MEDIA RELEASE: Friday, February 11, 2011, 4:30 p.m.

REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA

Tuesday, February 15, 2011
9:15 A.M.
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. MOTION TO GO INTO CLOSED SESSION

THAT a closed meeting of the Planning & Works Committee be held on Tuesday, February 15, 2011 at 8:45 a.m. in the Waterloo County Room in accordance with Section 239 of the Municipal Act, 2001, for the purposes of considering the following subject matters:

a) proposed or pending acquisition of land in the City of Waterloo
b) personal matters about identifiable individuals – committee appointments
c) potential litigation and receiving of legal advice and opinion that is subject to solicitor-client privilege related to a proceeding before an administrative tribunal
d) proposed or pending acquisition of land in the Township of Wilmot

2. MOTION TO RECONVENE IN OPEN SESSION

3. DELEGATIONS

a) E-11-020, Fountain Street - King Street Improvements, Shantz Hill Road to Eagle Street, City of Cambridge Class Environmental Assessment, Recommended Design Concept

   i) John Doherty and Victor Labreche re: 255 King Street W.
   ii) David Sunday representing owners of 246 Fountain Street S. and 275 Abraham Street, Cambridge, ON
   iii) Martin Wiens, Cambridge, ON
   iv) John Waring, 237 King St. W. Condo Association President
   v) Bob McMullen, Cambridge, ON

b) Memo re: South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment Study, City of Cambridge and Township of North Dumfries – Recommended Design Alternative - Supplementary Information to Report E-10-088

   E-10-088, South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment, City of Cambridge and Township of North Dumfries - Recommended Design Alternative (deferred from November 16, 2010 Planning and Works Committee)

   i) Susan Shackleton, Cambridge, ON

Note Time Change →
4. **REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES**

**COMMUNITY PLANNING**


b) P-11-013, Appeals to the New Regional Official Plan 93

**TRANSPORTATION PLANNING**

c) P-11-014, Amendment to Regional Municipality of Waterloo Controlled Access By-Law #58-87 for the Closure of Two Accesses to Regional Road #28 (Homer Watson Boulevard) and for Two New Accesses to Regional Road #28 (Homer Watson Boulevard), City of Kitchener 116

5. **REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES**

**RAPID TRANSIT**

d) E-11-021, Rapid Transit Implementation Options (*staff presentation*)

Report distributed separately

**DESIGN AND CONSTRUCTION**

e) E-11-001, Pre-Budget Funding Approval for 2011 Construction Contracts 123

f) E-11-018, Consultant Selection - Class Environmental Assessment and Preliminary Design Study; Ottawa Street Improvements from King Street to Mill Street, City of Kitchener 126

g) E-11-022, Kitchener Wastewater Treatment Plant 1 Upgrades – Purchase of High Speed Turbo Blowers 132

h) CR-RS-11-009, Fairway Road Extension - Servicing Agreement with Grand River Conservation Authority and Rockway Holdings Ltd. 135

**TRANSIT**

i) E-11-025, Mobile Video Surveillance Update 138

**WATER**

j) E-11-013, Preparation of the Updated Grand River Assessment Report Under the *Clean Water Act* 152

k) E-11-014, 2010 Annual Water Quality Report for the Region of Waterloo Rural and Integrated Water Systems 157

l) E-11-017, Kitchener Wastewater Treatment Plant 1 Upgrades – Extension of Consultant’s Assignment 160

m) E-11-019, Consultant Selection for the West Montrose Water Supply System Class EA 164
6. INFORMATION/CORRESPONDENCE
   a) Memo re: Breslau Commuter Parking Lot - Project Update

7. OTHER BUSINESS
   a) Council Enquiries and Requests for Information Tracking List

8. NEXT MEETING – March 8, 2011

9. ADJOURN
# NEXT MEETINGS

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<td>Planning and Works Committee</td>
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<tr>
<td>March 8, 2011</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>April 12, 2011</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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<td>March 8, 2011</td>
<td>9:00 A.M.</td>
<td>Public Meeting for Greenlands Network Implementation Guideline</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<td>TBA</td>
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<td>Transit Service Improvements Public Meeting</td>
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<td>February 22, 2011</td>
<td>7:00 P.M.</td>
<td>River Road Extension – Information Package in advance of PCC</td>
<td>Knights of Columbus Hall, 110 Manitou Drive, Kitchener</td>
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<td>March 8, 2011</td>
<td>7:00 PM</td>
<td>Weber Street Environmental Assessment Study, College Street to Guelph Street – Public Input for the Preferred Design Concept</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<td>TBA</td>
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<td>Fischer-Hallman Road Improvements from Ottawa Street to Bleams Road - Information Package in Advance of PCC</td>
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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: February 15, 2011

FILE CODE: T04-20, 5337

SUBJECT: FOUNTAIN STREET – KING STREET IMPROVEMENTS, SHANTZ HILL ROAD TO EAGLE STREET, CITY OF CAMBRIDGE CLASS ENVIRONMENTAL ASSESSMENT, RECOMMENDED DESIGN CONCEPT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for Fountain Street – King Street Improvements, Shantz Hill Road to Eagle Street, City of Cambridge:

a) Approve the implementation of a realigned intersection at Fountain Street/Shantz Hill, a roundabout at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street, in the City of Cambridge, all as presented in Report E-11-020.

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

SUMMARY:

The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study to consider road improvements on Fountain Street from Shantz Hill Road to King Street and on King Street from Fountain Street to Eagle Street, in the City of Cambridge. The project limits are indicated on the key plan in Appendix “A”. The Class EA Study is being guided by a Project Team consisting of staff from the Region of Waterloo and the City of Cambridge; Regional Councillor, Jane Brewer and City of Cambridge Councillor, Karl Kiefer.

The Fountain Street – King Street Class Environmental Assessment was initiated to examine traffic congestion and higher than expected collisions on the Fountain Street – King Street corridor.

There has been extensive public involvement, which included two Public Consultation Centres, one Public Input Meeting, a Presentation to City of Cambridge Council and Presentations to Region of Waterloo, Heritage Planning Advisory Committee (HPAC), and Regional Cycling Advisory Committee (RCAC) and to City of Cambridge Municipal Heritage Advisory Committee (MHAC). This extensive Class EA approach involved the development, presentation and evaluation of nine alternative solutions and seven alternative design concepts.

With the exception of the “do-nothing” alternative the alternative design concepts all consist of various combinations of intersection improvements, local widening or addition of through lanes where required, active transit priority features, sidewalks and on-road cycling lanes on both sides of the road.
Based on a review of the technical information gathered for this project, the public input and the evaluation criteria, a majority of the Project Team members have confirmed that Alternative Design Concept 6 - Realigned intersection at Fountain Street/Shantz Hill, roundabout at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street - is the Recommended Design Concept.

The Project Team also recognized that:

- **Design Concept 2 - Realigned intersection at Fountain Street/Shantz Hill, realigned intersection at King Street/Fountain Street, with conventional intersection improvements at King Street/Eagle Street** - is also feasible but is technically less preferred due to less reduction in delays than Design Concept 6 (50% versus 75%) and no significant expected reduction in injury collisions at the Fountain Street/King Street intersection versus a 70% reduction for Design Concept 6.

The main reasons for Alternative Design Concept 6 being recommended is that it is deemed best from a traffic and safety standpoint, and does not require the removal of any designated or listed heritage structures.

Further, the roundabout is recommended at the King/Fountain intersection because, in addition to providing superior operational and safety performance, the roundabout would also:

- Improve access/egress to the existing Kressview Condominium driveway by providing a left-turn lane on King Street and a "left-out" movement via a U-turn at the roundabout, benefits that cannot be provided by a signalized intersection;
- Improve the pedestrian environment by slowing vehicles to 40 km/h and providing priority to pedestrians; and
- Provide the potential to substantially improve the aesthetics of the intersection through landscaping of the roundabout while enhancing the vista of the 102 Fountain Street South hotel building.

Public comments are generally supportive of the evaluation of alternatives, but there remain some concerns regarding changes to the historic road patterns, property impacts, property access changes and the operation of the proposed roundabout.

The Recommended Design Concept is estimated to cost $14.5 million - $16 million. Construction is currently scheduled for 2015.

**REPORT:**

1. **Background**

The Fountain Street – King Street corridor functions as a significant link between two heavily used arterial roads crossing Highway 401, Fountain Street North and Shantz Hill Road. Shantz Hill Road is a major access point for Cambridge area traffic to both Highway 401 and Highway 8. Fountain Street North is also a significant access route for Cambridge area traffic to the industrial areas north of Highway 401, in particular the Cambridge Business Park and the Region of Waterloo International Airport. A key plan of the study area is shown in Appendix “A”.

There are three signalized intersections within the study area:
• Shantz Hill Road at Fountain Street
• Fountain Street at King Street
• King Street at Eagle Street

All three intersections are experiencing traffic congestion and delays, and this congestion is projected to increase in the future as planned developments for north and west Cambridge are completed. Of these three signalized intersections, only Fountain Street at King Street has been identified as having higher than expected numbers of vehicular collisions. Collision and traffic safety assessments, summarized in Appendix “B”, identify the intersection of Fountain Street and King Street as the #7 ranked intersection in 2009 for higher than expected collisions. Much higher than expected collisions are also identified at all mid-block sections with the exception of King Street between Chopin Drive and Eagle Street; these are associated with unexpected stops for queues, left-turns and weaving/lane-changing at those locations.

Fountain Street, King Street and Eagle Street have been identified in the Regional Cycling Master Plan as core on-road cycling routes. Currently, no dedicated cycling facilities exist on these roads. As such there is a need to address and improve cycling facilities through the corridor. Finally, the corridor also has discontinuous stretches of sidewalk along Fountain Street and King Street, and improvements are required to facilitate pedestrian movement through the area.

The need for traffic capacity improvements through the corridor has previously been identified in a number of Cambridge area traffic and transportation studies, including:

• Cambridge Area Routes Selection Study (2000)
• Detailed Transportation Network Review (2004)
• Regional Transportation Master Plan (2010)

The study area has significant constraints which limit the range of improvements that can be accomplished. These include the location of numerous heritage resources, steep slopes, and the Speed River/Regional Flood Plain. Early in this study, the Project Team realized that due to capacity constraints in the transportation network adjacent to the study limits, the potential of the project to create significant corridor capacity improvements would be limited. Consequently, the Project Team agreed to strive for a solution that included improvements to the corridor that are operational in nature rather than an expansion in capacity.

Additionally, the recently completed 2010 Regional Transportation Master Plan identified the need for "Enhanced Transit" through the King Street – Fountain Street – Shantz Hill Road corridor; so there will clearly be a need to improve public transit operations within the study limits.

As a result of the existing traffic conditions, projected growth and existing deficiencies in pedestrian, cycling and transit facilities, the Region of Waterloo is undertaking a Schedule “C” Class Environmental Assessment (EA) Study to consider road improvements on Fountain Street from Shantz Hill Road to King Street and on King Street from Fountain Street to Eagle Street, in the City of Cambridge to improve the movement of people through the study area to a horizon year of 2023.

This study is being guided by a Project Team consisting of staff from the Region of Waterloo, and the City of Cambridge, Regional Councillor Jane Brewer and City of Cambridge Councillor Karl Kiefer. The engineering consulting firm of Stantec Consulting Ltd. has been retained to assist with this Class EA Study.
2. Preliminary Alternative Solutions

Nine Preliminary Alternative Solutions were presented to the public at the first Public Consultation Centre (PCC #1) held on April 23, 2009. These solutions were assessed for consideration in addressing the transportation needs along King Street and Fountain Street to determine which solutions singly, or in combination with other solutions, best address the problems in the study area. The nine Preliminary Alternative Solutions are described and evaluated by the Project Team as follows:

- “Do Nothing” Carried forward as a baseline for comparison
- Traffic Operations Improvements – Consider only as part of other solutions
- Access Management – Consider only as part of other solutions
- Intersection Improvements – Carried forward for detailed evaluation
- Roundabouts – Carried forward for detailed evaluation
- Widening of Roadways – Consider only as part of other solutions
- Off Road Cycling Lane – Consider only as part of other solutions
- Diversion and Improvements to Alternative Transportation Routes – Rejected
- Develop Alternative Routes Within the Study Area – Rejected – more discussion is provided in Appendix “C”:

The Project Team concluded as a result of its evaluation and considering public input from PCC#1, that only intersection improvements, including a possible roundabout at the King Street/Fountain Street Intersection would be evaluated further as a potential solution for this Class EA study.

3. Alternative Design Concepts

As a result of the preliminary screening and input from the public at PCC #1, the Project Team developed a set of Seven Alternative Design Concepts for the Intersection Improvement Solution, including “do-nothing” for further review and assessment.

All short listed Alternative Design Concepts include:
- operational widening of Fountain Street to 4 lanes between King Street and Shantz Hill Road,
- sidewalks and on-road cycling lanes on both sides of Fountain Street and King Street,
- active transit priority features and
- other common road infrastructure improvements, such as storm sewers, etc., as necessary.

Please refer to Appendix “E” – Alternative Design Concepts, which shows the details of proposed intersection improvements for all Design Concepts. The Do-Nothing Alternative as previously discussed is included but not shown. At the King Street/Eagle Street intersection, only conventional signalized intersection improvements were found to be feasible. At the Fountain Street/King Street intersection, conventional and realigned intersection improvements and a roundabout were evaluated. At the Shantz Hill Road/Fountain Street intersection, conventional and realigned intersection improvements were evaluated. The Project Team assessed that the cost and property/heritage impacts of a roundabout at the Eagle Street and at the Shantz Hill Road locations exceed the benefit of the estimated reduction in expected injury collisions.

The seven Alternative Design Concepts considered are:
The “DO-NOTHING” Alternative

For all Class EA studies, the Do-Nothing alternative is used as a baseline for comparison purposes. This alternative normally consists of maintenance of existing conditions as presently planned, and minor improvements at specific locations that would have little to no effect on addressing the overall study needs. The Region’s base program of normal maintenance and reconstruction would require reconstruction of the pavement on the Regional Roads. At that time deficiencies in sidewalks and on-road cycle lane would need to be corrected. The estimated cost of the “Do Nothing” design concept is $11 million for reconstruction, property acquisitions, utility relocations and engineering.

Alternative Design Concept 1

Conventional intersection improvements at all three intersections of Fountain Street/Shantz Hill, King Street/Fountain Street and King Street/Eagle Street.

Alternative Design Concept 2

Realigned intersection at Fountain Street/Shantz Hill and King Street/Fountain Street, with Conventional intersection improvements at King Street/Eagle Street.

Alternative Design Concept 3

Realigned intersection at Fountain Street/Shantz Hill, with Conventional intersection improvements at King Street/Fountain Street and King Street/Eagle Street.

Alternative Design Concept 4

Conventional intersection improvements at Fountain Street/Shantz Hill, realigned intersection at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street.

Alternative Design Concept 5

Conventional intersection improvements at Fountain Street/Shantz Hill, roundabout at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street.

Alternative Design Concept 6

Realigned intersection at Fountain Street/Shantz Hill, roundabout at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street.

4. Assessment of Alternative Design Concepts on the Project Environment

All seven Alternative Design Concepts were assessed by the Project Team as to how they address the traffic and transportation needs in comparison to their potential environmental impacts. The evaluation criteria and the evaluation of the Alternative Design Concepts are shown in Appendix “F” and summarized as follows:

Traffic Capacity, Operations & Safety

Design Concepts 1, 2, 3, 4, 5 and 6 provide for existing and future traffic operational needs in meeting the transportation objectives which are local operational needs only, since increased
network capacity is not achievable. It is expected that Alternative Concepts 5 and 6 with roundabout intersection at Fountain/King would experience 25% less travel delays along the corridor as compared to the best fully signalized corridor concept.

Design Concepts 5 and 6 with a roundabout at Fountain/King would result in 70% fewer injury collisions at that intersection and shorter crossing distances for pedestrians when compared to fully signalized corridor concepts.

Design Concept 1 with all conventional intersection improvements does the least to address weaving/left-turn issues. Concepts 2 and 6 best address the weaving issues and would result in fewer mid-block collisions.

**Natural Environment**

The “Do Nothing” alternative has the least impact on the natural environment; however, it does not address the traffic operational needs. All of the Alternative Design Concepts reviewed are expected to have minor negative impact on the natural environment associated with culvert extensions, some valley slope re-grading and some removal of some roadside trees. Mitigation and regulatory approval requirements for all identified impacts will be provided for in the detailed design and construction phases of the project.

**Social Environment**

Design Concepts 1, 4 and 5 would all require demolition of an inventoried heritage structure which operates as a travel agency at 285 Fountain Street South. Design Concepts 1, 4 and 5 are therefore screened out for further consideration, as having an unacceptable impact with no other clear advantages. No other structures which are designated under the Ontario Heritage Act (or listed on the City of Cambridge Heritage Properties Registry) would be directly impacted by any of the Design Concepts reviewed. All Alternative Design Concepts would require some property to be acquired from properties with built heritage features. A draft Cultural Heritage Impact Assessment was prepared and presented to both the City of Cambridge Municipal Heritage Advisory Committee and the Region of Waterloo Heritage Planning Advisory Committee. Both committees advised the Project Team that they are not in favour of a roundabout or other significant changes in the historic streetscape.

Design Concepts 5 and 6 would require a major property taking from the vacant property at 255 King Street W. Other Design Concepts would require much less land from that property. Design Concepts 5 and 6 would require major property takings from “The Pines” at 115 Fountain Street North including removal of a portion of the building, while Design Concepts 2 and 4 would require less of the building but greater reduction of parking spaces. While all Design Concepts would require removing parking spaces from 250 King Street West, Design Concepts 5 and 6 would have the largest impact. While the property impacts at both 250 King Street W and The Pines may require full purchase, there are opportunities in the design process to maintain one or both properties in operation with significant modifications.

The total private property requirements range from a minimum of 0.64 hectares for Concept 1 to a maximum of 0.96 hectares for Concept 6.

**Costs**

The capital costs for the seven Design Concepts range from an estimated $11 million for the “Do-Nothing” alternative to an estimated $16 million for Concept 5.
5. Public Consultation

The following is a summary of the public consultation process for this study. Further details of the public meetings are provided in Appendix “C”. All Comments received and the Project Team responses will be included in the Final Class EA Study Report for the study.

Public Consultation Centre (PCC) #1, April 23, 2009

At the first PCC the Problem Statement, Evaluation Criteria and Preliminary Alternative Solutions to be considered as part of the study were presented to the public for review and comments. A total of approximately 70 attended the meeting and 51 written comments were received. In general the comments and suggestions recognized the current traffic congestion and operational difficulties and supported the need for improvements on Fountain Street/King Street, as well as identified a need for better accommodating pedestrians and cyclists. Other comments questioned the need for corridor improvements, instead suggesting redirecting traffic, especially trucks, to alternative roads, and expressed concerns with hydro-geological issues, traffic operations impact of the Dover Flour Mills operations, support and opposition for roundabouts and potential property and access impacts.

Public Consultation Centre (PCC) #2, March 9, 2010

At PCC #2, the seven (7) Alternative Design Concepts were presented to the public and Alternative Design Concept 6 was presented as the Project Team’s Preliminary Preferred Design Concept.

Approximately 165 people attended the PCC and thirty (30) comments were received. These comments are summarized with responses by the Project Team in Appendix “C”.

In general, there was support for needed improvements on Fountain Street/King Street; however, some believe widening for additional capacity, and traffic signal improvements are a better solution than a roundabout, while others do not believe improvements are required at all and traffic, especially trucks, should be directed to other roads.

Additional Consultations were undertaken as follows:

- Presentation to City of Cambridge Municipal Heritage Advisory Committee (MHAC), February 18, 2010
- Presentation to Region of Waterloo Heritage Planning Advisory Committee (HPAC), March 11, 2010
- Presentation to Regional Cycling Advisory Committee (RCAC), March 23, 2010
- Project staff met with several property owners directly impacted by additional land needs, March 1 – October 13, 2010

Public Input Meeting (PIM), June 8, 2010

On June 8, 2010, a special evening public meeting of the Region of Waterloo, Planning and Works Committee was held for this project at King Street Baptist Church in Cambridge. Alternative Design Concept 6 - Realigned intersection at Fountain Street/Shantz Hill, Roundabout at King Street/ Fountain Street, and Conventional intersection improvements at King Street/Eagle Street, was presented as the Project Team’s Preferred Design Concept for this Class EA Study.

Ten delegations appeared and presented their input at the PIM. A summary of those presentations and responses prepared by the Project Team is provided in Appendix “D”.

DOCS #845494
Presentation to City of Cambridge, Council, June 21, 2010

At the June 21, 2010, General Committee meeting of City Council, Alternative Design Concept 6 - Realigned intersection at Fountain Street/Shantz Hill, Roundabout at King Street/Fountain Street, and Conventional intersection improvements at King Street/Eagle Street, was presented as the Project Team’s Preferred Design Concept for this Class EA Study.

Comments received were not documented in the minutes of the Council meeting; however, the following concerns were expressed: that the study may have underestimated the future traffic volumes and; that the project cost and property impacts are excessive for a small benefit and; that the potential to realign the King Street/Rogers Road intersection alignment was not fully explored. A summary of those comments and responses prepared by the Project Team is provided in Appendix “D”.

6. Summary of Concerns Raised by the Public and Other Project Issues

The main issues raised by the public are as follows:

Cost and Impact are High for Limited Benefit

Some people are concerned that the project cost and property impacts are excessive for a small benefit.

Project Team Response:

Design Concept No. 6 would reduce injury collisions by 70% at the Fountain Street/King Street intersection and would reduce peak hour delays through the Study Area by approximately 75% versus the “Do-Nothing Alternative”. Design Concept No. 2 would result in only a 50% reduction in delays and no major reduction in injury collisions, and 350 square metres (3.6%) less property taking than Design Concept No. 6. Capital costs for Design Concept 2 and Design Concept 6 are approximately the same at $14.4 M and $14.5 M respectively. The capital cost for the “Do-Nothing Alternative” would be $11.0M which would be required for reconstruction of age-deteriorated pavement plus addition of required on-road cycling lanes and sidewalks.

Traffic Operation at Roundabouts

Comments received from the public expressed concerns about how the roundabout at Fountain/King might get congested in times of peak traffic demand, creating significant delays and backups on Fountain Street and on King Street. Comments relate to concerns that the roundabout cannot handle the traffic needs during peak periods, and that heavy directional traffic on King Street/Fountain Street South may provide little opportunity for gaps in traffic for traffic from Fountain Street North.

Project Team Response:

A very comprehensive traffic analysis concluded that there would not be a problem to enter at any leg of the Fountain/King roundabout. The traffic analysis for this roundabout indicates the roundabout would result in acceptable operations for the anticipated 10-20 year horizon in traffic growth. Operational analyses done for the signalized options at the same location indicate that traffic signals would also work but with significantly higher delays and more injury collisions than for a roundabout.
Diversion of Traffic from the Study Area

Numerous comments mentioned the need to divert traffic from the Maple Grove Business Park and Highway 401 to alternate routes.

Project Team Response:

The Project Team has assessed that there is no practical way of diverting drivers to use other routes. Presumably traffic from this area still finds the study area to be the best route for their particular destination.

The Ministry of Transportation (MTO) has completed an EA study proposing direct ramps connecting Hwy 401 (to/from London) with Hwy 8 (to/from Kitchener/Waterloo). This would lead to reduced use of Fountain Street to access westbound 401 from the Maple Grove Road/Fountain Street area. In addition, staff undertook additional analysis with respect to diverting traffic from the King/Fountain study area to Speedsville Road. The Project Team assessed that even with both the new Hwy 8 ramps and diversion of traffic to Speedsville Road, roadway operational improvements would still be required within the King/Fountain study area.

An alternate route from Highway 401 to south Cambridge has been identified in the 2010 Regional Transportation Master Plan, Moving Forward 2031. The route identified in the Master Plan begins in the north with Dickie Settlement Road, from Fountain Street to Roseville Road, then along Roseville Road to Edworthy Side Road, then along Edworthy Side Road to Alps and along Alps to Spragues Road. The need for this route is identified for the 10-20 year time frame. The southern portion of this route will eventually connect with a proposed Cambridge South Link which will cross the Grand River and connect Spragues Road and Water Street in Cambridge. Staff have assessed that this long-term network improvement will not address the existing or future needs in the Fountain Street/King Street study area.

At the request of the City of Cambridge, a new bridge to extend Shantz Hill Road across the Speed River to King Street was reviewed in detail by the Project Team, which concluded that the benefits of increased safety and reduced delay for such a bridge would be comparable to those achieved with intersection improvements within the existing corridor but at an additional cost of $20 million and with greater natural environment and social impacts. The new bridge alternative was therefore screened out from further consideration.

Property Impacts During and After Construction

Several property and business owners would be impacted by the proposed Design Concept 6 improvements and some members of the public have commented on concerns such as loss of property, loss of parking, loss of business access, and the potential loss of business.

Project Team Response:

As indicated in the assessment and evaluation of the six Alternative Design Concepts, the road widening needs for Design Concept 6 will directly impact approximately 40 properties, with approximately 12 properties expected to have land-use impacts (such as loss of parking), and 2 potentially requiring total purchase. Region staff met with several of the directly impacted property owners prior to the Project Team’s consideration of a Recommended Design Concept for this project.
The Project Team intends to mitigate as much as possible any adverse property impacts such as loss of property, loss of parking, and changes to property access. The potential for mitigation of impacts to properties will be considered in further refining the Recommended Design Concept through later detailed design and negotiations for the necessary property. A Property Acquisition Process Information Sheet (Appendix “G”) has been previously sent to potentially affected property owners.

As part of detailed design the project will be staged to keep traffic and access within the study limits open as much as practically possible. This staging information and the expected timing of actual construction work will be communicated in advance of construction to all property owners and residents after the detailed design and construction staging plans are complete.

**Cultural Heritage Impacts – Building and Landscapes**

The Region’s Heritage Planning Advisory Committee and the City of Cambridge Municipal Heritage Advisory Committee both expressed concerns that the proposed road improvements should not impact heritage structures; that the Fountain/King intersection should be considered a cultural heritage landscape and; that a roundabout is inappropriate for the Fountain/King intersection.

**Project Team Response:**

The impacts on the identified heritage properties in the area have been evaluated in the “Draft” Cultural Heritage Impact Assessment (CHIA) that was prepared for this project and this assessment determined that Design Concepts 2, 3 and 6 had the least direct impact on heritage properties. The potential impact of the “Do-Nothing” Alternative Design Concept due to widening for sidewalk, cycling and transit priority facilities was not analyzed, but it would be expected that the impacts of this alternative would be similar to those of Alternative Design Concept 3.

The final, revised version of the Cultural Heritage Impact Assessment (CHIA) considers the project study area as a Cultural Heritage Landscape in order to assess the impact of the design alternatives on the overall character of the area. The potential impact of character defining elements such as historical associations, built heritage, circulation patterns and landscape views and vistas was assessed as part of the CHIA. A summary of that assessment has been incorporated in Appendix “F”. A landscape architect has prepared two visualizations of the expected visual impact of Alternative Design Concepts No. 2 and No. 6. These are included in Appendix “H”.

**Access Difficulty at Kressview Condominiums**

Some residents of the Kressview Condominiums expressed concerns that a roundabout at the Fountain Street/King Street intersection would eliminate gaps in traffic flow and make left-turns in and out more difficult at the existing entrance of the Kressview Condominiums, and that to best solve this problem, a second entrance from Fountain Street North should be provided.

**Project Team Response:**

Currently, the existing signal at Fountain/King does not create gaps. Drivers approaching on King Street from the direction of Eagle Street now yield to condominium residents wishing to access King Street only when the King Street drivers approach a red signal. With the
recommended roundabout, the Project Team believes the condo entrance will be more convenient and safer with:

- Reduced vehicle speeds on King Street
- Drivers on King Street will not be concerned that they will “miss the green light” and will be able to yield to residents as necessary
- Left-turn exits onto King Street from Kressview Condominiums can become right-turn with a U-turn through the roundabout

Also Alternative Design Concept 6 will include a small protected left-turn entry to the Kressview Condominiums from King Street. This protected left-turn entry cannot be provided with any of the other alternatives considered. The second entrance from Fountain Street North requires land be obtained from a neighbouring property and requires the support of that property owner in order for that entrance to be provided.

7. Project Team Recommended Design Concept

Based on a review of the technical information gathered for this project, and in consideration of the evaluation of the environmental impacts and benefits/opportunities of the alternatives, as well as a thorough review of all public comments received, a majority of the Project Team members has confirmed Alternative Design Concept 6 – realigned intersection at Fountain Street/Shantz Hill, roundabout at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street, as the Recommended Design Concept for this Class EA Study. It is noted that a consensus was not reached by the Project Team in identification of the Recommended Design Concept. There was one Project Team member who preferred a signalized intersection over a roundabout for the Fountain Street/King Street intersection. Please see Appendix “H” for a schematic of the Recommended Design Concept (6).

The Recommended Design Concept (Concept 6) would provide much needed operational improvements within the study limits, including a 75% reduction of peak hour delays for travelers in the study area.

The Recommended Design Concept would reduce the number and societal cost of injury collisions by 70% at the Fountain Street/King Street intersection as compared to a conventional, signalized intersection at this location.

The Recommended Design Concept includes a realignment of the curve on King Street West between the Speed River Bridge and the Dover Flour Mill. This will enhance safety by increasing the existing horizontal radius and visibility for all users of the roadway. The Recommended Design Concept will also provide a dedicated left-turn lane to Riverside Park at the Rogers Drive/King Street intersection and a small increase in the distance between the railway and King Street at Rogers Drive.

The Recommended Design Concept includes a raised centre median on King Street at Chopin Drive to prevent left-turns at that location. This median would also restrict one of two driveways at 172 King Street East to right-in and right-out movements. This removal of left turn operations would address the left-turn collisions at this location while maintaining site accessibility through the ability to make U-turns at the proposed Fountain/King roundabout. The raised centre median would also provide for improved traffic capacity along King Street by reducing “side friction” associated with existing left turn movements.

Increased active transportation and in particular increased transit mode share is vital to reduction of congestion in the study area and in the Region’s transportation network. To achieve mode share targets for transit in the Region and in the study area, effective enhancement of transit service is necessary. The Recommended Design Concept provides transit priority at Shantz Hill Road.
approaching Fountain Street and at King Street eastbound approaching Eagle Street in the form of queue-jump lanes and signal priority for transit vehicles. These transit enhancements are expected to reduce delay for public transit vehicles in the study area; however, in some cases this will be at the expense of travel delay for other vehicles. More extensive transit priority measures could not be achieved without significant direct impact on heritage resources and greatly increased property requirements.

The use of a roundabout at the Fountain/King intersection and the Recommended Design Concept’s inclusion of narrower pavement widths and raised medians at intersections would provide additional opportunities to enhance landscaping which would improve streetscape aesthetics and may also help reduce operating speeds in the corridor.

The Recommended Design Concept would also provide continuous sidewalks and on-road cycling lanes along both sides of Fountain Street and King Street and Shantz Hill Road. Additional property is required for widening of the road allowance to accommodate the proposed sidewalks and cycling lanes.

It is recognized that the Recommended Design Concept would require additional property at the realigned and roundabout intersections and would involve some significant property impacts and Cultural Heritage Landscape impacts.

8. **Design Concept 2 as an Alternative Design Concept for Implementation**

In response to the concerns regarding the proposed roundabout at King/Fountain and the lack of Project Team consensus on a Recommended Design Concept, the Project Team discussed at length the advantages and disadvantages of **Alternative Design Concept 2 - Realigned intersection at Fountain Street/Shantz Hill, realigned intersection at King Street/Fountain Street, and conventional intersection improvements at King Street/Eagle Street**, as a design concept for implementation.

Alternative Design Concept 2 is similar to the Recommended Design Concept (6) in all aspects except that it includes a realigned signalized intersection at King/Fountain instead of a roundabout. The Project Team concluded that Concept 2 is technically feasible but would address to a much lesser degree the existing travel delays, high vehicle collisions and other operational problems along this corridor. The Project Team notes the following advantages/disadvantages of Design Concept 2 when compared to the Recommended Design Concept (6):

**Advantages of Design Concept 2**

- Design Concept 2 would result in 0.035 hectares less property required than Design Concept 6.
- Design Concept 2 has an estimated capital cost which is $100,000, lower than the Recommended Design Concept due to less property required.

