that a fee of $2.00 per hour up to a daily maximum of $12.00 would be charged for parking after 7:10 AM effective January 19, 2012. This price is comparable with fees set by the City of Kitchener at nearby downtown Kitchener paid parking lots. City of Kitchener staff was consulted in the development of this parking plan.

Kiss and Ride Facility

There is limited room available on site at the rail station to provide an expanded Kiss and Ride facility. It is expected that the parking area will continue to be used as a pick up and drop off area as it is currently configured. There is the potential to develop a Kiss and Ride Facility at the future King/Victoria Transit Hub. GO Transit is still investigating opportunities for a Kiss and Ride facility near the rail station.

GRT Service Integration

As illustrated in Map 1, the current GRT service nearest to the rail station is available at the bus stops on Weber Street West at Victoria Street North. These stops are served by Route 18 GUELPH STREET which connects the Charles Street Terminal to the Lancaster Street West – Guelph Street area of West Kitchener. Riders travelling to the rail station from other areas of the Region can access Route 18 at the Charles Street Terminal. The span and frequency of service on Route 18 is
limited, however, and the current schedule does not conveniently connect to the planned GO train schedule. The scheduled 5:52 AM GO Transit rail trip departs prior to the start of Route 18 service and the two afternoon GO trains are scheduled to arrive after the daily end of service on Route 18.

A shuttle service could be implemented to connect the Charles Street Terminal, stops at the intersection of King Street and Victoria Street and the rail station in order to integrate GRT service with GO Transit rail trips. As illustrated in Map 2, the shuttle would stop at the Charles Street Terminal to provide connections to the variety of GRT routes available there. It would stop at the intersection of King Street and Victoria Street to provide connections to iXpress, Route 7 MAINLINE and other routes. GO Transit riders who park at the temporary parking lot on the future King/Victoria Transit Hub land would also have the option of boarding the shuttle at the intersection of King Street and Victoria Street.

In the morning, the GO shuttle would drop passengers off at the stop adjacent to the rail station on Weber Street West at Victoria Street North. In the afternoon, the GO shuttle would wait at a new stop on Ahrens Street West at Victoria Street North for riders arriving from trains before leaving the rail station to stop at the intersection of King Street and Victoria Street and the Charles Street Terminal.

It is recommended that this shuttle service be introduced on December 19, 2011 to coincide with the start of GO rail service. Trips can be scheduled to meet morning GO train departures and afternoon GO train arrivals. The schedule of this shuttle would be available to customers through all typical sources of customer information. The initial service would be closely monitored and if necessary adapted in consultation with riders. The ridership performance of the shuttle would be monitored and an update of whether the shuttle achieves minimum performance targets would be provided to Council in 2012. If approved, initial service would be provided using busPLUS vehicles in order to minimize the costs of the shuttle and offer greater vehicle maneuverability on site at the rail station.

Because of the high frequency of service available at King Street West and Victoria Street this location may represent a convenient point for many riders to access the rail station. The GO shuttle would connect to this location and provide a means to reduce the walk distance to this location for riders. The development of the King/Victoria Transit Hub will improve the coordination of local and interregional transit services by bringing the rail platform to a short distance from the future LRT station as well as nearby bus stops.

**GRT Fare Integration**

The coordination of GRT and GO Transit fares would reduce the overall cost of travelling by transit, provide an incentive to encourage ridership, increase convenience, and reduce parking demand at the rail station. It is recommended that the Region enter into a fare integration agreement with Metrolinx, the operator of GO Transit. The implementation of a new coordinated fare requires an amendment to the Region’s Fees and Charges By-law. This report recommends setting a new GRT fare for GO Transit customers at $0.50 per ride, effective December 15, 2011.

The terms of such an agreement would define the obligations of the Region and GO Transit in executing the agreement, establish a commitment to prevent fare fraud, define how a fare subsidy provided by GO Transit to the Region would be calculated, set the initial fare level, define accepted methods of counting and reporting fare usage, establish a principle to cooperate at marketing the fare, and make provision for a periodic joint review of the program. The terms of the agreement would be similar to fare integration agreements between GO Transit and other transit agencies.

Such a fare integration agreement would enable GRT passengers to present a valid GO Transit fare when boarding a GRT vehicle to travel to or from the rail station and pay a reduced fare for the GRT portion of their trip. GO Transit would reimburse GRT with a fare subsidy equal to the difference
between an adult ticket fare and the coordinated fare up to a maximum of 75% of the price of an adult ticket. The current price of 5 adult tickets is $9.75, or $1.95 per ride. If GRT charges eligible riders a $0.50 fare then GO Transit would provide a subsidy valued at $1.45 per ride.

Such an agreement would apply only to GRT riders travelling to the rail station with the intention of using GO Transit service, or to riders boarding GRT service having immediately before used GO Transit service would represent to GRT a total of $1.95 in revenue per MobilityPLUS rider. This is $0.55 less than the base MobilityPLUS fare and would result in a lower amount of revenue per MobilityPLUS passenger.

Such an agreement would not apply to VIA Rail service, GO Transit bus service at any location other than the Kitchener rail station or to other out of town bus service operators. Transit Services will develop a communications plan to advertise this fare option to riders and familiarize bus operators.

GO Transit is currently implementing the Presto smartcard fare system across its service area. Riders would not be able to use the Presto card as proof of a valid GO fare under the fare integration agreement because GRT vehicles are not equipped to validate Presto cards. GO Transit is extending fare integration to all Presto card holders boarding GO bus service at all locations in municipalities which are equipped with Presto card readers and Metrolinx has a fare integration agreement with.

The implementation of a smartcard fare system could simplify the coordination of GRT and GO Transit fares by allowing passengers to apply such a card when boarding a transit vehicle and have the appropriate fare automatically calculated. A different legal agreement than is recommended by this report would be required to implement such fare coordination. Staff is initiating an investigation of Presto and other smartcard fare systems as part of the Planning, Housing and Community Services departmental section of Council’s 2011-2014 Strategic Plan.

**Area Municipal Consultation/Coordination**

City of Kitchener staff was consulted in the development of the plan for temporary parking at the King/Victoria Transit Hub lands. A copy of this report has been sent to Area Municipal staff for information.

**CORPORATE STRATEGIC PLAN:**

The integration of GO Transit and GRT fares supports the Region’s Strategic Objective 3.4: encouraging improvements to inter-city transportation services to and from Waterloo Region. The launch of GO Transit rail service to Kitchener supports Action 3.4.3 (Advocate for improved Rail service to Kitchener and Cambridge) of the Region’s Strategic Plan.

**FINANCIAL IMPLICATIONS:**

Any revenue generated from parking fees at the temporary parking lot on the King/Victoria Transit Hub lands would be applied towards recovering the cost of converting the site and the operation of Pay and Display machines. It is estimated that the net increase in GRT passenger revenue to result from a GO Transit Fare Integration Agreement is between approximately $20,000 and $30,000 annually. The cost of adding GO shuttle trips connecting the Charles Street Terminal to the rail station can be accommodated within the existing GRT operating budget when supplemented with the additional new revenue.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Facilities Management has been involved in the conversion of the King/Victoria Transit Hub lands to a temporary parking facility. Staff from Finance, Legal Services and Transit Services has been consulted on the financial implications and implementation plans of the Fare Integration Agreement, as well as on GRT service coordination.

ATTACHMENTS:

Appendix 1: Schedule of Weekday VIA Rail and GO Transit Rail Service to Waterloo Region
Appendix 2: Applicable GO Transit Fares between Waterloo Region and Toronto Union Station
Appendix 3: Map 1 – GRT Service Available Near Kitchener Rail Station
Appendix 4: Map 2 – GO Shuttle Service

PREPARED BY:  Reid Fulton, Principal Planner (Transit)

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
# Appendix 1: Schedule of Weekday VIA Rail and GO Transit Rail Service to Waterloo Region

<table>
<thead>
<tr>
<th>Service</th>
<th>Train Number</th>
<th>Kitchener rail Station</th>
<th>Guelph VIA Station</th>
<th>Acton</th>
<th>Georgetown GO Station</th>
<th>Mount Pleasant GO Station</th>
<th>Brampton GO Station</th>
<th>Bramalea GO Station</th>
<th>Malton GO Station</th>
<th>Etobicoke North GO Station</th>
<th>Weston GO Station</th>
<th>Bloor GO Station</th>
<th>Toronto-Union Station</th>
<th>Travel Time between Kitchener &amp; Toronto</th>
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<tbody>
<tr>
<td>GO</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6:40</td>
<td>6:00</td>
<td>6:11</td>
<td>6:18</td>
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<tr>
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<tr>
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<td>5:52</td>
<td>6:14</td>
<td></td>
<td></td>
<td></td>
<td>7:05</td>
<td>7:20</td>
<td>7:31</td>
<td>7:38</td>
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<td>GO</td>
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<td></td>
<td></td>
<td>7:22</td>
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<td></td>
<td>7:33</td>
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<td>GO</td>
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<td></td>
<td></td>
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<td>8:07</td>
<td>8:34</td>
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<tr>
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<td>212</td>
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<td>7:32</td>
<td></td>
<td></td>
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<td>8:05</td>
<td>8:29</td>
<td>8:54</td>
<td>9:07</td>
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<td></td>
<td></td>
<td>8:14</td>
<td>8:35</td>
<td>9:03</td>
<td>9:15</td>
<td></td>
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<td></td>
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<tr>
<td>VIA</td>
<td>84</td>
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<td>9:42</td>
<td></td>
<td></td>
<td></td>
<td>10:12</td>
<td>10:22</td>
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<td>11:14</td>
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</table>
## Westbound trains

<table>
<thead>
<tr>
<th>Service</th>
<th>Train Number</th>
<th>Toronto-Union Station</th>
<th>Bloor GO Station</th>
<th>Weston GO Station</th>
<th>Etobicoke North GO Station</th>
<th>Malton GO Station</th>
<th>Bramalea GO Station</th>
<th>Brampton GO Station</th>
<th>Mount Pleasant GO Station</th>
<th>Georgetown GO Station</th>
<th>Acton</th>
<th>Guelph VIA Station</th>
<th>Kitchener rail Station</th>
<th>Travel Time between Kitchener &amp; Toronto</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIA</td>
<td>85</td>
<td>10:55</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>12:08</td>
<td>12:36</td>
<td>1:41</td>
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<tr>
<td>GO</td>
<td>205</td>
<td>16:15</td>
<td>16:24</td>
<td>16:32</td>
<td>16:37</td>
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</tr>
<tr>
<td>GO</td>
<td>207</td>
<td>16:45</td>
<td>16:54</td>
<td>17:02</td>
<td>17:07</td>
<td>17:14</td>
<td>17:21</td>
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<td>1:57</td>
</tr>
<tr>
<td>GO</td>
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<td>17:15</td>
<td>17:24</td>
<td>17:32</td>
<td>17:37</td>
<td>17:44</td>
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<td>VIA</td>
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<td>→</td>
<td>→</td>
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<tr>
<td>VIA</td>
<td>89</td>
<td>22:10</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
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<td>→</td>
<td>→</td>
<td></td>
<td></td>
<td></td>
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Appendix 2: Applicable GO Transit Fares between Waterloo Region and Toronto Union Station

<table>
<thead>
<tr>
<th>GO Fare:</th>
<th>Price:</th>
</tr>
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<tbody>
<tr>
<td>Adult single-ride ticket</td>
<td>$14.60</td>
</tr>
<tr>
<td>Adult two-ride ticket</td>
<td>$29.20</td>
</tr>
<tr>
<td>Adult day pass</td>
<td>$29.20</td>
</tr>
<tr>
<td>Adult 10-ride ticket</td>
<td>$135.00</td>
</tr>
<tr>
<td>Adult monthly pass</td>
<td>$482.00</td>
</tr>
<tr>
<td>Senior or Child single-ride ticket</td>
<td>$7.30</td>
</tr>
<tr>
<td>Senior or Child two-ride ticket</td>
<td>$14.60</td>
</tr>
<tr>
<td>Senior or Child day pass</td>
<td>$14.60</td>
</tr>
<tr>
<td>Senior or Child 10-ride ticket</td>
<td>$73.00</td>
</tr>
<tr>
<td>Senior or Child monthly pass</td>
<td>$292.00</td>
</tr>
<tr>
<td>Student 10-ride ticket</td>
<td>$124.00</td>
</tr>
<tr>
<td>Student monthly pass</td>
<td>$380.00</td>
</tr>
<tr>
<td>Group pass</td>
<td>$58.40</td>
</tr>
</tbody>
</table>
Appendix 3: Map 1 – GRT Service Available Near Kitchener Rail Station
Appendix 4: Map 2 – GO Shuttle Service

- Kitchener Rail Station
- Future Region of Waterloo (King/Victoria) Transit Hub and temporary parking
- New bus stop on Ahrens Street
- Weber Street and Victoria Street
- King Street and Victoria Street
- Charles Street Terminal

Legend:
- Rail station or bus terminal
- GO Shuttle
- Bus stop
REGION OF WATERLOO
PLANNING, HOUSING AND COMMUNITY SERVICES
Transportation Planning

TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: D10-70

SUBJECT: TRAVELWISE PROGRESS 2011

RECOMMENDATION:
For information.

SUMMARY:
The Region of Waterloo actively encourages residents and staff to travel more often on foot, by bike, in carpool or on the bus through TravelWise – the Region’s Transportation Demand Management (TDM) program. TravelWise accomplishes this task with programs and incentives that are designed to make sustainable transportation (walking, cycling, carpooling and transit) more convenient relative to driving alone. In this way, TravelWise has a direct impact on public health, quality of life and the environment.

Today, TravelWise is a Region of Waterloo employee program that supports and promotes alternatives to single occupancy vehicle travel. Employees receive discounted transit passes, access to showers and secure bike parking, as well as online ridematching services. TravelWise also has a community education and outreach component. In 2011, TravelWise attended 18 community events, hosted the Commuter Challenge, completed six individualized marketing campaigns that contacted 8000 households and 5400 employees, and partnered with Public Health to provide CAN-BIKE training to 19 adults and 14 children. TravelWise also worked with a dozen local employers to develop a Transportation Management Association (TMA) pilot project prepared to launch in January 2012.

Residents are changing the way they view transportation in Waterloo Region. In the surveys conducted for the Transportation Master Plan, residents placed a higher priority on transportation choice than in previous surveys. Also, it was local employers interested in providing transportation choice to their employees who initiated the TMA discussions with the Region. Since our first individualized marketing campaign in Downtown Cambridge in 2006, TravelWise has been working directly with residents, Regional employees and other businesses to support the shift to more sustainable transportation use. To evaluate the impact of its TDM programs, the Region uses a combination of surveys, online trip tracking tools and data collected by Grand River Transit. The following report provides an evaluative summary of TravelWise’s 2011 successes.

REPORT:
Transportation Demand Management (TDM) is the use of policies, programs and services to influence when, why and how people travel. Municipalities use TDM to improve the efficiency of their existing transportation networks, to achieve higher returns on their transit investments and to achieve higher usage rates of their cycling and pedestrian infrastructure.

TDM is making significant progress in Waterloo Region as residents increasingly perceive cycling, walking and transit as realistic transportation solutions for their families. In a survey conducted for the Transportation Master Plan, residents placed a higher priority on transportation choice than in
previous surveys. Increasingly, local businesses are also interested in providing incentives for employees to use active and sustainable transportation and initiated discussions with the Region to develop a Transportation Management Association.

Commuter Challenge

The annual Commuter Challenge is the Region’s most intensive outreach event for sustainable transportation. It encourages participants to commute for a week on foot, by bike, by bus, in a carpool, or by teleworking. For the second year in a row, Waterloo Region placed first in Ontario and second in Canada for our population category. The 12th annual event attracted 2,795 participants – an increase of 94% over last year’s 1,440 participants. In 2011, the Challenge also saw an increase in participating organizations with 68 taking part compared to 60 in 2010. The Challenge reduced our community’s green house gas emissions by 33,650 kilograms, a 23% increase from last year’s reduction of 27,158 kilograms.

Neighbourhoods TravelWise

In partnership with Grand River Transit (GRT), TravelWise communicates directly with households through its individualized marketing campaigns. In Waterloo Region, these neighbourhood based campaigns are conducted where new or improved transit service has recently been installed. After an initial survey, residents are invited to order customized information packages on the mode(s) of their choice. Typically 30% of households contacted during the initial survey are interested in the Region’s TDM information. The GRT Bus ‘n’ Bike map is the most popular item ordered by participating households.

The Region completed its most successful individualized marketing campaign ever in Uptown Waterloo in June 2011. Among the 348 participating households, there was a 26% increase in sustainable transportation use and a 13% decrease in auto use (please see Figure 1). In neighbourhoods of roughly 1,000 households, TravelWise estimates that individualized marketing results in 27 to 68 more transit trips per day.

Figure 1:
Impact of Individualized Marketing on mode share in Uptown Waterloo
Employers TravelWise

In September 2010, Sun Life Financial, Equitable Life of Canada and the City of Waterloo confirmed their participation in a TravelWise demonstration project funded in part by Transport Canada’s ecoMOBILITY grant program. Each employer has since received customized employer individualized marketing services, baseline surveying, online ride matching and trip tracking services, two Regionally hosted outreach events, as well as rewards and incentives to improve employee participation.

TravelWise staff delivered over 1000 customized transportation packages to interested employees at its six outreach events. TravelWise also promoted Carpool Zone during its individualized marketing campaign. As a result, 162 people created new Carpool Zone accounts. The final evaluation of this initiative is currently underway.

Transportation Management Association (TMA)

TMAs work with employers to provide an assortment of TDM tools and services to reduce the number of people driving alone to work in an effort to ease parking concerns, relieve traffic congestion and reduce green house gas emissions.

A Working Group was established in January 2011 to determine the feasibility of a TMA in Waterloo Region. Representatives from twenty organizations including the Cities of Cambridge, Kitchener and Waterloo, Research In Motion, Sun Life Financial, Equitable Life of Canada, Open Text and the University of Waterloo met every six weeks to guide the development of the TravelWise Business Plan. During the Working Group meetings, key stakeholders recommended that the Region manage the TravelWise TMA as a two year pilot project. In November 2011, Regional Council approved the two year pilot program.

The Business Plan recommends that TravelWise establish four basic services as part of the TravelWise TMA: online ridematching, Emergency Ride Home, individualized marketing campaigns, and a new online store for the Grand River Transit Corporate Pass. The new Corporate Pass is a significant improvement on the program first launched in 2000. In the past, interested organizations were required to have at least 24 employees willing to make a one year commitment to transit. For their one year commitment, employees would receive a pass (without an expiry date) at a monthly discount of 15%. The pass was paid for through payroll deductions. In recent years, however, several employers were interested in the Corporate Pass but were deterred by the administrative process which they saw as a liability. The new pass can be purchased online using a credit or debit card with discounts increasing proportionately with the term of the commitment. Once the online purchase is confirmed, GRT will print the Corporate Pass (with an expiry date) and send it to the participating organization. The pass will be distributed to employees through interoffice mail.

The Business Plan also recommends programming fees for interested organizations and Area Municipalities, as well as an overall budget for TravelWise services. Eleven organizations and Area Municipalities have confirmed their intent to join TravelWise and another six organizations are still seeking internal approval to join the initiative.

Region of Waterloo TravelWise Results

Since 2006, TravelWise has been making active and sustainable transportation more convenient for Regional staff. TravelWise offers the following incentives to active and sustainable commuters:

- Forty-five percent discount on transit passes;
- Emergency Ride Home reimbursements of up to $35;
- Access to Grand River CarShare vehicles (since 2010);
Online carpool matching services;
Covered bike parking; and
Access to change rooms and shower facilities.

By November 2011, 254 Regional TravelWise members were regularly tracking their sustainable commutes, up from 78 members in December 2010. This information is essential for TravelWise to more accurately track green house gas savings from changes in commuter behaviour. Reporting this information to participating staff members has increased staff interest in tracking their commuting trips. In 2011, Regional staff travelled over 94,425 kilometres using sustainable transportation and saved over 11,705 kilograms of green house gas emissions.

A comparison between the 2006 Transportation Tomorrow Survey (TTS) and TravelWise individualized marketing surveys shows that the drive alone rate for staff in the Uptown and Downtown offices is approximately 9% lower than for the Region as a whole—71% compared to 81.5%. Staff cycling to work rates are also significantly higher at 4%, compared to 0.7% in TTS. Staff at these locations are also more likely to ride transit with a 6% transit to work mode share compared to 3.2% community wide. Staff working from the Region’s downtown offices, however, do have access to the highest frequency transit routes in the Region, which can also partly explain higher rates of transit use.

Area Municipal Consultation/Coordination

The Cities of Cambridge, Kitchener and Waterloo are partners in several TravelWise initiatives and are regularly consulted regarding the implementation of TravelWise programs. The three Cities are in concurrence with the establishment of the TravelWise TMA as a supplementary initiative to local TDM initiatives.

CORPORATE STRATEGIC PLAN:

TravelWise implements focus area 3.2, which is to develop, promote and integrate active forms of transportation, as well as strategic objective 3.2.2, which is to support the development of a Transportation Management Association in Waterloo Region. TravelWise also supports strategic objective 3.1.3, implementing programs to improve access of public transit options, and 3.3, which is to optimize existing road capacity to safely manage traffic throughout Waterloo Region. By providing Transportation Demand Management programs and services, the TravelWise also implements the objectives of Regional Official Plan policy 3.C.1.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Partnerships are essential to the success of TravelWise. TDM staff regularly work with staff from Grand River Transit, Public Health, Design and Construction, Information and Technology Services and Transportation and Environmental Services.

ATTACHMENTS:

Appendix A – TravelWise Monitoring and Evaluation Matrix

PREPARED BY: John Hill, Principal Planner, Transit Development

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
## Appendix A

### TravelWise Monitoring and Evaluation Matrix

<table>
<thead>
<tr>
<th>Project</th>
<th>TDM Category</th>
<th>Performance Indicator</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>TravelWise</td>
<td>Education, promotion and Outreach &amp; Travel Incentives and Disincentives</td>
<td>Number of community events attended</td>
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<td>Number of TravelWise presentations to external companies</td>
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<tr>
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<td></td>
<td>Number of TravelWise employers</td>
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<td>4</td>
<td>11</td>
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<td>254</td>
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<td>Number of TravelWise CarShare members</td>
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<td>N/A</td>
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<td>Total KM travelled using sustainable transportation</td>
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<td>Performance Indicator</td>
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<td>2011</td>
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<tr>
<td>Commuter Challenge</td>
<td>Education, promotion and Outreach</td>
<td>Total number of participants</td>
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<td>1440</td>
<td>2795</td>
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<tr>
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<td>Number of companies represented</td>
<td>60</td>
<td>60</td>
<td>68</td>
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<td>Total carbon dioxide (CO2) reductions</td>
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<td>27,158 Kg</td>
<td>33,650 Kg</td>
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<td>Travel Incentives</td>
<td>Corporatepass employers (old payroll system)</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>Number of Corporatepass holders (in payroll deduction system)</td>
<td>N/A</td>
<td>214 Total (63 at ROW, 16 at St. Mary's Hospital, 66 at Grand River Hospital, 69 at UW)</td>
<td>222 Total (57 at ROW, 13 at St. Mary's Hospital, 79 at Grand River Hospital, 73 at UW)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U-Pass ridership</td>
<td>3,285,163</td>
<td>4,189,098</td>
<td>5,084,515*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total # of riders</td>
<td>16,599,974</td>
<td>18,054,938</td>
<td>19,481,322*</td>
</tr>
<tr>
<td>Cycling</td>
<td>Transportation Supply &amp; Travel Incentives</td>
<td>Total KM, existing, on-road Regional and on-road AM that is in CMP, 2004</td>
<td>N/A</td>
<td>309 Km (estimate)</td>
<td>304* Km</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total KM, existing, off-road in CMP, 2004</td>
<td>N/A</td>
<td>44 Km</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education, promotion and Outreach &amp; Travel Incentives</td>
<td>Total number of CAN-BIKE participants</td>
<td>10 instructors trained</td>
<td>18 adults, 10 children (14 adults, 18 children taste of Can-Bike)</td>
<td>4 adults, 14 children (Otesha taste of Can-Bike, 15 adults)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cycling mode share, 2015 goal 2% in CMP (Stats Can)</td>
<td>1.1% (2001)</td>
<td>1.6% (2006)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education, promotion and Outreach &amp; Travel Incentives</td>
<td>Pedestrian mode share (Stats Can)</td>
<td>4.8% (2001)</td>
<td>5.1% (2006)</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>TDM Category</td>
<td>Performance Indicator</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
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<tr>
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<tr>
<td>Carpooling</td>
<td>Education, promotion and Outreach &amp; Travel Incentives</td>
<td>Total number of Regional Carpool Zone accounts</td>
<td>N/A</td>
<td>242</td>
<td>307*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total number of registered Region of Waterloo carpools</td>
<td>N/A</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waterloo Region driving rate (Stats Can)</td>
<td>81%</td>
<td>78%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Waterloo Region vehicle occupancy rate (TTS)</td>
<td>1.23</td>
<td>1.215</td>
<td></td>
</tr>
<tr>
<td>Residential Individualized marketing</td>
<td>Education, promotion and Outreach &amp; Travel Incentives</td>
<td>Number of Households segmented (I, R, N)</td>
<td>315</td>
<td>956</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Number of reward packages delivered</td>
<td>128</td>
<td>348</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Sustainable mode share change among participants</td>
<td>7.2%</td>
<td>36.6%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>7.2% increase for walking, 36.6% increase in transit, 1% decrease in auto use</td>
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<tr>
<td></td>
<td></td>
<td>26.4% increase in active and sustainable modes, 13.3% decrease in auto use</td>
<td></td>
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*04-Nov-2011
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: T04-20, 5190

SUBJECT: BLOOMINGDALE ROAD IMPROVEMENTS, KRAFT DRIVE TO BRIDGE STREET, CITY OF KITCHENER – APPROVAL OF PROJECT

RECOMMENDATION:

a) THAT the Regional Municipality of Waterloo approve the proposed improvements on Bloomingdale Road (Regional Road #20) from Kraft Drive to Bridge Street as outlined in Report E-11-117.

SUMMARY:

The Region of Waterloo is planning roadway improvements on Bloomingdale Road between Kraft Drive and Bridge Street in the City of Kitchener. The project is being undertaken as a Schedule ‘A+’ project under the provincial “Municipal Class Environmental Assessment” Act. (Please refer to the Key Plan in Appendix “A” for project limits.) Bloomingdale Road between Kraft Drive and Bridge Street is in need of resurfacing/reconstruction to replace the deteriorated pavement surface.

As part of this project, the addition of sidewalk sections, where they currently do not exist is being recommended on Bloomingdale Road between Kraft Drive and Bridge Street. The addition of new sidewalks will enhance the pedestrian environment on this section of roadway and is consistent with the priorities identified in the Region of Waterloo and City of Kitchener Pedestrian Charters which support the installation of sidewalks within the public right-of-way and encourages people to walk for travel, exercise and recreation. Bloomingdale Road is identified as a Residential Connector in the Region of Waterloo Corridor Design Guidelines which indicates that sidewalks are a necessary component of the right of way. The sidewalks on Bloomingdale Road will provide a direct link with the new sidewalks to be constructed on Bridge Street between the Bridgeport Bridge and the Kitchener/Woolwich boundary which is currently scheduled for construction in 2014. The Region of Waterloo’s Cycling Master Plan also identifies Bloomingdale Road as an on-road cycling facility. The dedication of on-road cycling lanes is also proposed as the existing roadway platform width supports the addition of dedicated cycling lanes.

A Public Consultation Centre (PCC) was held on September 8th, 2011 to present the recommended design for the improvements on Bloomingdale Road. The recommended design proposed the addition of new sidewalks where they currently do not exist and the provision of on-road dedicated cycling lanes. The new sidewalk design/alignment would ‘mirror’ the existing sidewalk alignment located on the north side of Bloomingdale Road between Bridge Street and approximately 60 metres east of Colyer Place. This existing sidewalk alignment involves a 1.5 metre wide sidewalk and a 1.0 metre grassed boulevard. Three (3) existing street trees must be removed to accommodate the new sidewalk construction on the south side of Bloomingdale Road. As is customary on Regional Road improvement projects, staff will work with affected property owners on a tree replacement program which typically involves planting two replacement trees for every tree removed. Two (2) comments were received from the public as a result of the Public Consultation Centre. One resident supported the addition of the new sections of sidewalk while one resident did not support the addition of the new sidewalk.
Staff has responded to these comments indicating that the Region of Waterloo’s Pedestrian Charter supports the installation of sidewalks on all Regional Roadways.

Based on the public comments being received, it is recommended that the Design Alternative as presented at the September 8th, 2011 PCC be approved by Regional Council for construction in 2015. Property acquisitions from a number of adjacent property owners are required as part of this project to accommodate the proposed sidewalk installation. The total estimated Region of Waterloo cost of the Bloomingdale Road Improvements is $1,325,000.

REPORT:

1.0 Background

The Region of Waterloo is planning roadway improvements on Bloomingdale Road (Regional Road #20) between Kraft Drive and Bridge Street in the City of Kitchener. The project is being undertaken as a Schedule ‘A+’ project (pre-approved subject to public advisement) under the Class Environmental Assessment process. Bloomingdale Road is identified as a Residential Connector in the Region of Waterloo Corridor Design Guidelines. The section of Bloomingdale Road between Kraft Drive and Bridge Street is scheduled for roadway improvements in 2015. (Please refer to the Key Plan in Appendix “A” for project limits.)

Bloomingdale Road between Kraft Drive and Bridge Street is a two lane roadway with an existing sidewalk on the north side from Bridge Street to just east of Colyer Place. Bloomingdale Road, between Kraft Drive and Bridge Street requires full roadway asphalt removal and replacement, repairs to existing sections of deteriorated concrete curbs and gutters and installation of sections of sidewalks on both sides of the road where they currently do not exist.

In order to accommodate the addition of sidewalks where they currently do not exist on Bloomingdale Road, property acquisitions from a number of adjacent property owners are required.

2.0 Project Issues

2.1 Traffic Volumes, Collisions and Operational Issues

A review of existing traffic counts conducted by the Region of Waterloo along Bloomingdale Road reveals that no additional travel lanes or turn lanes are warranted and staff is not recommending any further traffic improvements be implemented. Staff has reviewed the collision history (2006 to 2010) on Bloomingdale Road between Kraft Drive and Bridge Street and note that there are no unusual collision patterns.

2.2 Cycling, Pedestrian and Transit Needs

In 2004, Regional Council approved the Regional Cycling Master Plan. Bloomingdale Road was identified as a long term on-road cycling facility in this plan. The existing pavement currently has the sufficient width to provide an on-road cycling facility; therefore, no widening of the existing roadway is required to implement the dedicated on-road cycling lanes.

The Region of Waterloo and the City of Kitchener Pedestrian Charters both support the installation of sidewalks within the public right-of-way, which encourage people to walk for travel, exercise and recreation. Bloomingdale Road is identified as a Residential Connector in the Region of Waterloo Corridor Design Guidelines which indicates that sidewalks are a necessary component of the right of way. The Waterloo Region District School Board also supports the installation of new sidewalks on Bloomingdale Road to provide a proper walking surface for school children that currently walk to Bridgeport Public School located on Bridge Street near Woolwich Street. GRT staff has identified a need for upgraded bus stops and added bus shelters along the corridor where possible.
3.0 Design Concepts
Two design concepts were developed for review and comment by the public. The two alternative design concepts are as follows:

Alternative Design Concept “1” – comprises no change to the existing lane configuration and no additional sections of sidewalk. (‘Do nothing’ alternative)

Alternative Design Concept “2” – includes two 3.35 metre wide travel lanes and two 1.25 metre bike lanes between Kraft Drive and Bridge Street. It also includes the installation of sections of 1.5 metre wide sidewalks on both sides of the road where they currently do not exist.

4.0 Public Consultation Centre Issues and Project Team Response

4.1 Public Consultation Centre (PCC) – September 8, 2011
A Public Consultation Centre (PCC) for this project was held at the Holy Family Croatian Roman Catholic Church, 180 Schweitzer Street in the City of Kitchener on Thursday September 8th, 2011. A plan showing the Recommended Design Concept was on display and staff were present to answer questions and receive feedback.

4.2 Issues Raised by the Public at the PCC
Approximately twenty six (26) members of the public attended the PCC and two (2) comment sheets/emails were received. One response supported the Recommended Design Concept - two 3.35 metre wide travel lanes and 1.25 metre bike lanes between Kraft Drive and Bridge Street and the installation of sections of sidewalks on both sides of the road where they currently do not exist. One response did not support the addition of new sections of sidewalk where they currently do not exist citing that these sidewalks were not necessary. Please see Appendix “C” for the full comments received at the PCC and the staff responses to them.

5.0 Recommendation
Based on a technical assessment of the two Alternative Design Concepts and the public input received, staff recommends Alternative Design Concept “2” - two 3.35 metre wide travel lanes and two 1.25 metre bike lanes between Kraft Drive and Bridge Street and the installation of sections of sidewalks on both sides of the road where they currently do not exist. The design includes the complete replacement of the existing asphalt platform, repairs to sections of existing concrete curb and gutters and sidewalks and the installation of new sections of sidewalks between Kraft Drive and Bridge Street. Property acquisitions from a number of adjacent property owners are required as part of this project to accommodate the proposed sidewalk installation. A 2 for 1 tree replacement program will be implemented to replace the 3 existing trees that require removal to accommodate the new sidewalk installation on the south side of Bloomingdale Road.

The Recommended Design will also implement upgraded bus stops and added bus shelters along the corridor where possible. Please see Appendix “B” for the Recommended Design Alternative cross-section.

6.0 Project Cost
The estimated preliminary cost of the project is broken down as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region of Waterloo (Road improvements and new sidewalk)</td>
<td>$1,325,000</td>
</tr>
<tr>
<td>City of Kitchener (Minor sidewalk repairs)</td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>Total Estimated Project Cost</strong></td>
<td><strong>$1,335,000</strong></td>
</tr>
</tbody>
</table>
7.0 Next Steps

All members of the public who have expressed an interest in this project have been notified directly of the opportunity to comment before a final decision is made for this project. Subject to Regional Council approval of the Recommended Design Concept, staff will commence with the detailed design efforts on this project and obtain necessary property for completing the project. Staff will also coordinate the relocation of some existing utility poles.

8.0 Project Schedule

Subject to project approval at the December 14, 2011 Regional Council meeting, the acquisition of the required property would commence in the Winter of 2012 to secure the property in advance of the recommended road improvements from Kraft Drive to Bridge Street in the summer of 2015.

CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management and Prosperity). This project specifically addresses Strategic Objective 2.2:

- Develop, optimize and maintain infrastructure to meet current and projected needs.

It is also consistent with the development of Strategic Focus Area 3 (Sustainable Transportation), specifically Strategic Objective 3.2:

- Develop, promote and integrate active forms of transportation (cycling and walking).