**Disadvantages of Design Concept 2**

- Design Concept 2 would not reduce rush-hour delays as well as the Recommended Design Concept (50% vs. 75% reduction).
- Design Concept 2 would not achieve the substantial benefit of the 70% reduction in injury collisions expected from the Recommended Design Concept 6.
- The longer queues and delays at a signalized Fountain Street/King Street intersection would not make it possible to provide the eastbound left turn lane at Rogers Drive.
• The lack of a convenient U-turn provision and longer queues at the signalized Fountain Street/King Street intersection would not address the existing difficulties in making left-turns to/from the Kressview Condominiums.

• Design Concept 2 would still require approximately 0.92 hectares property and would involve some significant property impacts and significant Cultural Heritage Landscape impacts.

The Project Team notes that Design Concept 3 is similar to Design Concept 2 but instead of having a realigned intersection at King/Fountain Street, it includes a conventional signalized intersection configuration at this intersection. Design Concept 3 would have slightly lower property impacts (0.85 hectares) and slightly lower capital cost ($13.6 M) than either Design Concept 2 or the Recommended Design Concept 6; however, Design Concept 3 would result in significantly more delays and significantly more injury collisions than either Design Concept 2 or 6.

In conclusion, all members of the Project Team agreed that both Design Concepts 2 and 3 are technically feasible alternatives, but a majority of the Project Team members have assessed that Concept 6 is the best solution for this project.

9. Project Cost

The capital cost for the Recommended Design Concept is estimated to be in the range of $14.5 million to $16 million. The final cost will be further refined as part of the detailed design phase and will depend on costs for relocation of utilities and property acquisition.

10. 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 Environmental Study Report (ESR) documenting the planning and decision process for the project will be completed and a “Notice of Study completion” will be ‘filed’ in the public record for a 30 day review period. This filing will be advertised by mail-outs and notices in newspapers. During this filing period, anyone concerned that the study did not fully follow the appropriate requirements of the Class EA process or address all of the issues, may 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 be considered approved and proceed to detailed design and construction. It is anticipated that the bulk of the construction of the improvements will occur in 2015, pending detail design, property acquisitions, and utility relocations.

CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management) in terms of:

• Enhancing, developing, promoting and integrating sustainable and active forms of transportation (public transit, cycling, and walking).

It is also consistent with the development of Strategic Focus Area 5 (Infrastructure) in terms of:

• Providing infrastructure needed to accommodate planned growth.
FINANCIAL IMPLICATIONS:

Based on implementation of only a single lane widening of Fountain Street, the 2010 Transportation Capital Program only included $3,190,000 over the years 2010 to 2014 for this project to be funded from the Region Development Charges and the Roads Capital Levy Reserve Funds. The capital cost of the Recommended Design Concept which now includes extensive widening, intersection re-configuration, reconstruction of the existing road and extended project limits is estimated to be between $14.5 million and $16 million. The DRAFT 2011 Transportation Capital Program includes $15 million in the years 2011 – 2016 for this project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Transportation Planning Division of the Planning, Housing and Community Services Department was consulted in the preparation of this Report.

ATTACHMENTS

Appendix A – Key Plan
Appendix B – Summary: Collision and Traffic Safety Assessments
Appendix C – Public Consultation Centres
Appendix D – Summary of Comments and Responses From The Public Input Meeting
Appendix E – Design Concepts
Appendix F – Summary Evaluation Matrix
Appendix G – Property Acquisition Process Information Sheet
Appendix H – Recommended Design Concept (6)
Appendix I – Design Visualizations of King Street/Fountain Street Intersection

PREPARED BY: Wayne Cheater, Senior Project Manager, Transportation Expansion

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
Figure 1: Key Plan of Study Area
Region of Waterloo
Fountain Street and King Street Improvements
Class Environmental Assessment
APPENDIX B
SUMMARY OF COLLISION AND TRAFFIC SAFETY ASSESSMENTS

Fountain Street at King Street is the only signalized intersection in the study area to have experienced higher than expected collisions in the past 5 years (2005-2009). Fountain Street at King Street experienced 85 collisions where 36 were expected based on the Region’s Collision Prediction Model. Of the 85 collisions, 44 were turning-type collisions where 10 were expected and 17 were sideswipe collisions where 3 were expected.

To address turning-type collisions at the Fountain Street and King Street intersection, staff installed a “signal your turn” sign on northbound Fountain Street on January 20, 2004. A review of turning collisions (2 years before versus 2 years after implementing this countermeasure) involving northbound/southbound vehicles indicates that turning collisions reduced from 18 to 10 collisions.

To address sideswipe collisions involving westbound dual left-turning motorists, staff re-marked the westbound dual left-turn lanes and guidance markings with durable pavement marking material June 3, 2003. In 2002 there were 7 sideswipe collisions involving westbound turning vehicles. Following the re-marking utilizing durable material, there were only 10 sideswipe type collisions in four years (2003-2006) involving westbound turning motorists.

King Street at Eagle Street experienced 32 collisions where 38 collisions were expected based on the Region’s Collision Prediction Model. In 2008 King Street at Eagle Street was supplemented with special ladder crosswalk treatments to address unusual pedestrian/vehicle collisions. Since then, there have been no pedestrian collisions at this intersection.

There are no other unusual collisions patterns at this intersection.

Shantz Hill Road at Fountain Street experienced 29 collisions where 44 collisions were expected based on the Region’s Collision Prediction Model.

King Street between Fountain Street and the entrance to Riverside Park experienced 50 collisions where 10 were expected based on the Region’s Collision Prediction Model. Of the 50 collisions, 18 were sideswipe type collisions where 2 were expected and 8 collisions were single-motor-vehicle collisions where 1 was expected. This midblock section of road is ranked 3rd in the Region for most unexpected sideswipe collisions.

King Street at Rogers Drive experienced 3 collisions where 5 collisions were expected based on the Region’s Collision Prediction Model. Of the 36 collisions, 31 were turning type collisions where 2 were expected.

King Street at Chopin Drive experienced 36 collisions where 6 collisions were expected based on the Region’s Collision Prediction Model.

Fountain Street between King Street and Shantz Hill Road experienced 33 collisions where 12 collisions were expected based on the Region’s Collision Prediction Model. Of the 33 collisions, 19 were rear-end collisions where 5 were expected.

King Street between Rogers Drive and Chopin Drive experienced 29 collisions where 6 collisions were expected based on the Region’s Collision Prediction Model. Of the 29 collisions, 13 were rear-end collisions where 2 were expected.

King Street between Chopin Drive and Eagle Street experienced 8 collisions where 5 collisions were expected based on the Region’s Collision Prediction Model.
Public Consultation Centre (PCC) #1, April 23, 2009

At the first PCC the Problem Statement, Evaluation Criteria and Preliminary Alternative Solutions to be considered as part of the study were presented to the public for review and comments. A total of approximately 70 attended the meeting and 51 written comments were received. In general the comments and suggestions recognized the current traffic congestion and operational difficulties and supported the need for improvements on Fountain Street/King Street, as well as identified a need for better accommodating pedestrians and cyclists. Other comments questioned the need for improvements in association with suggestions for redirecting traffic, especially trucks, to alternative roads, and expressed concerns with hydro-geological issues, traffic operations impact of the Dover Flour Mills operations, support and opposition for roundabouts and potential property and access impacts.

All public comments were reviewed by the Project Team as part of the study. All 51 comments complete with responses from the Project Team are provided in Appendix “C”.

Preliminary Alternative Solutions

Nine Preliminary Alternative Solutions were presented to the public at the first Public Consultation Centre and were assessed for consideration in addressing the transportation needs along King Street and Fountain Street to determine which solutions singly, or in combination with other solutions, best address the problems in the study area. The Preliminary Alternative Solutions considered which are described and evaluated in as follows:

- “Do Nothing” Carried forward as a baseline for comparison
- Traffic Operations Improvements – Consider only as part of other solutions
- Access Management – Consider only as part of other solutions
- Intersection Improvements – Carried forward for detailed evaluation
- Roundabouts – Carried forward for detailed evaluation
- Widening of Roadways – Consider only as part of other solutions
- Off Road Cycling Lane – Consider only as part of other solutions
- Diversion and Improvements to Alternative Transportation Routes – Rejected
- Develop Alternative Routes Within the Study Area – Rejected – more discussion follows:

To develop alternative routes within the study area would require additional road allowances within or around the study area. This would be a local solution with applications and impacts within and outside the study area. As one of these alternative route solutions, a new bridge crossing of the Speed River at Shantz Hill Road at Fountain Street, to connect to local roads leading to Eagle Street and King Street, was reviewed in some detail. The Project Team concluded it would not fully address the traffic problems in the study area, would have significant property impacts on local streets and would still require Fountain Street and King Street improvements within the study corridor. In addition, this alternative would have significant environmental impacts (crossing of Speed River), and significant capital cost (for new bridge). It would also significantly increase traffic on local roads between the Speed River and Eagle Street in addition to significant private property purchases on local roads.

This “new bridge” solution was re-examined at the request of City of Cambridge staff, but not to divert traffic totally from the existing corridor. The Project team found that an extension of Shantz Hill Road across the new Speed River Bridge, on a new alignment between the east bank of the River and Chopin Drive to connect to King Street, west of Chopin Drive would not increase traffic on local roads between the Speed River and Eagle Street since the proposed new road would connect only to the Regional Roads. This version of the “new bridge” solution would greatly reduce traffic and congestion on King Street between the Shantz Hill Drive extension and Fountain Street; however, a detailed traffic analysis found that the total reduction in delay through the study area and capacity improvements to the transportation network for this “new bridge” solution, would only be
comparable to those achieved with intersection improvements within the existing corridor, but at substantially greater cost, and greater natural environment and social impacts. As a result, the Project Team confirmed its initial assessment that the “new bridge” alternative was not viable as a solution for the Class EA study.

Therefore, the Project Team concluded as a result of its evaluation and considering input from PCC#1, that only intersection improvements, including a roundabout at the King/Fountain intersection would be evaluated further as a potential solution for this Class EA study.

PUBLIC CONSULTATION CENTRE (PCC) #2, MARCH 9, 2010

Summary of Comments and Responses From PCC No. 2

The Seven (7) Design Concepts were presented to the public at a Public Consultation Centre (PCC) #2 on March 9, 2010 from 5:00 p.m. to 8:30 p.m. at the King Street Baptist Church, 361 King Street East, Cambridge, Ontario. Alternative Design Concept 6 was presented as the Project Team’s Preliminary Preferred Design Concept. In advance of the meeting approximately 500 notices were sent to property owners/occupants within the Study Area; in addition notices were also placed in the local newspapers the week prior to the meeting and advisory signs were set up along Fountain and King Streets to advertise the meeting.

One Hundred and Fifty-two (152) persons signed in at the PCC and it is believed that another 10 to 15 persons attended the meeting but either declined to sign in or were unaware of the sign-in request.

A PCC Information Package was distributed at the meeting and provided by request to those who indicated an interest in the project but were unable to attend. The Information Package described in detail the project, the Alternative Design Concepts, and included a comment sheet at the back that asked several questions and gave room for public comments and suggestions.

Thirty (31) responses were received at the PCC session itself or subsequently by submission of the comment sheets by mail or email. A total of 7 respondents indicated the Preliminary Preferred Concept No. 6 was the best design concept. A total of 13 respondents indicated Alternative Design Concept 6 was not the best, with 4 indicating Concept 2 was best, 2 indicated Concept 5 was best, 2 indicated Concept 4 or Concept 4 with some modifications was best, and one indicated Concept 3 was best. The remaining respondents did not indicate a preference for any of the presented design concepts.

The following summarizes the main issues brought forward by the public at the second PCC and the Project Team responses:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>PROJECT TEAM RESPONSE</th>
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<tbody>
<tr>
<td>Roundabout won’t work – The issues raised ranged from the roundabout will be avoided as people are “afraid of them”, it will not solve the traffic issues, and are unsafe for pedestrians</td>
<td>Roundabouts are becoming more common in the Region, and have proven to be more efficient than signals from a traffic perspective. Construction and use of Roundabouts also result in less personal injury collisions than a signalized intersection. The slower speeds in a roundabout make them conducive to yield to pedestrians. The Region is continuing to provide forums to educate drivers and pedestrians on how to safely use roundabouts.</td>
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<td>(12 Responses)</td>
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### APPENDIX “C-3”

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>PROJECT TEAM RESPONSE</th>
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<tbody>
<tr>
<td>King Street and Fountain Street is only problem area, as signals</td>
<td>If the King/Fountain intersection only is improved, additional traffic and delays will be experienced at Fountain/Shantz Hill, requiring improvements to the Fountain/Shantz Hill Intersection. The preferred design takes into account future traffic volumes at the Fountain Street/Shantz Hill Road intersection.</td>
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<td>installed at Fountain Street and Shantz Hill is working fine.</td>
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<tr>
<td>(4 Responses)</td>
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<td>Collisions and access difficulties at the Riverside Park entrance</td>
<td>Signals or turn lanes are not warranted at the Riverside Park entrance. Furthermore, geometrics, sightlines and the railway tracks make improvements difficult. With the roundabout, the queues at the King/Fountain intersection will be reduced, allowing better access to Riverside Park. The project team is reviewing options at this entrance to improve access for visitors and address the collision issue.</td>
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<td>should be addressed – turn lanes, access modifications or signals</td>
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<td>should be installed.</td>
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<td>(3 Responses)</td>
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<td>Concerns about impacting The Pines necessitating it to close.</td>
<td>The preferred design has indicated The Pines property as a potential buyout. However as part of negotiations, The Pines is reviewing methods to keep their business operating.</td>
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<tr>
<td>(3 Responses)</td>
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<td>The traffic problems only occur at peak hours and are fine the</td>
<td>The traffic analysis is based on both am and pm peak hour traffic, which is when most of the congestion and collisions occur.</td>
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<td>rest of the day, therefore no improvements are required.</td>
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<tr>
<td>(1 Response)</td>
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<tr>
<td>These improvements will change the character of Downtown Preston.</td>
<td>The design has been developed to not require any removal of any buildings of heritage interest or designated buildings. The installation of a roundabout will present opportunities for a gateway feature at the King/Fountain intersection. In addition, opportunities for landscaping/streetscaping will be explored as part of the detail design.</td>
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<td>(1 Response)</td>
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<td>Proposed solutions are only short term and not for the future.</td>
<td>The alternatives not only address traffic volumes up to 2023, but also improvements for increased transit vehicle use/routes.</td>
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<td>(2 Responses)</td>
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<td>ISSUE</td>
<td>PROJECT TEAM RESPONSE</td>
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<td>Provide, or divert traffic to alternate routes from the Maple Grove Business Park and Highway 401.</td>
<td>There is no practical way of diverting drivers to use other routes. Presumably traffic from this area still finds the study area to be the best route for their particular destination. In addition, a study was undertaken with respect to diverting traffic to Speedsville Road. However improvements would still be required within the King/Fountain study area. The MTO is reviewing additional accesses to Highway 401. Currently there is a ramp from Hwy 8 to westbound 401 being proposed.</td>
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<td>Sidewalks are not required everywhere.</td>
<td>Sidewalks do not currently exist in many locations in the study area. Sidewalks are proposed in accordance with Regional policy and to promote more active forms of transportation.</td>
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<td>Cycling lanes are not required.</td>
<td>Both King Street and Fountain street are designated as an approved core on-road route in the Regions Cycling Master Plan. More convenient facilities for cyclists are intended to reduce traveler’s dependency of car use, thereby reducing vehicle traffic volumes.</td>
</tr>
<tr>
<td>The intersection improvements at Shantz Hill/Fountain should be designed to take more property from vacant lot at southwest corner to minimize impacts to homes and businesses in other quadrants.</td>
<td>The design has been reviewed, and the intersection has been designed to reduce impacts to the private properties on the east side of Fountain Street by moving slightly further into the private property on the southwest corner</td>
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<tr>
<td>Access to Kressview Condominiums near King/Fountain should be addressed.</td>
<td>With the roundabout, left turns out of the Kressview Condominiums can be accommodated by turning right and using the roundabout to travel towards Eagle Street. The preferred design concept has been revised to accommodate a short left turn lane on King Street for eastbound traffic needing to turn left into the Kressview Condominium entrance.</td>
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### APPENDIX “C-5”

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<th>PROJECT TEAM RESPONSE</th>
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| A new river crossing at the bottom of Shantz Hill should be constructed to connect to King Street near Eagle.  
(1 Response) | A similar alternative was proposed by City of Cambridge staff and reviewed by the Project Team. However the traffic benefits are similar to the Preferred Design Concept and will cost over twice as much (approximately $20 million more) than the Preferred Design Concept. |
| Other river crossings elsewhere in Cambridge should be constructed to help divert traffic away from this area  
(2 Responses) | Additional river crossings throughout central Cambridge have been considered in past studies and eliminated from further consideration. |
| No Left Turns at King Street at Chopin Drive to address collisions and problems with access at Chopin Drive.  
(6 Responses) | This has been reviewed by the Project Team, and turning movements will be restricted at the Chopin Drive/King St Intersection by means of installing a centre median island on King Street at Chopin Drive. Meetings with business owners will be set up to review the impacts on their properties. City of Cambridge staff is in favour of restricting left turns at Chopin Drive. |
| Proposed roundabout at King/Fountain should be relocated closer to The Pines to reduce impact on vacant developable property on corner.  
(2 Responses) | Moving the roundabout further onto The Pines/Heat Place is limited by standard/safe roundabout alignments and the sewage pumping station. Moving the roundabout further into The Pines property will also limit the re-use of the building by the current owners. However moving the roundabout will be reviewed by the Project Team. |
| Concerns about the loss of the current free flow right turn lane at Shantz Hill/Fountain making traffic backup more.  
(1 Response) | The intersection design is such that the realigned intersection will operate at an acceptable level of service without the free-flow right turn. The Preferred Design Concept replaces the existing single right turn lane with through lanes. |
| Dover Flour Mills operations should be modified so that truck loading/unloading does not impact traffic on King Street.  
(1 Response) | Dover Flour Mills attempts to restrict their loading times to off-peak hours. Changing the loading areas is impossible without significant renovations to their building and site beyond the scope of this study. |
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<th>ISSUE</th>
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<td>More turn lanes required at Eagle Street. (2 Responses)</td>
<td>The number of lanes at the King/Eagle intersection is restricted by a number of properties with heritage interest. The preliminary preferred concept arrangement of lanes is the maximum possible without removing and heritage buildings.</td>
</tr>
<tr>
<td>Ensure future traffic volumes from the proposed expansion of Conestoga College are included in traffic projections. (1 Response)</td>
<td>Impacts of proposed developments have been included in the traffic analysis. The Regional model does not include projections from the Conestoga College expansion proposal because it is too recent to have been included in the land use forecast. However, the land use forecast does incorporate growth at Conestoga College. While the exact impact of the proposed expansion has not been incorporated into the Region’s model, the expected difference is not great.</td>
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<tr>
<td>COMMENT</td>
<td>RESPONSE</td>
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<tr>
<td><strong>Comment at the Public Input Meeting, June 8, 2010:</strong></td>
<td><strong>Response</strong></td>
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</table>
| 1. Jerry Van Dyke: | • A Bypass is a network level concept that is addressed by the RTMP review.  
• A new bridge to extend Shantz Hill Road across the Speed River to King Street was reviewed by the Project Team.  
• The City of Cambridge had previously attempted to negotiate a land exchange with Dover Flour, for relocation of the business but this initiative was rejected by the property owner.  |
| • A Bypass is the best option  
• A new bridge would allow for less property impacts and wouldn’t interfere with traffic  
• Toyota traffic and Dover Flour truck traffic are major problems |  
| 2. Al Junker o.b.o. Heritage Planning Advisory Committee: | • The impacts on the identified heritage properties in the area have been evaluated in the Cultural Heritage Impact Assessment (CHIA) and Design Concepts 2, 3 and 6 were identified as having the least direct impact.  
• The consideration of a Cultural Heritage Landscape has been addressed in the revised CHIA.  
• Design Concept 6 provides the greatest benefits from a traffic, congestion and safety perspective. |
| • Should not impact Heritage structures  
• Fountain/King intersection should be considered a cultural heritage landscape  
• Should consider Design Concepts 2 and 3 and not concept 6 |  
| 3. Victor Labrec, o.b.o. 255 King Street West property owners: | • At 255 King Street West, approximately 1496.46 sq.m. (0.37 acres) would be required.  
• Approximately 1.5 hectares (3.7 acres) would be required. Compensation would be in accordance with Regional policy.  
• Roundabouts are approved for Regional Roads  
• Design Concept No. 2 would result in reduced impact on delays and injury collisions, approx. 2 more properties impacted and 12.5% less property taking than Design Concept No. 6.  
• Capital costs for #2 and #6 are approximately the same. |
| • Concept 6 property taking (4 acres) would adversely affect property owner and City.  
• Roundabout is not in keeping with intent of City O.P.  
• Prefers Design Concept 2 |  
| 4. John Waring, o.b.o. Kressview Condo, (also Robert Wall): | • The existing signal does not create gaps. Approaching drivers now yield only when they approach a red signal. With a roundabout, approaching drivers have no need to reach the green signal and can yield at any time. Also a small protected left-turn entry will be created on King Street.  
• The second entrance would benefit all affected properties but it requires support of property owners. |
| • Concerned that a roundabout would eliminate gaps in traffic flow and make left-turns in and out more difficult  
• A second entrance from Fountain Street N. should be added |
### Comment at the Public Input Meeting, June 8, 2010:

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<tr>
<th>COMMENT</th>
<th>RESPONSE</th>
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| 5. John Duncan:  
- Roundabout @ Fountain/King will make Fountain Street N. a “truck-friendly route” with increase in truck volumes. |  
- Any approved design concept would facilitate safer operations for large vehicles. This would benefit all travelers. |
| 6. Brad Hallman:  
- 40 homes on Fountain Street, are outside the project limits and do not have sidewalks on the street. Safety concern with increase in traffic volumes. |  
- This study would recommend provision of sidewalks on both sides of streets in the study area. Additional sidewalks on Fountain Street South are identified as a deficiency to be addressed in the Regions 2010 – 2019 Transportation Capital Plan. |
| 7. Derek Bowman:  
- Pleased that no new Speed River Bridge is proposed  
- Pedestrian safety should be addressed  
- A roundabout at King/Fountain should have a heritage look. |  
- All 3 points are carried forward. |
| 8. John Cole:  
- Difficult left-turn egress from property with increased traffic flow  
- Off-road collisions at 101 King Street w. request traffic calming  
- Prefers Concept #2 due to less property impact |  
- No major change is proposed for the 149 King Street W. location. Traffic growth will be modest due to increased transit mode share.  
- The study will investigate possible improvements to the road alignment and operational measure to address off-road and turning collisions.  
- There are less property impacts at 101 & 149 King Street S. for Design Concept # 6. (See also response No. 3 above.) |
| 9. Bruce Langlade:  
- Concern with loss of 10 ft. widening  
- Would like input to standard of restoration for wall and fence |  
- Request is carried forward to detail design stage of project.  
- The concrete curb and sidewalk would be moved approximately 2m closer to the house |
| 10. Jen Montague:  
- Request public information that businesses in the construction zone will not be closed and are “open for business”. |  
- In correspondence to property owners/residents, reference will be made to construction occurring in 2015 and that access will be maintained during construction. |
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<tr>
<th>COMMENT</th>
<th>RESPONSE</th>
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<tr>
<td><strong>Comment at City of Cambridge Council Meeting, June 21, 2010:</strong></td>
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</tr>
<tr>
<td>11. The evaluation result is questionable because the project cost and property impacts are excessive for a small benefit.</td>
<td>- Design Concept No. 2 would result in less reduction in delays and injury collisions, approx. 2 more properties impacted and 12.5% less property taking than Design Concept No. 6. Capital costs for #2 and #6 are approximately the same.</td>
</tr>
<tr>
<td>12. King Street at Rogers Road/Riverside Park realignment should be considered.</td>
<td>- The parking at 126 King Street E. which is the Admin. Office for the flour mill and extension of the Mill race culvert would be impacted to improve the road alignment. The property impact has been presented to Dover Flour.</td>
</tr>
<tr>
<td>13. Concern that the proposed roundabout will fail to handle traffic and back-up to Shantz Hill Road.</td>
<td>- The proposed roundabout would offer the greatest capacity to prevent the backup from occurring when compared to alternatives which were considered.</td>
</tr>
</tbody>
</table>

<p>| <strong>Comment received immediately prior to and after the Public Input Meeting:</strong> | |
| 14. Greg Hood-Morris, email June 9, 2010: | |
| - Roundabout will eliminate opportunities for parking at the Preston Springs Hotel |
| - Relocate Fountain Street, Behind “The Pines” | - Roundabout provides better access for the Preston Springs Hotel property than all other alternatives. |
| - Relocation has been considered. The location behind “The Pines” is unacceptable because of impacts on the regulatory flood plain, natural environment, sanitary pumping station and property impacts. |
| 15. Neil Palmer, after the PIM, June 8, 2010: | |
| - Suggest additional WB lane on Shantz Hill Road to receive Fountain Street NB left-turn traffic so that both Fountain Street SB right-turns may be free-flow. | - The current single lane free flow right turn lane for SB to WB traffic to go up Shantz Hill Rd is being replaced with a double through lane controlled by signals. This arrangement will reduce overall queues for this movement at the intersection |
| 16. Tim Bowman, email May 31, 2010: | |
| - Construction will result in a reduction of accessibility for business and decease in business. | - The Region's project will be planned to avoid road closures wherever possible and to keep the reduction of capacity for traffic of all types to a minimum during construction. |</p>
<table>
<thead>
<tr>
<th>COMMENT</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment received immediately prior to and after the Public Input Meeting:</td>
<td></td>
</tr>
<tr>
<td>• Concerns with shifting Shantz Hill/Fountain onto vacant land as well as implementation of a roundabout</td>
<td>• The implementation of a realigned intersection and shifting to the south at Fountain/Shantz Hill provides the best traffic solution at this intersection such that the heaviest traffic movements are now the “through” movement.</td>
</tr>
<tr>
<td>• Concerns with property required to implement a sidewalk</td>
<td>• Deficiencies in pedestrian routes require elimination of gaps in the sidewalks. Sidewalks are required on both sides of the road, in particular in areas where crossing opportunities are limited due to large distances.</td>
</tr>
<tr>
<td>• Roundabout will not solve traffic problems as Dover Mills trucks unloading will cause delays through a roundabout</td>
<td>• The proposed roundabout would offer the greatest capacity to prevent the backup from occurring when compared to alternatives which were considered.</td>
</tr>
<tr>
<td>• Widen Fountain St to King St would eliminate some of the traffic delays, and cut some of the costs by eliminating a roundabout</td>
<td>• Simply widening Fountain Street does not improve the capacity at the King/Fountain intersection.</td>
</tr>
<tr>
<td><strong>18. Bob McMullen</strong></td>
<td><strong>18. Bob McMullen</strong></td>
</tr>
<tr>
<td>• Cost of project is too high for traffic problems that only occur for 2 hours daily during the week</td>
<td>• Not widening Fountain and King Streets was considered as part of the Region Transportation Master Plan which recommended widening/improvements within the study area</td>
</tr>
<tr>
<td>• One lane roads just outside study limits will be more congested with improvements in the study area</td>
<td>• The project also addresses collision problems within the study area</td>
</tr>
<tr>
<td>• Congestion created by improvements (outside study limits) will increase smog. Smog monitoring stations should be installed</td>
<td>• The traffic study for this project took into account the traffic outside the study area flowing into the study area as well as flowing out. Traffic impacts on other parts of the transportation network and improvements to them are considered as part of the Region’s Capital Roads program for future work.</td>
</tr>
<tr>
<td>• Congestion in this area is created by lack of overall network approach/facilities for traffic in Cambridge</td>
<td>• The traffic study includes a parameter that 20% of the travelers in the study area will be using transit, in accordance with the new Region Transportation Master Plan.</td>
</tr>
<tr>
<td>• Do nothing within study limits and traffic will find other routes due to congestion - delay decision until after the new Fairway Rd bridge is constructed, as this will have impacts on how many people use this intersection.</td>
<td>• The “Do-Nothing” alternative also has significant costs associated with it to rehabilitate the road and include upgraded sidewalk and cycling facilities.</td>
</tr>
</tbody>
</table>
### APPENDIX D-5

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comment received immediately prior to and after the Public Input Meeting:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>19. Carol Thorman</strong>&lt;br&gt;• Delays during construction will be a concern based on the impacts experienced with truck rollover in July 2010&lt;br&gt;• Roundabout at King/Fountain will provide little improvement within the study area and it is not worth spending money on this solution</td>
<td>• As part of detail design the project will be staged to keep traffic and access within the study limits open as much as practically possible. In addition, the evaluation of alternatives took into account the reduction of the larger than expected number of collisions within the study area&lt;br&gt;• There will be substantial reduction in injury collisions and expected reduction in delays vs. the “Do-Nothing” alternative. In addition, improvements to cycling and pedestrian facilities are included in the project justification and cost.</td>
</tr>
<tr>
<td><strong>20. Letter dated July 21, 2010 from John Doherty on behalf of Delos and Margaret Huntley</strong>&lt;br&gt;• Improvements to the Transportation network outside the study area and Development pressures outside the study area should be considered.&lt;br&gt;• Sidewalk design alternatives were not considered. There are other barriers to pedestrians and no demand for sidewalks on the east side of Shantz Hill or the north side of Fountain Street&lt;br&gt;• Our clients property will be adversely affected by:&lt;br&gt;   o Property taking&lt;br&gt;   o Tree and slope stability impacts&lt;br&gt;   o Large increase in Region owned boulevard area&lt;br&gt;   o Access and nuisance issues during construction</td>
<td>• Improvements to roads outside the study area were considered and would not provide a solution to the problems of congestion and serious collisions in the study area.&lt;br&gt;• The Regional Transportation Master Plan update has examined the role of the study area roads in the Region’s transportation network. Please also refer to response to No. 18 above.&lt;br&gt;• The Recommended Design Concept would provide continuous sidewalks on both sides of the Regional Roads. This is required to promote and encourage active transportation in the Region. This is consistent with the Regional Transportation Master Plan and the Pedestrian Charter.&lt;br&gt;• Deficiencies in pedestrian routes require elimination of gaps in the sidewalks. Sidewalks are required on both sides of the road, in particular in areas where crossing opportunities are limited due to large distances.&lt;br&gt;• The Region’s project team has included an evaluation of property impacts in the study decision process. Information on the Region’s property acquisition process was provided as part of the public information and was also mailed to concerned property owners.&lt;br&gt;   o The Project Team has addressed GRCA concerns, and impacts on trees and steep slopes will be addressed and mitigated during detail design in accordance with GRCA permit requirements.&lt;br&gt;   o As part of the detail design the project will be staged to keep traffic and access within the study limits open as much as practically possible.</td>
</tr>
</tbody>
</table>
APPENDIX “E-1”
Alternative Design Concepts
Conventional Intersection Improvements At King Street/Eagle Street (All Concepts)
APPENDIX “E-2”

Conventional Intersection Improvements at King Street/Fountain Street (Concepts 1 & 3)

Conventional Intersection Improvements at Fountain Street/Shantz Hill Road (Concepts 1, 4 & 5)
APPENDIX “E-3”

Realigned Intersection Improvements at King Street/Fountain Street (Concepts 2 & 4)
APPENDIX “E-4”

Realigned Intersection Improvements at Fountain Street/Shantz Hill Road (Concepts 2, 3 & 6)
APPENDIX “E-5”

New Roundabout at King Street/Fountain Street (Concepts 5 & 6)
### APPENDIX “F-1” – Alternative Design Concepts Summary Evaluation Matrix

**NOTE! OPTIONS 1-6 INCLUSIVE INCLUDE TRAFFIC OPERATIONS IMPROVEMENTS, ACCESS MANAGEMENT & WIDENED ROADS WHERE APPROPRIATE, ENHANCED TRANSIT PRIORITY, ON ROAD CYCLING FACILITIES AND SIDEWALKS.**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>1. Traffic Capacity, Operations, Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecasted (2023) Traffic/Transportation Network</td>
<td>Vehicular traffic and transit will continue to increase. With no improvements congestion will continue to increase</td>
<td>King/Eagle</td>
<td>King/Eagle</td>
<td>King/Eagle</td>
</tr>
<tr>
<td></td>
<td>Does the alternative efficiently and safely handle the forecasted traffic?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• LOS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Length of Queues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Person Delays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AM: Overall LOS C, v/c 0.81 PM: Overall LOS C, v/c 0.94 Max. Queue 215m WB Thru</td>
<td>AM: Overall LOS C, v/c 0.81 PM: Overall LOS C, v/c 0.94 Max. Queue 215m WB Thru</td>
<td>AM: Overall LOS C, v/c 0.81 PM: Overall LOS C, v/c 0.94 Max. Queue 215m WB Thru</td>
<td></td>
</tr>
<tr>
<td></td>
<td>King/Fountain</td>
<td>King/Fountain</td>
<td>King/Fountain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AM: Overall LOS A, v/c 0.59 PM: Overall LOS B, v/c 0.86 Max. Queue 121m WB Thru</td>
<td>AM: Overall LOS B, v/c 0.88 PM: Overall LOS C, v/c 0.91 Max. Queue 143m NB Thru</td>
<td>AM: Overall LOS A, v/c&lt;0.43 PM: Overall LOS A, v/c&lt;0.68 Max Queue 39 m WB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shantz Hill/Fountain</td>
<td>Shantz Hill/Fountain</td>
<td>Shantz Hill/Fountain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AM: Overall LOS B, v/c 0.80 PM: Overall LOS B, v/c 0.82 Max. Queue 155m SB Left</td>
<td>AM: Overall LOS B, v/c 0.80 PM: Overall LOS B, v/c 0.82 Max. Queue 155m SB Left</td>
<td>AM: Overall LOS B, v/c 0.80 PM: Overall LOS B, v/c 0.82 Max. Queue 155m SB Left</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall PM Peak Hour Delays (person – hrs) = 60.0 Overall PM Peak Hour Delays (person – hrs) = 64.7 Overall PM Peak Hour Delays (person – hrs) = 43.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collisions</td>
<td>Existing traffic safety issues and collisions are not addressed and will continue to increase</td>
<td>Addresses SBL collisions at King/Fountain with realigned approach</td>
<td>Addresses SBLT collisions at King/Fountain to some degree with protected left turn phase</td>
<td>Addresses SBLT collisions at King/Fountain as left turns are no longer required</td>
</tr>
<tr>
<td></td>
<td>• Addresses weaving collisions on Fountain south of King with 2 lanes turning right onto Shantz Hill.</td>
<td>Addresses weaving collisions on Fountain south of King with 2 through lanes to Shantz Hill.</td>
<td>Addresses weaving collisions on Fountain south of King with two through lanes to Shantz Hill.</td>
<td>With fewer conflict points the roundabout would significantly reduce the severity of collisions at King/Fountain.</td>
</tr>
<tr>
<td>Access Management</td>
<td>Congestion will continue to occur and access to and from driveways will continue to be difficult.</td>
<td>Some access removal/ relocation implemented near intersections to prevent unsafe turn movements.</td>
<td>Some access removal/ relocation implemented near intersections to prevent unsafe turn movements.</td>
<td>Some access removal/ relocation implemented near intersections to prevent unsafe turn movements.</td>
</tr>
<tr>
<td></td>
<td>• Access to private properties should improve due to less congestion on roadway.</td>
<td>Access to private properties should improve due to less congestion on roadway.</td>
<td>Access to private properties should improve due to less congestion on roadway.</td>
<td>Access to private properties should improve due to less congestion on roadway.</td>
</tr>
</tbody>
</table>
### APPENDIX “F-2” – Alternative Design Concepts Summary Evaluation Matrix

**NOTE! ALL ALTERNATIVE CONCEPTS INCLUDE TRAFFIC OPERATIONS IMPROVEMENTS, ACCESS MANAGEMENT & WIDENED ROADS WHERE APPROPRIATE, ENHANCED TRANSIT PRIORITY, ON ROAD CYCLING FACILITIES AND SIDEWALKS.**

|---------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| **Transit Operations** | - How does the alternative help to improve transit service within the Study Area?  
- How does the alternative improve transit priority? | Improves transit use by reducing delays and implementing transit priority features such as queue jump lanes and signal priority | Improves transit use by reducing delays and implementing transit priority features such as queue jump lanes and signal priority | Improves transit use by reducing delays and implementing transit priority features such as queue jump lanes and signal priority |
| **Cycling Facilities** | With no addition of cycling lanes and with increased congestion, no steps are being taken to encourage cycling | Adds on-road cycling lanes to address cycling needs | Adds on-road cycling lanes to address cycling needs | Adds on-road cycling lanes to address cycling needs,  
- Slower motor vehicle speeds an advantage in the roundabout. |
| **Pedestrian Facilities** | There are currently several areas with no sidewalks. With increased traffic congestion, the pedestrian environment is not improved. | - Adds sidewalks in all locations.  
- Crossing distances at signalized intersections increased due to additional lanes, but signal timing will address pedestrian crossing times. | - Adds sidewalks in all locations.  
- Crossing distances at signalized intersections increased due to additional lanes, but signal timing will address pedestrian crossing times. | - Adds sidewalks in all locations.  
- Crossing distances at signalized intersections increased due to additional lanes, but signal timing will address pedestrian crossing times.  
- Shorter crossing distances and splitter islands at roundabout provide refuge |
| **Emergency Services** | Emergency Services response times will deteriorate as congestion and delays increase. | Should improve emergency response time as delays will be reduced. | Should improve emergency response time as delays will be reduced. | Should improve emergency response time as delays will be reduced. |

**OVERALL TRAFFIC EVALUATION**

<table>
<thead>
<tr>
<th>EVALUATION LEGEND:</th>
<th>○</th>
<th>☀</th>
<th>☀</th>
<th>☀</th>
</tr>
</thead>
<tbody>
<tr>
<td>= lowest benefit</td>
<td>= lower benefit</td>
<td>= medium benefit</td>
<td>= higher benefit</td>
<td>= highest benefit</td>
</tr>
</tbody>
</table>

**DOCS #845494**

**Page 34 of 43**
## APPENDIX “F-3”

**NOTE! ALL ALTERNATIVE CONCEPTS INCLUDE TRAFFIC OPERATIONS IMPROVEMENTS, ACCESS MANAGEMENT & WIDENED ROADS WHERE APPROPRIATE, ENHANCED TRANSIT PRIORITY, ON ROAD CYCLING FACILITIES AND SIDEWALKS.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Natural Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Habitat, Fisheries, and Surface Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does the alternative affect the Speed River and aquatic life and aquatic habitats contained therein?</td>
<td>No improvements implemented at the River and Creek crossings. Therefore no aquatic habitat or fisheries are affected.</td>
<td>● No improvements required at the Speed River but the Mill Race Bridge and bridge at tributary near Fountain Street must be upgraded.</td>
<td>● No improvements required at the Speed River but the Mill Race Bridge and bridge at tributary near Fountain Street must be upgraded.</td>
<td>● No improvements required at the Speed River but the Mill Race Bridge and bridge at tributary near Fountain Street must be upgraded.</td>
</tr>
<tr>
<td>Terrestrial Habitat (Natural)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How would the alternative affect existing terrestrial animals and birds and their habitat within the project area?</td>
<td>No habitat is disturbed, but resulting congestion and resultant pollution will disrupt terrestrial habitat.</td>
<td>Some landscaping trees would have to be removed but these can be replaced and enhanced with new trees. Woodland impact at 319 Shantz Hill Road and 278 Fountain Street South.</td>
<td>Some landscaping trees would have to be removed but these can be replaced and enhanced with new trees. Woodland impact at 319 Shantz Hill Road and 278 Fountain Street South.</td>
<td>Some landscaping trees would have to be removed but these can be replaced and enhanced with new trees. Woodland impact at 319 Shantz Hill Road and 278 Fountain Street South.</td>
</tr>
<tr>
<td>Floodplain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What effect would the alternative have on the Speed River flood plain in the area of the project?</td>
<td>No impacts to existing floodplain features</td>
<td>Some minor impacts on floodplain at Mill Race Bridge and culvert at tributary near Fountain Street. However all impacts can be mitigated.</td>
<td>Some minor impacts on floodplain at Mill Race Bridge and culvert at tributary near Fountain Street. However all impacts can be mitigated.</td>
<td>Some minor impacts on floodplain at Mill Race Bridge and culvert at tributary near Fountain Street. However all impacts can be mitigated.</td>
</tr>
<tr>
<td>Wetlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What impacts does the alternative have on any evaluated wetlands within the project area?</td>
<td>No wetlands exist within the study area</td>
<td>No wetlands exist within the study area</td>
<td>No wetlands exist within the study area</td>
<td>No wetlands exist within the study area</td>
</tr>
<tr>
<td>Valley Slopes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is GRCA permit required?</td>
<td>No GRCA permit required with no improvements being undertaken.</td>
<td>GRCA Valley Slope Permit Required for King/Shantz Hill work.</td>
<td>GRCA Valley Slope Permit Required for King/Shantz Hill work.</td>
<td>GRCA Valley Slope Permit Required for King/Shantz Hill work.</td>
</tr>
<tr>
<td>Trees (Landscaping)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any impacts to existing tree plantings and tree canopy within the project area?</td>
<td>No impacts to existing trees, however increased pollution due to increased congestion will affect trees. Trees that need to be removed can be replaced during construction. Opportunities for enhanced streetscaping as part of improvements.</td>
<td>Trees that need to be removed can be replaced during construction. Opportunities for enhanced streetscaping as part of improvements.</td>
<td>Trees that need to be removed can be replaced during construction. Opportunities for enhanced streetscaping as part of improvements.</td>
<td>Trees that need to be removed can be replaced during construction. Opportunities for enhanced streetscaping as part of improvements.</td>
</tr>
<tr>
<td>OVERALL NATURAL ENVIRONMENT EVALUATION</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

**EVALUATION LEGEND:**
- ★ = highest benefit
- ★ = higher benefit
- ★ = medium benefit
- ★ = lower benefit
- ★ = lowest benefit
## APPENDIX “F-4”

Table: EVALUATION CRITERIA

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<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>DO NOTHING</th>
<th>OPTION 2</th>
<th>OPTION 3</th>
<th>OPTION 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Social Environment:</strong></td>
<td><strong>Archaeological Impacts</strong></td>
<td><strong>What impact does the alternative have on Archaeological Resources?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No impacts to Archaeological features.</td>
<td>High potential at site of P.E. Shantz foundry and all locations outside of current road alignment. A Stage 2 archeological assessment is recommended.</td>
<td>High potential at site of P.E. Shantz foundry and all locations outside of current road alignment. A Stage 2 archeological assessment is recommended.</td>
<td>High potential at sites of P.E. Shantz foundry and former Kress Hotel and all locations outside of current road alignment. A Stage 2 archeological assessment is recommended.</td>
</tr>
<tr>
<td></td>
<td><strong>Individual Heritage Features</strong></td>
<td><strong>What impact does the alternative have on individual Cultural Heritage features?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No impacts to existing Built Heritage features, Although not assessed in detail, incremental improvements to pedestrian, cycling and transit priority facilities may eventually have impacts similar to those of Option 3. Impact total = 0</td>
<td>9 Context changes, 8 encroachments and structure at 134 Fountain St. N is impacted. Impact total = 59</td>
<td>10 Context changes and 7 encroachments. Impact total = 50</td>
<td>12 Context changes and 5 encroachments. Impact total = 42</td>
</tr>
<tr>
<td></td>
<td><strong>Local Cultural Heritage Landscape Impacts On:</strong></td>
<td><strong>Historical Relationships</strong></td>
<td><strong>Contextual relationships</strong></td>
<td><strong>Built Heritage</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Cultural &amp; Recreational</strong></td>
<td><strong>Are there any cultural or recreational institutions within the project area that would be affected by this alternative?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased congestion will hamper access to Riverside Park.</td>
<td>Less congestion may improve access to Riverside Park and cultural heritage resources within study area.</td>
<td>Less congestion may improve access to Riverside Park and cultural heritage resources within study area.</td>
<td>Less congestion may improve access to Riverside Park and cultural heritage resources within study area.</td>
</tr>
<tr>
<td></td>
<td>New on-road cycle lane will increase exposure to cultural heritage resources within study area.</td>
<td>New on-road cycle lane will increase exposure to cultural heritage resources within study area.</td>
<td>New on-road cycle lane will increase exposure to cultural heritage resources within study area.</td>
<td>New on-road cycle lane will increase exposure to cultural heritage resources within study area.</td>
</tr>
<tr>
<td></td>
<td>No impact on existing views and vistas</td>
<td>Views to Hotel altered. Fountain Street is realigned so the view is on an angle, not straight.</td>
<td>Slight change from present as street width/angles will change.</td>
<td>Views to Hotel altered because of increased open space to be provided.</td>
</tr>
</tbody>
</table>
## APPENDIX “F-5”

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>DO NOTHING</th>
<th>OPTION 2</th>
<th>OPTION 3</th>
<th>OPTION 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighbourhood Fabric</strong></td>
<td>Increased congestion will encourage traffic infiltration into local neighborhoods.</td>
<td>Less congestion should reduce traffic infiltration into existing neighborhoods</td>
<td>Less congestion should reduce traffic infiltration into existing neighborhoods</td>
<td>Less congestion should reduce traffic infiltration into existing neighborhoods</td>
</tr>
<tr>
<td><strong>Commerce</strong></td>
<td>Increased congestion may improve access to businesses.</td>
<td>Less congestion may improve access to businesses.</td>
<td>Less congestion may improve access to businesses.</td>
<td>Less congestion may improve access to businesses.</td>
</tr>
<tr>
<td></td>
<td>Will be disruption during construction but access will be maintained during construction.</td>
<td>Will be disruption during construction but access will be maintained during construction.</td>
<td>Will be disruption during construction but access will be maintained during construction.</td>
<td>Will be disruption during construction but access will be maintained during construction.</td>
</tr>
<tr>
<td></td>
<td>Future Development opportunities reduced somewhat due to property purchases, but design accounts for future development traffic (not including potential turn lanes for new development access.) Vacant property on southeast corner of King/Fountain is impacted due to more significant property purchase.</td>
<td>Future Development opportunities reduced somewhat due to property purchases, but design accounts for future development traffic (not including potential turn lanes for new development access.) Vacant property on southeast corner of King/Fountain is impacted due to more significant property purchase.</td>
<td>Future Development opportunities reduced due to property purchases, but design accounts for future development traffic (not including potential turn lanes for new development access.) Vacant property on southeast corner of King/Fountain is impacted due to most significant property purchase.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PetroCan – Property required close to pumps.</td>
<td>PetroCan – Property required close to pumps.</td>
<td>PetroCan – Property required close to pumps.</td>
<td>PetroCan – Property required close to pumps.</td>
</tr>
<tr>
<td></td>
<td>Knotty Pine</td>
<td>Knotty Pine</td>
<td>Knotty Pine</td>
<td>Knotty Pine</td>
</tr>
<tr>
<td></td>
<td>– 30 Parking spaces lost</td>
<td>– 17 Parking spaces lost</td>
<td>– 15 Parking spaces lost</td>
<td></td>
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<td></td>
<td>– “larger” corner of building lost.</td>
<td>– “small” corner of building lost.</td>
<td>– “largest” corner of building lost.</td>
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<td></td>
<td>Fireplace Store – All front parking gone.</td>
<td>Fireplace Store – Reduced Parking.</td>
<td>Fireplace Store – All front parking gone.</td>
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<td></td>
<td>Old Hotel Site – Property frontage required.</td>
<td>Old Hotel Site – Property frontage required.</td>
<td>Old Hotel Site – No significant property, improved access</td>
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<tr>
<td><strong>Private Property Purchases</strong></td>
<td>No impacts to private properties.</td>
<td>Approximately 42 properties required to have property purchased and approximately 9,215 s.m. of private property needs to be purchased.</td>
<td>Approximately 43 properties required to have property purchased, and approximately 8,498 s.m. of private property needs to be purchased.</td>
<td>Approximately 40 properties required to have property purchased, and approximately 9,565 s.m. of private property needs to be purchased.</td>
</tr>
</tbody>
</table>

**NOTE!** ALL ALTERNATIVE CONCEPTS INCLUDE TRAFFIC OPERATIONS IMPROVEMENTS, ACCESS MANAGEMENT & WIDENED ROADS WHERE APPROPRIATE, ENHANCED TRANSIT PRIORITY, ON ROAD CYCLING FACILITIES AND SIDEWALKS.
APPENDIX “F-6”

**NOTE! ALL ALTERNATIVE CONCEPTS INCLUDE TRAFFIC OPERATIONS IMPROVEMENTS, ACCESS MANAGEMENT & WIDENED ROADS WHERE APPROPRIATE, ENHANCED TRANSIT PRIORITY, ON ROAD CYCLING FACILITIES AND SIDEWALKS.**

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<tr>
<td>Streetscaping</td>
<td>Limited opportunities to enhance streetscaping as no additional property is obtained.</td>
<td>Opportunities for Streetscaping can be incorporated in areas where properties must be purchased – includes planting, decorative paving materials, decorative streetlights, etc.</td>
<td>Opportunities for Streetscaping can be incorporated in areas where properties must be purchased – includes planting, decorative paving materials, decorative streetlights, etc.</td>
<td>Opportunities for Streetscaping can be incorporated in areas where properties must be purchased – includes planting, decorative paving materials, decorative streetlights, etc.</td>
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<td>Air Quality &amp; Noise</td>
<td>Increased congestion will adversely affect air quality due to additional idling vehicles. Noise may increase due to additional traffic volumes, but congestion will slow speeds resulting in reduced noise at times.</td>
<td>Air quality should be improved due to less congestion and more transit use. Noise may increase due to additional vehicles, but increased transit use should reduce number of vehicles compared to “Do-Nothing”.</td>
<td>Air quality should be improved due to less congestion and more transit use. Noise may increase due to additional vehicles, but increased transit use should reduce number of vehicles compared to “Do-Nothing”.</td>
<td>Air quality should be improved due to less congestion and more transit use. Noise may increase due to additional vehicles, but increased transit use should reduce number of vehicles compared to “Do-Nothing”.</td>
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<td><strong>OVERALL SOCIAL ENVIRONMENT EVALUATION</strong></td>
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<td><strong>4. Costs</strong></td>
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<tr>
<td>Initial Capital Cost</td>
<td>$11.0 M.</td>
<td>$14.4 M</td>
<td>$13.6 M</td>
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<td>OVERALL COST EVALUATION</td>
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<td>OVERALL PROJECT EVALUATION</td>
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**EVALUATION LEGEND:**

- = lowest benefit
- = lower benefit
- = medium benefit
- = higher benefit
- = highest benefit

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**Streetscaping**
Can the alternative incorporate streetscaping features to maintain and enhance the character of the community?

**Air Quality & Noise**
What effect does the alternative have on air quality and noise within the project area?
APPENDIX G-1

Property Acquisition Process Information Sheet
(Projects requiring Class Environmental Assessment Approval)

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

Once the Class Environmental Assessment is complete and the Environmental Study Report outlining the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans
After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawing are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff
Once the PIPs are available, Regional Real Estate staff will contact the affected property owners by telephone and mail to introduce themselves and set-up initial meetings to discuss the project and proposed acquisitions.

Initial Meetings
The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties
The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

Steps Toward Offer of Settlement or Agreement of Purchase and Sale
The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation
Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario Expropriations Act must be followed to ensure that the rights of the property owners provided under that Act are protected.

For information on the expropriation process, please refer to ‘Expropriation Information Sheet’.
APPENDIX “H”
Recommended Design Concept (6)
APPENDIX “I-1”
Design Visualizations of King Street/Fountain Street Intersection

KING AND FOUNTAIN STREETS INTERSECTION IMPROVEMENTS – RE-ALIGNED INTERSECTION OPTION
CAMBRIDGE, ONTARIO
APPENDIX “I-2”
Design Visualizations of King Street/Fountain Street Intersection

KING AND FOUNTAIN STREETS INTERSECTION IMPROVEMENTS – ROUNDBOXT OPTION
CAMBRIDGE ONTARIO
MEMORANDUM

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

From: William Gilbert, Senior Project Manager, Design and Construction

Signature: _____________________________________________________________

Subject: South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment Study, City of Cambridge and Township of North Dumfries
Recommended Design Alternative - Supplementary Information to Report E-10-088

File No: 7128.E

SUMMARY:

The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study for the South Boundary Corridor and Franklin Boulevard Extension to address the need for improvements to the transportation network in the south Cambridge area. Please refer to Appendix “A” for a Key Plan of the Project Limits.

Extensive public consultation has been undertaken on this project, including previous considerations of corridor alignments. In April of 2009 Regional Council approved a Recommended Corridor Alignment for the South Boundary Corridor and Franklin Boulevard Extension and directed staff to proceed with preliminary design of the corridor and continue consultation with the public in completion of the Class EA. Please refer to Appendix “B” of Report E-10-088 for a plan of the Council approved Hybrid 1 Corridor Alignment.

Subsequent to Council’s approval of the corridor alignment, the Project Team developed alternative design concepts for preferred roadway cross-sections and traffic control options at the intersections, including consideration of stop controlled, traffic signals and roundabouts. The Project Team, after consideration of the technical issues and considerable public consultation, identified Roundabout Intersections to be incorporated in the Recommended Design Alternative.

The Project Team’s Recommended Design Alternative was presented and considered at Regional Planning and Works Committee on November 16, 2010 (Report E-10-088). At the November 16, 2010 meeting, several members of the public attended as delegations and expressed concerns about the project. In response, Regional Council deferred a decision on the Recommended Design Alternative to a meeting of Planning and Works Committee early in 2011 to allow staff to meet with individuals and address issues raised. The issues raised at the November 16, 2010 Planning and Works Committee meeting and staff responses are provided in Section 2.0 of this Memo.
Based on a review of the technical information gathered for this project, consideration of the evaluation for environmental impacts and benefits/opportunities of the alternatives, a thorough review of all public comments received, and consideration of the issues raised by delegations on November 16, 2010, the Project Team is confirming its recommendation that Regional Council approve the proposed South Boundary Corridor and Franklin Boulevard Extension improvements, as per the recommendations within Report E-10-088.

REPORT:

1. Background

This Memo serves to supplement the information contained in Report E-10-088 presented to Regional Planning and Works Committee on November 16, 2010. Please refer to Report E-10-088 for additional information.

The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study for the South Boundary Corridor, from Water Street (Highway 24) to Dundas Street (Highway 8), and Franklin Boulevard Extension, from Myers Road to the South Boundary Corridor, in the City of Cambridge and the Township of North Dumfries. Please refer to Appendix A for a Key Plan of the project limits. This Class EA was initiated in 2007 to address the need for improvements to the transportation network in the south Cambridge area.

This Class EA study is guided by a Project Team consisting of staff from the Region of Waterloo, City of Cambridge, Township of North Dumfries, and Grand River Conservation Authority, as well as Regional and Local Municipal Councilors from the City of Cambridge and Township of North Dumfries.

In the initial stages of the Class EA Study, the Project Team considered corridor alignment alternatives which were assessed with respect to their ability to meet the traffic and transportation needs in the south Cambridge area, as well as their potential impact on the project environment. Several public consultation sessions were held and after due consideration of the comments received, in April 2009 Regional Council approved Hybrid 1 as the Recommended Corridor Alignment for the South Boundary Corridor and Franklin Boulevard Extension. Please refer to Appendix “B” of Report E-10-088 for a plan view of the Hybrid 1 alignment. In addition, Region Council directed staff to proceed with preliminary design of the corridor and continue consultation with the public in determining opportunities to minimize and/or mitigate impacts to the natural and social environment in completion of the Class EA.

As part of preliminary design, the Project Team developed minor refinements to the road alignment, design elements for a preferred roadway cross-section, and alternative design concepts for traffic control options at intersections. The Design Alternatives for traffic control options at Intersections included consideration of stop controlled, signalized and roundabout intersections, which were assessed and evaluated with respect to their potential impacts on the project environment.

There has been extensive public consultation for this project including several Public Consultation Centres, Public Input Meetings with Regional Planning and Works Committee, and various additional consultation meetings with directly-affected property owners. The Project Team, after consideration of the technical issues and all public input, identified Roundabouts as part of the Recommended Design Alternative for this project.

The Project Team’s Recommended Design Alternative for this Class EA study includes: initial construction of the South Boundary Road and the Franklin Boulevard Extension to a two lane urban cross-section with four lanes in the future; raised centre medians on both
South Boundary Corridor and Franklin Boulevard; multi-use trails along both sides of the
Franklin Boulevard Extension and along the north side of the South Boundary Corridor;
roundabouts on South Boundary Road at the intersections of Water Street, Franklin Boulevard,
Branchton Road and Dundas Street, and at the intersection of Myers Road and
Franklin Boulevard. The Recommended Design Alternative also includes an overpass bridge
carrying South Boundary Road over Cheese Factory Road. Please see Appendix “C” of
Report E-10-088 for plans of the Recommended Design Alternative - Cross-Sections and
Traffic Control at Intersections.

The South Boundary Corridor is proposed to be constructed in two phases with Phase 1 of the
South Boundary Corridor from Water Street to Franklin Boulevard and Franklin Boulevard
Extension from Myers Road to South Boundary Corridor to be constructed in 2016. Initially this
stage will involve constructing the preferred design in the interim as a 2 lane urban roadway with
widening to the ultimate 4 lanes when future traffic capacity needs are reached. Phase 2 would
include the South Boundary Corridor from Franklin Boulevard to Dundas Street which is
currently not projected to be needed until after the 10 year traffic projection horizon of 2021.

The Recommended Design Alternative was presented to Regional Council and members of the
public at the November 16, 2010 Regional Planning and Works Committee meeting. At the
November 16 meeting, several members of the public attended as delegations and expressed
concerns about the project. In response, Regional Council deferred a decision on this project to
a meeting of Regional Planning and Works Committee early in 2011. This deferral was made to
allow for staff to further meet with individuals and to report back with additional information in
addressing the specific issues raised by the November 16, 2010 delegations.

Subsequent to the November 16, 2010 meeting, staff have met and discussed the issues with
the delegations and a summary of staff responses is provided in Section 2.0 below.

2. Issues Raised at the November 16, 2010 Planning and Works Committee Meeting

2.1 Delegation from Mr. Kevin Fergin, Stantec Consulting Ltd., with respect to impacts
of the proposed South Boundary Corridor alignment on the Activa Holdings Inc.
proposed Draft Plan of Subdivision south of Dundas Street

At the November 16, 2010 Planning and Works Committee meeting, Kevin Fergin of
Stantec Consulting, on behalf of Activa Holdings, appeared before Committee. He stated
concerns about the impacts of the Council-approved South Boundary Corridor alignment on
Activa’s proposed Draft Plan of Subdivision south of Dundas Street. Mr. Fergin requested that
Region staff work with his client to optimize the amount of developable land within the proposed
Draft Plan of Subdivision. Region staff met with representatives of Stantec and Activa on
November 26, 2010, and January 19, 2011 to discuss and clarify their concerns raised at the
November 16, 2010 Committee meeting. At these meetings, Activa expressed its concerns as follows:

a) Activa would like the Region to shift the South Boundary Corridor alignment at
Dundas Street further to the south to optimize the amount of developable lands within
the proposed Draft Plan of Subdivision;

b) Activa would like the Region to undertake a joint Stormwater Management (SWM) facility
to service both the South Boundary Corridor and Activa development;
c) Activa’s lands are in Phase 2 of the South Boundary Corridor project which is currently not projected to be needed until after 2021. Activa has expressed a need for additional earth fill in the future development of their lands and has requested the Region to advance the grading design of Phase 2 to fix the elevation of the South Boundary Corridor across their lands and determine if there is surplus grading material from the road allowance that can be used as fill on Activa’s future development lands; and

d) Activa requested that the existing Countryside Line between the City of Cambridge and Township of North Dumfries be moved to the south into North Dumfries to allow Activa’s currently-zoned agricultural lands between the Municipal boundary and the north side of the South Boundary Corridor to be re-zoned for additional residential development as an expansion of its proposed Draft Plan of Subdivision.

Project Team Response:

The Project Team’s responses to Activa’s requests are as follows:

a) Regarding Activa’s request for a southerly shift of the South Boundary Corridor and Dundas Street intersection, the Project Team is not recommending this alignment adjustment as it would increase project costs by requiring acquisition of additional property along Dundas Street, potentially requiring the additional full buy-out of an existing residential house. Also, a shift of the Dundas Street intersection would unduly constrain options for the future connection of the South Boundary Corridor to the future East Boundary Road.

b) Joint use Stormwater Management (SWM) facilities have been successfully undertaken between the Region and developers in the past. As such, staff are prepared to work with Activa during the detail design phase of South Boundary Road to explore the potential for a joint SWM facility that will be mutually beneficial to both the Region and Activa.

c) Regarding Activa’s request for advancing the grading design for Phase 2 of the South Boundary Corridor, staff are prepared to advance to 2011 the grading design of Phase 2 by including it as part of detailed design for Phase 1 of the South Boundary Corridor. This advancement will assist Activa in finalizing the grading plans of its development lands adjacent to Phase 2. Advancement of the grading design for Phase 2 will also determine if there is surplus grading material from the South Boundary Corridor road allowance that can be used as fill on Activa’s low lying lands.

d) Throughout this Class EA study, representatives of Activa have expressed on several occasions that the Countryside Line between the City of Cambridge and Township of North Dumfries should be amended to permit the lands between the City of Cambridge municipal boundary and the north side of the South Boundary Corridor within the Township of North Dumfries to be re-zoned for use as residential development. Activa’s proposal for an adjustment to the Countryside Line was reviewed by Region staff in connection with the Regional Official Plan (ROP) review process. Activa further appeared as a delegation before Regional Council at its meeting of June 16, 2009 in presenting its proposed adjustment to the Countryside Line as part of Regional Council’s consideration of the Regional Official Plan (ROP). Activa’s proposal was subsequently not supported as part of the Regional Official Plan (ROP) by Council at the June 16, 2009 meeting at which the Regional Official Plan (ROP) was approved.
On January 21, 2011 Activa filed an appeal against the Region’s Official Plan (ROP). Region staff will be reviewing and responding to this appeal as part of the ROP appeal process which is expected to take place in 2011 and 2012.

2.2 Delegation from Mr. Jim Collishaw with respect to initiating the East Boundary Road Class EA for future development planning north of Dundas Street

At the November 16, 2010 Planning and Works Committee meeting, Jim Collishaw of Cambridge Planning Consultants, appeared before Committee on behalf of development interests within the Southeast Galt Community area north of Dundas Street. He stated there is a current need for completing an East Boundary Road Corridor study north of Dundas Street within the Southeast Galt Community area. Mr. Collishaw requested that Region staff commit to the timing for an East Boundary Road Corridor study, or permit area developers to undertake the study. Region staff met Mr. Collishaw on January 18, 2011 to discuss and clarify concerns raised at the November 16, 2010 Committee meeting. At the January 18th meeting, Mr. Collishaw expressed an urgency for the Region to initiate the East Boundary Road Corridor study in 2011 and complete it as soon as possible so that area developers can prepare development plans for the Southeast Galt Community area.

Project Team Response:

The Project Team’s response to Mr. Collishaw’s request is as follows:

The need for the East Boundary Road is identified in the 2010 Region Transportation Master Plan. It is also identified in the Region’s Official Plan as a “Proposed Regional Corridor” within the area of future development to the north-east of Dundas Street, known as the Southeast Galt Community area. As identified within the 2010 Region Transportation Master Plan, the East Boundary Road is not projected to be needed until after 2031. Region planning staff has received many requests for advancing development within the Southeast Galt Community area and have met on several occasions with representatives of local land developers including Mr. Collishaw. Mr. Collishaw is quite correct that the location of the East Boundary Road corridor needs to be verified through appropriate studies before development plans can be prepared within the Southeast Galt Community area.

In consideration of current and anticipated future land use planning pressures in the Southeast Galt Community area, Regional staff is planning to initiate a Corridor Planning Study in 2011 for the East Boundary Road that would determine the alignment for this road. It is expected that completion of this study would take until 2014 after which development plans in the Southeast Galt Community area can be prepared.

2.3 Delegation from Mr. Steve Adams, Forward Baptist Church, with respect to property impacts at the proposed Myers Road and Franklin Boulevard Roundabout

At the November 16, 2010 Planning and Works Committee meeting Steve Adams of the Forward Baptist Church appeared before Committee. He indicated that his Church is in favour of roundabouts but stated concerns about the adverse impacts the proposed roundabout at Franklin Boulevard and Myers Road would have on the Church’s property at the southeast corner of this intersection. Mr. Adams requested Region staff minimize the property required from the Church and resolve adverse impacts to the property. Region staff met with representatives of the Forward Baptist Church on January 11, 2011 to discuss and clarify their
concerns raised at the November 16, 2010 Committee meeting. At the January 11th meeting, Church representatives expressed their concerns as follows:

a) The Church requested the Region design the roundabout to minimize the loss of Church lands;

b) The Church is concerned that one of its two existing full-movement accesses on Myers Road will become a right-in/right-out because of the new roundabout. The Church requested that this westerly access be shifted to the east to allow it to remain full movement. In addition, the Church also requested a new additional access to the new Franklin Boulevard on the west side of the Church property;

c) The Church requested that any trees identified to be removed for the construction be moved to other areas on their property;

d) The Church requested that the existing electronic sign be moved to an area on the west side of their property;

e) The construction of the roundabout intersection will result in some removal of parking spaces on the Church property. In addition to providing fair compensation for any property acquisition required by the road improvements, the Church also asked the Region to reconfigure their parking lot to replace the removed parking spaces as well as to address any change in circulation patterns on the site.