FINANCIAL IMPLICATIONS:

The Region’s 2011 Ten-year Transportation Capital Forecast includes funding of $1,345,000 in the years 2011, 2012, 2013 and 2014 for the Bloomingdale Road Improvements, to be funded from the Roads Rehabilitation Capital Reserve Fund.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Appendix A Key Plan
Appendix B Recommended Design Cross-Section
Appendix C PCC Comments and Responses

PREPARED BY: Michael Halloran, Project Manager, Design & Construction Division

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
APPENDIX B
Recommended Design Cross-Section

REGIONAL ROAD 20
BLOOMINGDALE ROAD NORTH
## INTRODUCTION

The following tabulation is intended to summarize public comments received by the Bloomingdale Road Improvements project team between the September 8th, 2011 Public Consultation Centre and the September 23rd, 2011 cut-off for receipt of comments that can be responded to in this summary. Any comments received after September 23rd have been filed on the project record.

<table>
<thead>
<tr>
<th>Submitter</th>
<th>Comment Summary</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No name</td>
<td>Nice to have sidewalks on the regional roads. We can now walk to the community centre without walking on the roads, but it may result in the loss of the courtesy school bus route hidden in this neighbourhood. Please try to save trees especially by the cemetery.</td>
<td></td>
</tr>
<tr>
<td>September 8, 2011</td>
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<tr>
<td>2. Mark Schaefer</td>
<td>Here is a list of concerns regarding the proposal to add a sidewalk at the South side of Bloomingdale Road.</td>
<td>The Region of Waterloo will negotiate with all affected property owners to purchase only the necessary lands required based on a fair market assessment of the lands.</td>
</tr>
<tr>
<td>88 Bloomingdale Road, Kitchener, Ontario N2K 1A2</td>
<td>- At this time I have no property for sale.</td>
<td>The Region of Waterloo does not install signs to indicate the presence of sidewalks.</td>
</tr>
<tr>
<td></td>
<td>- Will there be signs posted like the bike lane signs to show people where the sidewalks are that they can walk on?</td>
<td>It is the Region of Waterloo policy to install sidewalks on both sides of all Region Roads in Cities and Villages during scheduled roadway reconstruction projects. We have attached a copy of the Region’s Pedestrian Charter that was approved by Regional Council. We believe it will provide the merits for installing sidewalks on Regional Roads.</td>
</tr>
</tbody>
</table>
Mark Schaefer  
88 Bloomingdale Road, Kitchener, Ontario  
N2K 1A2

- Sidewalk need to be shoveled which means an increase in back injuries and heart attacks.

- When snowblowers are used it will mean more pollutants into the atmosphere therefore hurting the environment.

- Aging population on this street with few children.
- Traffic is generated from parents driving kids to school – kids no note walk to school anymore and haven’t for a long time.

- Sidewalk leads to nowhere.

- Must cross street at busy Bridge Street intersection so it is safer to use existing sidewalk.

- If people believe they need walking exercise then there is a sidewalk across the street and a walking trail along the river.

- Who will draw up and pay for the revised deed to the property if the property is sold to region?

- Who will pay for repairs to landscaping and curbs that residents have put in that will be destroyed?

- Who will pay for any trees that need to be cut down and plant replacements?

- Who is going to pay to move all utility poles, fire hydrants and other things that are on the suggested sidewalk route?

- Will walking in the middle of the street be acceptable since the current sidewalk is not properly used?

| The school boards support the construction of sidewalks on all roadways. The presence of sidewalks can influence the school board’s decision to bus students to nearby schools. |
| The proposed Bloomingdale Road sidewalks would connect to the future sidewalks to be constructed to Bridge Street. |
| The crossing of Bridge Street could be done at the Bridge Street/Lancaster Street roundabout using the future Bridge Street sidewalks. |
| The Region will assume all legal survey costs for all required land purchases. |
| The Region will assume all construction costs for all required works associated with the sidewalk installation. |
| The Region will assume all costs for all required tree removals and replacements associated with the sidewalk installation. |
| The Region will assume all costs for all required utility pole and fire hydrant adjustments required for the sidewalk installation. |
| Mark Schaefer  
| 88 Bloomingdale Road, Kitchener, Ontario N2K 1A2 | -How will you enforce use of sidewalk so that people are not trespassing on my property?  
-How will irresponsible pet owners whose animals urinate and defecate on our property be dealt with?  
-How will a sidewalk slow the flow of traffic?  
-Have there been surveys or user studies conducted on the street to determine the need?  
-How will emergency services be guaranteed throughout the destruction process?  
  
Mike, I realize some of these questions are answered in the information package but am totally against this project. Residents who live on this street whom I have spoken to who where mostly not in favour of this project or they do not understand how this will affect them unfortunately have already given up by saying “what choice do we have”. Myself, I see nothing wrong with extending the existing sidewalk on the north side of Bloomingdale Rd. As a tax payer on that side of the road also I feel its time for the Region to make cuts in spending on new projects as I believe many households and businesses have been forced to do due to rising taxes and utilities combined with layoffs and shrinking profits. Perhaps the money is better diverted to the airport project which is well under way and will continue to be a burden to the taxpayer for a long time to come. Thanks for at least allowing the residents and taxpayers of this area to voice their opinions.  
  
The Region has not experienced trespassing on private properties once a sidewalk is provided.  
The Region does not expect the installation of sidewalks will slow the flow of traffic.  
Region staff has visited the site on several occasions and witnessed pedestrians either waking on grassed front yards or on the roadway within the bike lanes because sidewalks are not present. As noted above, Regional Council has adopted a Regional Pedestrian charter that supports provision of sidewalks.  
This project will be undertaken with one direction of traffic (Westbound toward Bridge Street) maintained at all times during construction while we detour Eastbound traffic. Staff coordinates with Emergency Services to ensure emergency access is maintained at all times.  

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REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: December 6, 2011
FILE CODE: T04-20, 5382
SUBJECT: HIGHLAND ROAD IMPROVEMENTS, PATRICIA AVENUE TO WESTMOUNT ROAD, CITY OF KITCHENER – APPROVAL OF PROJECT

RECOMMENDATION:

a) THAT the Regional Municipality of Waterloo approve the proposed improvements on Highland Road (Regional Road #6) from Patricia Avenue to Westmount Road as outlined in Report E-11-119.

b) Direct staff to file the Notice of Completion for this Class Environmental Assessment by means of advertisement in the local newspaper and mailings to the adjacent property owners, tenants and agencies and place the Environmental Assessment Study files on the public record for a period of 30 days.

SUMMARY:

The Region of Waterloo is planning roadway improvements on Highland Road between Patricia Avenue and Westmount Road in the City of Kitchener. The project is being undertaken as a Schedule ‘B’ project under the provincial “Municipal Class Environmental Assessment” Act. Highland Road is identified as a Neighbourhood Connector – Avenue in the Region of Waterloo Corridor Design Guidelines. (Please refer to the Key Plan in Appendix “A” for project limits.)

Highland Road between Patricia Avenue and Westmount is in need of resurfacing/reconstruction to replace the deteriorated pavement surface and underground infrastructure.

As part of this project, a slight reduction to the existing through lane widths is being recommended on Highland Road between Butler Lane and Westmount Road. This minor road narrowing will provide an opportunity to create wider boulevards which will enhance the pedestrian environment on this section of roadway and may provide the opportunity to add street trees. A slight road widening is being recommended on Highland Road between Patricia Avenue and Butler Lane to provide a 4.0 metre wide curb lane in each direction. The wider curb lanes will better accommodate GRT buses servicing this section of Highland Road. The additional curb lane width will also improve roadway maintenance and operations. Also recommended is the addition of an eastbound left turn lane at the Lawrence Avenue intersection. The addition of this left turn lane will address the higher than normal number of rear end collisions that are being experienced. The Region of Waterloo’s Cycling Master Plan does not identify Highland Road as an on-road cycling facility. The addition of on-road cycling lanes is not being recommended as an existing off-road City of Kitchener cycling facility exists along the Henry Sturm Greenway which runs parallel with Highland Road. However, a 3.0 metre wide boulevard multi-use trail is being recommended on the south side of Highland Road between Lawrence Avenue and Butler Lane to provide a cycling link to the City of Kitchener’s existing cycling network which ultimately connects with downtown Kitchener. (Please refer to Appendix “A”.)

A Public Consultation Centre (PCC) was held on June 2nd, 2011 to present the Project Team’s two (2) alternatives for improvements on Highland Road. Design Alternative #2 proposed a slight through lane width reduction from 3.65m to 3.35m and Design Alternative #3 illustrated virtually the same roadway cross-section but with wider curb lanes (4.0m).
Both Design Alternatives included the proposed eastbound left turn lane at the Lawrence Avenue Intersection. No comments were received from the public as a result of the Public Consultation Centre.

Based on no public comments being received, the Project Team is recommending that Design Alternative #3 as presented at the June 2\textsuperscript{nd}, 2011 PCC be approved by Regional Council for construction in 2014 at an estimated cost of $2,170,000.

REPORT:

1.0 Background

The Region of Waterloo is planning roadway improvements on Highland Road (Regional Road #6) between Patricia Avenue and Westmount Road in the City of Kitchener. The project is being undertaken as a Schedule ‘B’ project under the Class Environmental Assessment process. Highland Road is identified as a Neighbourhood Connector – Avenue in the Region of Waterloo Corridor Design Guidelines. The section of Highland Road between Patricia Avenue and Westmount Road is scheduled for roadway improvements in 2014. (Please refer to the Key Plan in Appendix “A” for project limits.)

Highland Road between Patricia Avenue and Butler Lane is a four lane roadway. The section of Highland Road between Butler Lane and Westmount Road is a five lane roadway. Highland Road, between Patricia Avenue and Westmount Road requires full roadway reconstruction, replacement of the concrete curbs and gutters and replacement of sections of the existing sidewalks on both sides of the road. The project also involves the replacement of the storm sewer system and sections of the City of Kitchener’s sections of underground infrastructure (sanitary sewers and watermain).

A Project Team was established to direct this project and included staff from the Region of Waterloo and the City of Kitchener as well as City of Kitchener Councillors Zyg Janecki and Frank Etherington.

2.0 Project Issues

2.1 Traffic Volumes, Collisions and Operational Issues

Traffic counts conducted by the Region of Waterloo in January 2009 and March 2011 along Highland Road reveals that an eastbound left turn lane on Highland Road at Lawrence Avenue is warranted to address the higher than normal number of rear end collisions that are being experienced. The provision of a dedicated eastbound left turn lane will help to reduce this collision problem.

The removal of the westbound right turn lane into the Evergreen Plaza located just west of Lawrence Avenue is being considered after further traffic studies are completed and a meeting with the plaza owner is held.

The Project Team also reviewed projected traffic volumes and existing traffic operations and is not recommending any further traffic improvements be implemented.

2.2 Cycling, Pedestrian and Transit Needs

In 2004, Regional Council approved the Regional Cycling Master Plan. Highland Road was not identified as a core or long term on-road cycling facility in this plan. However, the provision of an off-road boulevard multi-use trail on the south side of Highland Road between Lawrence Avenue and Butler Lane would provide a link to the City of Kitchener’s existing off-road cycling network.
Highland Road is recognized as providing a key connection to the downtown core of Kitchener. The Project Team considered options to address both pedestrian and cyclists needs. The addition of an off-road cycling link on Highland Road between Lawrence Avenue and Butler Lane was also reviewed as the existing road allowance width supports the ability to provide an off-road cycling link.

There is also a need to provide for improved pedestrian crossings at the Highland Road at Belmont Avenue intersection to enhance the pedestrian environment. In order to address this need a channelized right turn island on the northwest corner of Highland Road at Belmont Avenue is proposed as well as enhanced pedestrian crosswalk markings. The addition of the channelized island will shorten the length of this heavily utilized pedestrian crossing.

GRT staff has identified a need for upgraded bus stops and added bus shelters along the corridor where possible. These opportunities will be considered during the project detailed design phase.

3.0 Alternative Design Concepts

Based on the project issues and needs, the Project Team developed three Alternative Design Concepts to address the identified project needs. All design alternatives include the complete reconstruction of the Highland Road platform between Patricia Avenue and Westmount Road.

Alternative Design Concept “1” – comprises no change to existing lane configuration within the entire project limits. (Do nothing alternative)

Alternative Design Concept “2” – includes four 3.35 metre wide travel lanes and narrowing the existing two-way left turn lane from 5.0 metres to 3.25 metres between Butler Lane and Westmount Road to improve traffic turning operations. To address the high number of left turn collisions, the Project Team recommends adding an eastbound left turn lane on Highland Road at the Lawrence Avenue intersection. This left turn lane would reduce higher than usual left turn collisions at this signalized intersection. This Design Alternative also includes a 3.0 metre wide off-road multi-use trail on the south side of Highland Road between Lawrence Avenue and Butler Lane which provides a cycling link with the City of Kitchener’s cycling network. The addition of a channelized right turn island on the northwest corner of Highland Road at Belmont Avenue is also being recommended to enhance pedestrian operations at this heavily used pedestrian crossing.

Alternative Design Concept “3” – includes two 3.35 metre wide travel lanes, two 4.0m wide curb lanes (which will better accommodate GRT buses servicing this section of Highland Road and also improve roadway maintenance and operations), and narrowing the existing two-way left turn lane from 5.0 metres to 3.25 metres between Butler Lane and Westmount Road to improve traffic turning operations. To address the high number of left turn collisions, the Project Team recommends adding an eastbound left turn lane on Highland Road at the Lawrence Avenue intersection. This left turn lane would reduce higher than usual left turn collisions at this signalized intersection. At the time of the PCC, Concept “3” did not illustrate an off-road multi-use trail to provide a cycling link with the City of Kitchener’s off-road cycling network. However, upon a closer review it was found that it was possible to provide a 3.0 metre wide off-road multi-use trail within the existing right of way and is therefore incorporated as part of Alternative Design Concept 3. The addition of a channelized right turn island on the northwest corner of Highland Road at Belmont Avenue is also being recommended to enhance pedestrian operations at this heavily used pedestrian crossing.
4.0 Preferred Alternative Design Concept

All three Alternative Design Concepts were evaluated with respect to the traffic capacity, operations and safety in comparison to their potential environmental impacts on the natural environment, and the social environment and costs.

Based on this evaluation, the Project Team has identified Alternative Design Concept “3” – Two 3.35 metre travel lanes, two 4.0 metre wide curb lanes and narrowing of the two-way left turn lane from 5.0 metres to 3.25 metres between Butler Lane and Westmount Road, a dedicated eastbound left turn lane at the Lawrence Avenue intersection, a 3.0 metre wide off-road boulevard multi-use trail on the south side between Lawrence Avenue and Butler Lane to provide a cycling link to the City of Kitchener’s cycling network. The addition of a channelized right turn island on the northwest corner of Highland Road at Belmont Avenue is also being proposed to enhance pedestrian operations at this heavily used pedestrian crossing as the Preferred Design Alternative. Please see Appendix “B” for the typical cross-sections proposed under the Preferred Design Concept.

Public Consultation Centre Issues and Project Team Response

5.0 Public Consultation Centre (PCC) – June 2, 2011

A Public Consultation Centre (PCC) for this project was held at J. F. Carmichael Public School, 80 Patricia Avenue in the City of Kitchener on Thursday June 2nd, 2011. A plan showing the Project Team’s Preferred Design Alternative Concept was on display and Project Team representatives were present to answer questions and receive feedback.

5.1 Issues Raised by the Public at the PCC

Three (3) members of the public attended the PCC and no comment sheets/emails were received.

6.0 Recommendation

Based on a technical assessment of the three Alternative Design Concepts and no public input received, the Project Team recommends Alternative Design Concept “3” - Two 3.35 metre travel lanes, two 4.0 metre wide curb lanes, providing a narrower 3.25 metre wide two-way left turn lane between Butler Lane and Westmount Road, a dedicated eastbound left turn lane at the Lawrence Avenue intersection, a 3.0 metre wide off-road boulevard multi-use trail on the south side between Lawrence Avenue and Butler Lane to provide a cycling link to the City of Kitchener’s cycling network and the addition of a channelized right turn island on the northwest corner of Highland Road at Belmont Avenue to enhance pedestrian operations at this heavily used pedestrian crossing.

The Recommended Design will implement upgraded bus stops and added bus shelters along the corridor where possible. Also included will be provisions for landscaping where feasible to enhance the pedestrian environment. Please see Appendix “B” for the Recommended Design Alternative cross-section.
7.0 Project Cost

The estimated preliminary cost of the project is broken down as follows:

Region of Waterloo (Road improvements and share of storm sewer repairs) $2,170,000
City of Kitchener (Sidewalk, sanitary sewer, watermain and share of storm sewer repairs) $1,495,000
Total Estimated Project Cost $3,665,000

8.0 Next Steps

All members of the public who have expressed an interest in this project have been notified directly of the opportunity to comment before a final decision is made for this project.

Subject to Regional Council approval of the Recommended Design Alternative, the Notice of Completion for this Class Environmental Assessment will be advertised in the local newspaper and mailed to the adjacent property owners, tenants and agencies. The Environmental Assessment Study files will be available for review for a period of 30 days. If someone feels that the study did not fully address all of the issues, they can request that the Minister of Environment order the Project to a more detailed environmental assessment, referred to as a Part II Order request. The Minister of Environment must receive such requests in writing, with a copy sent to the Region’s Commissioner of Transportation and Environmental Services. The Minister will determine if a more detailed environmental assessment is required and the Minister’s decision will be final.

If there are no significant unresolved objections following the 30 day review period, the project will proceed to detailed design and construction.

9.0 Project Schedule

Subject to project approval at the December 14, 2011 Regional Council meeting, the recommended road improvements from Patricia Avenue to Westmount Road would occur in the summer of 2014. Final surface asphalt would be placed in 2015.

CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management and Prosperity). This project specifically addresses Strategic Objective 2.2:

- Develop, optimize and maintain infrastructure to meet current and projected needs.