Project Team Response:

The Project Team’s responses to the Church’s requests are as follows:

a) The Project Team’s Recommended Design Alternative for the roundabout at the Franklin Boulevard and Myers Road intersection will require property from the Forward Baptist Church property at the southeast corner of the intersection. In the development of the preliminary layout of the proposed Roundabout, the Project Team considered options for shifting the location of the roundabout within the road allowance and selected the recommended option because it is the layout that results in the least amount of overall net adverse impact to all of the surrounding properties at the intersection. The concept plan for the proposed Roundabout at the Franklin Boulevard and Myers Road intersection as recommended by the Project Team is shown in Appendix C. During detailed design Region staff will consider minor refinements to the proposed roundabout with a view to further minimizing adverse impacts on the Church property.

b) Currently, the Church has two full-movement accesses to Myers Road. The westerly access is the access used most often. The proposed roundabout would require significant reconstruction of this access and will likely require it to be limited to a right-in/right-out operation because of its proximity to the new roundabout. During detailed design, staff will consider shifting this westerly access to the east away from the roundabout to allow it to be a full movement access. Should this shift not be feasible, staff support the provision of an additional new access to Franklin Boulevard to help mitigate the change in site circulation caused by limiting the west access on Myers Road to a right-in/right-out operation. Should a new access to Franklin Boulevard be permitted by the Region, it would have to be right-in/right-out only as the proposed Franklin Boulevard includes a raised median in this vicinity.
c) The roundabout construction will result in the loss of parking spaces and the loss of trees at the Church. Region staff commit to relocating or replacing at the Region’s full expense any trees impacted by the roundabout construction. Region staff will work with the Church during detailed design and property acquisition to determine the location and type of any trees to be replaced.

d) The Church’s existing electronic sign is within the area of their property needed for the Region’s road improvements and will be required to be moved by the Region. During detailed design and property acquisition Region staff will work with the Church in identifying an appropriate location on the Church property for relocating the sign at Region cost.

e) Exact property acquisition requirements will depend on completion of detailed design and once this is completed the Church will be contacted by Regional Real Estate staff to discuss the necessary property acquisitions and related issues. For any property to be acquired, the Church will be reimbursed by the Region of Waterloo for the required land at fair market value. An independent appraisal will be completed for the land based upon recent local sales to determine fair market value. The Region’s Property Acquisition Process Information Sheet, which explains the Region’s property acquisition process, has been made available to the Church and is attached as Appendix “E” to Report E-10-088.

Region staff have met on several occasions with representatives of the Forward Baptist Church in identifying and discussing potential parking, access, and traffic circulation impacts to its property. Region staff will work with the Church during detailed design and property acquisition to identify all potential adverse impacts to its property as a result of the road improvements. Staff will then explore opportunities for reconfiguring the Church parking lot and replacing any resulting lost parking so as to absolutely mitigate any adverse impacts caused by the adjacent road improvements.

2.4 Delegation from Mr. Thomas Hardacre, IBI Group, with respect to severance and land use impacts of the proposed South Boundary Corridor on the Sunvest lands west of Cheese Factory Road

At the November 16, 2010 Planning and Works Committee meeting, Thomas Hardacre of IBI Group, on behalf of Sunvest Developments, appeared before Committee. He stated concerns about the impacts of the April 2009 Council-approved alignment of the South Boundary Corridor on Sunvest lands westerly of Cheese Factory Road. Mr. Hardacre requested that Region staff work with his client to minimize the amount of undevelopable lands created as a result of the road alignment. Region staff met with representatives of IBI and Sunvest on January 13, 2011 to discuss and clarify their concerns raised at the November 16, 2010 Committee meeting. At the January 13th meeting, Sunvest requested that the South Boundary Corridor alignment be shifted across Sunvest lands to the south to minimize the extent of undevelopable lands on the north side of its property.

Project Team Response:

The Project Team’s response to Sunvest’s request is as follows:

The alignment for the South Boundary Corridor in the area of Sunvest’s lands at Cheese Factory Road is heavily constrained by existing wetlands, existing gas infrastructure, and roadway geometry. Staff are not recommending any significant shift of the road alignment to the south in this area as this would create additional adverse encroachment into adjacent wetlands and would increase project costs by requiring the acquisition of additional property to the east of Sunvest’s lands.
Region staff will work with Sunvest during detailed design of the South Boundary Corridor to explore opportunities for minor refinements to the corridor alignment across the Sunvest property to reduce the extent of undevelopable parcels on their property, as long as any change in the corridor alignment does not adversely affect adjacent lands. As part of detailed design and property negotiations/acquisition for the South Boundary Corridor, fragmented parcels on the Sunvest lands will be reviewed by Region staff with respect to their viability and if any remnant parcel is found to be non-viable based on its approved land-use designation, the Region will consider full acquisition of the remnant parcel.

3. **Project Team Recommended Design Alternative**

Based on a review of the technical information gathered for this project, consideration of the evaluation of the environmental impacts and benefits/opportunities of the alternatives, a thorough review of all public comments received and consideration of the issues raised at Committee on November 16, 2010, the Project Team is confirming its recommendation for South Boundary Corridor and Franklin Boulevard Extension improvements, as per the recommendations within Report E-10-088.

4. **Next Steps**

Subject to Regional Council approval of the Recommended Design Alternative, the Environmental Study Report (ESR) documenting the planning and decision process for the project will be completed and a “Notice of Study Completion” will be ‘filed’ in the public record for a 30 day review period. This filing will be advertised by mail-outs and notices in newspapers. During this filing period, anyone concerned that the study did not fully follow the appropriate requirements of the Class EA process or address all of the issues, may 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 be considered approved and will proceed to detailed design and construction.

**ATTACHMENTS:**

Appendix A – Key Plan of Project Limits

**PREPARED BY:** William Gilbert, Senior Project Manager, Design and Construction

cc: Mike Murray
    Chief Administrative Officer
Appendix “A”

Figure 1: Key Plan of Study Area
Region of Waterloo
South Boundary Corridor and Franklin Boulevard Extension
Class Environmental Assessment
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: November 16, 2010

FILE CODE: T04-20, 7128

SUBJECT: SOUTH BOUNDARY CORRIDOR AND FRANKLIN BOULEVARD EXTENSION CLASS ENVIRONMENTAL ASSESSMENT, CITY OF CAMBRIDGE AND TOWNSHIP OF NORTH DUMFRIES – RECOMMENDED DESIGN ALTERNATIVE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for South Boundary Corridor and Franklin Boulevard Extension, in the City of Cambridge and the Township of North Dumfries:

a) Approve the preliminary design for construction of the South Boundary Corridor and Franklin Boulevard Extension as described as the Recommended Design Alternative outlined in Report E-10-088, dated November 16, 2010;

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

SUMMARY:

The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study for the South Boundary Corridor, from Water Street (Highway 24) to Dundas Street (Highway 8), and Franklin Boulevard Extension, from Myers Road to the South Boundary Corridor, in the City of Cambridge and the Township of North Dumfries (Please refer to Appendix “A” for a key plan of the Study Area). The South Boundary Corridor and Franklin Boulevard Extension Class EA was initiated in 2007 to address the need for improvements to the transportation network in the south Cambridge area. This project is being planned as a Schedule ‘C’ Class EA project as per the Municipal Class EA guidelines.

There has been extensive public consultation on this project, including for previous considerations of corridor alignments. In April of 2009 Regional Council approved a Recommended Corridor Alignment for the South Boundary Corridor and Franklin Boulevard Extension (Please refer to Appendix “B” for a plan of the approved Hybrid 1 Corridor Alignment). In addition, Region staff were directed to proceed with preliminary design of the corridor and continue consultation with the public in determining opportunities to minimize and/or mitigate impacts to the natural and social environment in completion of the Class EA.

Design alternatives for traffic control options at the intersections and standards for roadway cross-sections were developed by the Project Team and assessed with respect to impacts on the project environment related to; traffic operations and safety, social environment, natural environment, and costs. These design alternatives include traffic signals and roundabouts at the proposed intersections in meeting the traffic operation needs for the corridor. The design alternatives and their evaluations were presented to the public along with identification of the Project Team’s
Preferred Design Alternative for Roundabout Intersections. Comments received from the public are generally supportive of the evaluation of alternatives, but some concerns were expressed regarding increases in traffic noise, pedestrian and emergency access at Carpenter Drive associated with the proposed raised centre median, property impacts, traffic operations at roundabouts, impacts to natural areas, and opportunities for landscaping within the corridor.

In consideration of the technical information gathered for this project and public comments gathered for this project, the Project Team is recommending Roundabout Intersections be incorporated in the Recommended Design Alternative. The Recommended Design Alternative includes: initial construction of the South Boundary Road and the Franklin Boulevard Extension to a two lane urban cross-section with provision to accommodate four lanes in the future; raised centre medians on both South Boundary Corridor and Franklin Boulevard; multi-use trails along both sides of the Franklin Boulevard Extension and along the north side of the South Boundary Corridor; roundabouts at the intersections of Water Street and South Boundary Road, Franklin Boulevard and South Boundary Road, Branchton Road and South Boundary Road, Dundas Street and South Boundary Road, and Myers Road and Franklin Boulevard; and an overpass bridge carrying South Boundary Road over Cheese Factory Road.

The implementation of roundabouts instead of traffic signals on this project would result in a 3% increase in overall construction costs; however, the Project Team believes the benefits of the roundabouts, such as 75% fewer injury collisions, reduced delay, reduced fuel consumption and emissions, far outweigh the increased construction cost.

Initial construction of the South Boundary Corridor from Water Street to Franklin Boulevard and Franklin Boulevard Extension from Myers Road to South Boundary Corridor is planned as a 2 lane urban roadway and is scheduled to commence in 2015 or 2016 to coincide with the completion of capacity improvements on Franklin Boulevard. The completion of the South Boundary Corridor construction from Franklin Boulevard to Dundas Street is currently not projected to be needed until after the 10 year traffic projection horizon of 2021.

The cost for the Project Team’s Recommended Design Alternative is estimated to be up to $36 million, and will depend on costs for property acquisition and relocation of utilities.

REPORT:

1. Background

Transportation network improvement needs in the south Cambridge area have been identified in a number of Cambridge area traffic and transportation studies completed over the past several years. These studies looked at future transportation network requirements to address the rapidly increasing traffic growth and changing traffic patterns within and around the City of Cambridge and Region of Waterloo. These studies identified a need to better manage traffic growth on the key roadways by dispersing traffic away from the most congested parts of the road network and diverting through traffic away from the downtown core and residential areas.

As a result of the existing traffic conditions and projected growth, the Regional Municipality of Waterloo is undertaking a Class Environmental Assessment (EA) study of the South Boundary Corridor, from Water Street (Highway 24) to Dundas Street (Highway 8), and Franklin Boulevard Extension, from Myers Road to the South Boundary Corridor, to identify a recommended solution that would provide required traffic and transportation network capacity for the south Cambridge area. Please refer to Appendix “A” for a Key Plan of the Study Area. This project is being planned as a Schedule ‘C’ Class EA project as per the Municipal Class EA guidelines.
The study is guided by a Project Team consisting of staff from the Region of Waterloo, City of Cambridge, Township of North Dumfries, and Grand River Conservation Authority, as well as Regional Councillor/Township of North Dumfries Mayor Kim Denouden, City of Cambridge Councillor Gary Price, and Township of North Dumfries Councillor Ted Higgins. The engineering consulting firm of Delcan has been retained to assist with this Class EA Study.

2. Corridor Alignment

Initial stages of the Class EA Study identified corridor alignment alternatives which were assessed with respect to their ability to meet the traffic and transportation needs in the south Cambridge area, as well as their potential impact to the social environment, natural environment, cultural/heritage environment, traffic operations and cost. Several public consultation sessions were held to solicit public input on the transportation needs and potential impacts of the alternatives on the project environment. Comments received generally supported the need for traffic and transportation improvements and expressed concerns regarding impacts to the natural and social environment.

After due consideration of the public comments received, Regional Council approved Hybrid 1 as the Recommended Corridor Alignment for the South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment, as recommended by Regional Planning and Works Committee at their meeting of March 31, 2009. Please refer to Appendix “B” for a plan view of the Hybrid 1 alignment and details regarding the approval process. In addition, Region Council directed staff to proceed with preliminary design of the corridor and continue consultation with the public in determining opportunities to minimize and/or mitigate impacts to the natural and social environment in completion of the Class EA.

3. Design Alternatives

Following Regional Council’s approval of the Hybrid 1 corridor alignment, design elements for a preferred roadway cross-section and alternatives for traffic control options at intersections were developed by the Project Team.

Preferred Roadway Cross-Section

The Project Team considered various roadway cross-section elements for this study and identified a preferred roadway cross-section with features as follows:

- Initial construction of the South Boundary Road and the Franklin Boulevard Extension to two lanes with a raised centre median and ability to accommodate a future ultimate requirement for four lanes.
- A multi-purpose trail on the north side of the roadway for the South Boundary Road, and both sides of the roadway for Franklin Boulevard to accommodate cyclists and pedestrians.
- Roadway illumination at intersections.
- Curb and gutter on both sides of the roadway.
- Stormwater drainage control (quantity and quality) by storm sewers and stormwater management facilities where necessary, and via catchbasins and piping under the roadway draining to enhanced drainage ditches along sections of South Boundary Road.
- Some possibility for provision of a vegetated buffer along the north side of South Boundary Road adjacent to the rear yard of residential properties where cross-section grades and offsets permit.
- Potential for aesthetic features such as roadside trees and vegetative plantings.
Traffic Control Options at Intersections

In consideration of the future forecasted travel demands within the study area, and with the exception of the future South Boundary Road / Branchton Road and South Boundary Road / Franklin Boulevard intersections, it was determined that all intersections meet the warrants for traffic signals. In accordance with the Region of Waterloo policy, a review of the appropriate traffic control was undertaken (i.e. stop control, signalization or roundabouts) for all major intersections along the South Boundary Road Corridor.

Summary of Design Alternatives for Traffic Control Options at Intersections

<table>
<thead>
<tr>
<th>Intersection Location</th>
<th>Traffic Control Options at Intersections</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Boundary Road at Water Street</td>
<td>• Signalized Intersection</td>
</tr>
<tr>
<td></td>
<td>• Roundabout</td>
</tr>
<tr>
<td>South Boundary Road at Franklin Boulevard</td>
<td>• Stop Controlled Intersection</td>
</tr>
<tr>
<td></td>
<td>• Roundabout</td>
</tr>
<tr>
<td>South Boundary Road at Branchton Road</td>
<td>• Stop Controlled Intersection</td>
</tr>
<tr>
<td></td>
<td>• Roundabout</td>
</tr>
<tr>
<td>South Boundary Road at Dundas Street</td>
<td>• Signalized Intersection</td>
</tr>
<tr>
<td></td>
<td>• Roundabout</td>
</tr>
<tr>
<td>Franklin Boulevard at Myers Road</td>
<td>• Signalized Intersection</td>
</tr>
<tr>
<td></td>
<td>• Roundabout</td>
</tr>
</tbody>
</table>

As part of the earlier Council approval of the Hybrid 1 corridor alignment, the public were presented with 3 intersection alternatives for the South Boundary Road and Cheese Factory Road intersection. These alternatives were: At-Grade Intersection, At-Grade Intersection with Limited Access, and Grade Separated Intersection. Based on an evaluation of these 3 intersection alternatives at this location, the Project Team has identified a grade separated overpass bridge carrying South Boundary Road over Cheese Factory Road as the preferred Design Alternative at this intersection location. Compared to other alternatives for this intersection this configuration would provide better overall traffic operations, minimize impacts on the existing Cheese Factory Road and would result in less impacts on the natural environment.

4. Assessment and Evaluation of Traffic Control Options at Intersections

The Design Alternatives for traffic control options at the intersections were assessed and evaluated by the Project Team using the following criteria:

- Traffic Operations & Safety (ability to accommodate the expected vehicular, transit, pedestrian and cycling traffic needs)
- Social Environment (impacts on the local community and property)
- Natural Environment (effect on existing vegetation, storm drainage, wildlife and wildlife habitat)
- Estimated 20 Year Life-Cycle Costs (construction cost, maintenance, and injury collisions)
The results of the comparative evaluation and cost analysis undertaken for the traffic control options at project intersections are provided in Appendix “C”. Appendix “C-6” includes a detailed comparison of the estimated 20 Year Life-Cycle Costs for each traffic control option at each location.

5. Public Consultation

The following is a summary of the public consultation process undertaken for consideration of Design Alternatives for the Region-approved Corridor Alignment for this project. All public comments received and Project Team responses will be included in the final Class EA Study Report for the project.

Design Alternatives Public Consultation Centre (Project PCC #3)

The Preferred Roadway Cross-section for South Boundary Road and Franklin Boulevard Extension, and the Traffic Control Options at intersections and their preliminary evaluations, were presented to the public for comments on March 10, 2010 at the Cambridge Christian School in the City of Cambridge. Roundabout Intersections were presented as part of the Project Team’s Preliminary Preferred Design Alternative. Approximately 105 people attended the PCC and comments received generally supported the preferred roadway cross-section and roundabout intersections; however, specific concerns were expressed with respect to pedestrian crossing and emergency access at the Carpenter Drive intersection of Franklin Boulevard, property impacts at the roundabout intersections, traffic operations at roundabouts, impacts to natural areas, and opportunities for landscaping within the corridor. Other concerns received were similar to those received at previous public consultations with respect to the corridor alignment and increase in traffic noise associated with the proximity to adjacent residential homes.

Design Alternatives Public Input Meeting

After review of all technical information gathered for this project and after consideration of all public comments received, the Project Team identified Roundabouts as the Preferred Traffic Control Option at all intersections. This assessment was presented to the public at a Public Input Meeting (PIM) of the Regional Municipality of Waterloo Planning and Works Committee on May 6, 2010. Advance notices of the PIM were advertised in the local newspapers and signboards were erected within the study area. Notices of the PIM were also mailed, and/or delivered to area residents, property owners, businesses, agencies and interest groups.

The Public Input Meeting was a formal meeting of the Region of Waterloo Planning and Works Committee which incorporated an informational report to Committee and a formal presentation by Region staff followed by questions from the Committee and delegations from the public. The meeting was well attended with 46 people signing the attendance register, and 8 delegations from the public. Appendix “D” outlines the summary of public comments received at the PIM and responses by the Project Team.

Comments received from the meeting were similar to those received at the previous public consultation centre. All comments received and Project Team responses will be included in the final Environmental Study Report for the project.
6. **Main Concerns Raised by the Public**

Comments received from the public consultations relate to increases in traffic noise; safety of pedestrian crossing and emergency access at the Carpenter Drive intersection of Franklin Boulevard; property impacts; traffic operations at roundabouts; impacts to natural areas; and opportunities for landscaping within the corridor. A summary of the main concerns raised by the public and responses by the Project Team is included in Appendix “E”.

It is recognized that implementation of the proposed corridor alignment and intersection control design alternatives would require acquisition of portions of private property for the new road allowance, widening onto private property, and the total purchase of some properties. In order to help property owners better understand the Region’s process for acquiring property for this project, an Information Sheet was made available to the public (see Appendix “F”). This Property Acquisition Process Information Sheet is intended to better familiarize the public with the Region’s property acquisition practices and describes the steps of notice, negotiation, appraisal, and expropriation as necessary.

7. **Project Team Recommended Design Alternative**

Based on a thorough review of all public comments received, the technical information gathered for this project, and the evaluation of environmental impacts and benefits/opportunities of the alternatives, the Project Team has confirmed the Recommended Design Alternative for this Class EA study as follows: initial construction of the South Boundary Road and the Franklin Boulevard Extension to a two lane urban cross-section with provision to accommodate four lanes in the future; raised centre medians on both South Boundary Corridor and Franklin Boulevard; multi-use trails along both sides of the Franklin Boulevard Extension and along the north side of the South Boundary Corridor; roundabouts at the intersections of Water Street and South Boundary Road, Franklin Boulevard and South Boundary Road, Branchton Road and South Boundary Road, Dundas and South Boundary Road, and Myers Road and Franklin Boulevard; and an overpass bridge carrying South Boundary Road over Cheese Factory Road. Please see Appendix “G” – Recommended Cross-Section and Traffic Control Options at Intersections – Recommended Design Alternative.

Roundabouts are recommended by the Project Team at each of the major intersections within this project as they would result in a reduction in the number and severity of future collisions, and would assist in providing speed control, with slightly lower overall life-cycle costs despite higher initial construction costs as compared to the signalized Intersection alternatives. Specifically, the construction of roundabouts at the five major intersections would increase the estimated cost of this project by approximately $800,000 (an increase of 3% in overall project costs) but is expected to avoid $900,000 in injury collisions while reducing delays, fuel consumption and emissions. As a result, staff are confident of the benefits of providing roundabouts in this project. In addition, the Region’s Roundabout Coordinating Committee endorsed the implementation of roundabouts for this project.

An overpass bridge carrying South Boundary Road over Cheese Factory Road has been identified as the Project Team’s Recommended Design Alternative at this intersection location as it would provide better overall traffic operations, minimize impacts on the existing Cheese Factory Road and would result in fewer impacts on the natural environment.

The Project Team’s recommended roadway cross-section for both South Boundary Road and Franklin Boulevard includes for a raised centre median which would provide access management in restricting driveway and local street access to right-in and right-out movements, while maintaining accessibility through the ability to make U-turns at the roundabouts. The centre median would reduce the risk of collisions associated with motorists making left-turns on-to and off-of the roadway,
as well as the potential for head-on collisions from opposing traffic along South Boundary Road and Franklin Boulevard. The centre median would provide additional opportunities to enhance landscaping which would improve aesthetics and may also help reduce operating speeds in the corridor.

The Project Team also believes that through incorporation of off-road multi-use trails, the recommended cross-sections of both roadways support the Region’s Transportation Master Plan in providing a balanced transportation facility that better serves the needs of the active transportation users in the community, such as cyclists and pedestrians. The proposed multi-use trails have been reviewed and supported by the Region’s Cycling Advisory Committee.

The South Boundary Corridor is proposed to be constructed in stages. The first stage would include the South Boundary Corridor from Water Street to Franklin Boulevard and Franklin Boulevard Extension from Myers Road to South Boundary Corridor. Initially this stage will involve constructing the preferred design in the interim as a 2 lane urban roadway with widening to the ultimate 4 lanes when future traffic capacity needs are reached. The second stage would include the South Boundary Corridor from Franklin Boulevard to Dundas Street which is currently not projected to be needed until after the 10 year traffic projection horizon of 2021.

8. Project Cost

The capital cost for the Recommended Design Alternative for this project is estimated to be up to $36 million, with stage 1 works estimated at $22 million, and stage 2 works estimated at $14 million. The final cost will be further refined as part of detailed design and will depend on costs associated with property acquisition and utilities relocations.

9. 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 Environmental Study Report (ESR) documenting the planning and decision process for the project will be completed and a “Notice of Study completion” will be “filed” in the public record for a 30 day review period. This filing will be advertised by mail-outs and notices in newspapers. During this filing period, anyone concerned that the study did not follow the appropriate requirements of the Class EA process or did not address all of the issues, may 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 be considered approved and proceed to detailed design and construction. It is anticipated that the construction of the first stage could commence in 2015/2016, pending detail design, property acquisitions, and utility relocations. The construction timing of this project needs to be coordinated with the construction of the Franklin Boulevard project to ensure that capacity improvements on Franklin Boulevard are complete before South Boundary Road and Franklin Boulevard Extension are opened up to traffic.
CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management) in terms of:

- Enhancing, developing, promoting and integrating sustainable and active forms of transportation (public transit, cycling, and walking).

It is also consistent with the development of Strategic Focus Area 5 (Infrastructure) in terms of:

- Providing infrastructure needed to accommodate planned growth.

FINANCIAL IMPLICATIONS:

The 2010 Transportation Capital Program and Ten Year Forecast currently includes $20 million over the years 2010 to 2019 for the design and construction of this project to be funded from the Region Development Charges Reserve Fund.

The updated project cost of $36 million will be incorporated into the development of the 2011 Transportation Capital and Ten Year Forecast as part of Council’s 2011 budget deliberation.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Transportation Planning Division of the Planning, Housing and Community Services Department has been consulted in the preparation of this report.

ATTACHMENTS

Appendix A – Key Plan
Appendix B – Corridor Alignment Options Hybrid 1 (approved by Regional Council March 31, 2009)
Appendix C – Comparative Evaluation and Cost Analysis – Intersection Control Design Alternatives
Appendix D – PIM Summary of Public Comments Received and Project Team Responses
Appendix E – Summary of Main Concerns Raised by the Public and Project Team Responses
Appendix F – Property Acquisition Process Information Sheet (Projects Requiring Class EA Approval)
Appendix G – Recommended Cross-Section and Traffic Control Options at Intersections – Recommended Design Alternative

PREPARED BY: William Gilbert, Senior Project Manager, Transportation Expansion

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
Figure 1: Key Plan of Study Area
Region of Waterloo
South Boundary Corridor and Franklin Boulevard Extension
Class Environmental Assessment
APPENDIX “B-1”

SOUTH BOUNDARY CORRIDOR CLASS ENVIRONMENTAL ASSESSMENT
CORRIDOR ALIGNMENT OPTIONS HYBRID 1 (SB1-PIC3)

Region Approved Alignment

City of Cambridge
Township of North Dumfries

Franklin Boulevard Expansion
South Boundary Corridor
APPENDIX “B-2”
South Boundary Corridor and Franklin Boulevard Extension Class EA
Corridor Alignment Approval

Public Consultation Centre (PCC #1)
An initial Public Consultation Centre (PCC #1) was held for this project on April 10, 2007 and presented the reasons for the study, reviewed the Class EA process, detailed the study area and current conditions, and described the implications of doing nothing to address the current issues. An information package was made available at the meeting, explaining the EA process, the need and justification for the study and the alternatives under consideration.

Alternative Corridor Alignments
Following the identification of the Study Problem Statement, detailed inventories of the natural and social environments were undertaken within the study area and four corridor alignments for the South Boundary Corridor were developed. Each of the alternative corridor alignments for the South Boundary Corridor and Franklin Boulevard Extension were assessed and evaluated with respect to their potential impacts on the project environment including: the natural environment; social environment; heritage/archaeological/cultural environment; traffic capacity/operations and safety; and costs.

In accordance with the Class EA process, the study has also evaluated the “Do Nothing” alternative to determine the effect of implementing none of the above alternatives to address the identified problems/opportunities.

Based on an evaluation of all four corridor alignments and the “Do Nothing” alternative, Hybrid 1 corridor was identified as the Project Team’s preliminary preferred alignment alternative. The Hybrid 1 alignment was identified as the preliminary preferred alignment because it was shown to have significantly fewer impacts on:

- Natural Environment: Avoids direct impacts to natural features that contain ecologically sensitive or significant habitat functions; and
- Land Fragmentation: Least amount of land fragmentation as compared to other alternatives.

Public Consultation Centre (PCC #2)
The four alternatives, their assessments, evaluations, and the Project Team’s preliminary preferred corridor alignment was presented to the public and reviewing agencies at a Public Consultation Centre on June 25, 2008 to solicit input into the selection of the recommended corridor.

Approximately 70 individuals attended the PCC. All comments received were summarized and reviewed by the Project Team for consideration of a preferred corridor alignment. In general there were numerous comments in support of the preferred corridor, but there were also concerns regarding impacts to the natural environment, social environment, and traffic operations.

Based on the public input and additional comments from external agencies, the Project Team confirmed the Hybrid 1 alternative as the Preferred Corridor Alignment.

Public Input Meeting
A Public Input Meeting (PIM) of the Planning and Works Committee was held on February 3, 2009 to present the Project Team’s Preferred Corridor Alignment and to receive further public input about the study.
Approximately 75 people signed in at the meeting. Concerns expressed at the PIM were reviewed by the Project Team and responses were mailed to all those who had attended. Comments received at the PIM were generally of the following themes: use of Waynco Road, shifting western portion of corridor further away from the Municipal Boundary, noise impacts, lighting impacts, air quality impacts, traffic assessments, Municipal Boundary adjustments for development, property impacts, and Highway 8 at Vanier Drive access impacts.

Regional Council Approval of the Corridor Alignment

After due consideration of the public input received at the February 3, 2009 PIM, the Project Team confirmed its assessment of the Hybrid 1 alternative as the Recommended Corridor Alignment for presentation to Regional Planning and Works Committee for endorsement to Regional Council for approval.

On March 31, 2009, the Regional Planning and Works Committee approved the Hybrid 1 corridor as the Recommended Corridor Alignment for the South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment. In addition, Region staff were also directed to proceed with preliminary design of the corridor and continue consultation with the public in determining opportunities to minimize and/or mitigate impacts to the natural and social environment in completion of the Class EA.
# APPENDIX “C-1”
## Comparative Evaluation – Intersection Control Design Alternatives

### Water Street / South Boundary Road

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>Signalized Intersection</th>
<th>Roundabout</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAFFIC OPERATIONS &amp; SAFETY</strong></td>
<td>Provides a high level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians.</td>
<td>Provides a high level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians. Fewer expected injury collisions than signalized intersection. Provides speed control along roadways.</td>
</tr>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td>Compatible with adjacent land use. Minor property impacts.</td>
<td>Compatible with adjacent land use. Moderate property impacts.</td>
</tr>
<tr>
<td><strong>NATURAL ENVIRONMENT</strong></td>
<td>No impacts to embankment on the west side.</td>
<td>Minor impacts to embankment on west side. Results in lower pollutant output due to reduced starts and stops.</td>
</tr>
<tr>
<td><strong>HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS</strong></td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
</tr>
<tr>
<td><strong>COST</strong> (Estimated Construction Cost + 20yr Injury Collision Cost)</td>
<td>$1,190,000</td>
<td>$1,165,000</td>
</tr>
</tbody>
</table>

| Overall Rank | 2nd | 1st |

![Desirability Scale](image)
### APPENDIX “C-2”
Comparative Evaluation – Intersection Control Design Alternatives

#### Franklin Boulevard / South Boundary Road

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>Stop Controlled Intersection</th>
<th>Roundabout</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAFFIC OPERATIONS &amp; SAFETY</strong></td>
<td>Provides a good level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians.</td>
<td>Provides a high level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians. Potential to reduce the number and severity of injury collisions. Provides speed control along roadways. Provides U-turn movement for Franklin Blvd traffic.</td>
</tr>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td>Compatible with adjacent land use. Minor property impacts.</td>
<td>Compatible with adjacent land use. Minor property impacts.</td>
</tr>
<tr>
<td><strong>NATURAL ENVIRONMENT</strong></td>
<td>Moderate intrusion into the natural area immediately south of the intersection.</td>
<td>No intrusion into the natural area immediately south of the intersection. Results in lower pollutant output due to reduced stops and stops.</td>
</tr>
<tr>
<td><strong>HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS</strong></td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
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<tr>
<td><strong>COST</strong> <em>(Estimated Construction Cost + 20yr Injury Collision Cost)</em></td>
<td>$675,000</td>
<td>$855,000</td>
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<tr>
<td><strong>Overall Rank</strong></td>
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<td>1st</td>
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![Desirability Scale](image-url)
### APPENDIX “C-3”
Comparative Evaluation – Intersection Control Design Alternatives

#### Branchton Road / South Boundary Road

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>Stop Controlled Intersection</th>
<th>Roundabout</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAFFIC OPERATIONS &amp; SAFETY</strong></td>
<td>Provides a good level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians.</td>
<td>Provides a high level of service for traffic operations. Fewer expected injury collisions than stop-controlled. Would provide increased speed control along South Boundary Road consistent with lower desired operating speeds east of Branchton Road.</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td>Compatible with adjacent land use. Moderate to high property impacts.</td>
<td>Compatible with adjacent land use. Would provide a visual gateway into the residential area north of the intersection. Moderate to high property impacts.</td>
<td></td>
</tr>
<tr>
<td><strong>NATURAL ENVIRONMENT</strong></td>
<td>No impacts to environmentally sensitive areas.</td>
<td>No impacts to environmentally sensitive areas. Results in lower pollutant output due to reduced starts and stops.</td>
<td></td>
</tr>
<tr>
<td><strong>HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS</strong></td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
<td></td>
</tr>
<tr>
<td><strong>COST</strong> (Estimated Construction Cost + 20yr Injury Collision Cost)</td>
<td>$300,000</td>
<td>$1,200,000</td>
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<th>Overall Rank</th>
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<th>1st</th>
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</table>

### APPENDIX “C-4”
Comparative Evaluation – Intersection Control Design Alternatives

#### Dundas Street / South Boundary Road

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>Signalized Intersection</th>
<th>Roundabout</th>
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</thead>
<tbody>
<tr>
<td><strong>TRAFFIC OPERATIONS &amp; SAFETY</strong></td>
<td>Provides high level of service for traffic operations.</td>
<td>Provides high level of service for traffic operations.</td>
</tr>
<tr>
<td></td>
<td>Adequately addresses safety needs for motorists, cyclists and</td>
<td>Adequately addresses safety needs for motorists,</td>
</tr>
<tr>
<td></td>
<td>pedestrians.</td>
<td>cyclists and pedestrians.</td>
</tr>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td>Compatible with adjacent land use.</td>
<td>Compatible with adjacent land use.</td>
</tr>
<tr>
<td></td>
<td>Moderate to high property impacts.</td>
<td>Moderate to high property impacts.</td>
</tr>
<tr>
<td><strong>NATURAL ENVIRONMENT</strong></td>
<td>No impacts to environmentally sensitive areas.</td>
<td>No impacts to environmentally sensitive areas.</td>
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<tr>
<td><strong>HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS</strong></td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
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<td><strong>COST (Estimated Construction Cost + 20yr Injury Collision Cost)</strong></td>
<td>$1,920,000</td>
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**Overall Rank**

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</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>1st</td>
</tr>
</tbody>
</table>

![Comparison Chart]

[Legend for Comparison Chart: Least Desirable to Most Desirable]
## APPENDIX “C-5”
### Comparative Evaluation – Intersection Control Design Alternatives

### Myers Road / Franklin Boulevard

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>Signalized Intersection</th>
<th>Roundabout</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAFFIC OPERATIONS &amp; SAFETY</strong></td>
<td></td>
<td>Provides a high level of service for traffic operations. Adequately addresses safety needs for motorists, cyclists and pedestrians. Fewer expected injury collisions than signalized intersection.</td>
</tr>
<tr>
<td><strong>SOCIAL ENVIRONMENT</strong></td>
<td></td>
<td>Compatible with adjacent land use. Minor property impacts. Significant property impacts. Potential for mitigation.</td>
</tr>
<tr>
<td><strong>NATURAL ENVIRONMENT</strong></td>
<td></td>
<td>No impacts to environmentally sensitive areas. Results in lower pollutant output due to reduced starts and stops.</td>
</tr>
<tr>
<td><strong>HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS</strong></td>
<td></td>
<td>No impacts to built heritage, cultural or archaeological features.</td>
</tr>
<tr>
<td><strong>COST (Estimated Construction Cost + 20yr Injury Collision Cost)</strong></td>
<td>$1,270,000</td>
<td>$1,225,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Rank</th>
<th>2nd</th>
<th>1st</th>
</tr>
</thead>
</table>

![Desirable Scale](image)

DOCS #847667
Page 17 of 36
## APPENDIX “C-6”

### 20-Year Life-Cycle: Intersection Control Alternatives

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Estimated Capital Cost</th>
<th>Projected 20-Year Injury Collision Cost</th>
<th>Total - Estimated Overall Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-way Stop Control</td>
<td>Signalized Intersection</td>
<td>Roundabout</td>
</tr>
<tr>
<td>Franklin Blvd./Myers Rd.</td>
<td>-----</td>
<td>$880,000</td>
<td>$1,070,000</td>
</tr>
<tr>
<td>South Boundary Rd./Water St.</td>
<td>-----</td>
<td>$863,000</td>
<td>$1,078,000</td>
</tr>
<tr>
<td>South Boundary Rd./Franklin Blvd.</td>
<td>$617,000</td>
<td>-----</td>
<td>$772,000</td>
</tr>
<tr>
<td>South Boundary Rd./Branchton Rd.</td>
<td>$884,000</td>
<td>-----</td>
<td>$1,065,000</td>
</tr>
<tr>
<td>South Boundary Rd./Dundas St.</td>
<td>-----</td>
<td>$1,210,000</td>
<td>$1,262,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$4,454,000</td>
<td>$5,247,000</td>
<td>$1,581,000</td>
</tr>
</tbody>
</table>
### SOUTH BOUNDARY RD AND FRANKLIN BLVD EXTENSION CLASS ENVIRONMENTAL ASSESSMENT

**PUBLIC INPUT MEETING**

**SUMMARY OF PUBLIC COMMENTS RECEIVED AND PROJECT TEAM RESPONSES**

*Region of Waterloo Planning and Works Committee, May 6, 2010*

Cambridge Christian School, 229 Myers Rd, Cambridge, Ontario

<table>
<thead>
<tr>
<th>NAME</th>
<th>SPEAKER QUESTIONS / CONCERNS</th>
<th>REGION / PROJECT TEAM RESPONSE</th>
</tr>
</thead>
</table>
| 1 Jan Liggett | ● Speaker queried the span of the structure over Cheese Factory Road, and proposed that the Cheese Factory Rd structure would not be necessary if the South Boundary Rd followed the alignment of Waynco Road. | ● Region staff advised that the Waynco Rd alternative was considered and not recommended based on potential impacts such as:  
  ○ Franklin Blvd would need to be extended further south to intersect South Boundary Rd at Waynco Rd, at additional costs and through environmentally significant areas  
  ○ Additional property takings would be required to widen South Boundary Rd on the Waynco Rd alignment  
  ○ Local access would not be permitted on a controlled access roadway, requiring either buyouts of a number of properties, or the construction of service roads  
  ○ Lengthy structures would be required to span the wetland areas, and would result in significant environmental impact due to the construction of piers and abutments. |
| 2 David Falle | ● Expressed concern that construction of a Roundabout at Franklin & Myers will result in significant impacts to the Church at that location, including property, parking and access. | ● Meetings have been held with Church officials to review the design issues.  
  ● The Region will continue to meet with Church officials to further review any impacts and concerns, and potential for mitigation. |
### APPENDIX “D-2”

**South Boundary Corridor and Franklin Boulevard Extension Class EA**

**PIM Summary of Public Comments Received and Project Team Responses**

<table>
<thead>
<tr>
<th>NAME</th>
<th>SPEAKER QUESTIONS / CONCERNS</th>
<th>REGION / PROJECT TEAM RESPONSE</th>
</tr>
</thead>
</table>
| 3    | Len Stuiver                  | - A Noise Study has been completed for the proposed SBR in accordance with MOE guidelines and Region policies.  
- The projected noise level along the rear of properties on Langlaw Dr is calculated to be 59 dBA which is less than a 5 dBA increase from the existing noise level of 55 dBA, being the threshold for requiring noise barriers per Regional policy. As such no additional noise mitigation is proposed.  
- The noise study is based upon calculating existing and projected noise levels using traffic volumes, topography and other parameters. The Noise Study was completed assuming the full 4-Lane construction. The noise model does not consider the impact of the specific vehicles such as the motorcycle without baffles or the use of truck engine brakes.  
- The proposed preliminary design for SBR includes for a multi-use trail and the potential for landscaping on the north side which could assist in providing a buffer along the rear of properties on Langlaw Drive. Landscaping opportunities will be identified during detail design.  
- Initial construction of SBR, from Franklin Blvd to Water St, and Franklin Blvd extension, is currently proposed for 2015/2016, subject to detail design, property acquisition, and approvals.  
- Widening of SBR and Franklin Blvd to four lanes, and the extension of SBR from Franklin Blvd to Dundas St, will be constructed when future traffic capacity needs are required. |
### APPENDIX “D-3”

**South Boundary Corridor and Franklin Boulevard Extension Class EA**

**PIM Summary of Public Comments Received and Project Team Responses**

<table>
<thead>
<tr>
<th>NAME</th>
<th>SPEAKER QUESTIONS / CONCERNS</th>
<th>REGION / PROJECT TEAM RESPONSE</th>
</tr>
</thead>
</table>
| 4 Alexander Dammert       | - Requested clarification on the alignment of SBR from Cheese Factory Rd to Water St and how close it would be to the properties on Langlaw Dr.                                                                                   | - Region staff advised that the SBR corridor would be a minimum of 50 metres in width and wider for required grading.  
- Region staff advised that the corridor would be directly adjacent to the rear property lines along Langlaw Dr; however, the road will be slightly shifted to the south side of the corridor to provide opportunities for a vegetated buffer and landscaping along the north side adjacent to the rear of private properties. |
| 5 Ben Tucci               | - Expressed concern regarding noise levels.  
- Requested Regional Council consider providing noise barriers including allocation of funds as he believes they will be required.                                               | - Region staff identified that the Regional Noise Study guidelines allow affected property owners to request another noise study to be done within 5 years of the road being constructed. The need for noise barriers would again be reviewed and considered as per the Region’s Policies. |
| 6 Cesar Fernandes         | - Expressed concern regarding noise levels and property impacts.  
- Requested clarification on how noise levels were determined.                                                                                                   | - Region staff identified that the Noise study was completed in accordance with the Ministry of Environment Noise Guidelines and Regional Policies (see response to #3 above).  
- The noise analysis calculations are based on volume of traffic and the type of traffic as an average over the day, identifying that it is not a peak or a one time incident volume of noise. Calculations are also based on a distance of separation from the travelling traffic to the rear yard area of the property as well as the difference in elevation between them.  
- The Noise study is based on calculated levels and not on field measurements.                                                                                      |
## APPENDIX “D-4”

### South Boundary Corridor and Franklin Boulevard Extension Class EA

#### PIM Summary of Public Comments Received and Project Team Responses

<table>
<thead>
<tr>
<th>NAME</th>
<th>SPEAKER QUESTIONS / CONCERNS</th>
<th>REGION / PROJECT TEAM RESPONSE</th>
</tr>
</thead>
</table>
| 7 Nancy Fabbro | • Speaker expressed the view that the SBR alignment should follow Waynco Road.  
• Noted that accidents on Hwy 24 have resulted in traffic detoured onto Cheese Factory Rd four times in the past year, and that the Waynco Rd alignment would alleviate Cheese Factory Rd traffic. | • Region staff advised that the Waynco Rd alternative was considered and not recommended based on potential impacts as identified per the response to Speaker #1 above.  
• Region staff advised that the SBR is proposed to alleviate traffic that travels from the south end of Cambridge/ north end of the Township of North Dumfries to the north end of Cambridge/ Hwy 401 area.  
• Emergency detour routes for accidents on Water St/ Hwy 24 south of SBR would still consider existing side roads, such as Waynco Rd and Cheese Factory Rd, as detour alternatives. |
| 8 Keith Gosse | • Expressed concern for excessive traffic speeds on Branchton Road and Dundas Street where roundabouts are proposed, and requested consideration of speed control measures. | • Region staff advised that speed limits will be posted on these roads and the provision of roundabouts will cause drivers to slow down to yield to traffic and also to negotiate the geometric design of the roundabout. |

*Note:*
The comments and concerns noted above are also available from the Regional Planning & Works Committee Minutes.
APPENDIX “E-1”

South Boundary Corridor and Franklin Boulevard Extension Class EA
Summary of Main Concerns Raised by the Public and Project Team Responses

Noise Impacts

A number of comments were received with respect to concerns about an increase in noise levels associated with traffic, especially trucks, and the close proximity of both the South Boundary Road and Franklin Boulevard Extension to residential properties. Many have requested consideration for providing noise walls.

Project Team Response:

A Noise Study has been undertaken for the proposed corridor alignment and intersection control design alternatives for assessment of mitigation requirements such as noise barriers, in accordance with the Region’s Noise Guidelines and MOE guidelines. The results of the noise study indicate that projected noise levels along both the South Boundary Road and Franklin Boulevard Extension are predicted to be less than 5 dB over the existing ambient levels associated with the Outdoor Objective of 55 dBA, and less than 65 dBA as the maximum threshold requiring mitigation considerations. In addition, a previous noise study completed as part of the Empire Homes Development identified that noise walls would not be required along Franklin Boulevard with the exception of recommending noise mitigation on the west side of Franklin Boulevard north of Bloomington Road, which is to be provided by the developer. As a result of these noise assessment study results, under Region Noise Guidelines no additional mitigation is warranted and the Project Team is not recommending noise walls as part of this project.

Franklin Boulevard/Carpenter Street Pedestrian Crossing and Emergency Access

Many comments expressed concern with the lack of a proposed controlled pedestrian crossing at the existing local Carpenter Street crossing of the future Franklin Boulevard. In addition, some expressed concern associated with the proposed raised centre median and resulting access restrictions on Franklin Boulevard, and the potential impacts on emergency service access and response times at this location.

Project Team Response:

The Project Team’s Preferred Design Alternative includes improved pedestrian facilities for multi-use trails along both sides of Franklin Boulevard including crossings at roundabout intersections. No additional road crossings are proposed by the Project Team at this time; however, the Preferred Design Alternative includes a centre median which may provide future opportunities for a mid-block pedestrian crossing at the existing local Carpenter Street crossing of the future Franklin Boulevard (e.g. pedestrian refuge island). The need for a mid-block crossing, based on pedestrian warrants, at the Franklin Boulevard/Carpenter Street location will be reviewed during detail design.

Access requirements for emergency vehicles will be provided at the Carpenter Street intersection of Franklin Boulevard through incorporation of a proposed emergency access break in the centre median and will be determined during detail design through consultation with the Cambridge Fire Department, Regional Emergency Medical Services (EMS) and Regional Police Services.
Property Impacts

Many concerns have been received regarding the property impacts of the land requirements to facilitate the proposed South Boundary Road, Franklin Boulevard Extension, and proposed roundabouts. Specific concerns were received related to the roundabout proposed at Franklin Boulevard and Myers Road. These concerns questioned the layout of the proposed roundabout, its impact on property access and the amount of land required.

Project Team Response:

In the development of concept plans for the preliminary layout and design of the roundabout intersections, the Project Team considered options for shifting the roundabouts to minimize the overall net impacts to the properties on all corners of each intersection. During detail design further refinements to the proposed road improvements and roundabouts will be considered with a view to minimizing impacts and development of potential mitigation options where feasible.

Property Impacts at the Franklin Boulevard/Myers Road Roundabout:

The recommended roundabout at Franklin/Myers will require significant land from each of the properties on the southeast and southwest corners of the existing intersection; the former being a church and the latter being a residential farm property. Please refer to the plan view in Appendix “G-7”. The Project Team acknowledged the significant impacts to these properties but agreed to shift the roundabout to the south side of the road to avoid the total purchase of several existing homes on the north side of Myers Road. Staff had several discussions with church representatives and learned their concerns include: loss of one of their two accesses on Myers Road, impacts to traffic circulation on site, the loss of parking spaces and the relocation of their existing sign. Staff note the site has considerable undeveloped additional property on the south side of the existing church with frontage on the new Franklin Boulevard extension and on a proposed local road connected to the new Franklin Boulevard extension. In discussions with church representatives staff assured the church that during detail design all efforts will be made to maintain site circulation and the existing access. If these cannot be maintained, staff will consider allowing new accesses and parking lot modifications/expansions as part of the property negotiations.

Property Impacts at the South Boundary Road/Dundas Street Roundabout:

Concerns have also been raised about the need to buy three homes for the proposed roundabout at the intersection of South Boundary Road and Dundas Street. Through detail design, staff will look to minimize the amount of property required. It is important to note that regardless of whether traffic signals or a roundabout are constructed at this location, a minimum of three homes will have to be purchased to accommodate the alignment of the proposed South Boundary Road Corridor and the potential extension of a future East Boundary Road easterly of Dundas Street.

General Property Issues:

Some minor modifications have been made to the roundabout layouts and accesses as a result of specific concerns received from the public consultation. Access impacts associated with property acquisitions at roundabouts and alternatives for mitigation will be reviewed as part of detail design and property negotiations. Alternatives for mitigation may include modification or relocation of an existing access and/or construction of a new access as necessary.
APPENDIX “E-3

Implementation of the Recommended Design Alternative would require acquisition of portions of private property for the new road allowance, widening onto private property, obtaining temporary easements during the construction period, and the total purchase of some properties. Exact property acquisition requirements will depend on completion of detail design. Once the detail design is completed the affected property owners will be contacted by Regional Real Estate staff to discuss the necessary property acquisitions and related issues. It is the Region’s standard practice to negotiate agreements of purchase and sale with the affected property owners, based on an independent appraisal of the land’s fair market value. If agreements cannot be reached in time to meet the project schedule, the Region can acquire the needed lands through expropriation. Please see Appendix “F”, the Property Acquisition Process Information Sheet (Projects Requiring Class EA Approval), for more detailed information. Any lands disturbed as a result of construction, such as with working easements, will be restored to their current condition or better. Proposed property acquisitions associated with the Recommended Design Alternative are shown on the plans in Appendix “F”.

Traffic Operations at Roundabouts

Comments received from the public expressed concern for the ability of roundabouts to safely accommodate traffic including trucks, pedestrians and cyclists.

Project Team Response:

The capacity analysis of the proposed roundabouts on the South Boundary Road Corridor and Franklin Boulevard Extension indicates the roundabouts will provide the needed capacity for the projected traffic growth to beyond the 10 year horizon.

Roundabouts would result in lower delays for all users than traffic signals. These lower delays also result in lower fuel consumption and lower vehicle emissions. More importantly, roundabouts would result in fewer injury collisions than traffic signals. Data from North American studies and data from the Region’s existing 14 roundabouts confirm that 75% fewer injury collisions occur at roundabouts than at traffic signals. Pedestrians are also less likely to be injured at roundabouts than at traffic signals by a ratio of 2:1.

All of the proposed roundabouts will be designed to accommodate the turning movements of tractor-trailers: staff acknowledges that this does not mean that trucks can “stay in a lane” as they go through the roundabout. Truck operators need to straddle two lanes as they enter the roundabout; a practice that has already become quite common at the Region’s existing roundabouts and has not resulted in any operational problems.

Impacts on Natural Areas

Several respondents expressed concern for the potential impact on the natural environment and wildlife.

Project Team Response:

The Project Team recognizes the significant natural environmental features and wildlife that exists within the study area and has undertaken extensive studies to identify these features and evaluate the potential for impact from the Preferred Design Alternative. These studies have been coordinated with the Grand River Conservation Authority and Ministry of Natural Resources and have considered alternatives for minimizing impacts where feasible.
APPENDIX "E-4"

For the most part, the Recommended Design Alternative avoids direct impacts to natural features identified as core areas that contain ecologically sensitive or significant habitat functions. The potential for direct and indirect impacts to the natural areas within the study limits have been investigated and evaluated for identification and consideration of potential mitigation needs and measures. Mitigation measures, such as woodland edge pre-stressing, habitat compensation, and incorporation of a naturalized barrier with contour grading and landscaping, will be considered during the detail design and approvals phase in order to minimize and offset any direct and indirect impacts on the natural areas. In areas where existing wetlands are impacted and/or fragmented, mitigation measures such as wildlife crossings are being proposed to ensure that the ecological linkage is maintained. In addition, areas of wetland loss will be assessed in greater detail as part of a Scoped Environmental Impact Study (EIS) to be undertaken during the detail design. The Scoped EIS will consider the need for compensatory mitigation (i.e. "no net loss of habitat") which would involve replacing/recreating an equal amount of lost wetland. These measures will be further discussed in the Environmental Study Report for this project and will be considered during detail design through necessary approvals from the Grand River Conservation Authority and Ministry of Natural Resources.

**Landscaping Opportunities**

Comments received from the public indicated a desire for a significant level of landscaping along the corridor in order to provide a buffer to adjacent properties and create a green space within the centre median.

**Project Team Response:**

The Region’s standard practices for road construction incorporate natural landscaping components such as tree planting and low level vegetation which can provide a visual buffer to adjacent properties and create a green space within the centre median. The amount, type, and location of landscaping will be addressed during the detail design.
APPENDIX “F-1”

Property Acquisition Process Information Sheet
(Projects requiring Class Environmental Assessment Approval)

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

Once the Class Environmental Assessment is complete and the Environmental Study Report outlining the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans
After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawings are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff
Once the PIPs are available, Regional Real Estate staff will contact the affected property owners by telephone and mail to introduce themselves and set-up initial meetings to discuss the project and proposed acquisitions.

Initial Meetings
The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties
The goal is always to reach a fair and equitable agreement for both the property owner and the Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

Steps Toward Offer of Settlement or Agreement of Purchase and Sale
The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
APPENDIX “F-2”

3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

Expropriation
Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario Expropriations Act must be followed to ensure that the rights of the property owners provided under that Act are protected.

For information on the expropriation process, please refer to ‘Expropriation Information Sheet’.
APPENDIX “G-1”
Recommended Design Alternative
APPENDIX “G-2”
Recommended Design Alternative
APPENDIX “G-3”
Traffic Control at South Boundary Road and Water Street – Roundabout
Recommended Design Alternative
APPENDIX “G-4”
Traffic Control at South Boundary Road and Franklin Boulevard – Roundabout
Recommended Design Alternative

Traffic Control at South Boundary Road and Franklin Boulevard – Roundabout
Preferred Design Alternative

Legend:
- Proposed Property Line
- Existing Property Line
- Limit of Grading
APPENDIX “G-5”
Traffic Control at South Boundary Road and Branchton Road – Roundabout
Recommended Design Alternative
APPENDIX "G-6"
Traffic Control at South Boundary Road and Dundas Street – Roundabout
Recommended Design Alternative

Legend:
- Proposed Property Line
- Existing Property Line
- Limit of Grading

ROUNDABOUT AT
SOUTH BOUNDARY ROAD AND DUNDAS STREET
APPENDIX “G-7”
Traffic Control at Franklin Boulevard and Myers Road – Roundabout
Recommended Design Alternative
APPENDIX “G-8”
Traffic Control at South Boundary Road and Cheese Factory Road – Grade Separated Overpass
Recommended Design Alternative
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: February 15, 2011

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR JANUARY 2011

RECOMMENDATION:


SUMMARY:

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

1. Approved the following part lot control exemption by-law;
2. Accepted the following plan of condominium;
3. Draft approved the following plan of condominium;
4. Modified the following draft plan of subdivision;
5. Released for registration the following plans of subdivision and plans of condominium; and
6. Approved the following official plan amendments.

REPORT:

City of Cambridge

1. Registration of Draft Plan of Subdivision 30T-05102
Draft Approval Date: May 28, 2008
Phase: Stage 1
Applicant: Chrisview Custom Homes Ltd.
Location: Water Street and Myers Road
Proposal: To permit the development of 28 single detached units.
Processing Fee: Paid November 26, 2010
Commissioner’s Release: January 13, 2011

City of Kitchener

1. Registration of Draft Plan of Subdivision 30T-06201
Draft Approval Date: February 6, 2009
Phase: Entire Plan
Applicant: Kenmore Homes (Waterloo) Region Inc.
Location: Pioneer Tower Road
Proposal: To permit the development of 30 single detached units.
Processing Fee: Paid January 21, 2011
Commissioner’s Release: January 24, 2011
2. **Registration of Draft Plan of Condominium 30CDM-10208**

   **Draft Approval Date:** October 21, 2010  
   **Phase:** Entire Plan  
   **Applicant:** 1117691 Ontario Inc. and Nick Georgiades  
   **Location:** 76 Sydney Street South  
   **Proposal:** To permit the development of 34 apartment condominium units.  
   **Processing Fee:** Not applicable  
   **Commissioner’s Release:** January 25, 2011

**City of Waterloo**

1. **Plan of Condominium Application 30CDM-11401**

   **Date Accepted:** January 31, 2011  
   **Applicant:** 221853 Ontario Inc. and Nickolas Georgiades  
   **Location:** 133 Park Street  
   **Proposal:** To permit the development of 18 residential condominium units.  
   **Processing Fee:** Paid January 20, 2011

2. **Draft Approval of Plan of Condominium 30CDM-10407**

   **Applicant:** Pepbridge Development GP Inc.  
   **Location:** 42 Bridgeport Road East  
   **Proposal:** To permit the development of 55 residential and 5 commercial units.  
   **Processing Fee:** Paid December 22, 2010  
   **Commissioner’s Approval:** January 21, 2011  
   **Came Into Effect:** February 11, 2011

3. **Modification to Draft Plan of Subdivision 30T-07402**

   **Draft Approval Date:** August 5, 2008  
   **Applicant:** Clair Hills Development Inc.  
   **Location:** Bamberg Crescent  
   **Proposal:** To permit 10 additional lots.  
   **Processing Fee:** Paid December 3, 2010  
   **Commissioner’s Approval:** January 7, 2011  
   **Came Into Effect:** Immediately

4. **Official Plan Amendment No. 78**

   **Applicant:** BPR Developments Inc.  
   **Location:** 36-40 Regina Street North  
   **Proposal:** To re-designate 0.13 hectare of land from “Low Density 4 Storeys” to “Medium Density 6 Storeys”, to permit 4 additional residential dwellings.  
   **Processing Fee:** Paid January 5, 2011  
   **Commissioner’s Approval:** January 11, 2011  
   **Came Into Effect:** January 31, 2011

**Township of Woolwich**

1. **Part Lot Control Exemption By-law 4-2011**

   **Applicant:** Empire Communities (Riverland)  
   **Location:** Trowbridge Street  
   **Proposal:** To permit the creation of 13 townhouse units.  
   **Processing Fee:** Paid January 27, 2011  
   **Commissioner’s Approval:** January 28, 2011
2. **Registration of Draft Plan of Subdivision 30T-97008**
   - Draft Approval Date: April 3, 2003
   - Phase: Stage 2b
   - Applicant: Empire Communities (Riverland)
   - Location: Woolwich Street, Breslau
   - Proposal: To permit the development of 22 single detached units.
   - Processing Fee: Paid December 16, 2010
   - Commissioner’s Release: January 4, 2011

3. **Registration of Draft Plan of Subdivision 30T-97008**
   - Draft Approval Date: April 3, 2003
   - Phase: Stage 2c
   - Applicant: Empire Communities (Riverland)
   - Location: Woolwich Street, Breslau
   - Proposal: To permit the development of 42 single detached units.
   - Processing Fee: Paid December 16, 2010
   - Commissioner’s Release: January 4, 2011

4. **Registration of Draft Plan of Condominium 30CDM-10705**
   - Draft Approval Date: December 2, 2010
   - Phase: Entire Plan
   - Applicant: Thomasfield Homes Ltd.
   - Location: Townsend Circle
   - Proposal: To permit 1 landscaping block.
   - Processing Fee: January 5, 2011
   - Commissioner’s Release: January 7, 2011
   - Official Plan Amendment No. 17
     - Applicant: 2079993 Ontario Inc., Lunor Group Inc., 229249 Ontario Limited, Oak Leaf Farms and District Association for Community Living
     - Location: 88, 90, 122, 128 and 158 Church Street West, Elmira
     - Proposal: To re-designate portions on lands from “Residential and Ancillary Use” to “Service Commercial” to facilitate a future residential development, including some convenience and service commercial type uses.
     - Processing Fee: Paid December 1, 1010
     - Commissioner’s Approval: January 13, 2011
     - Came Into Effect: February 3, 2011

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

<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>
</tr>
</thead>
<tbody>
<tr>
<td><em>Kitchener</em></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:

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</tbody>
</table>

*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 associated 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 consistent with the streamlining objectives reflected in Focus Area 1: Manage Regional Growth to Enhance Quality of Life in the Corporate Strategic Plan.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Andrea Banks, Program Assistant

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: February 15, 2011
FILE CODE: D01-01

SUBJECT: APPEALS TO THE NEW REGIONAL OFFICIAL PLAN

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the following actions, as described in Report P-11-013, dated February 15, 2011 with respect to the new Regional Official Plan:

a) Ratify the Notice of Appeal dated January 21, 2011 filed by the Regional Commissioner of Planning, Housing and Community Services at the direction of Regional Council with respect to the Notice of Decision of the Minister of Municipal Affairs and Housing dated December 22, 2010;

b) Request the Ontario Municipal Board to move immediately toward a pre-hearing to identify the parties and participants of the hearing, and clarify and/or reduce the number of issues under appeal; and

c) Authorize Regional staff to participate and take any necessary steps in the Ontario Municipal Board process, including the negotiation and resolution of appeals, and direct the Regional Solicitor to retain such experts and legal counsel, all as deemed necessary and appropriate, by the Regional Solicitor and the Commissioner of Planning, Housing and Community Services to protect the Regional interest in this matter, as expressed by Regional Council through the adoption of the new Regional Official Plan on June 16, 2009 and in subsequent submissions to the Province.

SUMMARY:

This report provides a summary of the appeals that have been filed with respect to the new Regional Official Plan (ROP). A total of 21 appeals have been submitted on a wide range of planning policy and land use matters. Most of the appeals were submitted by individuals and corporations with development interests across the Region. Some recurring issues include the Regional Land Budget, the application of the reurbanization and density targets, and the desire to designate additional land for development.

In an effort to keep the public informed of the ongoing approval process, information letters were sent by the Region on January 5, 2011 to all the stakeholders on the ROP mailing list. The letter informed stakeholders about the Minister’s approval of the new ROP, where to view a copy of the Notice of Decision, and the steps and deadlines involved in filing an appeal to the OMB. The letter was distributed to approximately 1,020 groups, individuals or corporations. A copy of the letter was hand delivered to the three landowners in the southwest area of the City of Kitchener who appeared before Regional Council in June 2009 and indicated they did not receive copies of the Region’s previous public notifications regarding the new ROP. A copy of the letter and the Minister’s Notice of Decision was also posted on the Region’s website. This notification is over and above the statutory notification requirements, which are the sole responsibility of the Province.
Of the 21 appeals submitted, one was filed by the Regional Commissioner of Planning, Housing and Community Services at the direction of the Regional Council, and another was filed by the Township of Woolwich. Both appeals pertain to the decision by the Minister of Municipal Affairs and Housing to modify several ROP policies related to source water protection and mineral aggregate extraction, and pertain to the same policies.

To confirm the Region’s appeal, this report seeks Regional Council’s ratification of the Notice of Appeal filed by the Regional Commissioner. It also requests authorization for Regional staff to participate and take any necessary steps in the Ontario Municipal Board process, including the negotiation and resolution of appeals, and direct the Regional Solicitor to retain such experts and legal counsel, all as deemed necessary and appropriate, by the Regional Solicitor and the Commissioner of Planning, Housing and Community Services to protect the Regional interest in this matter, as expressed by Regional Council through the adoption of the new Regional Official Plan on June 16, 2009 and in subsequent submissions to the Province.

One of the main reasons for the Region’s appeal is to protect the Region’s groundwater resources. The Region of Waterloo is the largest municipality in Canada primarily dependent on groundwater sources for its municipal water supply. Approximately 75 per cent of the Region’s water supply comes from groundwater sources. Extracting mineral aggregates close to, or below, the water table has the potential to impact the quantity and quality of water, including both vulnerable and sensitive groundwater resources. Such impacts could potentially result in the need for more expensive water treatment measures and/or the closure of municipal wells.

It is important to emphasize that the Region’s appeal affects only a small number of policies in the Council adopted ROP. On the whole, the Province continues to support the new ROP and how it implements the Provincial Policy Statement, the Growth Plan for the Greater Golden Horseshoe and other Provincial policies and legislation.

Regional staff has met with the Area Municipalities to review the appeals and explain the next steps in the process. Each of the Area Municipalities is currently in various stages of updating their Official Plans to conform to the new ROP. To avoid delays, Regional staff has advised the Area Municipalities to continue working on their Official Plans during the appeal process.

Regional staff will report back to Regional Council from time-to-time, as appropriate, to keep Council informed and to seek further direction from Regional Council with respect to the appeals.

**REPORT:**

After nearly 18 months of review and negotiation, the Minister of Municipal Affairs and Housing approved the new Regional Official Plan (ROP), with modifications, on December 22, 2010. The Minister’s approval was released in a Notice of Decision dated January 4, 2011, and was subject to a 20 day appeal period under the Planning Act.

In an effort to keep the public informed of the ongoing approval process, information letters were sent by the Region on January 5, 2011 to all the stakeholders on the ROP mailing list. The letter informed stakeholders about the Minister’s approval of the new ROP, where to view a copy of the Notice of Decision, and the steps and deadlines involved in filing an appeal to the OMB. The letter was distributed to approximately 1,020 groups, individuals or corporations. A copy of the letter was hand delivered to the three landowners in the southwest area of the City of Kitchener who appeared before Regional Council in June 2009 and indicated they did not receive copies of the Region’s previous public notifications regarding the new ROP. A copy of the letter and the Minister’s Notice of Decision was also posted on the Region’s website. This notification is over and above the statutory notification requirements, which are the sole responsibility of the Province.
Most of the parties who filed an appeal have development interests in various land holdings across
the Region, including the southwest corner of the City of Kitchener and other parts of the Region.
Some appellants are challenging the methodology and results of the Regional Land Budget in
seeking the designation of additional land for urban development. Other key policies under appeal
certain to the Countryside Line, and the new Protected Countryside and Regional Recharge Area
designations. Some of the appeals also relate to smaller, site-specific matters.