It is also consistent with the development of Strategic Focus Area 3 (Sustainable Transportation), specifically Strategic Objective 3.2:

- Develop, promote and integrate active forms of transportation (cycling and walking).
FINANCIAL IMPLICATIONS:

The Region’s 2011 Ten-Year Transportation Capital Forecast includes funding of $2,192,000 for the Region share of this project in the years 2011, 2012, 2013 and 2014 for the Highland Road Improvements, to be funded from the Roads Rehabilitation Reserve Fund and the Intersection Improvements (Growth-Related) Fund. The City of Kitchener portion of the work is estimated to be $1,495,000 and staff from the City of Kitchener has asked the Region to proceed with the work on their behalf and will provide funding for their portion of the project costs in 2014.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Appendix A  Key Plan
Appendix B  Typical Cross-Sections

PREPARED BY:  Michael Halloran, Project Manager, Design & Construction Division

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
APPENDIX A
Key Plan

HIGHLAND ROAD IMPROVEMENTS
REGIONAL ROAD No. 6
PATRICIA AVENUE TO WESTMOUNT ROAD
City of Kitchener
APPENDIX B
Typical Cross-Sections

Alternative 1: Existing Typical Cross-Section
STA. 1+380

Alternative 2: four-3.35 metre travel lanes

Alternative 3: two-3.35 metre travel lanes and two-4.00 metre wide curb lanes

Appendix B1
Highland Road
Patricia Avenue to Belmont Avenue
APPENDIX B

Typical Cross-Sections

Alternative 1: Existing Typical Cross-Section

Alternative 2: four-3.35 metre travel lanes

Alternative 3: two-3.35 metre travel lanes and two-4.00 metre wide curb lanes

Appendix B2

Highland Road
Belmont Avenue to Lawrence Avenue
APPENDIX B
Typical Cross-Sections

Alternative 1: Existing Typical Cross-Sections
STA. 1+597

Alternative 2: four-3.35 metre travel lanes and a 3.25 metre two-way left turn lane with a 3.0 metre asphalt multi-use trail
* Potential right turn lane removal

Alternative 3: two-3.35 metre travel lanes, two-4.00 metre wide curb lanes, 3.25 metre two-way left turn lane and a 3.00 metre asphalt multi-use trail
* Potential right turn lane removal

Appendix B3
Highland Road
Lawrence Avenue to Butler Lane
APPENDIX B

Typical Cross-Sections

Alternative 1: Existing Typical Cross-Sections
STA. 2+060

Alternative 2: four-3.35 metre travel lanes and a 3.25 metre two-way left turn lane

Alternative 3: two-3.35 metre travel lanes, two-4.00 metre wide curb lanes and a 3.25 metre two-way left turn lane

Appendix B4

Highland Road
Butler Lane to Westmount Road
REPORT: E-11-097

TO: Chair Jim Wideman and Members of Planning and Works Committee

DATE: December 6, 2011

FILE CODE: A02-30/PW

SUBJECT: PRELIMINARY PREFERRED RAPID TRANSIT PROCUREMENT AND DELIVERY OPTION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo direct staff to work with Infrastructure Ontario (IO) to develop a draft Memorandum of Understanding to engage IO as an independent contractor to provide rapid transit procurement coordination and transaction management services, for Council’s consideration, as described in Report No. E-11-097, dated December 6, 2011.

SUMMARY:

Region staff have been reviewing a number of procurement and delivery options for the light rail transit (LRT) project. The procurement and delivery options being considered are: Design-Bid-Build (DBB), Design-Build (DB), Design-Build-Finance (DBF), Design-Build-Operate-Maintain (DBOM), Design-Build-Finance-Maintain (DBFM) and Design-Build-Finance-Operate-Maintain (DBFOM). Staff considered and evaluated the risks and benefits associated with the various options. Based on this review staff have identified public-private Design-Build-Finance-Operate-Maintain (DBFOM) with a 30-year term as the preliminary preferred procurement and delivery option. The DBFOM option offers the following:

- **cost**: LRT design and construction can proceed at the same time, with significant time savings. In spite of higher costs of the private financing component, competitive pressure and up-front due diligence by lenders would compel the private sector to optimize management and produce design innovations, resulting in better value and a lower total project cost (construction, operation and maintenance).
- **funding contributions**: Use of the DBFOM option will be subject to confirmation by the provincial and federal governments that they will maintain their rapid transit funding commitments with the DBFOM option.
- **experience and qualifications**: The private sector has more experience and qualifications than the Region in designing and constructing an LRT system, in operating and maintaining an LRT system at start-up, and in providing trained and certified staff to operate the light rail vehicles.
- **incentives**: Coordination efficiencies provide strong incentives for the private sector to design an LRT system that can be constructed efficiently. Payments and penalties based on LRT system performance and availability would provide a strong incentive for the private sector to complete construction on schedule and to meet availability and operational service standards after construction, with greater long-term asset quality. By taking on financial risks, the lender would have interests aligned with the Region’s in monitoring contractor performance and protecting their investment.
- **risks**: The DBFOM option with a 30-year term results in the lowest net present value of Regional capital, operating and maintenance costs when the value of the Region’s retained risks are included. The financing component would give strength to the....
contractual obligations with less risk of contractor default because the private sector would only receive each instalment payment if it has complied with performance and availability requirements. The option would provide better accountability where performance and availability issues may be related to either maintenance or operation (no integration issues between operations and maintenance). It would transfer lifecycle risks to the private sector. The Region would retain those risks that it is best positioned to manage and mitigate, such as fare setting and ridership risk.

- flexibility: The DBFOM option may constrain the choices for LRT integration with Grand River Transit and for who would maintain and/or operate Stage 2 LRT.

Pending Planning and Works Committee discussions and staff responses to any questions raised, it is proposed that a report including a recommended procurement and delivery option be presented to Planning and Works Committee on January 10, 2012.

Implementation of the DBFOM option will require the Region to engage assistance to provide procurement coordination and transaction management services. Staff discussions with Infrastructure Ontario (IO) have confirmed that IO is interested in having a role with respect to the procurement of the Region’s rapid transit project and has procured numerous DBFOM-type projects for the Province of Ontario. Staff are seeking direction to work with IO to develop a draft Memorandum of Understanding (MOU) to engage IO as an independent contractor to provide rapid transit procurement coordination and transaction management services, for Council’s consideration. Pending successful negotiations with IO, staff plan to bring a report to Planning and Works Committee in January 2012 for Council approval of the MOU and to engage IO.

REPORT:

1. Introduction

Rapid transit is needed in Waterloo Region because it will move people and shape urban form as the Region continues with tremendous population and employment growth. In June 2011, among other motions related to rapid transit, Council approved the technology, route, stations, staging and funding of Stage 1 of the Region’s rapid transit project. Stage 1 includes 19 km of light rail transit (LRT) from Conestoga Mall to Fairview Park Mall and 17 km of adapted bus rapid transit (aBRT) from Fairview Park Mall to the Ainslie Street Terminal.

In June 2011, Council also directed staff to complete an evaluation of project procurement and delivery options, including the role of Infrastructure Ontario, with the goals of maximizing project innovation and quality, leveraging private sector expertise, and managing risks to the Region of Waterloo and our taxpayers. Staff have considered the rapid transit project procurement and delivery options available, and the risks and benefits associated with the various options, within an evaluation framework.

2. Procurement and Delivery Options

The following is not an exhaustive list of available project procurement and delivery options, but rather a list of the most likely options for delivering the rapid transit project:

Design-Bid-Build (DBB): The Region completes the preliminary and detail design and then tenders the project to the private sector for construction through separate and distinct procurements. The selection of the construction contractor is generally focused on the lowest construction cost. Payment is typically on a monthly progress basis. Only one complete design is generated for the project.
Design-Build (DB): The private sector completes the preliminary and detail design and the construction in an integrated process. Payment is typically on a monthly progress basis. The Region would hold contractors to performance by conducting engineering reviews of contractor-supplied documents, field inspection and compliance reviews during construction.

Design-Build-Finance (DBf): A portion of construction payments are withheld until completion of construction, adding short-term financing requirements for the private sector to the DB process, with payments to the private sector based on major milestone payments or substantial completion.

Design-Build-Operate-Maintain (DBOM): This adds an operating and maintenance term to the design-build process, which can be DB or DBf. The contractor operates and maintains all or part of the system during revenue operations. Payment for operation and maintenance is typically on a monthly basis based on performance and availability, with security in the form of performance bonding or a letter of credit, equal to about the annual maintenance fee. The term is typically a relatively short 10 to 15 years. This provides incentive to the private sector to maintain the system in good repair so that they are in a better position to be awarded the next operating and maintenance term. At the same time, this approach reduces the lifecycle cost to the private sector and the Region.

Design-Build-Finance-Maintain (DBFM): A portion of construction payments are withheld and paid during a maintenance term to secure performance. This withheld portion could be in the order of 25 per cent of construction costs. This adds long-term maintenance and long-term financing to the DBf process for the portion of the construction costs that have been withheld. The Region pays the private sector for this withheld payment in installments over the length of the project term, subject to compliance with performance and availability specifications. The term is typically 25 to 30 years to ensure that the lifecycle is covered. The 25-year lifecycle includes major capital refurbishment, including the full rehabilitation of civil infrastructure, vehicles and systems. During the procurement process, the shortlisted bidding construction contractors would each generate complete designs, each meeting the requirements of the Region, but each likely reflecting a different approach or innovation on the project.

Design-Build-Finance-Operate-Maintain (DBFOM): This adds a long-term operation term to the DBFM process. Bundling operations with maintenance reduces the coordination risk between the two, lowering costs.

3. Private Sector Roles

Table 1 summarizes the roles allocated to the private sector by procurement and delivery option. Generally, fare setting and ridership risk are retained by the Region. A small portion of ridership risk may be allocated to the private sector as a performance incentive under DBFOM.
Table 1: Roles allocated to Private Sector by Procurement and Delivery Option

<table>
<thead>
<tr>
<th></th>
<th>DBB</th>
<th>DB</th>
<th>DBOM</th>
<th>DBf</th>
<th>DBFM</th>
<th>DBFOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary design</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Detail design</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Design and construction co-ordination</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lifecycle (major capital refurbishment)</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Operation and maintenance integration</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Short-term financing during construction</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term financing</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Evaluation Criteria for Procurement and Delivery Options

The evaluation criteria for procurement and delivery options provide conflicting measures that must be balanced to find the best option for the Region. The evaluation criteria include:

- **project cost**;
- level of funding contributions from senior government;
- the Region’s experience and qualifications to fill the roles that could possibly be allocated to the private sector (does the Region have the ability to perform the roles required for the different options);
- incentives for private sector innovation and performance, including quality of product and service over the lifecycle;
- transfer of appropriate risks from the Region to the private sector that the private sector can best price and mitigate or manage e.g. construction cost overruns. The transfer of risk is also tied to incentives for performance in terms of on-time construction and long-term operational performance, including a consideration of the related performance security upon which the Region can rely; and
- operational and expansion flexibility in the long term.

Appendix A includes a comparison of the pros and cons associated with the procurement and delivery options.

5. Value for Money Assessment

With the assistance of Deloitte, staff undertook an assessment of the procurement and delivery options listed in Section 2, to provide a relative comparison of the value for money (VFM) for each option and of project terms of 15, 25 and 30 years. The VFM is the amount of capital, operating and maintenance costs saved by each option, in net present value, compared to the base option of DBB. The analysis places a value on the risks retained by the Region under each option. The risks were identified using output from a comprehensive rapid transit risk workshop undertaken by the Region in 2008, plus comparable data from a recent VFM exercise undertaken by the City of Ottawa for its LRT project (lifecycle cost curve, financing assumptions, and some risk analysis).

Table 2 lists the risks retained by the Region for each option, assuming a 30-year term. The VFM savings range from 0 per cent for the base DBB option to 18 per cent for the DBFOM option. The DBFOM option results in the lowest value of risks retained by the Region and the highest VFM savings.
Table 2: Risks Retained by the Region by Procurement and Delivery Option (30-year term)

<table>
<thead>
<tr>
<th>Option</th>
<th>Retained Risks ($Millions)</th>
<th>VFM Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBB</td>
<td>825</td>
<td>0%</td>
</tr>
<tr>
<td>DB</td>
<td>728</td>
<td>5%</td>
</tr>
<tr>
<td>DBf</td>
<td>597</td>
<td>9%</td>
</tr>
<tr>
<td>DBOM</td>
<td>622</td>
<td>10%</td>
</tr>
<tr>
<td>DBFM</td>
<td>318</td>
<td>16%</td>
</tr>
<tr>
<td>DBFOM</td>
<td>274</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 3 lists the risks retained by the Region for the DBFOM option by project term. For each project term, the analysis covered 30 years with the assumption that, following the expiry of the project term, the Region would take over all operations and maintenance. The VFM savings ranges from 13 per cent for a 15-year term to 18 per cent for a 30-year term. The 30-year term results in the lowest value of risks retained by the Region and the highest VFM savings.

Table 3: Risks Retained by the Region by Project Term (DBFOM Option)

<table>
<thead>
<tr>
<th>Project Term (years)</th>
<th>Retained Risks ($Millions)</th>
<th>VFM Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>413</td>
<td>13%</td>
</tr>
<tr>
<td>25</td>
<td>328</td>
<td>16%</td>
</tr>
<tr>
<td>30</td>
<td>274</td>
<td>18%</td>
</tr>
</tbody>
</table>

Staff also reviewed and evaluated why the VFM assessment for DBFOM resulted in savings over the traditional approach and the most savings of all the options considered. With this option, the cost of financing is higher but the construction, operating and maintenance costs are significantly lower. The cost of financing is higher because the cost of private sector financing is higher than public financing. The costs of construction, operating and maintenance are lower because of competitive pressures, because of efficiencies from integrating the design, construction, operating and maintenance processes, and because of the incentives introduced by the private sector having money at risk based on their performance. Overall, based on recent industry observation, the significant reductions in construction, operating and maintenance costs are expected to more than balance the higher costs of financing resulting in overall savings. The DBFOM option is expected to be affordable, within the funding approved by Regional Council, subject to annual budget deliberations, for the Region’s portion of the Stage 1 capital, operating and maintenance costs.

6. Preliminary Preferred Procurement and Delivery Option

6.1 aBRT Procurement and Delivery Option

Along Hespeler Road, the aBRT construction will generally include station improvements and intersection improvements to provide queue-jump lanes. The Region has the experience and qualifications to manage the design and construction process for the aBRT improvements along Hespeler Road through its traditional DBB procurement and delivery option. The Region will complete the preliminary and detail design and then tender the work to the private sector for construction, beginning in 2012.

Along Highways 8 and 401, the aBRT construction will include bus bypass shoulders. The construction of the Highway 8 bus bypass shoulders by the Ministry of Transportation of Ontario
(MTO) is nearing completion. The Highway 401 bus bypass shoulders will be designed and built by the Region of Waterloo subject to MTO approval of the design and the construction methods.

6.2 LRT Procurement and Delivery Option

For Stage 1 LRT, staff have identified DBFOM with a 30-year term as the preliminary preferred procurement and delivery option. During the DBFOM procurement process, the shortlisted contractors would each generate designs to meet the requirements of the Region, and each provide a DBFOM proposal with a fixed price to design and construct and then operate and maintain the Stage 1 LRT for 30 years. The successful contractor would complete the preliminary and detail design and the construction followed by operation and maintenance, in an integrated process. The Region would withhold a portion of construction payments and pay the private sector for this withheld payment in installments over the 30 years, subject to compliance with performance and availability specifications. A private sector lender would be required to provide short-term financing during construction and long-term financing for withheld payments over the 30-year term. The contractor would be responsible for lifecycle costs (major capital refurbishment) during the 30-year term. The DBFOM option offers the following:

- **cost**: LRT design and construction can proceed at the same time, with significant time savings. In spite of higher costs of the private financing component, competitive pressure and up-front due diligence by lenders would compel the private sector to optimize management and produce design innovations, resulting in better value and a lower total project cost (construction, operation and maintenance).
- **funding contributions**: Use of the DBFOM option will be subject to confirmation by the provincial and federal governments that they will maintain their rapid transit funding commitments with the DBFOM option.
- **experience and qualifications**: The private sector has more experience and qualifications than the Region in designing and constructing an LRT system, in operating and maintaining an LRT system at start-up, and in providing trained and certified staff to operate the light rail vehicles.
- **incentives**: Coordination efficiencies provide strong incentives for the private sector to design an LRT system that can be constructed efficiently. Payments and penalties based on LRT system performance and availability would provide a strong incentive for the private sector to complete construction on schedule and to meet availability and operational service standards after construction, with greater long-term asset quality. By taking on financial risks, the lender would have interests aligned with the Region’s in monitoring contractor performance and protecting their investment.
- **risks**: The DBFOM option with a 30-year term results in the lowest net present value of Regional capital, operating and maintenance costs when the value of the Region’s retained risks are included. The financing component would give strength to the contractual obligations with less risk of contractor default because the private sector would only receive each instalment payment if it has complied with performance and availability requirements. The option would provide better accountability where performance and availability issues may be related to either maintenance or operation (no integration issues between operations and maintenance). It would transfer lifecycle risks to the private sector. The Region would retain those risks that it is best positioned to manage and mitigate, such as fare setting and ridership risk.
- **flexibility**: The DBFOM option may constrain the choices for LRT integration with Grand River Transit and for who would maintain and/or operate Stage 2 LRT.
Pending Planning and Works Committee discussions and staff responses to any questions raised, it is proposed that a report including a recommended procurement and delivery option be presented to Planning and Works Committee on January 10, 2012.