Due to the scope of the appeals, the entire ROP is now before the Board and, as a result, has yet to
come into force and effect. Subject to Regional Council’s authorization, Regional staff will request
the OMB to move immediately to a pre-hearing to identify the parties and participants of the hearing,
and to clarify and/or scope the matters under appeal. A brief summary of each appeal is given
below.

Appeal Submitted by the Region of Waterloo

The Minister’s Notice of Decision included several modifications to the maps and policies the ROP.
The vast majority of the modifications are minor in nature and include additional changes
recommended by Region Council after the ROP was adopted. These additional changes were
recommended by Regional Council in a resolution passed on June 30, 2010 (see Report No. P-10-
056 dated June 22, 2010). Taken as a whole, the Province continues to be very supportive of the
new ROP and the manner in which it implements the Provincial Policy Statement, the Growth Plan
for the Greater Golden Horseshoe and other Provincial policies and legislation.

Notwithstanding the Province’s support, the Minister has made some significant modifications to the
ROP that are inconsistent with the policy direction as adopted by Regional Council. It is Regional
staff’s opinion that these modifications also do not represent good land use planning, and are not
consistent with or do not comply with various Provincial statutes, regulations or policies. The main
reasons for the Region’s appeal are summarized below. A copy of the Region’s Notice of Appeal is
provided in Appendix A.

Source Water Protection

The Region of Waterloo is the largest municipality in Canada primarily dependent on groundwater
sources for its municipal water supply. These resources supply approximately 75 per cent of the
Region’s total water supply. The extraction of mineral aggregates close to, or below, the water table
has the potential to impact the quantity and quality of water, including both vulnerable and sensitive
groundwater resources. These impacts could potentially result in the need for more expensive water
treatment measures and/or the closure of municipal wells. For these reasons, the Council adopted
ROP includes policies to prohibit certain high risk land uses, including mineral aggregate extraction,
within the two-year time of travel capture zone around a municipal drinking-water supply well. The
Minister revised these policies such that they will remain in effect only until the ROP has been
amended to incorporate the Source Protection Plans currently being developed by the Province.
Regional staff does not support these modifications as they could potential result in a lower level of
source water protection than is provided in policies of the Council adopted ROP.

Vertical Zoning/Depth of Aggregate Extraction

The adopted ROP includes several provisions related to the vertical zoning of mineral aggregate
operations. The Minister has deleted these provisions and removed the requirement for the Region’s
Area Municipalities to set the vertical limits (i.e., depth of extraction) of aggregate extraction in a
zoning by-law passed under the Planning Act. Regional staff does not support these modifications
because they fail to recognize the authority Area Municipalities have under the Planning Act to
restrict the use of land, including mineral aggregate extraction. This authority includes the right to set
both the horizontal and vertical limits of any given land use in Area Municipal zoning by-laws.
Aggregate Extraction Below the Water Table

The Council adopted ROP contains policies that require a ROP amendment prior to allowing the extraction of mineral aggregates below the water table within Prime Agricultural Areas. The Minister’s modifications deleted these specific provisions. Regional staff does not support these modifications because they do not appropriately address the potential long-term planning implications of aggregate extraction below the water table on Prime Agricultural Lands.

Subwatershed Scale Hydrogeological Studies

Policies in the adopted ROP require the completion of a subwatershed-scale hydrogeological study prior to allowing an application for aggregate extraction below the water table. This policy is needed to assess the potential cumulative impacts of extraction below the water table at the subwatershed level. The Minister has modified this policy to require instead “a hydrogeological cumulative impacts assessment in accordance with best practice guidelines established by the Grand River Conservation Authority, Ontario Stone Sand and Gravel Association, and Ministry of Natural Resources”. Compliance with these “best practice guidelines” as currently written is voluntary, thereby effectively eliminating any mandatory compliance. Regional staff does not support this modification because it would potentially establish a lower standard of groundwater protection.

Aggregate Extraction within Environmentally Sensitive Policy Areas

Environmentally Sensitive Policy Areas (ESPAs) have been the cornerstone of the Region’s environmental planning policies since 1976. Given their significance, policies of the adopted ROP prohibit outright any aggregate extraction within those portions of Core Environmental Features meeting the criteria of ESPAs. The Minister has modified these policies to permit aggregate extraction within ESPAs under certain conditions. Regional staff does not support these modifications. The Minister’s modifications fail to recognize the ecological significance of ESPAs, many of which are as significant, if not more significant than some ecological communities located within areas identified as Provincially Significant Wetlands (PSWs) by the Ministry of Natural Resources. The Minister’s modification would weaken the Region’s long standing policy to protect ESPAs.

Clerical Errors Included in the Minister’s Decision

The Minister’s decision includes several clerical errors that affect various policies and a portion of Map 7. The version of Map 7 appended to the Minister’s Notice of Decision does not designate the southwest corner of the City of Kitchener as Protected Countryside, as specifically recommended by Regional Council in a resolution passed on June 30, 2010. In discussions with Regional staff, the Ministry of Municipal Affairs and Housing confirmed that an incorrect copy of Map 7 had been included in the Notice of Decision, and that the Ministry had no objection to the modification as recommended by Regional Council. The Ministry advised the Region to appeal the affected policies and mapping so that they may be corrected by the Board. In a follow-up letter dated February 2, 2011, the Ministry confirmed that it is prepared to work with the Region in placing an appropriate Map 7 before the Board. A copy of this letter is provided in Appendix B.

Appeal Submitted by the Township of Woolwich

The Township of Woolwich has also filed an appeal with respect to the Minister’s decision to modify several of the ROP’s aggregate policies. The Township has appealed the same policies as the Region.
Appeals Submitted by Other Parties

1. An appeal, received from Dryden Smith & Head, on behalf of Myles Schmidt Property - City of Kitchener - 845026 Ontario Limited, on January 17, 2011 regarding the “Core Environmental” designation on their lands.

2. An appeal, received from Peter Pickfield Partner, on behalf of Lea Silvestri Investments Ltd. and 1541179 Ontario Ltd, on January 20, 2011 regarding the inclusion of their lands within the Protected Countryside in the Township of North Dumfries.

3. An appeal, received from Goodmans LLP, on behalf of Activa Holdings Inc., 2140065 Ontario Inc., 159805 Ontario Inc. and Stonefield Properties Corp., on January 21, 2011 regarding:
   (a) the methodology used by the Region to prepare the Regional Land Budget exercise;
   (b) the growth management policies respecting the Countryside, Countryside Line, Protected Countryside and associated mapping;
   (c) Regional Recharge Area designation and policies and the delineation of the wellhead protection area;
   (d) Greenlands Network policies and mapping; and
   (e) any other policies impeding the development of their lands.

4. An appeal, received from Brenda and Rusty Brissette, on January 21, 2011 regarding the Protected Countryside designation on their lands.

5. An appeal, received from Springbank Investments Inc, on behalf of Kirtaff Holdings Inc., Edmund Patrick Taylor, Linda Margaret Taylor, Mary Alma Corbett, John Kostas, on January 21, 2011 regarding policies, maps and section which impede the development of their lands.

6. An appeal, received from MHBC Planning, on behalf of William Gies, on January 24, 2011 regarding Protected Countryside designation on a portion of his lands in the Township of Woolwich.

7. An appeal, received from Bratty and Partners, LLP, on behalf of Madison Homes Inc, on January 24, 2011 regarding the exclusion of their lands from the Urban Area designation.

8. An appeal, received from Ontario Stone, Sand & Gravel Association, on January 24, 2011 regarding various mineral resource policies and study requirements.

9. An appeal, received from Connie and Robert Bogusat, on January 24, 2011 regarding the inclusion of their lands within the Protected Countryside in the City of Kitchener.

10. An appeal, received from White, Duncan, Linton LLP, on behalf of Plains Westmount Farms Limited, on January 24, 2011 regarding specific sections and maps on the basis that proper studies have not been conducted to justify the Protected Countryside and Regional Recharge Areas designations.

11. An appeal, received from Hardy Bromberg, on January 24, 2011 regarding the Protected Countryside designation and Environmentally Sensitive Landscape and Core Environmental Features designation on his property in the Township of North Dumfries.

12. An appeal, received from Townsend and Associates, on behalf of Mattamy Development Corporation, on January 24, 2011 regarding the Region's land budget methodology and development restrictions.
13. An appeal, received from Ricketts, Harris LLP, on behalf of Elaine Fratton and Howard Lemieux, on January 24, 2011 regarding the affordable housing policies which deal with the conversion of rental affordable housing to condominium ownership.

14. An appeal, received from Glen Schnarr & Associates Inc., on behalf of 2163846 Ontario Inc., (Arden Semper) on January 24, 2011 regarding the exclusion of their lands in the City of Kitchener from the urban area designation and applicable policies.

15. An appeal, received from Gowlings Lafleur Henderson, LLP, on behalf of Alfred and Rita Cutaja, Lisa and Willi Kellner, on January 24, 2011 regarding the Greenland Network, Core Environmental Features and Regional Recharge Area designation on their lands in the City of Kitchener.

16. An appeal, received from Weir Foulds LLP, on behalf of Select Sand and Gravel, Robert Kieswetter in Trust, B&B Kieswetter Excavating, Kieswetter Holdings Limited & STAMM Investments, on January 24, 2011 regarding various sections of the ROP and the glossary of terms as it relates to their interest to develop their land.

17. An appeal, received from Weir Foulds LLP, on behalf of The INCC Corp, on January 24, 2011 regarding various sections of the ROP and the glossary of terms as it relates to their interest to develop a large parcel of land for commercial purposes in the City of Waterloo and the City of Kitchener.

18. An appeal, received from Goodmans LLP, on behalf of Northgate Land Corp. and 2115881 Ontario Limited, on January 24, 2011, regarding:

   (a) the ‘Core Environmental Features’ designation on their lands in the City of Waterloo;
   (b) the methodology used by the Region to prepare the Regional Land Budget Exercise;
   (c) the Greenland Network policy requirements; and
   (d) Source Water Protection.

19. An appeal, received from Goodmans LLP, on behalf of Hallman Construction Limited and Gatestone Development Corp., on January 24, 2011, regarding:

   (a) the methodology used by the Region to prepare the Regional Land Budget exercise;
   (b) the growth management policies;
   (c) any other policies which appear to predetermine the location for growth.

Next Steps

Subject to Regional Council’s authorization, Regional staff will request the OMB to move immediately towards a pre-hearing to identify the parties and participants of the hearing, and clarify and/or reduce the number of issues under appeal. In addition, staff will continue to communicate and consult with the Area Municipalities to avoid any planning delays during the appeal process. Regional staff will report back to Regional Council from time-to-time, as appropriate, to keep Council apprised and to seek further direction from Council with respect to the appeals.

Area Municipal Consultation/Coordination

Regional staff met with Area Municipal planning staff representatives on February 10, 2011 to review the appeals to the ROP and the next steps in the approval process. Each of the Area Municipalities is currently in various stages of updating their Official Plans to conform to the new ROP. Regional staff advised the Area Municipalities to continue working on their Official Plans while the appeals to the ROP are being addressed. In addition, as noted above, the Township of
Woolwich has also decided to file an appeal with the OMB. The Township’s appeal pertains to the same policies that were appealed by the Region.

CORPORATE STRATEGIC PLAN:

The recommendations of this report directly support the Region’s priorities with respect to implementing Focus Areas 1 and 5 of the Corporate Strategic Plan.

FINANCIAL IMPLICATIONS:

The Legal Services Division has retained outside legal counsel with specialized expertise to provide assistance to Regional staff in preparing for the OMB hearings as required. Due to the complexity of the issues, Regional staff anticipates that the hearing could last for six to eight weeks, depending on the final number of participants and issues under appeal. As a result, the OMB hearing will require significant staff and financial resources, including representation by outside legal counsel, to appropriately represent the Region’s interests noted in this Report.

Funding to support Regional participation in the OMB process to the end of 2011 would be available through funding currently provided for within the proposed 2011 budget ($100,000). A request for additional funding for 2012 ($200,000) is also contained in the budget package currently being considered by Regional Council. Depending on the outcome of the pre-hearing processes, additional funds may be required. Any requests for additional funding will be brought to Regional Council for consideration after the final scope of the hearing is better understood.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Legal Services and Water Services have been directly involved in the preparation of the Region’s appeal to the OMB and concur with the recommendations of this report.

ATTACHMENTS:

Appendix B: Letter from the Ministry of Municipal Affairs and Housing dated February 2, 2011.

PREPARED BY:  
Kevin Eby, Director, Community Planning  
John Lubczynski, Principal Planner

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

HAND DELIVERED, FACSIMILE
& ORDINARY MAIL

The Hon. Rick Bartolucci, Minister of Municipal Affairs and Housing
c/o Ministry of Municipal Affairs and Housing
Municipal Services Office – Western
Ministry of Municipal Affairs and Housing
659 Exeter Road, 2nd Floor
London, ON N6E 1L3

Dear Minister:

RE: Notice of Appeal
RE: New Official Plan for the Regional Municipality of Waterloo
RE: Appeal of Decision of Ministry of Municipal Affairs and Housing dated December 22, 2010
RE: File No. 30-OP-0030-08006
RE: EBR Registry No. 010-236

The Regional Municipality of Waterloo hereby appeals the decision of the Minister of Municipal Affairs and Housing (the Minister) dated December 22, 2010 with respect to the new Regional Official Plan (ROP) adopted by the Regional Municipality of Waterloo (the Region) on June 16, 2009.

The Region hereby appeals several policies and maps, or parts thereof, as approved by the Minister. The policies and maps that are the subject matter of this appeal do not represent good land use planning and are not consistent with or do not comply with various Provincial statutes, regulations or policies.

A summary of the approved polices that are being appealed and the reasons for this appeal are more fully described below.

Policies 8.A.12 (a), 8.A.14 (a) and 8.A.16 (a)

Policies 8.A.12 (a), 8.A.14 (a) and 8.A.16 (a) are the subject of Minister’s Modification No. 43. These policies were established by the Region to prohibit certain high risk land uses, including mineral aggregate extraction, within the two-year time of travel capture zone around a municipal drinking-water supply well. The Minister’s modification revised these policies such that they will remain in
effect only for an interim period of time. Specifically, the policies will remain in effect only until such time as the ROP has been amended to incorporate the Source Protection Plans currently being developed under the Clean Water Act. The Region appeals the Minister's decision with respect to these policies for the following reasons:

- The Region of Waterloo is the owner of a municipal drinking water system where approximately 75 per cent of the water supply comes from groundwater sources. This makes the Region the largest municipality in Canada primarily dependent on groundwater sources for its municipal water supply.

- In recognition of the importance of groundwater to the Region and its area municipalities, the Region employs eight hydrogeologists within its Hydrology and Source Water Division. This Division is responsible for the planning for and implementation of water resource protection programs.

- As the owner of a municipal drinking-water system, the Region is legally obligated under the Safe Drinking Water Act to ensure that "all water provided by the system to the point where the system is connected to a user's plumbing system meets the requirements of the prescribed drinking-water quality standards."

- Under Section 3(5) of the Planning Act, any planning decisions made by the Region must be consistent with the Provincial Policy Statement (PPS). Section 2.2.1 d) of the PPS requires municipalities to protect all municipal drinking water supplies and designated vulnerable areas by implementing necessary restrictions on development and site alteration. Within the PPS, the term "site alteration" is defined as grading and excavation activities that would include aggregate extraction.

- Extracting mineral aggregate resources within the two-year time of travel capture zone around a municipal drinking-water supply well has the potential to increase the risk of groundwater contamination through spills caused during the extraction of mineral aggregates (e.g., fuel spills), or through contamination related to post-extractive land uses or activities (e.g., road salt, fuel spills, agricultural pesticides or nutrients).

- The area actually impacted by the policies restricting aggregate extraction within the two-year time of travel capture zone as proposed by the Region is less than 1.3 percent of the total Mineral Aggregate Resource Area.

- Any contamination within the Region's two-year time of travel capture zones could result in the need for more expensive water treatment measures and/or the closure of municipal wells. These problems could significantly impede the
Region's ability to meet its legal obligations under the *Safe Drinking Water Act*.

- Under the PPS, the Region is required to develop source water protection policies independent of the process to develop Source Protection Plans. The Region's policies as adopted by Regional Council can coexist with the future Source Protection Plan policies. The Region's policies are prudent, supportable and should not be viewed as having a temporary or interim status.

- Under Sections 38 and 39 of the *Clean Water Act*, the Region is obligated to implement any policies set out in the approved Source Protection Plan. However, if there is a conflict between a policy set out in the Source Protection Plan and a policy of the PPS as implemented through the ROP, the policy that provides the greatest protection to the quality and quantity of any water that is or may be used as a source of drinking water prevails.

- The policies as approved are not consistent in the context of the other source water protection policies in the ROP. In particular, the requirement to incorporate the policies of approved Source Protection Plans into the ROP only apply to three of the eight Wellhead Protection Sensitivity Areas (WPSA) designated in the ROP (i.e., they apply to WPSAs 2, 4, and 6 but not WPSAs 1, 3, 5, 7 and 8. From a source water protection perspective, this approach is inconsistent and unreasonable because it potentially reduces the level of protection relating to Category ‘A’ uses within the more sensitive WSPAs 2, 4, and 6 by making the restriction of such uses temporary, while leaving permanent the same restriction in less sensitive areas designated WSPA 3, 5, 7 and 8.


Policies 9.B.2, 9.C.1, 9.C.3, 9.C.9 and 9.D.2 are the subject of Minister's Modification Nos. 45, 46, 52 and 59. The policies contain provisions related to the vertical zoning of mineral aggregate operations. The Minister's modifications deleted those provisions and thereby removed the requirement for the Region's area municipalities to set the vertical limits of aggregate extraction in a zoning by-law passed under the *Planning Act*. The Region appeals the Minister's decision with respect to these policies for the following reasons:

- Under Section 34(1) of the *Planning Act*, municipalities have the jurisdiction to pass zoning by-laws to restrict the use of land.

- Section 34(2) of the *Planning Act* explicitly states that pits and quarries are deemed to be a use of land.
• A municipality's authority under the Planning Act to restrict the use of land includes the right to set both the horizontal and vertical boundaries of the permitted use. Therefore, municipalities have the legal authority to set the vertical limits of mineral aggregate extraction in a zoning by-law adopted under Section 34(1) of the Planning Act.

• Section 2.2.1 d) 2 of the PPS requires municipalities to protect, improve or restore vulnerable and sensitive groundwater resources. Extraction of aggregates close to, or below, the water table has the potential to impact the quantity and quality of water, including both vulnerable and sensitive groundwater resources. Therefore, the Region and its area municipalities have the legal authority and responsibility to set the vertical limits of aggregate extraction within a zoning by-law passed under the Planning Act. Vertical limits restricting aggregate extraction are required until such time as it has been appropriately demonstrated that extraction below the water table will not negatively impact the quality or quantity of groundwater resources and, if applicable, that the criteria for evaluating applications for aggregate extraction below the water table in prime agricultural areas have been met consistent with the policies of the PPS as implemented through the ROP.

Policy 9.C.13 (b)

Policy 9.C.13 (b) is the subject of Minister's Modification No. 54. This policy contains provisions relating to use of zoning regulations and development agreements to ensure that all appropriate municipal requirements resulting from the review of an application for aggregate extraction can be imposed and enforced by the municipality. The term "zoning regulations" in this policy would include regulations regarding the vertical limit of aggregate extraction on specific properties (i.e., vertical zoning). The Minister's modification deleted these provisions from the policy. The Region appeals the Minister's decision with respect to this policy for the following reasons:

• Under the Planning Act, municipalities have the legal authority to pass zoning regulations to facilitate good land use planning.

• The Planning Act also provides, subject to the issuance of a future regulation, the legal authority for municipalities to establish zoning with conditions under the provisions of Section 34(16). Section 34 (16.2) permits a municipality to require an owner of land to enter into a development agreement registered on title relating to the conditions.

• The applicability of Policy 9.C.13 (b) to any given mineral aggregate application is qualified through the words "all appropriate requirements" and "as may be applicable." This language is intended to limit the use of zoning
regulations and development agreements by a municipality to those areas legally permitted under the provisions of the Planning Act.

- Therefore, it is inappropriate to preclude the use of these planning tools by municipalities with respect to the review of applications for mineral aggregate extraction.

Policy 9.C.2 and the Preamble to Policy 9.D.1

Policy 9.C.2 and the preamble to Policy 9.D.1 are the subject of Minister's Modification Nos. 47 and 56. These policies contain provisions requiring a ROP amendment prior to allowing the extraction of mineral aggregates below the water table within prime agricultural areas. The Minister's modifications deleted these specific provisions. The Region appeals the Minister's decision with respect to Policy 9.C.2 and the preamble to Policy 9.D.1 for the following reasons:

- Consistent with the PPS, policies within the ROP permit aggregate extraction within prime agricultural areas provided that the site is rehabilitated back to an acceptable agricultural condition. This provision recognizes the interim nature of aggregate extraction and does not generally result in the permanent removal of prime agricultural land.

- Where an aggregate extraction operation would result in the permanent removal of prime agricultural land through the extraction of aggregates below the water table, the ROP sets out a planning test for evaluating the proposed operation against a series of criteria. These criteria, which are consistent with the provisions of Section 2.5.4 of the PPS, must be evaluated to establish the principle of aggregate extraction below the water table within prime agricultural areas.

- Therefore, it is appropriate and necessary to require a ROP amendment as part of the planning process for evaluating applications for below the water table extraction within prime agricultural areas.

Policies 9.D.1 (b) and 9.D.2

Policies 9.D.1 (b) and 9.D.2 are the subject of Minister's Modification Nos. 58 and 59. These policies as originally adopted by Regional Council contain provisions requiring the completion of a subwatershed-scale hydrogeological study prior to allowing an application for aggregate extraction below the water table. This requirement is necessary to evaluate the potential cumulative impacts of extraction below the water table at the subwatershed level. The Minister's modifications reduced the scope and magnitude of, and mandatory compliance
with this requirement by instead requiring "a hydrogeological cumulative impacts assessment in accordance with best practice guidelines established by the Grand River Conservation Authority, Ontario Stone Sand and Gravel Association, and Ministry of Natural Resources". The Region appeals the Minister's decision with respect to these policies for the following reasons:

- The Region of Waterloo's current Regional Official Policies Plan, as approved by the Minister of Municipal Affairs in Housing in 1995, contains provisions requiring the completion of a subwatershed-scale hydrogeological study prior to allowing extraction below the water table anywhere in the Region of Waterloo. Consequently, the proposed modification would potentially establish a lower standard of groundwater protection in the new ROP than was previously accepted and approved by the Minister in the 1995 Regional Official Policies Plan.

- In practice, applications for aggregate extraction are reviewed individually on a site-by-site basis. This approach is narrowly focused and does not give adequate consideration to the potential cumulative impacts of below the water table extraction, particularly where a new aggregate operation is proposed in a landscape already altered by other existing and former aggregate operations and with the potential for additional pits in the future.

- Successive individual decisions on aggregation extraction over a span of decades may not discern landscape level groundwater recharge, discharge and flow patterns.

- Extensive mineral aggregate extraction below the water table could also adversely impact the ability of the groundwater aquifers to continue to discharge water into the Grand River watershed in the quantity and quality necessary to ensure both the long-term health of the watershed and provide an adequate drinking water supply for communities located downstream of the Region of Waterloo.

- Requiring subwatershed-scale hydrogeological studies that address the potential cumulative impacts of below the water table extraction represents a prudent and comprehensive approach to protecting and managing the Region's natural heritage and water resources over the long term. This approach is also consistent with Section 2.2.1 a) of the PPS, which obliges municipalities to use the watershed as the meaningful scale for planning.

- The policy as approved (Policy 9.D.2 was simply deleted) would obligate the Region to review applications for below the water table extraction in accordance with best practice guidelines established by the Grand River Conservation Authority, the Ministry of Natural Resources and the Ontario Stone Sand and Gravel Association.
• It is unclear exactly what "best practice guidelines" are being referred to in the policy as approved by the Minister and the Region is left to conclude that the document being referred to is the "Cumulative Effects Assessment (Water Quality and Quantity) Best Practices Paper for Below-Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed" dated September 2010, that was referred to by the Grand River Conservation Authority in a resolution of the Authority’s Board on November 12, 2010, as “Version 1”.

• This paper was developed without the direct involvement of the Region and its area municipalities, involved limited consultation with the public and has not been subject to any natural justice process.

• Under the ROP, the Region may adopt Regional Implementation Guidelines to detail the manner in which certain policies will be implemented. The content and scope of these guidelines are to be determined by the Region, in consultation with its area municipalities and the Grand River Conservation Authority. In addition, the ROP requires public and agency notification of any proposed new or revised Regional Implementation Guidelines, and to provide an opportunity for the public to make representations before Regional Council. This process was designed to be open and transparent, and to ensure that, as stated in Policy 10.B.10, Regional Implementation Guidelines do not "introduce new policy provisions that could be the basis for denying development applications under the Planning Act, or for interfering with the natural justice rights of landowners and the public".

• The best practice guidelines referenced in Policy 9.D.1 (b) (assumed to be Version 1 of the best practices paper as noted above) was prepared without proper public and agency consultation, and has the potential to be the instrument for introducing new policy without meeting the natural justice provisions of the Planning Act. As written, the policy as modified by the Minister does not specify a specific version of the best practice guidelines and as such, the requirement established by the policy can conceivably be changed at any time by the two agencies and the Ontario Stone Sand and Gravel Association without any additional public notice or due process.

• Version 1 of the best practices paper sets out a general process for evaluating the potential cumulative impacts of aggregate extraction below the water table. As currently written, the paper encourages, but does not require, applicants to comply with the best practices described therein.

• The preamble to Policy 9.D.1 states that "mineral aggregate extraction below the water table will only be permitted (emphasis added) where" among other things, compliance is established with the referenced best practice guidelines. However, as noted above, Version 1 of the best practices paper, which is assumed to be the guidelines referenced in Policy 9.D.1, only encourages
and does not require the participation of applicants. The effect of the modification by the Minister has been to eliminate the requirement for a comprehensive (subwatershed scale) hydrogeological cumulative impact review, which has been a policy of the Region of Waterloo since 1995, and replace it with a best practices paper that applicants are simply encouraged to follow.

- Incorporating policy into the ROP that requires compliance with what is a non-regulatory (encourage only) best practices paper in place of requiring completion of a subwatershed scale hydrogeological study as has been the practice in the Region of Waterloo for over 15 years is inappropriate, does not provide adequate due process and does not represent good land use planning.

Policy 9.C.6

Policy 9.C.6 is the subject of Minister’s Modification Nos. 50 and 51. Policy 9.C.6 provides exceptions to the outright prohibition of aggregate extraction in Core Environmental Features established in Policy 7.C.8. As adopted, Policy 9.C.6 contained no provisions that would permit aggregate extraction within those portions of Core Environmental Features designated by the Region on the basis that they meet the criteria of Environmentally Sensitive Policy Areas (ESPAs). The Minister’s modifications to Policy 9.C.6 would have the effect of permitting aggregate extraction within ESPAs subject to certain conditions. The Region appeals the Minister’s decision with respect to this policy for the following reasons:

- ESPAs consist of high quality natural areas that meet exacting criteria established within the ROP. These natural areas, which were among the first municipally protected environmental areas in Canada, have been the cornerstone of the Region’s environmental planning policies since 1976.

- ESPAs contain a range of valuable habitats such as bogs, marshes, swamps, woodlands and floodplains, along with comparatively rare ecosystems such as Carolinian forest, tallgrass prairie, marl meadows, oak savannahs, coldwater streams and alvars. From an ecological perspective, these natural areas are as significant, if not more significant than some ecological communities located within areas identified as Provincially Significant Wetlands (PSWs) by the Ministry of Natural Resources. This is clearly demonstrated by the fact that some of the lands in the Region of Waterloo identified as PSW by the Province do not meet the criteria detailed in the ROP for ESPAs.

- The Region’s current Regional Official Policies Plan, as approved by the Minister in 1995, prohibits outright any and all types of aggregate extraction
within ESPAs. The Minister’s approval of the new ROP would weaken this long standing policy and establish a lower standard of protection than was previously accepted and approved by the Minister in the 1995 Regional Official Policies Plan.

- The areas of ESPAs proposed to be protected by the new ROP as adopted by Council that would now be subject to extraction under the policies as approved by the Minister represent less than 0.75 percent of the total Mineral Aggregate Resource Area.

- Establishing a lower standard of environmental protection in the new ROP is not consistent with the intent of Sections 2.1 and 4.6 of the PPS.

- Policy 9.C.6 as adopted by Regional Council refers to term “Regionally Significant Woodlands.” This term should be revised to read “Significant Woodlands” consistent with the Minister’s modifications to Policy 7.C.6.

**Policy 7.C.5 (a)**

The Region appeals the Minister’s decision with respect to Policy 7.C.5 (a) for the following reasons:

- When the Region updated the criteria for ESPAs in 1995, Provincially significant Life Science Areas of Natural and Scientific Interest (ANSIs) were listed as one of the key categories of natural heritage resources protected by the Comprehensive Set of Policy Statements (1995) and subsequently the 1996 PPS. However, during the Province’s review of the adopted ROP last year, staff of the Ministry of Natural Resource (MNR) expressed a concern with the use of this criterion due to what they considered to be the limitations of the MNR’s ANSI datasets.

- The Ministry’s concern was raised in the context the ROP policies prohibiting aggregate extraction within ESPAs. As noted during the Region’s discussions with the Province, this concern was one of the primary reasons given by MNR staff to justify the need for the Minister’s decision to permit aggregate extraction within portions of ESPAs.

- Therefore, the Region is appealing Policy 7.C.5 (a) to provide the Board an opportunity to revise this specific criterion as part of what may be an eventual resolution to the Region’s appeal of Policy 9.C.6 as noted above.
Policy 9.C.8

The Region appeals the Minister's decision with respect to Policy 9.C.8 for the following reasons:

- During the review of the aggregate policies as approved by the Minister, Regional staff noted an inconsistency in the wording associated with the review of development and site alteration proposals contiguous to Core Environmental Features as adopted by Regional Council and approved by the Minister. Policy 7.C.9 states that development or site alteration (which includes aggregate extraction) that is contiguous to Core Environmental Features will only be permitted where such development or site alteration "... would not result in adverse environmental impacts on the features and ecological functions ..." This contrasts with Policy 9.C.8, which applies specifically to aggregate extraction proposed contiguous to Core Environmental Features. The test as established through Policy 9.C.8 is "... that there will be no significant adverse environmental impacts to their features or ecological functions ...".

- The definition of adverse environmental impacts in the ROP includes a series of qualifiers regarding the significance of any potential development or site alteration impacts on land contiguous to a Core Environmental Feature. As a result, the adjective "significant" as used in Policy 9.C.8 should be deleted. The same would also apply to any future resolution of the wording of Policy 9.C.6.

- There is a need to correct an inconsistency in the policies within the ROP relating to the test associated with determining the acceptability of aggregate extraction contiguous to Core Environmental Features.

Portions of Map 4

Policy 9.C.6 of the ROP as adopted by Regional Council provides the opportunity to consider aggregate extraction within those portions of Core Environmental Features identified by the Region as Regionally Significant Woodlands and Environmentally Significant Valley Land Features.

During the review of the ROP as approved by the Minister, the Region identified the need to correct an issue in respect to the application of the version of Policy 9.C.6 as adopted by Regional Council. In order to apply Policy 9.C.6 (modified to refer to Significant Woodlands rather than Regionally Significant Woodlands consistent with the Minister's modification to Policy 7.C.6), changes are required to Map 4 to identify which natural areas have been designated as Core Environmental Features solely on the basis that they meet the test of Significant Woodlands (see Schedule 'A'). As approved, Map 4 does not identify or
separate out Significant Woodlands from the other natural areas within the Core Environmental Feature designation and as a result, it is unclear as to which lands Policy 9.C.6 applies.

There is no need to address Environmentally Significant Valley Features (ESVF) at this time as there are no Core Environmental Features meeting the criteria of ESVFs identified in the ROP at this time. The Region will be establishing ESVFs through a future amendment to the ROP following the completion of the Significant Valleylands Study.

The Region is appealing Map 4 only insofar as it fails to specifically identify which of the Core Environmental Features were designated solely on the basis that they meet the test of a Significant Woodland. The Region appeals the Minister’s decision with respect to portions of Map 4 for the following reasons:

- In the absence of the specific identification of which Core Environmental Features on Map 4 are designated solely because they meet the criteria of Provincially Significant Woodlots, Policy 9.C.6 as adopted by Regional Council (modified to correct reference to Significant Woodlands as noted above) cannot be applied since the lands to which the policy applies are not identified.
- The appeal of the identified portions of Map 4 will permit the Board to correct this deficiency in the ROP.

Portions of Policies 7.C.8 (e), 6.C.10 (d), 9.C.14 and Portion of Map 7

The Minister’s decision includes several clerical errors. These errors affect portions of Policies 7.C.8 (e), 6.C.10 (d), and 9.C.14, and a portion of Map 7. The Ministry has confirmed that Map 7 was replaced inadvertently in the Notice of Decision by an out-of-date map. The Ministry has advised the Region to appeal the affected policies and mapping affected by these clerical errors so that they may be corrected by the Board.

The Region’s appeal of Policies 7.C.8 (e), 6.C.10 (d) and 9.C.14 applies only insofar as it relates to the spelling error and incorrect italics as identified in attached Schedule ‘B’.

The Region’s appeal of Map 7 applies only insofar as the map relates to the southwest corner of the City of Kitchener as identified on attached Schedule ‘C’. The appeal relates to the Ministry’s failure to modify Map 7 to designate the lands subject to the appeal as Protected Countryside as per the resolution of Regional Council dated June 30, 2010.
The Region also relies upon such further grounds as may be required or advised for the hearing of this appeal.

Please find enclosed a completed copy of Appellant Form (A1) together with a certified cheque for $125 payable to the Ontario Municipal Board.

Should you have any questions or require additional information, please do not hesitate to contact Mr. Kevin Eby, Director Community Planning by telephone at (519) 575-4531, or by email at keby@regionofwaterloo.ca.

Please confirm that our appeal request has been forwarded to the Ontario Municipal Board.

In accordance with Section 47 of the Environmental Bill of Rights, the Region has also delivered a copy of this Notice of Appeal to the Environmental Commissioner of Ontario.

Yours truly,

THE REGIONAL MUNICIPALITY OF WATERLOO

Per:

Rob Horne, MA, MCIP, RPP
Commissioner
Planning, Housing and Community Services

Encl.
RH:ds

cc. Vincent Fabilli, Assistant Deputy Minister, MAH
Dwayne Evans, MAH
Gord Miller, Environmental Commissioner of Ontario
Mike Murray, CAO, Regional Municipality of Waterloo
Schedule ‘B’

List of Policies Containing Clerical Errors
Requiring Correction by the Board

1. Portion of Policy 7.C.8 (e)

   The term “mineral aggregate operations” in subsection (e) is defined in the Glossary of the ROP and should be italicized.

2. Portion of Policy 6.C.10 (d)

   The term “comply community” in subsection (d) is incorrect and should be revised to read “complete community.” Further, the term “complete community” is defined in the Glossary of the ROP and should be italicized.


   The term “quarry operation” is not defined within the Glossary of the ROP. As a result, this term should be corrected so that it is not italicized. The Region will develop an appropriate definition for quarry operations through a future ROP amendment.
APPENDIX B

February 2, 2011

Mr. Rob Horne
Commissioner of Planning, Housing and Community Services
Region of Waterloo
150 Frederick Street, 8th Floor
Kitchener, ON N2G 4J3

Dear Mr. Horne:

Re: Region of Waterloo New Official Plan - Map 7
   Council Proposed Modification to Countryside Designation – Southwest Kitchener

This correspondence is further to discussions with you and your staff, and as requested by you. Our Ministry’s decision on December 22, 2010, to approve the Region of Waterloo Official Plan contained modification # 67, which deleted Map 7 and replaced it with a new Map 7 (dated 2010), as provided by the Region of Waterloo on May 11, 2010.

It now apparent that modification # 67 does not include Council’s position of June 30, 2010, to revise Map 7 in relation to a Protected Countryside designation in the southwest area of the City of Kitchener.

We are aware that the Region has appealed the Ministry’s decision with respect to Map 7 (among other matters), in order to seek the Ontario Municipal Board’s approval to implement Council’s position of June 30, 2010, to place the Protected Countryside designation on the lands in question. The Ministry is prepared to work with the Region in placing an appropriate Map 7 before the Board.

Yours truly,

Bruce Curtis,
Manager, Community Planning and Development

cc: Irwin Shachter, Senior Counsel, Legal Services Branch, MMAH
TO:       Chair Jim Wideman and Members of the Planning and Works Committee
DATE:    February 15, 2011
FILE CODE: T15-40/28, C13-20/CA

SUBJECT:  AMENDMENT TO REGIONAL MUNICIPALITY OF WATERLOO CONTROLLED
ACCESS BY-LAW #58-87 FOR THE CLOSURE OF TWO ACCESSES TO
REGIONAL ROAD #28 (HOMER WATSON BOULEVARD) AND FOR TWO NEW
ACCESSES TO REGIONAL ROAD #28 (HOMER WATSON BOULEVARD), CITY
OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve an amendment to Controlled Access By-law #58-87 to close a right-in, right-out, left-in only access on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 257 metres south of Block Line Road and a right-in, right-out only access on the east side of Regional Road #28 (Homer Watson Boulevard) to the commercial block south of Block Line Road in the City of Kitchener.

AND THAT the Regional Municipality of Waterloo approve an amendment to Controlled Access By-law #58-87 for a right-in, right-out, left-in only access on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 251 metres south of Block Line Road and a right-in, right-out only access on the east side of Homer Watson Boulevard approximately 145 metres south of Block Line Road in the City of Kitchener with both accesses being subject to approval of a site plan by the City of Kitchener as described in P-11-014, dated February 15, 2011.

SUMMARY:

On June 30, 2010, Regional Council approved an amendment to Controlled Access By-law #58-87 for a right-in, right-out, left-in only access on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 257 metres south of Block Line Road and directed staff to work with the developer to finalize a location for a right-in, right-out only access on the east side of Regional Road #28 (Homer Watson Boulevard) to the commercial lands. The property was owned by Highland Park Shopping Centre Ltd (HPSC) and is located on the southeast corner of Homer Watson Boulevard and Block Line Road in the City of Kitchener. The northerly portion of the land is zoned C-2 and designated as a Mixed Use Node and the southerly portion is zoned R-8 and designated Medium Rise Residential.

HPSC was intending to retain ownership of the northerly commercial lands and had an offer to purchase on the southerly residential component of the property. The offer to purchase was never completed and HPSC has sold the entire parcel of land to 2269953 Ontario Incorporated. Although Controlled Access By-law #58-87 was amended, no accesses to Homer Watson Boulevard have been constructed to this property.

2269953 Ontario Incorporated now has a preliminary site plan for both the commercial and residential components of the property and is proposing a right-in, right-out, left-in only access on the east side of Homer Watson Boulevard approximately 251 m south of Block Line Road and a right-in, right-out only access on the east side of Homer Watson Boulevard approximately 145 m south of Block Line Road. It is intended to have both curb openings for the accesses including the
median modifications required on Homer Watson Boulevard for the right-in, right-out, left-in only access constructed as part of the Region’s roundabout contract at the intersection of Homer Watson Boulevard and Block Line Road proposed for 2011. The accesses will remain closed and an Access Permit will not be issued for the accesses until the site plans have been approved. Approval of the accesses should be subject to approval of a site plan by the City of Kitchener.

City of Kitchener staff and the proponents of 2269953 Ontario Incorporated support the recommendations noted above.

As Homer Watson Boulevard is designated as a Controlled Access – Prohibited road under the Region’s Controlled Access By-law 58-87, an amendment to this by-law is required to permit the accesses. City of Kitchener staff support both accesses to Homer Watson Boulevard.

REPORT:

By-law #58-87, “A By-law to Designate and Regulate Controlled – Access Roads” was enacted to control the construction or alteration to the geometric design of any private means of access to a Regional road. All Regional roads are included in either Schedule “A” or Schedule “B” of the By-law. Regional roads included in Schedule “A” (Controlled Access-Prohibited) include arterial roads and freeways where access to these roads must be restricted due to high traffic speed and volume. The main function of a Controlled Access – Prohibited Road is to move through traffic. All requests for changes to existing accesses or for new accesses on these roads require an amendment to the By-law. All remaining Regional roads are included in Schedule “B” (Controlled Access – Regulated). The function of a Controlled Access – Regulated Road is to move through traffic and provide access to adjacent lands. Typically, these roads are front-lotted with access available only to the Regional road or are comparatively lower volume rural roads.

At this location, Homer Watson Boulevard is designated as a Controlled Access – Prohibited road in the Region’s Controlled Access By-law. Homer Watson Boulevard is one of only two connections to Highway 401 from the north and access management is important to maintain the function of this road corridor.

The subject property is located on the northeast corner of Homer Watson Boulevard and Block Line Road in the City of Kitchener and is comprised of a northerly component at the intersection zoned C-2 and designated as a Mixed Use Node and a southerly component zoned R-8 and designated Medium Rise Residential. In 2010, Highland Park Shopping Centre Ltd (HPSC) intended to develop the northerly commercial component in the future and had an offer to purchase on the southerly residential lands. In order to facilitate development of the southerly residential lands, Regional Council approved an amendment to Controlled Access By-law #58-87 on June 30, 2010 for a right-in, right-out, left-in only access on the east side of Homer Watson Boulevard approximately 257 metres south of Block Line Road. Council further directed staff to work with the developer to finalize the location and design of an additional right-in, right-out only access on the east side of Homer Watson Boulevard to the commercial lands. The offer to purchase did not proceed and HPSC has sold the entire property to 2269953 Ontario Incorporated.

2269953 Ontario Incorporated is intending to develop the northerly commercial lands with a grocery store and smaller retail/commercial uses and the southerly lands with a residential use. A preliminary site plan prepared by the owner has located the right-in, right-out, left-in access to Homer Watson Boulevard approximately 251 metres south of Block Line Road and the right-in, right-out only access to Homer Watson Boulevard approximately 145 metres south of Block Line Road. Access to the property will also be available to Block Line Road and to Fallowfield Drive.

The right-in, right-out, left-in only access will require modifications to the existing median on Homer Watson Boulevard to accommodate a southbound left turn lane into the access. Since the Region of Waterloo is proposing to construct a roundabout at the intersection of Homer Watson Boulevard
and Block Line Road in 2011, the owner would like to incorporate the construction of both accesses and median modifications in the Region’s roundabout contract. Region of Waterloo staff see merit in accommodating this project in the roundabout contract as it minimizes future disruption to traffic on Homer Watson Boulevard when the owner proceeds to develop the property and requires the access and median work to be completed. The owner will be responsible for all costs related to the access and median work including the preparation of functional plans. The accesses will not be formally opened and Access Permits will not be issued until a site plan application has been circulated and approved by the City of Kitchener.

Because the site plans are preliminary at this time, the owner has been made aware that if the access locations are modified through the formal circulation and review of future site plan applications, a further amendment to Controlled Access By-law #58-87 may be required and they will be responsible for all costs associated with any modifications to the access and median. In addition, the owner is aware that if the size/scope of the development is modified from what is currently being proposed, the owner may be required to update a transportation study to assess the impact of the development on traffic operations on Homer Watson Boulevard.

Staff has reviewed the proposed right-in, right-out, left-in only access and the right-in, right-out only access to Homer Watson Boulevard and has no concerns.

It is recommended that approval of the amendment to Controlled Access By-law #58-87 for both accesses be conditional upon approval of a site plan by the City of Kitchener.

**Area Municipal Consultation/Coordination**

City of Kitchener staff support the construction of the right-in, right-out, left-in only access and the right-in, right-out only access to Homer Watson Boulevard.

**CORPORATE STRATEGIC PLAN:**

Focus Area 5: Infrastructure: Provide high quality infrastructure and asset management to meet current needs and future growth.

**FINANCIAL IMPLICATIONS:**

The developer will be responsible for all costs associated with the construction of the accesses in addition to any median modification to accommodate the southbound left turn movement from Homer Watson Boulevard.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Corporate Resources will be required to amend Controlled Access By-law #58-87. Design and Construction will be required to include the access/median construction in the roundabout contract at Homer Watson Boulevard and Block Line Road.
ATTACHMENTS

Appendix A – Map showing the location of the subject property.
Appendix B – Conceptual site plan showing the location of the proposed right-in, right-out, left-in only access and the right-in, right-out only access to Homer Watson Boulevard.
Appendix C – Council Resolution dated July 5, 2010 approving the previous right-in, right-out, left-in only access and directing staff to work with the developer on a location for a right-in, right-out only access to the commercial lands.

PREPARED BY: Bruce Erb, Transportation Planner

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

July 5, 2010
T15-40

Ms. Michelle DesRosiers
DGF Group of Companies
1 Pingel Road
Markham, ON L6B 1B7

Dear Ms. DesRosiers:

Re: Amendment to Regional Municipality of Waterloo Controlled Access By-law #58-87
for an Access to Regional Road #28 (Homer Watson Blvd). City of Kitchener

Please be advised that the Council of the Regional Municipality of Waterloo at their
regular meeting held on June 30, 2010, approved the following motion:

THAT the Regional Municipality of Waterloo approve an amendment to
Controlled Access By-law #58-87 for a right-in, right-out, left-in only access
on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 257 m south of Block Line Road.

AND THAT the Regional Municipality of Waterloo approve an amendment to
Controlled Access By-law #58-87 for a right-in, right-out access on the east
side of Regional Road #28 (Homer Watson Boulevard) south of Block Line Road into the commercial lands and staff are directed to work with the
developer to finalize the location and design of said access. [P-10-061]

Please accept this letter for information purposes only. If you have any questions please
contact Bruce Erb, Transportation Planner at 519-575-4536.

Please forward any written responses to this letter to Kris Fletcher, Director, Council &
Administrative Services/Regional Clerk.

Yours truly,

Erin Flewwelling
Council/Committee Support Specialist

EF/am

cc: Bruce Erb, Transportation Planner
Rob Horne, Commissioner Planning, Housing and Community Services

820110
TO: Chair Jim Wideman and Members of Planning and Works Committee

DATE: February 15, 2011

FILE CODE: A02-30/PW

SUBJECT: RAPID TRANSIT IMPLEMENTATION OPTIONS

RECOMMENDATIONS:

For information.

SUMMARY:

The Region continues to plan for significant population and employment growth over the next two decades. To provide for this tremendous growth, the Region will have to either continue its pattern of outward growth or encourage greater intensification in existing developed areas. Recognizing this challenge, the Region began a Rapid Transit Environmental Assessment (EA) in 2006 to identify the best possible rapid transit system for Waterloo Region. As part of the EA, the Project Team evaluated a number of rapid transit technologies. Bus Rapid Transit (BRT) and Light Rail Transit (LRT) were short listed because they had the greatest potential to:

- support the Region’s redevelopment and intensification objectives;
- optimize the use of road and railway corridors to serve major destinations; and
- be compatible with existing and planned built neighborhoods.

In June 2009, Regional Council approved a Rapid Transit implementation plan subject to satisfactory Federal and Provincial funding. In 2010, the Provincial and Federal governments announced their funding commitments and staff commenced a review of the financial implications of the Rapid Transit plan. During the fall of 2010, concerns were raised about the affordability of the rapid transit project, specifically in terms of the Region’s contribution. Staff have been undertaking an objective review of project implementation options for Council’s consideration, in order to identify a rapid transit project that is affordable to the Region and provides best value to the community. This report provides background information including new financial analysis that builds on the previous six years of studies and will be the basis of the next round of public consultation, leading to a staff recommendation regarding a preferred rapid transit system.

Staff have reviewed both BRT and LRT options in the implementation of a rapid transit system. With both BRT and LRT options, the Grand River Transit bus system would be re-oriented with rapid transit as the backbone of the system.

The Multiple Account Evaluation findings in 2009 demonstrated that LRT has a higher cost to install than BRT, but delivers the greatest benefits to the community, and best accomplishes the goals of the Regional Growth Management Strategy (RGMS). BRT is cheaper per kilometre to install and to operate than LRT, but the number of buses required to meet passenger demand is projected to exceed road capacity within 15 to 20 years, requiring replacement with alternate rapid transit technology such as LRT, at considerable expense and disruption.

The LRT implementation options consider sections of LRT in the northern half of the central transit corridor, with adapted BRT (aBRT) from the south end of the LRT to the Ainslie Street Bus Terminal.
The aBRT technology proposed is similar to that used in the VIVA rapid transit system in York Region and in the ZÜM rapid transit system in Brampton. It includes buses running in mixed traffic, with curbside rapid transit stations. As with VIVA and ZÜM, the aBRT technology would include a distinctive and frequent, limited-stop service, with signal priority and queue jumping, to allow buses to go ahead of regular traffic at signals and maintain faster, consistent travel times. In addition, the Ministry of Transportation of Ontario has agreed to incorporate bus bypass shoulders on key sections of Highways 8 and 401 between Fairway Road and Hespeler Road.

While there is flexibility to convert adapted BRT (aBRT) to LRT in the future, it should be noted that full BRT would be very difficult to convert to LRT because of the cost associated with replacing BRT infrastructure before its service life is over, because conversion is not likely to happen until BRT is at capacity, and because it would be very difficult to operate BRT while building LRT in the same passageway. As far as staff are aware, there has never been a conversion of BRT to LRT in the same at-grade passageway. Ottawa will be the first. Ottawa is avoiding some of the problems associated with converting BRT to LRT by planning to build their LRT underground in their downtown area, at very high cost. Implementation options for the rapid transit project in Waterloo Region focus on either BRT or LRT. Once either LRT or full BRT is chosen as the preferred technology, no change in technology is expected in the foreseeable future. Staging of LRT will allow the conversion of aBRT to LRT, when funding is available and/or when ridership warrants it.

Staff have considered 11 implementation options, as described in this report. Options L1 to L9 include lengths of LRT ranging from 12 to 39 kilometres, with aBRT making up the total length of rapid transit (34 to 39 kilometres, depending on the option chosen). Option B10 includes 38 kilometres of BRT. Option BU11 is business-as-usual, with no rapid transit. The annual average incremental impact of the implementation options ranges from approximately $15 to $63 per household per year over six years. There are also other potential capital funding sources or future budget savings that could be used to mitigate the impact on property taxes of funding rapid transit. These include new development charges, upload savings and savings from maturing debentures.

Plans for the public consultation program to share information and seek public input on the rapid transit technology and implementation options include a series of six Public Consultation Centres over March 3, 9 and 10 as well as booths at malls, updates to the rapid transit website and other points of contact.

REPORT:

1. **Background**

The Region continues to plan for significant population and employment growth over the next two decades. To provide for the projected growth, the Region will have to either continue its pattern of outward growth or encourage greater intensification in existing developed areas. High-quality rapid transit has been identified as a crucial component in managing growth, facilitating intensification and minimizing/reducing future “urban sprawl”. A high-quality rapid transit system is vital for the Region to evolve into a more compact urban form, helping to prevent sprawl and protect sensitive environmental landscapes and high quality farmlands from urban encroachment. The rapid transit system being considered in the Region has the multiple goals of providing transportation choice, meeting future transportation needs, and building a viable, vibrant and sustainable community.

2. **Rapid Transit Technology**

The Region began a Rapid Transit Environmental Assessment (EA) in 2006 to identify the best possible rapid transit system for Waterloo Region. In 2007, the rapid transit Project Team developed a number of criteria to evaluate 10 rapid transit technologies (BRT, LRT, commuter rail, diesel multiple units, aerobus, automated guideway transit, magnetic levitation, monorail, personal rapid
transit and subway) and their associated route designs. Based on the results of the evaluation, BRT and LRT operating on a mix of on/off road route designs were short-listed because they had the greatest potential to:

- support the Region’s redevelopment and intensification objectives;
- optimize the use of road and railway corridors to serve major destinations; and
- be compatible with existing and planned built neighborhoods.

Staff have reviewed both BRT and LRT options in the implementation of a rapid transit system. As shown in the maps in Appendix A, both BRT and LRT options would operate along basically the same route, some sections on road and some sections along existing rail corridors. For the section between Eagle Street and Fairway Road, BRT would run along Highways 401 and 8 with use of bus bypass shoulders, while LRT would run along the existing CP railway corridor. Both technologies would have stations in generally the same locations.

It is important to emphasize that both BRT and LRT would have similar cross-sections. Both would require separate and protected passageways for the rapid transit vehicles, with similar road impacts and property costs. The separate passageway is critical to optimize the speed of the rapid transit system, as opposed to, for example, a slower streetcar system running in mixed traffic. As shown in Figure 1, for two-way on-road sections of rapid transit, the separate passageway would be in the centre of the road. The passageway for BRT would be up to 0.5 m wider than for LRT.

Figure 1: Typical Cross-Section for On-Road Rapid Transit Passageway

With both BRT and LRT options, the Grand River Transit bus system would be re-oriented with rapid transit as the backbone of the system. As shown in the route maps in Appendix B, the new bus system would include expanded local bus routes and a system of express routes, like the iXpress, either feeding into rapid transit or complementing rapid transit by offering a parallel service outside of the central transit corridor. There would be local service along the central transit corridor, serving additional stops in between the rapid transit stations. In addition, there would be inter-regional GO transit service connecting to the central transit corridor.

3. Comparison of BRT and LRT

3.1 Multiple Account Evaluation

The Region faces a fundamental decision in its choice of the preferred long-term technology for the whole Region, BRT or LRT. Once that path is chosen, the Region will need to decide how best to implement the chosen long-term path.

In 2005, the Region completed a transit technology review and considered both BRT and LRT in the analysis. This involved a review of the North American experience over the past 25 years. Some of the key findings from this study included:

- LRT is much more likely to achieve the objectives of the RGMS than BRT;
- LRT has higher capital and net operating costs than BRT, but provides significantly greater benefits;
- LRT has much greater potential to attract transit ridership and to shape urban form than BRT; and
- LRT has a demonstrable influence on land values and is recognized as a planning tool that can support and encourage the development of more sustainable land use patterns.

These initial findings from the 2005 study are reinforced by the Multiple Account Evaluation (MAE) analysis. The findings from the MAE were previously presented to Regional Council on June 24, 2009 (Report E-09-073). The Project Team used the MAE to compare BRT and LRT because the process provided for flexibility in measuring benefits, allowing decision makers to consider quantitative measures for benefits that were difficult or impossible to translate into dollars and a broader and more targeted representation of project benefits. The MAE examined the economic costs and benefits of the proposed transportation investment within a series of separate accounts including environmental, economic and social drivers. The MAE findings demonstrated that LRT has a higher cost to install than BRT, but delivers the greatest benefits to the community, and best accomplishes the goals of the RGMS.

Figure 2 presents the MAE results incremental to the business-as-usual scenario for full implementation of the two technologies. Business-as-usual means a gradual expansion of roads and bus service. LRT was rated better than BRT for user benefits, environmental benefits, land use benefits and social and community benefits. This information was also previously presented to Council on June 24, 2009 (Report E-09-073).

**Figure 2: MAE Relative Costs and Benefits**

![Graph showing relative costs and benefits of LRT and BRT](image)

### 3.2 Costs

BRT is cheaper per kilometre to install and to operate than LRT. LRT costs approximately twice as much per kilometre as BRT to install. More details about capital and net operating costs are provided in Section 7.4. Operating costs are shown net of fare box revenue. LRT would have higher fare box revenues than BRT given that LRT (Conestoga Mall to Ainslie Terminal) is expected to have higher ridership than BRT.
3.3 Capacity

For BRT, the fleet would be a mixture of standard and articulated buses, with full standing capacity of approximately 75 and 115 passengers respectively. For LRT, the stations would be designed to accommodate two-car trains, with full standing capacity per train of up to 450 passengers, based on new vehicle designs now available. The train would have approximately four times the capacity of an articulated bus and six times the capacity of a standard bus.

For the Region’s rapid transit system, LRT would have more capacity than BRT because the trains would have more room for passengers, and more doors to quickly load and unload passengers with shorter dwell times at stations. Trains running on 5-minute frequencies could reasonably expect signal priority at intersections, so that trains would generally only stop at stations.

With BRT, the number of buses required to meet passenger demand is projected to exceed road capacity north of Fairview Park Mall in the peak period within 20 years. With bus frequencies every 2 to 3 minutes north of Fairview Park Mall, the buses would likely bunch up and signal priority would be impractical. With no spare road capacity, there would be no opportunity to expand passenger capacity by adding more buses. At that point, the Region would be facing replacement of the BRT with alternate rapid transit technology such as LRT, at considerable expense and disruption.

3.4 Urban Form

Both BRT and LRT would generate increased demand for lands near stations, increasing land values and generating new jobs. The increase in land values and jobs is greater for LRT with up to 23,000 new jobs in station areas compared to just over 11,500 for BRT, and up to $370 million in increased land values, compared to up to $75 million for BRT.

3.5 Transportation Benefits

Transportation benefits include savings in travel time, vehicle operating cost, accident avoidance and parking cost. LRT provides a smoother, quieter, more comfortable ride than BRT with greater passenger capacity. LRT is generally preferred by riders. LRT is expected to generate $523 million in transportation user benefits, compared to $360 million for BRT.

3.6 Environment and Public Health

LRT is projected to result in a reduction in greenhouse gas emissions of 22,260 tonnes per year by 2031 compared to 12,210 tonnes per year for BRT. LRT is projected to result in better environmental and public health.

4. LRT Staging

In considering the more-expensive LRT technology, it is also important to consider a phased transit system as a cost-effective way to allow transit to grow steadily. Rapid transit projects are usually implemented in stages to:

- allow for the efficient establishment of the rapid transit system and future extensions to the system as demand for public transport in the Region grows;
- enable the Region to cost-effectively deliver a staging option that meets the most immediate public transport needs;
- lessen the initial impact of the construction on the local community and road users by deferring the construction of certain sections; and
allow a level of flexibility so that future stages can be refined and tailored to meet the growing needs of the Region as it continues to develop.

It should be noted that there are no LRT systems in North America that were built in their entirety right at the start. As shown in Table 1, Edmonton and Calgary were frontrunners in building LRT in North America, starting with 7 km and 11 km respectively.

Table 1: LRT Staging in Other Municipalities (kilometres constructed per year)

<table>
<thead>
<tr>
<th>City</th>
<th>Year Opened</th>
<th>Starting Length</th>
<th>Additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edmonton</td>
<td>1978</td>
<td>7 km</td>
<td>2 km 1981, 1 km 1983, 1 km 1989, 2 km 1992, 1 km 2006, 2 km 2009, 5 km 2010</td>
</tr>
<tr>
<td>Calgary</td>
<td>1981</td>
<td>11 km</td>
<td>10 km 1985, 6 km 1987, 1 km 1990, 3 km 2003, 4 km 2009, 5 km 2010</td>
</tr>
<tr>
<td>Vancouver</td>
<td>1985</td>
<td>29 km</td>
<td>20 km 2002, 19 km 2009</td>
</tr>
</tbody>
</table>

When Calgary first started building LRT in 1978, it had a population of 506,000. The population of Edmonton was just over 445,000 when the City started LRT construction in 1974. Currently, Waterloo Region has a population of 535,000. Calgary and Edmonton both started with LRT lines from their downtown to a point in the suburbs, with the major activity point being downtown. In comparison, Waterloo Region has many activity points concentrated in a linear corridor along its central transit corridor. This gives the Region the advantage of generating trips in both directions along our rapid transit route, rather than a commuter route that runs peak-direction full and off-peak direction empty. It also gives the Region the advantage of serving a much higher proportion of its population and employment than Calgary and Edmonton were able to with their first LRT lines.

Generally LRT systems are expanded in steps, as little as one kilometre at a time. It would be unrealistic for the Region to plan construction of an entire 39-kilometre LRT system all at once, whether that construction starts now or in the future. It is realistic and achievable for the Region to consider building an LRT system in affordable stages. Therefore the LRT implementation options consist of a combination of LRT and aBRT, with the intent of expanding to a full LRT system in steps.

The LRT implementation options consider sections of LRT in the northern half of the central transit corridor, with aBRT from the south end of the LRT to the Ainslie Street Bus Terminal, based on existing and projected ridership. Currently, passenger boardings per weekday in the central transit corridor include 29,200 passengers from Fairview Park Mall north and 6,400 passengers south of Fairview Park Mall. More than 80 per cent of the passenger activity is from Fairview Park Mall north and less than 20 per cent is south of Fairview Park Mall. There is four times more passenger activity from Fairview Park Mall to the north compared to the south.
In the first five to ten years, GRT services would be expanded with new and more frequent routes that would provide fast, convenient connections with the rapid transit system. This improved service would translate into a broader transit user base to promote expanded LRT services. Introduction of LRT service in stages would allow the system to grow and bus services to adjust to provide the best connections.

This approach would also provide the necessary time for the Region, area municipalities and private land owners to collaborate on planning initiatives for increasing densities, improving walkability, controlling parking and enhancing the overall public environment for using public transit in the planned rapid transit station areas. In areas where aBRT is implemented, initiatives to increase ridership would be implemented with a goal of converting to LRT as soon as possible.

5. Adapted BRT

The LRT implementation options all include combinations of LRT and aBRT, with aBRT running from the south end of the LRT to the Ainslie Street bus terminal providing a complete rapid transit system connecting Cambridge, Kitchener and Waterloo. The aBRT technology proposed is also used in the current VIVA rapid transit system in York Region and in the ZÜM rapid transit system in Brampton. It includes buses running in mixed traffic, with curbside rapid transit stations.

As with VIVA and ZÜM, our aBRT technology would include a distinctive and frequent, limited-stop service, with signal priority and queue jumping, to allow buses to go ahead of regular traffic at signals and maintain faster, consistent travel times. The aBRT would include more stations than on the current iXpress line, with streetscaping, and bicycle and pedestrian amenities at stations. Fares would be paid before boarding, with ticket machines at each station. Real-time passenger information would be available at each station. The aBRT would be supported by expanded local bus routes, a system of express routes, and connections to inter-regional transit service.

In addition to the VIVA and ZÜM technologies, the Ministry of Transportation of Ontario has agreed to incorporate bus bypass shoulders on key sections of Highways 8 and 401 between Fairway Road and Hespeler Road. For this section of the rapid transit route, the technology is the same for both BRT and aBRT.

6. Converting to LRT

There is flexibility to convert aBRT to LRT in the future. During the conversion, one general traffic lane at a time would be shut down for construction. The aBRT service would continue to operate in mixed traffic, using its curbside stations. Its queue jump lanes and signal priority would allow the aBRT service to go ahead of the congested traffic. The aBRT would be converted to LRT when funding is available and/or when ridership warrants it, before the aBRT service lanes become overly congested. The aBRT service would allow transition from aBRT to LRT sooner by helping to build up ridership.

However, it should be noted that BRT would be very difficult to convert to LRT in the future. Having committed a high level of investment to BRT, it would not likely be converted to LRT until the BRT service has reached its capacity. It would be challenging to convert the system to LRT, using inflated future dollars, while maintaining a mature BRT level of transit service. BRT during conversion would not be able to access its existing stations and would not have the benefit of the aBRT priority measures to help maintain the level of transit service that passengers would have come to expect. The concept of convertibility is often advertised as the solution, but it fails to acknowledge the disruption riders would experience during the changeover and the cost associated with replacing BRT infrastructure before its service life is over.
The City of Ottawa will be facing this challenge over the next decade, as it tackles the problem of building LRT while moving its significant BRT transit ridership in buses running in mixed traffic on already-congested roads. With Ottawa’s BRT system, the streets in downtown Ottawa are dominated by buses. During the peak hours, most downtown buses are carrying full standing loads. One of the reasons that Ottawa is building their LRT underground in their downtown area, at very high cost, is to avoid some of the problems associated with converting BRT to LRT along the same passageway. As far as staff are aware, there has never been a conversion of BRT to LRT in the same at-grade passageway. Ottawa will be the first, but only outside of the downtown area.

Once either LRT or full BRT is chosen as the preferred technology, no change in technology is expected in the foreseeable future. Staging of LRT will allow the conversion of aBRT to LRT, when funding is available and/or when ridership warrants it.