7. Potential Role of Infrastructure Ontario

Implementation of the DBFOM option will require the Region to engage assistance to provide procurement coordination and transaction management services. Staff discussions with Infrastructure Ontario (IO) have confirmed that IO is interested in having a role with respect to the procurement of the Region’s rapid transit project. IO is a crown corporation that has procured many of Ontario’s public-private partnership (P3) projects for the provincial government. IO considers their role to be the delivery of infrastructure and partnership solutions through lending, project procurement and delivery, asset management and advisory services.

IO has considerable experience procuring DBFOM-type projects for the Province of Ontario. IO has not done many transportation projects, but is coordinating procurement of the Windsor-Essex Parkway and the Air Rail Link Spur in Toronto, and is taking a similar role with the City of Ottawa’s light rail transit project as is being considered for the Region of Waterloo. IO’s participation in past projects within Ontario has contributed to:

- completion of construction on time and on budget;
- reduced overall project costs by transferring appropriate risks to the private sector;
- enhanced private sector familiarity with the procurement process and private sector confidence that the project will proceed to completion, improving the number and quality of responses to the request for proposals; and
- improved capacity of the proponent to implement the project.

Staff propose to work with IO to develop a draft Memorandum of Understanding (MOU) for Council’s consideration. The draft MOU will pave the way for the Region to consider engaging IO as an independent contractor to provide rapid transit procurement coordination and transaction management services, with the Region retaining final approval authority on all decision making. The MOU will clarify the potential roles and responsibilities of IO and the Region with respect to the rapid transit project. Pending successful negotiations with IO, staff plan to bring a report to Planning and Works Committee in January 2012 for Council approval of the MOU and to engage IO.

8. Next Steps in the Rapid Transit Project

Implementation of the rapid transit project is being done on an aggressive schedule. There are a number of key decision points and major milestones that will have to be met to maintain the schedule. Adherence to the aggressive project schedule is critical because of the risks associated with any delays to the project including inflation and scope creep. Staff anticipate that the next steps in the rapid transit project will include:

- January 2012: report on recommended rapid transit procurement and delivery option;
- January 2012: hold public consultation centres for the Transit Project Assessment (TPA) for Stage 1;
- January 2012: report on an MOU with IO;
- February 2012: report on a preferred general engineering consultant;
- May 2012: complete the TPA for Stage 1;
- June 2012: finalize funding agreements;
- September 2012: issue request for qualifications from potential construction contractors;
- January 2013: shortlist qualified construction contractors;
- January 2013: complete performance specifications and a draft project agreement between the Region and a construction contractor;
- February 2013: issue request for proposals from shortlisted construction contractors;
- December 2013: evaluate and select preferred construction contractor;
- May 2014: approve final agreement with the preferred construction contractor;
- 2014: full implementation of aBRT
- 2014: begin construction of LRT Stage 1;
- 2014: begin the TPA for LRT Stage 2; and
- 2017: complete construction and begin operation of LRT Stage 1.

CORPORATE STRATEGIC PLAN:

The report supports Focus Area 3.1 of Council’s Strategic Focus: Develop an implementation plan for light rail transit including corridor and station area planning.

FINANCIAL IMPLICATIONS:

The capital cost of Stage 1 of the rapid transit project is estimated to be $818 million, in 2014 dollars. The Region’s portion of the capital cost is $253 million. On June 15, 2011, Council approved the funding for the Region’s portion of the Stage 1 capital costs, subject to annual budget deliberations.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

This report was prepared with input from Finance, from Planning, Housing and Community Services, from Transportation and Environmental Services, from Corporate Resources and from Human Resources.

ATTACHMENTS:

Appendix A – Comparison of Procurement and Delivery Options

PREPARED BY: Nancy Button, Director, Rapid Transit

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A

Comparison of Procurement and Delivery Options

The most likely options for the procurement and delivery of the rapid transit project include:

- Design Bid Build (DBB);
- Design Build (DB);
- Design Build Finance (DBf);
- Design Build Operate Maintain (DBOM);
- Design Build Finance Maintain (DBFM); and
- Design Build Finance Operate Maintain (DBFOM).

The procurement and delivery options are compared in a stepwise fashion starting with DBB and ending with DBFOM because each option contains all of the pros and cons of the previous option plus a step of added features.

**DB compared to DBB:**

**Cons:**
- The Region has less control over the design process.

**Pros:**
- The private sector has more experience and qualifications than the Region in designing and constructing a light rail transit (LRT) system.
- Combines design with construction. Design and construction can proceed at the same time, with significant time savings.
- Coordination efficiencies provide strong incentives for the private sector to design an LRT system that can be constructed efficiently.
- Less risk of implementing a less-than-optimal project.
- Less risk of change orders during construction because of design coordination issues.
- Lower net present value of Regional capital, operating and maintenance costs when the Region’s retained risks are included.

**DBOM compared to DB:**

**Cons:**
- Choices for who would maintain and/or operate any LRT expansion and choices for LRT integration with Grand River Transit would be impacted by private sector operation and maintenance of the first stage of the LRT system.

**Pros:**
- Provides for consideration of operations and maintenance costs during design and construction, which can introduce greater opportunities for cost savings through innovation, because the contractor will be responsible for operations and maintenance.
- Under a contract with defined performance standards, helps to ensure better initial construction quality and superior vehicle and system reliability.
- Transfers operations and maintenance risk to a corporate counterpart secured by a letter of credit and/or bonding, each of which is priced based on the annual fee.
- The private sector has more experience and qualifications than the Region in maintaining and operating an LRT system at start-up.
- Greater experience to provide trained and certified staff to operate vehicles. Particularly for a small LRT system, it can be difficult to draw transit operators because it will be a...
smaller pool of operators and harder to schedule time off.

**DBf compared to DB:** All of the pros and cons of DB plus:

**Cons:**
- Higher capital cost to the Region because of risk transfer security in the form of the cost of private short-term financing during the construction period because the private sector’s borrowing costs are higher than the Region’s. The costs of short-term private financing may be mitigated by providing milestone payments during construction.

**Pros:**
- Less risk to the Region in design, procurement and construction because of higher discipline and up-front due diligence because of private sector financial risks. Less risk of ambiguities in the project legal documents that could lead to disagreements at a later stage.
- Full co-ordination and control by the private sector results in less risk of change orders because change orders are difficult to get in public-private partnerships (e.g. requires approval of lender and Region).
- Less risk of construction contractor defaults because, in public-private partnerships, the private sector (project equity sponsor and/or the lender) is responsible to replace the construction contractor.
- Strong incentive for the private sector partner to complete construction on schedule because of deferment of payment until completion of construction or major milestones.
- Lower net present value of Regional capital, operating and maintenance costs when the Region’s retained risks are included.

**DBFM compared to DBf:** All of the pros and cons of DBf plus:

**Cons:**
- Highest capital cost to the Region because of the cost of private long-term financing during the term of the project.
- Choices for who would maintain any LRT expansion would be impacted by private sector maintenance of the first stage of the LRT system.
- May cause integration issues between maintenance and operational components.

**Pros:**
- The financing component gives strength to the contractual obligations; the contractor is less likely to default on their contractual obligations if the project goes poorly.
- Strong incentives for on-time and on-budget delivery, because late delivery results in higher financing costs and erodes private sector returns;
- Liquid performance security in the form of deferred payment;
- Long-term capital providers will monitor private sector performance. The lender is introduced between the equity sponsor (e.g. builder) and the Region and many of the lender’s interests are aligned with those of the Region.
- Fixed maintenance costs for the term of the project, which are locked in during the bid process and require the consideration of lifecycle cost efficiencies as part of the design-build process.
- The private sector has more experience and qualifications than the Region in maintaining an LRT system at start-up.
- The longer project term (25 to 30 years) introduces a strong incentive for the private sector to meet maintenance standards through payments and penalties based on system performance and availability and introducing opportunities for innovation, and result in an LRT system in good working condition at the end of the project term.
Lower net present value of Regional capital, operating and maintenance costs when the Region’s retained risks are included.

During the procurement process, the shortlisted bidding construction contractors would each generate complete designs, each meeting the requirements of the Region, but each likely reflecting a different approach or innovation on the project. This would provide the Region with some flexibility in evaluating the bids, other than lowest cost of construction, because these innovations would be reflected in the project cost (construction and maintenance costs).

**DBFOM compared to DBFM:** All of the pros and cons of DBFM plus:

- **Cons:**
  - Choices for LRT integration with Grand River Transit and for who would operate any LRT expansion would be impacted by private sector operation of the first stage of the LRT system.

- **Pros:**
  - The private sector has more experience and qualifications than the Region in operating an LRT system at start-up.
  - Greater experience to provide trained and certified staff to operate vehicles. Particularly for a small LRT system, it can be difficult to draw transit operators because it will be a smaller pool of operators and harder to schedule time off.
  - Strong incentive for the private sector to meet operational service standards through payments and penalties based on system performance and availability.
  - Better accountability where performance and availability issues may be related to either maintenance or operation (no integration issues between operations and maintenance).
  - Greater long-term asset quality.
  - Lowest net present value of Regional capital, operating and maintenance costs when the Region’s retained risks are included.
  - Design innovations would be reflected in the total project cost (construction, operation and maintenance).

**Project term:**
The options that include long-term financing (DBFM and DBFOM) have a project term that defines the length of period over which the project is financed by the private sector. The project term could range from 15 to 25 or 30 years. The impacts of the project term include:

- The capital cost to the Region increases with the length of the project term because of the cost of private long-term financing over that term.
- Maintenance risk is reduced with a longer project term. A longer project term of 30 years more than covers one full lifecycle so that significant rehabilitation and replacement occurs within the project term. The 25-year lifecycle includes major capital refurbishment, including the full rehabilitation of civil infrastructure, vehicles and systems.
- A longer finance period results in a lower net present value of Regional capital, operating and maintenance costs when the Region’s retained risks are included, principally because of the transfer of lifecycle risks.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: T01-20/39

SUBJECT: LANE DESIGNATION BY-LAW AMENDMENT FOR PINEBUSH ROAD (REGIONAL ROAD 39) AT SMART CENTRES ENTRANCE, CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-Law #06-072, as amended, to add to Schedule 16 – Lane Designation, eastbound left-turn, left-turn at 22 and 35 Pinebush Road (Regional Road 39) in the City of Cambridge, as outlined in report E-11-109, dated December 6, 2011.

SUMMARY:

NIL

REPORT:

The Region has recently reconstructed Pinebush Road between Hespeler Road (Regional Road 24) and Wayne Avenue in the City of Cambridge. As part of this reconstruction project, the Region has installed an eastbound dual left-turn lane at 22 and 25 Pinebush Road (Regional Road 39) at the Smart Centre entrance. As a result, the Region's Traffic and Parking By-law requires an amendment to reflect this designation. Figure 1 shows the intersection of the dual left-turn lane.

Figure 1 – Pinebush Road at 22 and 35 Pinebush Road Eastbound Dual Left-Turn Location
CORPORATE STRATEGIC PLAN:

The report addresses the Region’s goal to identify and address priority transportation bottlenecks to reduce road congestion and improve safety (Strategic Objective 3.3.1).

FINANCIAL IMPLICATIONS:

There would be no cost per sign installation as the signs have been installed upon completion of the reconstruction project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Council and Administrative Services Division will be required to prepare the amending by-law.

ATTACHMENTS:

NIL

PREPARED BY:  Patricia Heft, Engineering Technologist (Traffic), Traffic Engineering

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: T01-20/14

SUBJECT: REMOVAL OF RUMBLE STRIPS ON MOSER-YOUNG ROAD (REGIONAL ROAD 14) AND NOTRE DAME DRIVE (REGIONAL ROAD 12)

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take no action to reinstall the rumble strips on southbound Moser-Young Road (Regional Road 14) approaching Notre Dame Drive / Gerber Road (Regional Road 12).

SUMMARY:

NIL

REPORT:

Moser-Young Road (Regional Road 14) between Gerber Road / Notre Dame Drive (Regional Road 12) and Weimar Line (Regional Road 14) in the Township of Wellesley was resurfaced in September / October 2011. Rumble strips were present on Moser-Young Road approaching Gerber Road / Notre Dame Drive prior to the resurfacing and before reinstalling the rumble strips staff has undertaken a review to see if they are warranted.

Existing Conditions at the Intersection

Moser-Young Road intersects Notre Dame Drive / Gerber Road at a right angle creating a “T” intersection. All approaches to the intersection are controlled by stop signs. Rumble strips are present on the Gerber Road and Notre Dame Drive approaches to the intersection. Over time, the rumble strips on Moser-Young Road approaching the intersection have worn down to the point where they are barely audible / noticeable, especially during the last 3 - 4 years.

The posted maximum speed limit approaching the intersection from the southbound and westbound directions is 80 km/h. The posted maximum speed limit approaching from the eastbound direction is 60 km/h. Existing traffic controls on all approaches are clearly visible to motorists as they approach the intersection. Figure 1 illustrates the Moser-Young Road at Notre Dame Drive / Gerber Road intersection and the possible location of the rumble strips if they were to be reinstalled.

A review of the collision history in the past 5 years indicates that there have been 0 “disobey-stop” collisions at this intersection. Regional practice is to install rumble strips at an intersection when there have been 4 “disobey-stop” collisions over a 5 year period. It should also be noted that the collision history dating back to 1996 indicates that there have been 0 “disobey-stop” collisions at this location.
Rumble Strips

The rumble strips were installed initially on all three legs of this intersection in 1991 at the direction of Regional Council when a local resident requested they be installed. The rumble strips were installed according to the Regional standard at that time. Since 1991 Regional practice for rumble strip installation has changed to follow the design and installation parameters based on the Transportation Association of Canada (TAC) Best Practice Guidelines for the Design and Application of Transverse Rumble Strips.

Based on our current practice, the TAC design would include a set of rumble strips directly in front of a residence on Moser-Young Road, causing noise disturbances. Generally, the Region avoids implementing audible rumble strips within 200 m of a residence because of the noise nuisance impacts to the residence. If the first pair of rumble strips were moved further out from the minimum distance requirement, the rumble strips would still be within 50 m of residences.
Transportation staff surveyed the local residents regarding the re-installation and received 5 comments back. Of the comments received 3 oppose the installation and 2 support the installation. The main concerns of those who oppose the installation are the noise nuisance impacts the rumble strips would have on their property.

Regional staff do not recommend re-installing rumble strips at this location because of the following reasons:

1. The Best Practice Guidelines for the Design and Application of Transverse Rumble Strips recently published by the TAC indicates that rumble strips should only be implemented where there is an historic trend of collisions caused by failure to obey the stop sign. In the past 5 years there has been 0 collisions of this type southbound on Moser-Young Road, including the time period when the rumble strips were worn down and not audible;

2. Local residents within 200 m of the potential rumble strip locations are opposed to the rumble strips. Generally, the Region avoids implementing rumble strips within 200 m of a residence because of the noise nuisance impacts to the residence; and

3. The TAC guidelines indicate that rumble strips should be used sparingly and selectively because over-application of rumble strips can create driver expectation issues and desensitize drivers to the audible and vibratory effects. Rumble strips are an extraordinary traffic control measure to be used after all other usual treatments such as signing, lane markings and improvements to the geometric layout still leave a situation where the driver is likely to be caught by surprise by the stop sign.

Residents who responded to the initial notification of the installation of the rumble strips have been notified about the opportunity to appear as a delegate before the Planning and Works Committee.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2).

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Satinderjit Bahia, Engineering Technologist (Traffic)

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Transportation

TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: December 6, 2011
FILE CODE: T11-60/FAT
SUBJECT: SAFETY REVIEW OF FAIRWAY ROAD AT THALER AVENUE, IN CITY OF KITCHENER AND FLORADALE ROAD AT LINE 86 / CHURCH STREET, IN TOWNSHIP OF WOOLWICH

RECOMMENDATION:
For information.

SUMMARY:
NIL

REPORT:
Transportation staff obtain traffic volume information on an on-going basis and routinely assess various intersections to determine if traffic control and or operational enhancements are required. On average receive approximately 300 traffic counts per year are completed on Regional roads and of the 300 counts approximately 200 traffic counts are completed at traffic signals to help staff optimize traffic signal operation. All remaining intersections are assessed for traffic control enhancements. These 300 traffic counts as well as the 100 24-hour traffic counts are used by staff to develop the annual collision report that ranks approximately 3400 intersection and mid-block locations that make up the Regional road network. More importantly the collision report helps staff highlight locations that are most likely to benefit from proven collision countermeasures.

Following any fatal collision occurring on a Regional road, Transportation Engineering staff will review Waterloo Regional Police Services collision reports to better understand contributing factors that lead to the incident. Staff will also review the previous 5-year collision history at that location in detail to determine if there are any unusual collision patterns that should be addressed and treated with appropriate collision countermeasures. The City of Kitchener and Region of Waterloo Planning and Works committee have asked for Regional staff to provide a report on existing operations on Fairway Road (Regional Road 53) between Morgan Avenue and River Road (Regional Road 56) and on Line 86 / Church Street (Regional Road 86) at Floradale Road (Regional Road 19).

Fairway Road between Morgan Avenue and River Road
On September 12, 2011 a fatal collision occurred at the Fairway Road / Thaler Avenue intersection, in the City of Kitchener. According to the Motor Vehicle Accident Report (MVAR) a 14 year old male was riding a bicycle, travelling northbound on Thaler Avenue and was struck by a motor vehicle travelling eastbound on Fairway Road. The MVAR indicates that the cyclist failed to stop for the stop sign on Thaler Avenue and continued to enter the intersection where he was struck. According to the police report, the cyclist failed to use safety equipment and the bicycle had no lights, reflectors or brakes.
Fairway Road between Morgan Avenue and River Road is a 4-lane cross-section (2-lanes in each direction) with a 50 km/h posted maximum rate of speed. The average annual daily traffic volume on this section of Fairway Road is approximately 12,000 vehicles per day. Where Fairway Road intersects with Morgan Avenue and River Road pedestrian and vehicular traffic are controlled by traffic control signals. Stop signs are present at the remaining intersections which include Jansen Avenue, Thaler Avenue and Chicopee Park Court / Grulke Street. At Jansen Avenue a school crossing is present on the west approach crossing Fairway Road. Figure 1 illustrates the section of Fairway Road between Morgan Avenue and River Road.

**Figure 1 – Fairway Road between Morgan Avenue and River Road**

A review of collisions between 2006 and 2010 shows that the Fairway Road / Morgan Avenue, Fairway Road / Thaler Avenue and Fairway Road / River Road intersections experienced a higher total of actual collisions compared to the expected number of collisions. Table 1 below shows a summary of collisions between 2006 and 2010 at the intersections and mid-block sections along Fairway Road between Morgan Avenue and River Road. Following Table 1 is a detailed assessment of the collisions at the Fairway Road / Morgan Avenue, Fairway Road / Thaler Avenue and Fairway Road / River Road intersections.
Table 1 – 2006 to 2010 Collision Summary

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>2006 to 2010 Collisions</th>
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<tr>
<td></td>
<td>Actual</td>
<td>Expected</td>
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<tr>
<td>Fairway Road at Morgan Avenue</td>
<td>26</td>
<td>18</td>
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<td>Fairway Road between Morgan Avenue and Jansen Avenue</td>
<td>6</td>
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<td>537</td>
<td></td>
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<tr>
<td>Fairway Road between Jansen Avenue and Thaler Avenue</td>
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<td>1991</td>
<td></td>
</tr>
<tr>
<td>Fairway Road at Thaler Avenue</td>
<td>17</td>
<td>3</td>
<td>136</td>
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<td>Fairway Road between Thaler Avenue and Chicopee Park Court / Grulke Street</td>
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<td>1014</td>
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</tr>
<tr>
<td>Fairway Road at Chicopee Park Court / Grulke Street</td>
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<td>4</td>
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<td>Fairway Road between Chicopee Park Court / Grulke Street and River Road</td>
<td>5</td>
<td>3</td>
<td>811</td>
<td></td>
</tr>
<tr>
<td>Fairway Road at River Road</td>
<td>40</td>
<td>20</td>
<td>76</td>
<td></td>
</tr>
</tbody>
</table>

Fairway Road at Morgan Avenue

A review of the collisions at the Fairway Road / Morgan Avenue intersection shows that 26 collisions occurred between 2006 and 2010 where 18 would be expected. Of the 26 collisions, 35% are noted as rear-end type collisions. This type of collision pattern is typically attributed to a motorist driving too close and having to stop for traffic signals.

Fairway Road at Thaler Avenue

A review of collisions at the Fairway Road / Thaler Avenue intersection between 2006 and 2010 shows that there are 17 collisions where 3 would be expected. Of the 17 collisions, 41% are noted as turning movement collisions and 35% are noted as angle type collisions. According to the MVAR those motorists involved in the turning / angle type collisions are stopping before proceeding. In this regard, staff reviewed the available sight distance from Thaler Avenue looking east and west along Fairway Road. The available sight lines from Thaler Avenue fall within acceptable engineering standards.

Staff reviewed the need for traffic control signals at the existing unsignalized intersection. Current Regional practice is to consider the installation of traffic control signals when pedestrian and vehicular volume entering an intersection meet the justification as outlined in the Ontario Traffic Manual, Book 12, Traffic Signals.

Traffic and pedestrian volume obtained from an 8-hour turning movement count at the Fairway Road / Thaler Avenue intersection were applied to the traffic control signal warrant. Criteria used to
establish the need for traffic control signals includes main-street volumes, side-street volumes, pedestrian volumes, roadway characteristics and the collision history. The results of our warrant calculations are shown below:

- Minimum volume – 39%;
- Delay to cross traffic – 49%;
- Minimum 4-hour volume – 24%; and
- Collision warrant – 67%.

To warrant traffic control signals, one of the above warrants must satisfy 100% or the minimum volume warrant and delay to cross traffic warrant must both satisfy 80%. Based on our review, pedestrian and vehicular traffic entering the Fairway Road / Thaler Avenue intersection do not meet the need for traffic control signals at this time. Based on our review, the fatal collision that occurred on September 12, 2011 at the Fairway Road / Thaler Avenue intersection was the result of the cyclist failing to stop due to having a defective bike. Based on the review staff is not recommending any measures to address cyclist collisions at the location at this time, however staff will be reviewing and considering the potential installation of a median island on Fairway Road to restrict Thaler Avenue to a right in / right out design to address angle and turning collisions.

Fairway Road at River Road

A review of the 5-year collision history, also between 2006 and 2010, at the Fairway Road / River Road signalized intersection shows that there have been 40 collisions where 20 would be expected. Of the 40 collisions 48% are noted as rear-end type collisions. Similar to the Fairway Road / Morgan Avenue pattern, this type of collision is generally the result of a motorist driving too close and having to stop for traffic signals.

At this time staff does not have current turning movement counts for the Fairway Road / Jansen Avenue and Fairway Road / Chicopee Park Court / Grulke Street intersections. As such, staff has scheduled turning movement counts at both intersections to be completed in January 2012. Once received, staff will review the need for traffic control signals at the Fairway Road / Jansen Avenue and Fairway Road / Chicopee Park Court / Grulke Street intersections and will make the appropriate recommendations.

Line 86 / Church Street at Floradale Road

On August 17, 2011 a fatal collision occurred at the Line 86 / Church Street / Floradale Road intersection, in the Township of Woolwich. According to the Motor Vehicle Accident Report (MVAR), the vehicle being driven by an 82 year old female travelling northbound on Floradale Road was struck by a transport truck travelling eastbound on Line 86 / Church Street. The driver and a passenger travelling northbound on Floradale Road died as a result of injuries sustained in the collision. According to the MVAR, the driver travelling northbound on Floradale Road stopped for the stop sign before proceeding but failed to yield the right-of-way.

Floradale Road is a 2-way undivided roadway with 1 lane in each the northbound and southbound directions. Line 86 / Church Street is a 2-way undivided roadway with 1 lane in each the eastbound and westbound directions. The posted speed limit on both roadways is 80 km/h. The average annual daily traffic volume entering the Line 86 / Church Street / Floradale Road intersection is approximately 8,000 vehicles per day. Approaching the intersection on Floradale Road there are special oversize stop-ahead warning signs and special oversized stops signs in both the northbound and southbound directions. There are also 5 sections of visual rumble strips in both the northbound and southbound directions on Floradale Road approaching Line 86. Figure 2 shows the intersection of Line 86 / Church Street / Floradale Road.
Analysis of the collision history from January 2006 to December 2010 at the intersection of Floradale Road and Line 86 / Church Street shows that there were 14 collisions where 2 would be expected. Of the 14 collisions 5 are noted as angle where the motorist stopped before proceeding. In addition to the 5 angle collisions 4 collisions are noted as rear-end type collisions.

According to records dating back to 1996, 3 fatal collisions have occurred at the Line 86 / Church Street / Floradale Road intersection. The first fatal collision occurred on August 7, 2002, where a northbound motorist travelling on Floradale Road failed to stop for the stop sign before entering the intersection. The second fatality occurred on August 14, 2005 where a southbound motorist travelling on Floradale Road stopped for the stop sign but failed to yield the right-of-way. The third fatal collision occurred on August 17, 2011.

Staff reviewed the need for additional traffic control in the form of traffic control signals at the existing unsignalized intersection. Current Regional practice is to consider the installation of traffic control signals when pedestrian and vehicular volume entering an intersection meet the justification as outlined in the Ontario Traffic Manual, Book 12, Traffic Signals.
Traffic and pedestrian volume obtained from an 8-hour turning movement count completed in 2010 at the Line 86 / Church Street / Floradale Road intersection were applied to the traffic control signal warrant. Criteria used to establish the need for traffic control signals includes main-street volumes, side-street volumes, pedestrian volumes, roadway characteristics and the collision history. The results of our warrant calculations are shown below:

- Minimum volume – 95%;
- Delay to cross traffic – 74%;
- Minimum 4-hour volume – 37%; and
- Collision warrant – 27%.

To warrant traffic control signals, one of the above warrants must satisfy 100% or the minimum volume warrant and delay to cross traffic warrant must both satisfy 80%. Based on our review, pedestrian and vehicular traffic entering the intersection do not meet the need for traffic control signals at this time. Traffic volume would have to increase by an average of 12% between the hours of 8:30 a.m. and 2:00 p.m. to warrant signals. Based on this it is estimated that traffic signals could be warranted in approximately 10 years.

As there has been 3 fatal collisions within a 10-year period staff is undertaking an assessment of a potential roundabout at the Line 86 / Church Street / Floradale Road intersection and will make an appropriate recommendation following the completion of this review.

Staff has issued a request to relocate the northbound and southbound stopbar closer to Line 86 / Church Street. A site visit showed that the existing stopbars are located approximately 5 metres from the intersection. Stopbar offsets are typically required to assist with truck turning. Motorists, should they choose to accelerate from the stopbar to clear the intersection, require larger gaps to clear the intersection. Reducing the crossing distance between stopbars where possible may help drivers to select more appropriate gaps in traffic.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2).

FINANCIAL IMPLICATIONS:

The 2011 Transportation Capital Program does not include any proposed works at the intersections noted in this report. If the results of the intersection reviews recommend that changes be undertaken, appropriate funding will be considered in the 2012 Transportation Capital Program.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Asfaq Rauf, Engineering Technologist (Traffic), Traffic Engineering

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: A01-20(A)

SUBJECT: PROPOSED WASTE MANAGEMENT USER FEE CHANGES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the following waste management user fee changes, effective July 1st, 2012, subject to Council's approval of the 2012 base budget:

i) increase the general refuse/garbage tip fee to $74/tonne from $72/tonne;
ii) tie the segregated loads/special waste tip fee at 50% of the general refuse/garbage tip fee and,
iii) implement a $2.00 minimum fee at all six Regional Waste Management receiving facilities.

AND THAT the notice of the intent to amend the Region’s Fee’s and Charges (By-Law 11-015 as amended) as set out in Report E-11-111 dated December 6, 2011, be published in accordance with the provisions of the Municipal Act.

SUMMARY:

The Waste Management Division operates six waste receiving facilities across the Region; one small vehicle transfer station in each of the four Townships as well as waste receiving facilities at the Cambridge Waste Management site and the Waterloo Waste Management site. Fees charged for general refuse/garbage at the township sites are based on a piece rate structure, with the first three items free. At the Cambridge and Waterloo sites, fees are waived for the first 50kg of waste and are then imposed based on weight with a current tip fee of $72/tonne. The policy to except “free waste loads” was approved by Council in the early 1990’s primarily to discourage roadside dumping. Segregated loads/special waste such as yard waste, blue box recyclables and inert materials are received at a lower tipping rate; 50% of the piece rate at the township sites and at a flat fee of $30/tonne at Cambridge and Waterloo, to provide economic incentives to encourage diversion from landfill.

As part of 2012 budget preparations, staff has recently undertaken a detailed review of the Region’s user fee schedule in comparison with other Ontario municipalities as well as in response to significant program changes over the last number of years. With the expansion of collection and diversion programs throughout the entire Region, incidents of roadside dumping have decreased dramatically. The Region’s current tipping fee is one of the lowest amongst our peers and we are the only municipality of comparable size that does not currently charge a minimum fee at its sites, however, the number of “free” loads disposed at the sites now represents a significant portion of the waste transactions. A small increase in the Region’s general refuse/garbage tip fee (from $72/tonne to $74/tonne), tying our segregated loads/special waste fee at 50% of the general refuse/garbage tip fee and implementing a $2.00 minimum fee (excluding household hazardous waste/used oil) at all the Region’s waste receiving sites for loads less than 50kg are recommended. These fee changes are anticipated to help off-set the cost of waste diversion programs while maintaining fees that encourage diversion but discourage roadside dumping.
REPORT:

Background

The Waste Management Division operates one active landfill (Waterloo) and one large bulk transfer station (Cambridge) as well as four (4) small vehicle transfer stations across the Region; one in each of the four townships. All sites accept most residential waste and recyclable materials including general refuse/garbage, bulky items such as furniture and appliances, yard waste, blue box recyclables, tires and waste oil.

General refuse/garbage received at the township sites is charged on a “piece rate” basis because there are no weigh scales. Charges range from “no charge” for the first three items to a maximum of $14.00 for a full vehicle load up to a maximum of 200kg, based on the Region’s current tipping fee of $72.00/tonne. Segregated loads such as yard waste, blue box recyclables and inert materials are charged at 50% of the piece rates to encourage diversion.

The Cambridge and Waterloo sites both have weigh scales and charge a fee of $72/tonne for general refuse/garbage, however, these sites allow the “first 50kg free”. This policy was approved by Council in the early 1990’s primarily to discourage roadside dumping. The fee for segregated loads/special waste at Cambridge and Waterloo has been set at $30/tonne since 1993. The tipping fee for these materials is intended to provide economic incentives to encourage diversion from landfill.

PROPOSED CHANGES

As part of 2012 budget preparations, staff conducted a detailed review of the Region’s current fee structure as well as a municipal survey of fees charged by a number of Ontario municipalities that provide comparable waste management services. The following table illustrates the findings of the municipal survey.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Tipping Fee</th>
<th>Minimum Fees</th>
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<tbody>
<tr>
<td>Waterloo</td>
<td>$ 72.00</td>
<td>$0</td>
</tr>
<tr>
<td>Toronto</td>
<td>$100.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Peel</td>
<td>$ 80.00</td>
<td>$2 flat fee &lt;50kg</td>
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<tr>
<td>York (Markham)</td>
<td>$100.00 Res./$105.00 ICI</td>
<td>$10 min. res./$28 min. ICI</td>
</tr>
<tr>
<td>Durham</td>
<td>$120.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Guelph</td>
<td>$ 70.00</td>
<td>$20.00</td>
</tr>
</tbody>
</table>
| Hamilton       | $ 117.50          | $8.50 first 100kg 
|                |                   | Res $8 first 100kg                              |
|                |                   | Res $15 (101-200kg)                             |
|                |                   | Res $30 (201-400kg)                             |
|                |                   | Res $45 (401-600kg)                             |
|                |                   | Res $60 (601-800kg)                             |
|                |                   | Res $75 (801-1000kg)                            |
|                |                   | Res $75/mt (>1,000kg)                           |
| Niagara        | $ 90.00           | $5 first 60kg                                    |
| Halton         | $143.00           | $5 first 50kg                                    |
|                |                   | $10 first 150kg                                  |
| Windsor        | $ 61.00           | <100kg - 4 loads $2 each res.                   |
|                |                   | After 4 loads - $10 flat fee                     |
This review identified a number of opportunities to revise the existing fee structure to ensure that all users are charged fairly in relation to each other and to the extent that they use waste management facilities and that fees better reflect handling costs. The proposed changes to the Region’s user fee policy are as follows:

**General Refuse/Garbage Tip Fee:** increasing the tip fee from $72/tonne to $74/tonne will maintain a competitive tip fee in relation to the Region’s municipal peers and will have a limited impact on the amount of commercial tonnage received. This is expected to result in a revenue increase of approximately $280,000 in 2012.

**Segregated Loads/Special Waste:** the current fixed fee of $30/tonne would be charged at 50% of the above noted tip fee and any future fee changes would be directly tied to increases/decreases in the general refuse/garbage tipping fee. Therefore, effective July 1st, 2012, the segregated load/special waste fee would be $37/tonne based on a $74/tonne general refuse/garbage tip fee. This slight increase will assist in off-setting the costs of waste diversion programs while maintaining a fee at a level that still encourages diversion but discourages roadside dumping. This is expected to result in a revenue increase of approximately $196,000 in 2012.

**Minimum Fees at All Sites:** implementation of a $2.00 minimum fee (excluding household hazardous waste/used oil drop-off) at all six waste management receiving facilities for loads less than 50kg will result in residents consolidating trips to avoid multiple minimum fees, ease site congestion at peak times and potentially defer capital expenditures. The existing policy allowing for free disposal of the first 50kg of waste (typically 5 to 6 bags of garbage) was approved in 1990 to discourage roadside dumping. However, the significant expansion of curbside collection and diversion programs to all residents across the Region, including the townships, has resulted in the number of incidents of roadside dumping decreasing dramatically. This change will also increase awareness in our community of the amount of waste being generated and encourage residents to seek diversion options, most of which are already available through our existing curbside collection program. The introduction of a minimum fee will also gradually shift the cost from the tax payer to the generator of the waste. As noted in the above environmental scan summary, we are the only municipality that currently does not charge a minimum fee at our receiving sites. The introduction of minimum fees is expected to result in a revenue increase of approximately $149,000 in 2012.

The proposed fee increases will allow the Region to remain competitive within our local market and offer a fair and reasonable disposal fee to local business and residents. It should be noted that the 2012 recommended fees, including the minimum fee, still remain in the lower range when compared to other Ontario municipalities of comparable size. The anticipated increase in revenue will assist in off-setting the costs of waste handling and diversion programs while maintaining fees at a level that still encourages diversion from landfill.

Further evaluation of the Region’s “user fees” structure will be undertaken as part of the Waste Management Master Plan (currently underway) with a focus on minimizing future impacts on the property tax base.

**CORPORATE STRATEGIC PLAN:**

This report has been prepared consistent with the Corporate Strategic Objective 1.3 of “Reducing the Amount of Waste Requiring Landfill.”
FINANCIAL IMPLICATIONS:

The proposed user fee changes have been incorporated into the 2012 Waste Management Division base budget, however, they are still subject to Council approval. The recommended changes are expected to result in an increase of approximately $625,000 in revenue in 2012 directly from the generators of the waste.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from the Finance Department were consulted in the preparation of this report.

PREPARED BY: Jon Arsenault, Director, Waste Management

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: December 6, 2011

FILE CODE: C06-60

SUBJECT: EXTENSION OF CONSULTANT’S ASSIGNMENT FOR THE SURFACE WATER QUALITY MONITORING PROGRAM

RECOMMENDATION:

That the Regional Municipality of Waterloo extend LGL Ltd. Environmental Research Associates (LGL) of Burlington, Ontario, current consulting assignment for the Surface Water Quality Monitoring Program (Planning & Works Report E-09-054 of May 12, 2009) to include monitoring services for the Conestogo River and Canagagigue Creek from January 2012 to April 2014 at an additional upset fee limit of $162,000.00 plus applicable taxes.

SUMMARY:

The Region has retained LGL Ltd. Environmental Research Associates (LGL) of Burlington, Ontario (Report E-09-054, dated May 12, 2009) to conduct comprehensive monitoring of the middle Grand, lower Speed and Nith rivers for five years (2009 to 2014).

Water quality monitoring of the Conestogo River and Canagagigue Creek was initiated in December 2010 as part of the St. Jacob’s - Elmira Wastewater Treatment Master Plan and is being conducted by XCG Consultants Ltd. until the end of 2011. The Region wishes to continue water quality monitoring at these two Creeks as part of its consolidated surface water quality monitoring program for the Grand, Speed and Nith rivers.

LGL has been conducting surface water quality monitoring at the Region since the summer of 2009 and has developed significant expertise on the water quality of the middle Grand River and its tributaries. LGL is familiar with the new monitoring sites in the Conestogo River and Canagagigue Creek since their staff provided valuable input for the selection of these sites included in the St. Jacobs – Elmira Wastewater Treatment Master Plan. Both the Region and other watershed stakeholders, including the GRCA and the MOE, are pleased with the work being conducted by LGL. The additional work is based on the success of the current water quality monitoring program for the Grand, Speed, and Nith rivers.

Therefore, staff recommend that LGL’s current consulting assignment for the Surface Water Quality Monitoring Program (Planning and Works Report E-09-054 of May 12, 2009) be extended to include monitoring services for the Conestogo River and Canagagigue Creek from 2012 to 2014 at an additional upset fee limit of $162,000.00 plus applicable taxes. Unit costs were reviewed and evaluated by staff and found to be reasonable and comparable to the current monitoring program’s costs.
REPORT:

Background

The Region conducted water quality monitoring of the middle Grand and lower Speed rivers as part of the Wastewater Treatment Master Plan from 2004 to early 2009. In 2009, the Region consolidated these monitoring efforts into one long-term project to help reduce overall costs and bring efficiencies in terms of both project and data management. LGL was selected to conduct the surface water quality program (Planning and Works Report E-09-054 of May 12, 2009). The current program includes water quality monitoring upstream and downstream of the Region’s major wastewater treatment plants (WWTP) in the middle Grand, lower Speed, and Nith rivers on a quarterly basis, every year for an initial five-year period (2009-2014). The main objective of this work is to build a water quality database, which will allow the Region to better and continually assess the impacts of planned wastewater treatment upgrades on surface water quality.

In December of 2010, the Region initiated water quality monitoring of the Conestogo River and Canagagigue Creek as part of the St. Jacobs - Elmira Wastewater Treatment Master Plan. This work is being conducted by XCG Consultants Ltd. until the end of 2011.

It has been recommended by both the Ministry of Environment (MOE) and Grand River Conservation Authority (GRCA) that the Region continue monitoring water quality in the Conestogo River and Canagagigue Creek after completion of the monitoring being conducted as part of the St. Jacobs – Elmira Wastewater Treatment Master Plan. This information will be valuable to continually assess impacts on surface water quality from the St. Jacobs and Elmira WWTPs and will provide the necessary data for more detailed assimilative capacity studies required for plant upgrades or plant expansions in the future.

LGL has been conducting surface water quality monitoring for the Region since the summer of 2009 and has developed significant expertise on the water quality of the middle Grand River and its tributaries. LGL is familiar with the new monitoring sites in the Conestogo River and Canagagigue Creek since their staff provided valuable input for the selection of these sites included in the St. Jacobs – Elmira Wastewater Treatment Master Plan. Both the Region and other watershed stakeholders, including the GRCA and the MOE, are pleased with the work being conducted by LGL. In addition, LGL would be able to keep sampling protocols, data handling, and reporting consistent with the procedures already established in the current water quality program for the Grand, Nith, and Speed rivers.

It is anticipated that upon receiving Regional Council approval for extending the Water Quality Surface Monitoring Program, the additional work will commence in January 2012 concurrently with the work already scheduled for the Grand, Speed and Nith rivers.

Extension of Consultant’s Assignment and Upset Limit

An upset fee of $162,000.00 plus applicable taxes was negotiated with LGL including consulting fees and disbursements for the monitoring of the Conestogo River and Canagagigue Creek. This fee is equivalent to a unit cost of approximately $10,125.00 per WWTP monitored, per season, which is considered competitive and fair for a project of this nature. The current program has a unit cost of $10,070.00 per WWTP monitored, per season.

Under the Purchasing By-Law, Clause 21(g), the Chief Purchasing Officer may acquire goods or services, where the extension of an existing or previous contract would prove more cost effective or beneficial for the Region.
Therefore, it is recommended that the current consulting assignment for Surface Water Quality Monitoring Program be extended to include consulting and monitoring services for the Conestogo River and Canagagigue Creek between 2012 and 2014. A breakdown of the consultant’s upset fee is included in Appendix A attached to this report.

Scope of Work

The scope of work for the monitoring of the Conestogo River and Canagagigue Creek includes:

- Collection of water quality data, including seasonal/routine water quality monitoring;
- Data processing and database management; and
- Reporting.

Schedule

Subject to Council’s approval of this report, the proposed schedule is approximately 28 months commencing January 2012 and ending in April 2014.

CORPORATE STRATEGIC PLAN:

The Surface Water Quality Monitoring Program supports the Corporate Strategic Plan Focus Area 1: Environmental Sustainability; and strategic objectives: “1.1 - integrate environmental considerations into the Region’s decision-making” and “1.4 - protect the quality and quantity of our water sources.”

FINANCIAL IMPLICATIONS:

The proposed 2012 10-year Wastewater Capital Program has an annual budget of $400,000 for the Surface Water Quality Monitoring Program in each of the 2012, 2013 and 2014, which will cover the monitoring costs of the Grand, Speed, and Nith Rivers, and the additional costs related to the monitoring of the Conestogo River and Canagagigue Creek. This project is funded from the Development Charge Reserve Fund and the Wastewater Reserve Fund.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Finance Department, Financial Services, and Procurement and Supply Services

ATTACHMENTS:

Appendix A: Breakdown of consultant’s upset fee

PREPARED BY: José R. Bicudo, Senior Project Engineer, Water Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
## Appendix A – Breakdown of Consultant’s Upset Fee (2012 – 2014)

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>Collection of water quality data</td>
<td>$94,000</td>
</tr>
<tr>
<td>Task 2</td>
<td>Laboratory analyses</td>
<td>$38,000</td>
</tr>
<tr>
<td>Task 3</td>
<td>Database management and reporting</td>
<td>$30,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total Consultant Upset Fee</strong></td>
<td><strong>$162,000</strong></td>
</tr>
</tbody>
</table>
Welcome to the Public Information Centre (PIC) for the

Kitchener Pressure Zone 4 Trunk Watermain Study
Ottawa Street to Future Strasburg Road

Please complete the sign-in sheet and review the display materials.
One of our representatives will be pleased to answer your questions and address any concerns.

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. In accordance with the Municipal Freedom of Information and Protection of Privacy Act, personal information such as name, address, telephone number which may be included in a submission will become part of the public record.

Your input is much appreciated!

December 13, 2011
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Five Phases of the Municipal Class EA Planning Process

- **PHASE 1**
  - Problem or Opportunity

- **PHASE 2**
  - Alternative Solutions

- **PHASE 3**
  - Alternative Design Concepts for Preferred Solution

- **PHASE 4**
  - Environmental Study Report

- **PHASE 5**
  - Implementation

Class EA Schedule for this Study: Schedule “B”

**PHASE 1**
- Identification of Problem or Opportunity
- Notice of Study Commencement: September 2011

**PHASE 2**
- Evaluation of Alternative Solutions and Identification of Recommended Solution
- Selection of Preferred Solution following Consultation Activities
- Notice of Public Information Centre No. 1: December 13, 2011
- Ongoing Public & Agency Consultation throughout the Study

**PHASE 5**
- Implementation
- Notice of Study Completion
- File applicable Class EA reports for mandatory 30 day public review period

**The Municipal Class EA Process**
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Problem/Opportunity
To provide a direct connection from the Mannheim pumping station to the southwest section of the City of Kitchener to service existing / future water demands, and resolve pressure fluctuations, while minimizing impacts on the natural, cultural, social and agricultural features in the Study Area.

Project Objectives
- Review Potential Watermain Alignments
- Document/Mitigate Potential Impacts
- Identify Operational/Performance Requirements
- Consult with the Public and Agency Stakeholders

Project Study Area
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Information and Consultation

• Opportunities for Public Participation
• One Public Information Centre (Today)
• Add your name to our stakeholder contact list
• Submit your written comments to the Project Team
• Notice of Completion
• Project information available at the region of Waterloo Website: www.regionofwaterloo.ca/water click on “Master Plans and Projects”

Other

• Notification sent to Community organizations
• Review and Approval Agencies will be consulted, as needed, throughout the course of the Study’s undertaking.
  • City of Kitchener,
  • Hydro One Networks,
  • Grand River Conservation Authority,
  • Ministry of Natural Resources

Stakeholder Consultation

December 13, 2011
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Alignment Options

Do Nothing
- Maintain the Existing Infrastructure
- Existing system does not provide for future growth and would not achieve the project objectives.
- Does not address pressure fluctuations in Kitchener Zone 2.
- **NOT A FEASIBLE ALIGNMENT.**

Upgrade Existing Infrastructure
- Upgrade existing supply mains via reconstruction or twinning of existing mains in the City to achieve the necessary increase in capacity.
- Does not provide independent supply to southern end of Zone 4.
- Impact to residents would be significant with construction through the City.
- **NOT A FEASIBLE ALIGNMENT.**

Construction of New Watermain
- **SCREENED PREFERRED ALIGNMENT B – HYDRO ONE CORRIDOR**
  - Alignment A – 8.3 km – Trussler/Huron Road Allowance – Significant economic/social impacts
  - Alignment B – 5.5 km - Hydro One corridor - direct route – Least cost, potential environmental impacts
  - Alignment C – 8 km – Ottawa-Fischer Hallman-Bleams-Strasburg – Indirect route through urbanized area - Significant economic/social impacts including infrastructure conflicts.
  - All alignments address pressure fluctuations in Kitchener Zone 2.

Preliminary Alignments
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

**SOCIAL & CULTURAL ENVIRONMENT CONSIDERATIONS**
- Proximity to Built-up Areas
- Traffic Impacts during Construction
- Known Archaeological Features
- Private Properties Affected
- Impact on Recreation Areas

**NATURAL ENVIRONMENT CONSIDERATIONS**
- Crossing Natural Features (rivers, wetlands, woodlots)
- Proximity to Natural Heritage Features/Vegetation
- Groundwater/Subsurface Conditions
- Surface Water (Quality/Quantity)
- Proximity to Valley Lands and Floodplains
- Watercourse Crossings and Fisheries

**TECHNICAL CONSIDERATIONS**
- Ability to Service Future Development
- Constructability and Site Access
- Soil / Ground Conditions
- Location and Impacts of other Utilities
- Road Crossings
- Site size & compatibility
- Ability to Connect with Existing Infrastructure
- Water/Wetland Undercrossings
- Existing/Future Water Distribution System

**ECONOMIC CONSIDERATIONS**
- Capital Costs
- Operation and Maintenance Costs
- Land Acquisition Costs

Evaluation Criteria
Evaluation of Alternatives – Features of Interest

**Kitchener Pressure Zone 4 Trunk Watermain**

**Municipal Class Environmental Assessment**

**ISAIAH DRIVE ELEVATION VARIATION**
**Feature:** Large topographic changes
**Alternatives:**
- Directional drilling within Corridor.
- Move outside of corridor to continue with open cut digging.

**FISCHER-HALLMAN SPECIES AT RISK HABITAT**
**PARKVALE DRIVE WETLAND CROSSING**
**Feature:** GRCA regulated wetland area
**Alternatives:**
- Move alignment to the east of wetland area.
- Direct crossing of the regulated wetland area with mitigation of impacts

**HURON ROAD TRANSFORMER STATION CORRIDOR CONGESTION**
**Feature:** Hydro One high voltage transfer station
**Alternatives:**
- Continue alignment within corridor (must maintain 15m from hydro infrastructure)
- Modify alignment around the edge of the Hydro One transformer station facility to the south.
### Kitchener Pressure Zone 4 Trunk Watermain

#### Municipal Class Environmental Assessment

<table>
<thead>
<tr>
<th>Features</th>
<th>Natural Environment</th>
<th>Socio-Cultural Environment</th>
<th>Economic Environment</th>
<th>Technical Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• No issues</td>
<td>• No significant features</td>
<td>• Economic impacts are directly related to construction costs</td>
<td>• Significant elevation difference around the hydro tower base</td>
</tr>
<tr>
<td>Alignment Isaiah A – Trenchless</td>
<td>• No impact</td>
<td>• No impact</td>
<td>• More costly</td>
<td>• Tunneling preferred by Hydro One</td>
</tr>
<tr>
<td>Alignment Isaiah B – Open Cut</td>
<td>• No impact</td>
<td>• No impact</td>
<td>• Less Costly</td>
<td>• Open cut complex Direction change near towers not permitted</td>
</tr>
<tr>
<td>Evaluation</td>
<td>• Both Alignments are equal</td>
<td>• Both Alignments are equal</td>
<td>• Alignment Isaiah B is preferred from a cost perspective.</td>
<td>• Alignment Isaiah A is preferred due to lower risk of impact on the Hydro One Infrastructure.</td>
</tr>
</tbody>
</table>

### Preferred Alignment

- Alignment Isaiah A – Tunnel under elevated area of the corridor due to minimized impact on Hydro One infrastructure.

### Isaiah Drive Elevation Variation

December 13, 2011
### Municipal Class Environmental Assessment

#### Kitchener Pressure Zone 4 Trunk Watermain

### Features
- **Natural Environment**
  - Identified Species at Risk Jefferson Salamander Recovery Habitat
  - GRCA Regulated Wetland Crossing
- **Socio-Cultural Environment**
  - No significant features – work may impact adjacent forested area
- **Economic Environment**
  - Economic impacts are directly related to the construction and loss of development lands outside of hydro corridor.
- **Technical Considerations**
  - Crossing of the wetland area may require a more complex construction method.

### Alignment FH-A vs FH-B

<table>
<thead>
<tr>
<th>Features</th>
<th>Alignment FH-A</th>
<th>Alignment FH-B</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Environment</td>
<td>Impact to Species at Risk is mitigated</td>
<td>Requires species at risk permit (complex)</td>
<td>Alignment FH-A is preferred due to reduced impact on species at risk. Mitigation of disturbed vegetated areas.</td>
</tr>
<tr>
<td>Socio-Cultural Environment</td>
<td>Construction impacts within Huron Natural Area</td>
<td>No significant impact.</td>
<td>Alignment FH-B is preferred due to limited impact.</td>
</tr>
<tr>
<td>Economic Environment</td>
<td>High cost due to length, clearing and reinstatement</td>
<td>High cost due to mitigation of impacts within defined habitat and increased risk of species impacts</td>
<td>Alignment FH-A is preferred due to lower economic risk.</td>
</tr>
<tr>
<td>Technical Considerations</td>
<td>No significant comparative impact.</td>
<td>No significant comparative impact.</td>
<td>Both Alignments are equal.</td>
</tr>
</tbody>
</table>

### Preferred Alignment

- **Alignment FH-A** – Move watermain alignment out of corridor to the north due to the minimized potential environmental impacts associated with the Species at Risk Habitat and associated restrictions.

---

**Fischer-Hallman Species at Risk Habitat**

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**Region of Waterloo**

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**GENIVAR**

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**December 13, 2011**
### Kitchener Pressure Zone 4 Trunk Watermain
#### Municipal Class Environmental Assessment

<table>
<thead>
<tr>
<th>Features</th>
<th>Alignment Parkvale - A</th>
<th>Alignment Parkvale - B</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Wetland is part of the Strasburg Creek headwaters.</td>
<td>- Some impact on wetland (seasonal)</td>
<td>- Minimal impact to the natural environment</td>
<td>- Alignment Parkvale-B is preferred due to the reduced impact</td>
</tr>
<tr>
<td>- Area is impacted by previously restored wetland areas and upstream stormwater outlets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socio-Cultural Environment</strong></td>
<td>- Parkette temporarily affected</td>
<td>- Residence affected for several weeks</td>
<td>- Alignment Parkvale-A is preferred due to reduced impact on residents</td>
</tr>
<tr>
<td>- Work may temporarily impact park use or disturb newly developed roadways.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economic Environment</strong></td>
<td>- Cost related to wetland crossing</td>
<td>- High cost due to length of road reconstruction</td>
<td>- Construction costs of both Alignments will be similar</td>
</tr>
<tr>
<td>- Economic impacts are directly related to construction.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technical Considerations</strong></td>
<td>- May require additional design components to maintain wetland functionality</td>
<td>- Limited impacts with the exception of the culvert crossing</td>
<td>- Both Alignments are feasible technically; however, the potential for conflict is greater with Alignment Parkvale-B</td>
</tr>
<tr>
<td>- Crossing of the wetland area may require specialized installation methods to maintain wetland functionality.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Preferred Alignment
- Alignment Parkvale A – Maintain alignment within corridor and cross wetland area, subject to detailed delineation of the wetland area. It is anticipated that the wetland crossing can be mitigated.
# Kitchener Pressure Zone 4 Trunk Watermain

## Municipal Class Environmental Assessment

### Preferred Alignment

- **Alignment TS-A or TS-B** – Limited impacts to the socio-economic environment and flexibility with respect to land acquisition for permanent watermain easement.

### Evaluation

<table>
<thead>
<tr>
<th>Features</th>
<th>Alignment TS-A and Alignment TS-B</th>
<th>Alignment TS-C</th>
<th>Alignment TS-D</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Environment</strong></td>
<td>No Features of Interest</td>
<td>No Impact</td>
<td>No Impact</td>
<td>Any of the Alignments have equal impacts – No preference.</td>
</tr>
<tr>
<td><strong>Socio-Cultural Environment</strong></td>
<td>Construction outside of the corridor will impact adjacent residents.</td>
<td>Alignment TS-A requires land from proposed development</td>
<td>No significant impact.</td>
<td>Alignment TS-C would be preferred with Alignment TS-B as a secondary Alignment.</td>
</tr>
<tr>
<td><strong>Economic Environment</strong></td>
<td>Economic impacts are directly related to the technical solution and routing. Easement acquisition may be required.</td>
<td>Both Alignments will be similar cost and impacts. Both TS-A and TS-B are the longest alignment alternatives.</td>
<td>Significant length through developed areas.</td>
<td>Alignment TS-B would be preferred due to cost.</td>
</tr>
<tr>
<td><strong>Technical Considerations</strong></td>
<td>Existing hydro infrastructure is expanded around the transformer station limiting available space for trunk watermain.</td>
<td>Simple construction. Crossing of Huron Road can be mitigated.</td>
<td>Crossing of Huron Road conflicts with existing infrastructure.</td>
<td>Alignment TS-A or TS-B are preferred subject to land acquisition.</td>
</tr>
</tbody>
</table>

### Huron Road Transformer Station Corridor Congestion

December 13, 2011
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Comment Sheets from Public Information Centre
- Review and Incorporate comments received from Public and Review Agencies
  - January 10, 2012

Finalization of Project File
- Development of Phase 1 & 2 Report including input from public
  - Spring 2012

Notice of Completion
- 30 Day Review Period
  - Spring 2012
  - Opportunity for Public/Agencies to Review Project File

Preliminary Design
- Development of Preliminary Design Drawings for Preferred Alternative
  - Spring 2012
  - Development of Cost Estimates for Capital Budgeting

Project Close-out

Next Steps

December 13, 2011
Kitchener Pressure Zone 4 Trunk Watermain
Municipal Class Environmental Assessment

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. In accordance with the Municipal Freedom of Information and Protection of Privacy Act, personal information such as name, address, telephone number which may be included in a submission will become part of the public record.

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Jamie Witherspoon, P.Eng., LEED AP
Project Manager
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Phone: 519-827-1453 ext. 221
Fax: 519-827-1483
Email: jamie.witherspoon@genivar.com
To: Chair Jim Wideman and Members of the Planning and Works Committee
From: Paula Sawicki, Manager, Strategic Transportation Planning
Subject: HIGHWAY 401 IMPROVEMENTS (HESPeler ROAD – WELLINGTON COUNTY/HALTON REGION BOUNDARY) - PUBLIC INFORMATION CENTRE #2
File No: D09-30(A)

The Ontario Ministry of Transportation (MTO) is hosting a Public Information Centre (PIC) to present operational and capacity needs, evaluated alternatives and a recommended plan to address the long term requirements for the Highway 401 corridor, from 1.0 km west of Hespeler Road (Regional Road 24) to the Wellington County / Halton Region boundary (i.e. 25.8 km). The PICs are to be held:

Tuesday, December 6, 2011  Hespeler Memorial Arena  640 Ellis Road West  Cambridge, Ontario
Thursday, December 8, 2011  Puslinch Community Centre  29 Brock Road South  Aberfoyle, Ontario

The Notice of Public Information Centre is attached. The PICs begin at 4:00 pm, but Councillors and staff are also invited to attend a preview session from 3:00 pm – 4:00 pm.

In the Study Area, Highway 401 is currently three lanes in each direction, and the Ministry of Transportation is stating that traffic volumes are approaching the operational capacity of the freeway. A previous PIC was held in December 2009. After reviewing public comments, MTO developed the preliminary preferred plan, which involves widening Highway 401 to 10 total lanes, with four general purpose lanes and a high occupancy vehicle (HOV) lane in each direction. The HOV lanes will help to increase the capacity of the highway under congested conditions, improve the effectiveness of carpooling and transit, and maximize the use of public infrastructure investment.

Nearly all of the existing bridges over the highway require extensive rehabilitation, and many of them are not long enough to accommodate a widened Highway 401.

The Hespeler Road bridge over Highway 401 is proposed to be rebuilt slightly to the east of its current location. At this time, there are no proposed provisions for pedestrians and cyclists to cross the highway at this bridge, and MTO has committed to work with the Region and the City of Cambridge to determine the appropriate location of a separated pedestrian / cyclist crossing. This crossing would be specifically for an alternative to Hespeler Road for active transportation.
and would be for a different purpose than the crossing proposed as part of the Highway 401 Pedestrian and Cycling Bridge Feasibility Study that focused on the Franklin Boulevard location.

The Franklin Boulevard bridge over Highway 401 is proposed to be rebuilt at the existing location, which would require the temporary closure of Franklin Boulevard. The existing sidewalk on the east side of the bridge is proposed to be reconstructed. MTO is also to continue discussions with the Region and the City of Cambridge regarding the accommodation of pedestrian and cycling crossings of Highway 401 on Franklin Boulevard as per the recommendations of the Highway 401 Pedestrian and Cycling Bridge Feasibility Study.

Unlike Hespeler Road and Franklin Boulevard, the Townline Road bridge is new enough and large enough that it does not require full reconstruction. Minor realignments will be made to the existing ramps and the existing carpool parking lot is proposed to be expanded. The existing sidewalks and bicycle lanes are to be preserved.

MTO has not yet identified when the proposed improvements are to be constructed. However, the proposed staging plan recommends completing the section from Hespeler Road to Townline Road within Phase 1.

Following the PIC, MTO will continue consultation activities and incorporate the results of the consultation into a final design. A Transportation Environmental Study Report is to be filed for public comment by Spring 2012.

Staff will bring a report back with recommendations following the Public Information Centres.

The Project Manager is Roger Ward and he may be contacted at 519-873-4547 or roger.a.ward@ontario.ca.
MINISTRY OF TRANSPORTATION ONTARIO
PRELIMINARY DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT STUDY

HIGHWAY 401 IMPROVEMENTS
From 1.0 km west of Hespeler Road easterly to the Wellington County / Halton Region boundary, 25.8 km
GWP 8-00-00

NOTICE OF PUBLIC INFORMATION CENTRE #2

THE STUDY
The Ontario Ministry of Transportation (MTO) has retained McCormick Rankin Corporation (MRC) to conduct a Preliminary Design and Class Environmental Assessment (Class EA) Study to identify capacity, geometric and operational improvements along the Highway 401 corridor from 1.0 km west of Hespeler Road easterly to the Wellington County / Halton Region boundary, within the Region of Waterloo and the County of Wellington, as shown in the Key Plan. The study team has identified operational and capacity needs, evaluated alternatives and is recommending a plan to address the long-term requirements for the Highway 401 corridor, including the addition of new lanes, rehabilitation/repair of structures and interchange improvements. A section of the approved Environmental Assessment for Highway 6, Frielton to Guelph, falls within the limits of this study.

THE PROCESS
This study is following the approved environmental planning process for Group “B” projects under the Class Environmental Assessment (Class EA) for Provincial Transportation Facilities (2000). Upon completion of the study, a Transportation Environmental Study Report (TESR) will be completed and made available for a 30-day public review period. Notices will be published at that time to explain the review process and identify the locations where the TESR will be available for review.

External agency and public consultation is taking place throughout the study. Following the review of comments received at the first round of Public Information Centres (PICs) held in December 2009, the study team has completed the analysis and evaluation of alternatives and has identified a preferred alternative. This second round of PICs will present the analysis and evaluation of the alternatives and the preliminary design of the preferred alternative that will address the future needs of Highway 401 within the study limits.

PUBLIC INFORMATION CENTRE #2
PIC #2 will be held as a drop-in style, open house format. Each session will include brief, informal presentations. Representatives of the project team will be in attendance to answer questions and receive comments. We encourage you to attend this PIC to provide us with your views and comments. PIC #2 is scheduled as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Time Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday,</td>
<td>Hespeler Memorial Arena</td>
<td>4:00 p.m. to 8:00 p.m.</td>
</tr>
<tr>
<td>December 6,</td>
<td>(Beehive Hall)</td>
<td>Informal Presentation: 4:30 p.m. and again at 6:30 p.m.</td>
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<tr>
<td>2011</td>
<td>640 Elvis Road West</td>
<td></td>
</tr>
<tr>
<td>Cambridge, ON</td>
<td>Open HOUSE Format: 4:00 p.m.</td>
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<td></td>
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<tr>
<td>Thursday,</td>
<td>Puslinch Community Centre</td>
<td>4:00 p.m. to 8:00 p.m.</td>
</tr>
<tr>
<td>December 8,</td>
<td>29 Brock Road South</td>
<td></td>
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<tr>
<td>2011</td>
<td>Amberfoyle, Ontario</td>
<td>Informal Presentation: 4:30 p.m. and again at 6:30 p.m.</td>
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<tr>
<td></td>
<td>Open House Format: 4:00 p.m.</td>
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</table>

Information presented at the PICs will be available on the study website beginning on December 6, 2011.

COMMENTS
To obtain additional information, provide comments or to be placed on the mailing list, please visit the study website or contact:

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Fax: (519) 873-4600
Email: Roger.A.Ward@ontario.ca

Mr. Jim Dowell, P.Eng.
Consultant Project Manager
McCormick Rankin Corporation
2655 North Sheridan Way
Mississauga, ON L5K 2P8
Phone: (905) 823-6500
Toll Free: 1-877-562-7947
Fax: (905) 823-6501
e-mail: jdowell@mrc.ca

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Visit us at www.highway401-hespeler-halton.ca

Ontario
To: Chair Jim Wideman and Members of the Planning and Works Committee
From: Paula Sawicki, Manager, Strategic Transportation Planning
Subject: HIGHWAY 7/8 CONSTRUCTION STAGING – FISCHER-HALLMAN ROAD TO COURTLAND AVENUE – 2011 TO 2015
File No: D09-30(A)

In May 2011, a memo was forwarded to Regional Council providing information about The Ministry of Transportation’s timing for the reconstruction of Highway 7/8. MTO has informed us that the project was delayed, but has now completed the Environmental Assessment, detailed design and awarded the tender for construction.

The Project includes:

- Reconstruction and widening of Highway 7/8 from four to six lanes, including a median tall wall barrier, from 1.9 km west of Fischer-Hallman Road to 0.8 km east of Courtland Avenue.
- Interchange improvements at Courtland Avenue, Homer Watson Boulevard and Fischer-Hallman Road, requiring short and long term duration ramp closures during construction;
- Major rehabilitation and/or widening of the structures at each crossing (including the CNR overpass) with reduced lanes and short-term (weekend) closures of side roads;
- Construction of a closed median drainage system;
- Relocation and/or retrofit of existing noise barriers and installation of new noise barriers where warranted; and
- Installation of high mast lighting.

At this time, Ministry of Transportation Ontario (MTO) is proposing the following project phasing and closures:

1. For the majority of time, four lanes will be maintained on the highway, with the exception of the reduction of an eastbound lane on the highway for a short section under the Fischer Hallman Bridge (single lane closure for a construction season). There may be some overnight closures to facilitate high quality paving operations.
2. There will be no simultaneous lane reductions on Westmount Road and Fischer-Hallman Road.
3. Short term closures are considered to be either off-peak brief closures of a few hours to single evening and overnight closures.
<table>
<thead>
<tr>
<th>Area of Work and Closures</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 7/8</td>
<td></td>
</tr>
<tr>
<td>- Outside shoulder strengthening</td>
<td></td>
</tr>
<tr>
<td>- Single lane traffic at night for outside shoulder strengthening</td>
<td>2011 November – underway to be completed early December</td>
</tr>
<tr>
<td>Fischer Hallman Road</td>
<td>2012 Full construction season – April to November</td>
</tr>
<tr>
<td>- Bridge rehabilitation with Fischer-Hallman Road reduced to a single lane in each direction between Ottawa Street and the north ramp terminal</td>
<td></td>
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<tr>
<td>- Construction of a new eastbound highway on-ramp</td>
<td></td>
</tr>
<tr>
<td>- Short term ramp closures</td>
<td></td>
</tr>
<tr>
<td>Highway 7/8</td>
<td></td>
</tr>
<tr>
<td>- Eastbound traffic reduced to a single lane through the Fischer- Hallman Road Interchange for full construction season</td>
<td></td>
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<tr>
<td>- Night time single laning required west of Fischer-Hallman Road to complete pavement rehabilitation</td>
<td></td>
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<tr>
<td>Westmount Road</td>
<td>2013 Full construction season – April to November</td>
</tr>
<tr>
<td>- Westmount Road reduced to a single lane in each direction for pier construction and bridge rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Courtland Avenue</td>
<td></td>
</tr>
<tr>
<td>- Courtland Avenue reduced to a single lane in each direction for pier construction</td>
<td></td>
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<tr>
<td>Courtland Avenue</td>
<td>2013</td>
</tr>
<tr>
<td>- Bridge and interchange rehabilitation with full season closure of the Courtland Avenue northbound auxiliary lane</td>
<td></td>
</tr>
<tr>
<td>- Overnight closure of Courtland Avenue to complete deck removal and girder installation</td>
<td></td>
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<tr>
<td>- Nightly lane closures on Courtland Avenue to complete pavement rehabilitation</td>
<td></td>
</tr>
<tr>
<td>- Short and long term (full construction season) ramp closures</td>
<td></td>
</tr>
<tr>
<td>Ottawa Street</td>
<td></td>
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<tr>
<td>- Short term closure of the eastbound highway on-ramp</td>
<td></td>
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<tr>
<td>Westmount Road</td>
<td></td>
</tr>
<tr>
<td>- Overnight full closure of Westmount Road to complete deck removal and girder installation</td>
<td></td>
</tr>
<tr>
<td>Highway 7/8</td>
<td></td>
</tr>
<tr>
<td>- Nightly lane closures required east of Courtland Avenue to complete pavement rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Homer Watson Boulevard</td>
<td>2014</td>
</tr>
<tr>
<td>- Homer Watson Boulevard reduced to a single lane in each direction for pier construction (approximately 1 month)</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
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</tbody>
</table>
| Homer Watson Boulevard    | - Bridge rehabilitation with full season closure of the eastbound highway on-ramp and Homer Watson Boulevard reduced to a single southbound lane  
                          | - Short term full closure of Homer Watson Boulevard to complete deck removal and girder installation  
                          | - Short and long term ramp closures                                       | 2013/2014 Full construction season – April to November |
| Ottawa Street             | - Short term full closure of Ottawa Street to complete deck removal and girder installation |                                   |                                    |
| Highway 7/8               | - Night time lane closures to complete surface paving                         | 2015                              |
| Highway widening and noise wall construction |                                                                       | 2011 - 2015                      |

Timing may change and MTO is communicating with Regional and City staff on a regular basis to ensure coordination of Regional / City and MTO construction.

The Project Manager is Scott Howard and he may be contacted at 519-873-4588, scott.howard@ontario.ca. The project website that will be kept up to date about ongoing closures is www.highway7-8.com.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-May-11</td>
<td>P&amp;W</td>
<td>Staff report on emerging technology and current technology being used for traffic signal control</td>
<td>Transportation and Environmental Services</td>
<td>Jan-2012</td>
</tr>
<tr>
<td>16-Aug-11</td>
<td>P&amp;W</td>
<td>One year review of Report E-11-085 re: Parking on Bleams Road</td>
<td>Transportation and Environmental Services</td>
<td>1-Aug-2012</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>P&amp;W</td>
<td>Staff report on options for recognition of Nyle Ludolph, the 'Father of the blue box'</td>
<td>Transportation and Environmental Services</td>
<td>28-Feb-2012</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>C. Millar</td>
<td>Staff review the aesthetics of the bridge repairs to the Main Street, Cambridge</td>
<td>Transportation and Environmental Services</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>P&amp;W</td>
<td>Staff report on alternative financing options for Lloyd Brown Water Fees</td>
<td>Transportation and Environmental Services / Finance</td>
<td>6-Dec-2011 Administration &amp; Finance Committee</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>P&amp;W</td>
<td>Staff report on traffic safety on Fairway Road - City of Kitchener Request</td>
<td>Transportation and Environmental Services</td>
<td>6-Dec-2011</td>
</tr>
<tr>
<td>26-Oct-11</td>
<td>Council</td>
<td>Staff report on Homer Watson Boulevard / Block Line Roundabout</td>
<td>Transportation and Environmental Services</td>
<td>Jan-2012</td>
</tr>
<tr>
<td>26-Oct-11</td>
<td>Council</td>
<td>Staff report prior to the removal of or change to the oversize signs installed near the Homer Watson Boulevard / Block Line Roundabout</td>
<td>Transportation and Environmental Services</td>
<td>Apr-2012</td>
</tr>
<tr>
<td>08-Nov-11</td>
<td>J. Haalboom</td>
<td>Staff report re: pedestrian legislation with the Ministry of Transportation of Ontario (MTO)</td>
<td>Transportation and Environmental Services</td>
<td>Jan-2012</td>
</tr>
</tbody>
</table>