7. Implementation Options

7.1 Refining the Options

In 2010, the Provincial and Federal governments announced their funding commitments and staff commenced a review of the financial implications of the rapid transit plan. During the fall of 2010, concerns were raised about the affordability of the rapid transit project, specifically in terms of the Region’s contribution. Staff have been undertaking an objective review of project implementation options for Council’s consideration, to identify a rapid transit project that is affordable to the Region, and provides best value to the community. For both BRT and LRT options, staff have completed site specific surveys to refine the design and minimize property impact. In addition, new functional designs have been developed that affect both BRT and LRT options. These include:

- the grade separation of King Street at the CN Guelph Subdivision in Kitchener (adjacent to the proposed multimodal hub);
- the BRT route on Highway 401 and Hespeler Road;
- the route alignment along the Hydro Corridor in south Kitchener and the alternative on Fairway Road;
- the intersection design for the future Block Line Road Extension and Courtland Avenue integrated with rapid transit;
- route options along Ottawa Street in view of the recently completed Regional Transportation Master Plan (RTMP) and its recommendations; and
- a new station location at the intersection of Frederick/Benton Street and Charles Street in downtown Kitchener.

Moreover, staff have identified cost-saving opportunities that apply to either or both BRT and LRT through a review of several design elements. These refinements include:

- $35 to $100 million savings for BRT and LRT utility relocation (from delaying the replacement of certain infrastructure and refining the design), for civil works and for vehicles;
- $10 million savings for LRT from additional evaluation and engineering work for a maintenance and storage yard; and
- $40 million savings for LRT based on detailed estimates provided by potential electricity suppliers.

7.2 Description of Options

Based on the above design work as well as further structural and utilities review, the list of implementation options for the rapid transit project includes refined BRT and LRT options further to
the original BRT and LRT options considered in 2009.

The implementation options were generated based on a number of considerations, including:

- affordability – consideration given to available funding, capital and operational costs, and cost recovery from fare box revenue;
- likely public transport demand – identifying various sections that incorporate as many of the primary destinations and transfer points as possible in order to attract the highest patronage;
- ability to meet the overall public transport service need – consideration given to the ability of feeder bus services meeting the residual transport need in the interim period until that particular section of the rapid transit was delivered;
- economies of scale to capitalize the system – identifying an initial stage that is big enough to allow efficient operation and performance; and
- maintenance yard and storage facility location – consideration given to the ability of the initial stage to access this site.

The BRT option includes BRT from the St. Jacobs Farmers’ Market to the Ainslie Street Bus Terminal. No shorter options were considered for BRT because aBRT will not provide sufficient capacity north of Fairview Park Mall and because one of the reasons for considering BRT is to provide the same technology throughout the central transit corridor.

The LRT options include LRT from either Conestoga Mall or Northfield Drive to either Ottawa Street, Block Line Road, Fairview Park Mall or Sportsworld Drive, with aBRT from the south end of the LRT to the Ainslie Street Bus Terminal. Staff have also included an option that includes LRT from the St. Jacobs Farmers’ Market to the Ainslie Street Bus Terminal, and a business-as-usual option, that includes no rapid transit but gradually increasing roads and transit service.

The business-as-usual (road expansion) option is included not because it is considered a feasible option but for purposes of illustration. If the Region continues with current trends of auto use, the road network will need to expand by at least 500 additional lane-kilometres of traffic by 2031. As development spreads outward and congestion grows on the major arterial roads, further road construction will become necessary, including road widenings through mature neighbourhoods. Without rapid transit, the road expansion costs including property would be in the range of $1.4 to $1.5 billion. On top of the high cost, this road expansion would seriously threaten the quality of life in much of the community and cause significant disruption in many areas. Achieving higher transit ridership targets will not eliminate the need for road improvements, but it can reduce the amount of road construction required and reduce road expansion costs by $400 to $500 million. The approved RTMP concluded that the business-as-usual option is not feasible.

Should a decision be made that the preferred rapid transit system is an LRT-based system, it will become necessary to select a preferred staging option. The staging options will be evaluated based on affordability, ridership, integration with conventional transit and aBRT, and level of intensification. Affordability will be a significant factor as the options generally provide similar ridership and intensification potential. Options that go to Fairview Park Mall provide better connectivity to aBRT.

Table 2 lists the implementation options and their length. Options L1 to L9 include lengths of LRT from 12 to 39 kilometres, with aBRT making up the total length of rapid transit (34 to 39 kilometres, depending on the option chosen). Option B10 includes 38 kilometres of BRT. The BRT option is a kilometre shorter than the longest LRT option because it follows a slightly different route. Option BU11 is business-as-usual, with no rapid transit.
Table 2: Length of Implementation Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Length (km)</th>
<th>( \text{BRT} )</th>
<th>( \text{LRT} )</th>
<th>( \text{aBRT} )</th>
<th>( \text{Total Rapid Transit} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>LRT from Conestoga Mall to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>0</td>
<td>14</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>L2</td>
<td>LRT from Conestoga Mall to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>0</td>
<td>17</td>
<td>19</td>
<td>36</td>
</tr>
<tr>
<td>L3</td>
<td>LRT from Conestoga Mall to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>0</td>
<td>19</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>L4</td>
<td>LRT from Conestoga Mall to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>0</td>
<td>24</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>L5</td>
<td>LRT from Northfield Dr to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>0</td>
<td>12</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>L6</td>
<td>LRT from Northfield Dr to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>0</td>
<td>15</td>
<td>19</td>
<td>34</td>
</tr>
<tr>
<td>L7</td>
<td>LRT from Northfield Dr to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>0</td>
<td>17</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>L8</td>
<td>LRT from Northfield Dr to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>0</td>
<td>22</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>L9</td>
<td>LRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>0</td>
<td>39</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>B10</td>
<td>BRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>38</td>
<td>0</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>BU11</td>
<td>Business-as-Usual (road expansion)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

All of the LRT staging options provide rapid transit service to core areas along the central transit corridor, linking existing activity nodes to neighborhoods/station areas with future potential. As a result, all LRT staging options capture a considerable portion of the future growth, generating comparable land use and social benefits. Moreover, the sizeable catchment area served by these staging options results in sound annual ridership numbers ranging from 12 to 15 million by year 2031. Projected annual ridership is shown in Table 5. These ridership numbers can be compared to other LRT systems currently in service across North America (e.g. Edmonton, San Jose, Houston, and Buffalo).

The proposed LRT options, however, do differ from each other in terms of their influence on overall shift towards transit use. Although all LRT staging options generate positive benefits, the options with longer segments of LRT are more attractive to choice riders and out-of-town commuters.
because they reduce the number the transfers required, increase the number of destinations served, and provide convenient locations for patrons seeking a park ‘n’ ride facility (e.g. terminus at Sportsworld Drive and Conestoga Mall).

7.3 Moving Forward Transit Program

Rapid transit must proceed in the context of a Region-wide transit system. Staff are developing the Moving Forward Transit Program, an integrated rapid transit project that combines rapid transit with specific improvements identified in the approved RTMP and required to create a fully functional rapid transit system. The components of the program include:

- Rapid transit along the central transit corridor;
- Re-orientation of Grand River Transit bus system;
- New and more frequent bus service in targeted areas, requiring fleet and garage expansions;
- Integration with inter-regional transit service (VIA, GO Transit, Greyhound, etc.);
- Improved transit stations/stops and amenities;
- Intelligent Transportation Systems improvements (including real-time scheduling of transit vehicles, transit traveler information and optimization of transit priority);
- Development and implementation of smart-card fare-collection technology;
- Road improvements in support of rapid transit; and
- Park ‘n’ ride facilities.

7.4 Costs

All project costs have been revised to reflect 2014 dollars because it is anticipated that construction of rapid transit will begin in the year 2014. Table 3 below shows the impact of the project refinements and the inflationary impacts, using projected inflation from 2009 to 2014, on the project costs. The inflationary impacts are based on values being used by Metrolinx for predicting inflation on similar projects in Toronto. The inflation values used are 2009/2010 - 3.0 per cent, 2010/2011 - 3.0 per cent, 2011/2012 - 4.0 per cent, 2012/2013 - 4.0 per cent and 2013/2014 - 4.5 per cent.

<table>
<thead>
<tr>
<th>Option</th>
<th>Original</th>
<th>Refined</th>
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<tbody>
<tr>
<td>L3</td>
<td>$790</td>
<td>$1010</td>
</tr>
<tr>
<td>B10</td>
<td>$584</td>
<td>$747</td>
</tr>
</tbody>
</table>

The Provincial government has agreed to provide $300 million towards the capital cost of the rapid transit system and the Federal government has agreed to fund one third of eligible project costs to a maximum of $265 million. Region staff have been in discussions with Federal staff to determine if related projects which complement the implementation of rapid transit (such as bus purchases, bus storage and maintenance facilities, road improvements, signal changes, etc.) could be included as eligible costs. Federal staff have verbally confirmed that these types of projects could be eligible for federal funding provided they are required for the successful implementation of a rapid transit system and form an integrated rapid transit project. The types of projects being considered for inclusion in the rapid transit funding proposal are either already included in the Transportation Capital program or are part of the RTMP. There are approximately $150 million in projects in the current Transportation Capital program that would be related to the implementation of the rapid transit system and approximately $50 million in RTMP implementation costs from 2011 to 2018. This is a total of $200 million in rapid-transit-related costs that can be counted as included in the overall scope of eligible project cost to maximize Federal government funding. These costs would
be common to all of the options because they are required regardless of the rapid transit option selected.

Table 4 below shows the construction costs of all of the implementation options in 2014 dollars, the level of senior government funding and the additional Regional funding required to construct the different rapid transit options.

### Table 4: Implementation Options and Capital Costs ($ millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>LRT from Conestoga Mall to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>$644</td>
<td>$300</td>
<td>$215 (3)</td>
</tr>
<tr>
<td>L2</td>
<td>LRT from Conestoga Mall to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>$770</td>
<td>$300</td>
<td>$257 (3)</td>
</tr>
<tr>
<td>L3</td>
<td>LRT from Conestoga Mall to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>$818</td>
<td>$300</td>
<td>$265</td>
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<tr>
<td>L4</td>
<td>LRT from Conestoga Mall to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>$960</td>
<td>$300</td>
<td>$265</td>
</tr>
<tr>
<td>L5</td>
<td>LRT from Northfield Dr to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>$608</td>
<td>$300</td>
<td>$203 (3)</td>
</tr>
<tr>
<td>L6</td>
<td>LRT from Northfield Dr to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>$733</td>
<td>$300</td>
<td>$244 (3)</td>
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<tr>
<td>L7</td>
<td>LRT from Northfield Dr to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>$773</td>
<td>$300</td>
<td>$258 (3)</td>
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<td>L8</td>
<td>LRT from Northfield Dr to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>$922</td>
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<td>$265</td>
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<tr>
<td>L9</td>
<td>LRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>$1550</td>
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<td>B10</td>
<td>BRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>$702</td>
<td>$300</td>
<td>$234 (3)</td>
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<td>BU11</td>
<td>Business-as-Usual (road expansion)</td>
<td>$500 (2)</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

(1) Construction costs are shown in 2014 dollars. Construction inflation of 12.5 per cent from 2011 to 2014 is assumed.
(2) Incremental road construction costs without rapid transit.
(3) Other related projects would be included in the Moving Forward Transit Program to optimize the available Federal funding.
Table 5 below shows the projected ridership and the anticipated net operating and maintenance costs for all of the implementation options. The net operating and maintenance costs are net of anticipated farebox revenue, and are expected to decrease over time as rapid transit ridership increases.

**Table 5: Implementation Options, Ridership and Net Operating and Maintenance Costs**

<table>
<thead>
<tr>
<th>Option</th>
<th>Annual Rapid Transit Ridership (millions)</th>
<th>Net Operating &amp; Maintenance Costs ($ millions per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2031</td>
</tr>
<tr>
<td>L1</td>
<td>6.4</td>
<td>12.6</td>
</tr>
<tr>
<td>L2</td>
<td>7.3</td>
<td>14.3</td>
</tr>
<tr>
<td>L3</td>
<td>7.5</td>
<td>15.0</td>
</tr>
<tr>
<td>L4</td>
<td>7.6</td>
<td>15.4</td>
</tr>
<tr>
<td>L5</td>
<td>6.1</td>
<td>12.2</td>
</tr>
<tr>
<td>L6</td>
<td>7.0</td>
<td>13.9</td>
</tr>
<tr>
<td>L7</td>
<td>7.3</td>
<td>14.7</td>
</tr>
<tr>
<td>L8</td>
<td>7.4</td>
<td>15.0</td>
</tr>
<tr>
<td>L9</td>
<td>9.3</td>
<td>18.0</td>
</tr>
<tr>
<td>B10</td>
<td>7.5</td>
<td>14.9</td>
</tr>
<tr>
<td>BU11</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
There are a number of ways to phase in and finance the costs of the various implementation options, and many variables that affect the property tax levy impacts of these options. Staff have done some initial estimates of potential property tax implications of the various scenarios based on several assumptions including:

- All costs are funded from the property tax levy;
- Estimated 2014 average annual property tax of $1,656.32;
- Each $50 million in capital financing translates into .87 per cent property tax increase in 2014 for the 2014 urban service area based on a 30-year term at 4.75 per cent;
- Each $3.6 million increase in operating cost requires a 1.0 per cent property tax increase;
- For the business-as-usual option, there would be an expenditure of $25 million per year for 20 years and a one-time tax increase with no debentures; and
- Business-as-usual operating costs only include annual maintenance costs. Future rehabilitation and replacement costs would be in addition to these costs.

A potential financing strategy for implementing the property tax increases is to implement the increases over a six-year period from 2012 to 2017. The six-year period was selected to smooth out the tax rate increases over the construction period and have the funding in place when construction is complete and operations are starting. Table 6 summarizes the potential incremental property tax impacts of this funding strategy. Other financing strategies are possible and staff can develop alternative options for Council’s consideration. The household impacts are the annual amount that the average property tax bill would increase incrementally over six years. The percentage impacts are calculated only on the Regional portion of property taxes.

It should be noted that the property tax impacts shown on Table 6 are relatively conservative estimates of the potential tax rate impacts. The tax rate impacts could be mitigated in several ways, involving reductions in capital and operating costs through further value engineering or inflation impacts being less than projected, or funding a portion of the capital costs through other mechanisms, such as development charges. Some of the potential ways to mitigate the tax rate impacts are discussed in the Financial Implications section.
### Table 6: Implementation Options and Project Financing Strategy Property Tax Impacts Per Household in Urban Service Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 LRT from Conestoga Mall to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>0.97%</td>
<td>$16.01</td>
</tr>
<tr>
<td>L2 LRT from Conestoga Mall to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>1.27%</td>
<td>$20.98</td>
</tr>
<tr>
<td>L3 LRT from Conestoga Mall to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>1.37%</td>
<td>$22.63</td>
</tr>
<tr>
<td>L4 LRT from Conestoga Mall to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>1.90%</td>
<td>$31.46</td>
</tr>
<tr>
<td>L5 LRT from Northfield Dr to Ottawa St &amp; aBRT from Ottawa St to Ainslie St Bus Terminal</td>
<td>0.88%</td>
<td>$14.63</td>
</tr>
<tr>
<td>L6 LRT from Northfield Dr to Block Line Rd &amp; aBRT from Block Line Rd to Ainslie St Bus Terminal</td>
<td>1.13%</td>
<td>$19.04</td>
</tr>
<tr>
<td>L7 LRT from Northfield Dr to Fairview Park Mall &amp; aBRT from Fairview Park Mall to Ainslie St Bus Terminal</td>
<td>1.25%</td>
<td>$20.70</td>
</tr>
<tr>
<td>L8 LRT from Northfield Dr to Sportsworld Dr &amp; aBRT from Sportsworld Dr to Ainslie St Bus Terminal</td>
<td>1.78%</td>
<td>$29.53</td>
</tr>
<tr>
<td>L9 LRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>3.71%</td>
<td>$62.65</td>
</tr>
<tr>
<td>B10 BRT from St Jacobs Farmers’ Market to Ainslie St Bus Terminal</td>
<td>0.95%</td>
<td>$15.73</td>
</tr>
<tr>
<td>BU11 Business-as-Usual (road expansion) (3)</td>
<td>1.51%</td>
<td>$24.98</td>
</tr>
</tbody>
</table>

(1) Annual incremental property tax impact over six years (2012 -2017) assuming all costs are funded by property tax levy. Tax levy impacts may be reduced through financing options (e.g. contribution from development charges).

(2) Based on average property assessment of $225,000 ($ 2010).

(3) The majority of road expansion costs are usually collected from development charges. The future replacement costs (which are fully borne by tax payers) are not included in this cost. The business-as-usual case does serve as a good comparison to rapid transit costs and also confirms that there are significant costs associated with expansion of the road network.
8. **Next Steps**

Subject to Regional Council consideration, staff anticipate that steps leading up to the Transit Project Assessment for the rapid transit project will include:

- **February/March:** undertaking public consultation. The purpose of this next series of public consultation, through February and March, is to share information (including refined options and cost implications since fall 2010), respond to questions, and seek public input on the rapid transit technology (BRT or LRT), the functional design of the route, the implementation options, and the evaluation of the implementation options;
- **April 12:** providing feedback to Planning and Works Committee regarding public consultation and identifying a preliminary preferred option;
- **April/May:** undertaking public consultation regarding the preliminary preferred option;
- **Late May:** Public Input Meeting(s) regarding the preliminary preferred option;
- **June:** Council approval of the preferred rapid transit system;
- **July/August/September:** completing Environmental Project Report; and
- **October:** commencing six-month Transit Project Assessment (the expedited Provincial EA process for transit projects).

The public will be given an opportunity to provide comment on the benefits and impacts of both the LRT and BRT systems in terms of service delivery, cost and effectiveness.

9. **Public Consultation Program**

Plans for the public consultation program include:

- **Public Consultation Centres in March 2011**
  - Thursday, March 3 at the Albert McCormick Community Centre on 500 Parkside Drive in Waterloo;
  - Thursday, March 3 at the Regional headquarters on 150 Frederick Street in Kitchener;
  - Wednesday, March 9 at 150 Main Street in Cambridge;
  - Wednesday, March 9 at the First United Church on 16 William Street West in Waterloo;
  - Thursday, March 10 at the United Kingdom Club on 35 International Village Drive in Cambridge; and
  - Thursday, March 10 at the Faith Lutheran Church on 247 Westmount Road East in Kitchener.

- **Public information booths in March 2011**
  - Saturday, March 5 at Fairview Park Mall on 2960 Kingsway Drive in Kitchener;
  - Saturday, March 5 at the Kitchener Farmer’s Market on 300 King Street East in Kitchener;
  - Saturday, March 12 at Conestoga Mall on 550 King Street North in Waterloo; and
  - Saturday, March 19 at Cambridge Centre on 355 Hespeler Road in Cambridge.

- **Public Consultation Centres in May 2011 (suburban locations have yet to be confirmed)**
  - Wednesday, May 4 at the Regional headquarters on 150 Frederick Street in Kitchener;
  - Thursday, May 5 at the First United Church on 16 William Street West in Waterloo; and
  - Tuesday, May 10 at the United Kingdom Club on 35 International Village Drive in Cambridge.

- **Public information booths in April-May 2011**
  - Saturday, April 30 at Cambridge Centre on 355 Hespeler Road in Cambridge;
  - Saturday, April 30 at the Kitchener Farmer’s Market on 300 King Street East;
  - Saturday, May 14 at Conestoga Mall on 550 King Street North in Waterloo; and
  - Saturday, May 14 at Fairview Park Mall on 2960 Kingsway Drive in Kitchener.
- Updates to the rapid transit website;
- All-Council meeting on March 10;
- Speaking engagements;
- Displays;
- Newsletters mailed to all households in the Region and all businesses within the three Cities;
- Television and newspaper advertisements; and
- Emailed and mailed notices.

Staff will present comprehensive information on the rapid transit project at each public meeting, booth and event. The public will be able to submit their comments in person, by mail, by email, or through the website.

The public will have multiple opportunities to obtain information or to provide input to the rapid transit project. Staff will notify the public of these opportunities through television advertisements running for two weeks, through email or regular mail notices to the rapid transit contact list of nearly 3,000 addresses, through roadside signs and website updates, and through newspaper advertisements placed in seven different newspapers.

CORPORATE STRATEGIC PLAN:

The report supports several objectives of Council’s Strategic Focus. These include:

Focus Area 1: Environmental Sustainability: Protect and Enhance the Environment.
Focus Area 2: Growth Management: Manage and shape growth to ensure a livable, healthy, thriving and sustainable Waterloo Region.
Focus Area 5: Infrastructure: Provide high quality infrastructure and asset management to meet current needs and future growth.

FINANCIAL IMPLICATIONS:

A potential financing strategy for implementing the property tax increases is to implement the increases over a six-year period. Table 6 in Section 7.4 summarizes the potential property tax impacts of this strategy. Other financing strategies are possible and staff can develop alternative options for Council’s consideration. Funding for the Rapid Transit system is proposed to be area rated to the cities of Cambridge, Kitchener and Waterloo in the same manner as current GRT costs.

There are also other potential capital funding sources or future budget savings that could be used to mitigate the impact on property taxes of funding rapid transit. Staff continue to pursue the possibility of legislative changes that would allow the Region to collect development charges for rapid transit. Over the 2012 to 2017 time period, the province will upload a total of $8.4 million of annual costs from the Region. These savings could be directed to rapid transit to mitigate tax impacts. Some of the Region’s debentures for Regional facilities will be maturing between 2012 and 2017. This would also create the option to direct these savings to rapid transit without increasing property tax rates.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The rapid transit Project Team includes representatives from Regional Council, the CAO’s office, Communications, Community Planning, Finance, Legal, Public Health, Social Services, Transit Development, Transportation and Environmental Services, Transportation Planning and Transit Services.
ATTACHMENTS:

Appendix A – Maps of BRT and LRT Routes
Appendix B – Transit Network Supporting Rapid Transit

PREPARED BY: Nancy Button, Director, Rapid Transit

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A
Maps of BRT and LRT Routes

Map of BRT Route

Map of LRT Route
Appendix B
Transit Network Supporting Rapid Transit

Existing

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

DATE: February 15, 2011

FILE CODE: C04-30

SUBJECT: PRE-BUDGET FUNDING APPROVAL FOR 2011 CONSTRUCTION CONTRACTS

RECOMMENDATION:

THAT the Regional Municipality of Waterloo grant pre-budget approval in the amount of $21.965 million prior to finalization of the 2011 Regional budget in March 2011, to allow the tendering and contract award of selected 2011 capital projects in the first quarter of 2011.

REPORT:

To achieve desired April and May 2011 construction start dates, a number of Regional capital projects need to be tendered in February and March 2011 with Council award of the contracts between March and April 2011. Since the Region’s 2011 budget will not be approved until late March 2011, staff is recommending that select 2011 construction projects be granted pre-budget approval at this time so that they can be tendered, and in some cases presented to Council for award prior to budget approval day in March 2011.

The 2011 capital projects listed in Appendix A are scheduled for tendering and in some cases for contract award in the first quarter of 2011. In order to take advantage of early 2011 competitive tender pricing and ensure the projects are completed before Winter 2011, these projects must be tendered early in 2011. Early tendering will also ensure better quality concrete and asphalt work in the most favourable weather conditions.

CORPORATE STRATEGIC PLAN:

Pre-budget approval of these selected projects meets Focus Area #5 of the Region’s Corporate Strategic Focus to optimize the use of existing infrastructure and ensure it is adequately maintained and provide infrastructure needed to accommodate planned growth.

FINANCIAL IMPLICATIONS:

The DRAFT 2011 Transportation Capital Program and 10 Year Forecast includes $18.365 million for the transportation projects ($13.165 million of projected 2011 capital expenditures and $5.2 million of projected 2012 capital expenditures) as shown in Appendix “A” for which staff is seeking pre-budget approval. These projects will be funded from the Roads Capital Levy Reserve Fund, the Development Charge Reserve Fund, and the Roads Rehabilitation Reserve Fund. Please note that the $13.165 million of projected 2011 capital expenditures will be reduced to $10.565 million due to a cost-share recovery of $2.6 million from the City of Kitchener for the Courtland Avenue project. Likewise the $5.2 million of projected 2012 capital expenditures will be reduced to $1.6 million due to a cost-share recovery of $3.6 million from the City of Kitchener for the Courtland Avenue project.
The DRAFT 2011 Water Capital Forecast includes $3.6 million of 2011 capital expenditures for installation of Regional watermain for the Dundas Street reconstruction project and for the Erb’s Road Watermain project (from Wilmot Line to Notre Dame Drive), all to be funded from the Water Reserve Fund and the Development Charge Reserve Fund.

Granting pre-budget approval of the capital projects in Appendix A would pre-authorize $21.965 million of Regional transportation and, water capital expenditures in advance of Council finalizing the Transportation Capital Program, and the Water Capital Forecast as part of its 2011 budget deliberations.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Finance Department has been consulted in the preparation of this report.

ATTACHMENTS: NIL

PREPARED BY: Marcos Kroker, Head, Transportation Rehabilitation

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
## Table 1: Capital Projects Requiring 2011 Pre-budget Approval

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated 2011 Capital Expenditures</th>
<th>Tender Date</th>
<th>Contract Award Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dundas Street Reconstruction including Regional Watermain</td>
<td>$3,480,000</td>
<td>Feb 8, 2011</td>
<td>March 23, 2011</td>
</tr>
<tr>
<td>St. Agatha Watermain – Erb's Road, (from Wilmot Line to Notre Dame Drive) including Regional roadwork</td>
<td>$2,930,000</td>
<td>Feb 8, 2011</td>
<td>March 23, 2011</td>
</tr>
<tr>
<td>Fischer-Hallman Road – Queen’s Boulevard to Victoria Street</td>
<td>$2,470,000</td>
<td>March 8, 2011</td>
<td>April 20, 2011</td>
</tr>
<tr>
<td>2011 Bridge Rehabilitation Projects</td>
<td>$1,205,000</td>
<td>March 8, 2011</td>
<td>April 20, 2011</td>
</tr>
<tr>
<td>a) Northfield Dr. at Canagagigue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Katherine St. at Trans Canada Trail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011 Urban Resurfacing Projects</td>
<td>$2,930,000</td>
<td>March 8, 2011</td>
<td>April 20, 2011</td>
</tr>
<tr>
<td>a) Westmount Rd – Erb St. to University Ave.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Victoria St. – Edna St. to Lancaster St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Waterloo St. – New Hamburg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Village of New Dundee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Village of Linwood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Maple Grove Rd. – Cherry Blossom St. to Fountain St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1 and 2 of Courtland Avenue Reconstruction Highway 7/8 to Queen Street (including a contractual commitment of $5.2 million for capital expenditures in 2012 for Stage 2)</td>
<td>$8,950,000</td>
<td>March 8, 2011</td>
<td>April 20, 2011</td>
</tr>
<tr>
<td>Total</td>
<td>219,650,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

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

DATE: February 15, 2011

FILE CODE: T04-20, 7098

SUBJECT: CONSULTANT SELECTION – CLASS ENVIRONMENTAL ASSESSMENT AND PRELIMINARY DESIGN STUDY; OTTAWA STREET IMPROVEMENTS FROM KING STREET TO MILL STREET, CITY OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consulting Services Agreement with AECOM to provide consulting engineering services for the Class Environmental Assessment and Preliminary Design Study for the proposed improvements to Ottawa Street between King Street and Mill Street in the City of Kitchener for an upset limit fee of $402,612.00 plus applicable taxes.

AND THAT the Regional Municipality of Waterloo grant pre-budget approval, for this phase of the project, prior to approval of the 2011 Ten Year Transportation Capital Program.

SUMMARY:

The Region of Waterloo intends to proceed with the proposed reconstruction and capacity improvements on Ottawa Street from King Street to Mill Street currently scheduled for 2014 at an estimated project cost of $5.0 million. The location of this project is shown on the attached key plan in Appendix A. The construction of the roadworks is planned to be undertaken at the same time as the proposed implementation of the Rapid Transit (RT) system on Ottawa Street in order to minimize the disruption for traffic and local property owners. To meet this aggressive schedule, an Environmental Assessment and Preliminary Design Study must be initiated now to determine the extent of roadway improvements required, their environmental impacts and required mitigation measures. Following the completion of this study, a detailed design and property acquisition must be completed before construction of the roadworks can begin. Planning for the required roadway and bridge improvements will be undertaken in accordance with the Schedule ‘C’ requirements of the Municipal Class Environmental Assessment.

Since staff are currently fully committed to other projects, an engineering consultant must be hired now to undertake the Environmental Assessment and Preliminary Design Study for Ottawa Street between King Street and Mill Street.

An invitation to submit Letters-of-Interest to provide engineering services for this assignment was advertised in the Kitchener-Waterloo Record. Nine (9) firms submitted Letters-of-Interest. Four (4) were subsequently short-listed and requested to prepare work plans and fee estimates.

The selection process for this assignment included price as an evaluation factor. Based on the evaluation criteria and review of the submitted work plans and fee estimates, the Consultant Selection Team recommends that AECOM be retained to undertake this assignment for an upset limit fee of $402,612.00 plus applicable taxes. Sufficient funds are available in the 2010 Ten Year Transportation Capital Program to initiate the study process in 2011.
REPORT:

1. Background

Ottawa Street is a four (4) lane urban arterial road for much of its length between Lackner Boulevard and Trussler Road in the City of Kitchener. It provides a vital east-west transportation link within the city. Between King Street and Mill Street, the road width narrows to two lanes. The existing road structure is in fair to poor condition and in need of full reconstruction. The location of this project is shown on the attached key plan in Appendix A. The approved Regional Transportation Master Plan dated April 2010 identifies the widening of this section of Ottawa Street to a four lane cross-section as a high priority within a 0-5 year time period in order to adequately accommodate existing and future traffic volumes. Widening of the existing pavement to address future traffic needs combined with the proposed implementation of the Rapid Transit (RT) system will necessitate the acquisition of private property on one or both sides of the road.

The skewed alignment of Ottawa Street as it transitions through the King Street intersection is considered sub-standard. Recent observation of intersection traffic movements provides evidence that motorists crossing the King Street intersection periodically experience significant delays during peak periods.

The currently proposed route of the Region’s Rapid Transit system includes Ottawa Street from Charles Street to Mill Street. A separate Rapid Transit Environmental Assessment Study is currently being undertaken by the Region and will determine alignment and property requirements for the Rapid Transit system.

Schneider’s Creek is conveyed under Ottawa Street in the vicinity of Nyburg Road through an existing reinforced concrete bridge. This structure was constructed in 1968. A preliminary structural evaluation of the bridge indicates that its structural capacity may be exceeded by the combined application of traffic and light rail loading. Additionally, the bridge is not wide enough to accommodate the proposed widening of the road.

The Region of Waterloo intends to proceed with the proposed reconstruction and capacity improvements on Ottawa Street from King Street to Mill Street currently scheduled for 2014 at an estimated project cost of $5.0 million. The location of this project is shown on the attached key plan in Appendix A. The construction of the roadworks is planned to be undertaken at the same time as the proposed implementation of the Rapid Transit (RT) system on Ottawa Street in order to minimize the disruption for traffic and local property owners. To meet this aggressive schedule, an Environmental Assessment and Preliminary Design Study must be initiated now to determine the extent of roadway improvements required, their environmental impacts and required mitigation measures. Following the completion of this study, a detailed design and property acquisition must be completed before construction of the roadworks can begin. Planning for the required roadway and bridge improvements will be undertaken in accordance with the Schedule ‘C’ requirements of the Municipal Class Environmental Assessment.

Since staff are currently fully committed to other projects, an engineering consultant must be hired now to undertake the Environmental Assessment and Preliminary Design Study for Ottawa Street between King Street and Mill Street.

2. Consultant Selection

An invitation to submit Letters-of-Interest to provide engineering services was advertised in the Kitchener-Waterloo Record on Tuesday November 30, 2010. Nine (9) Letters-of-Interest were submitted and evaluated by the Consultant Selection Team which consisted of the following staff:
After the evaluation of the Letters of Interest, the Team short-listed four (4) firms which were invited to submit detailed work plans and fee estimates. The short-listed consultants were:

- AECOM;
- IBI Group;
- HDR/iTRANS; and
- McCormick Rankin Corporation.

The criteria used to evaluate the Letters of Interest, Work Plans and Fee Estimates were in accordance with the Region’s Purchasing Bylaw and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

**Quality Factors**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Approach and Understanding</td>
<td>35%</td>
</tr>
<tr>
<td>Experience of the Project Manager</td>
<td>20%</td>
</tr>
<tr>
<td>Experience of the Project Support Staff</td>
<td>15%</td>
</tr>
<tr>
<td>Experience on Similar Projects</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Equity Factors**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Workload for Region</td>
<td>3%</td>
</tr>
<tr>
<td>Local Office</td>
<td>2%</td>
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</tbody>
</table>

**Price Factor**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upset Limit Fee</td>
<td>15%</td>
</tr>
</tbody>
</table>

The Work Plans submitted by the short-listed consultants all demonstrated a comprehensive understanding of the components of the project, capable project teams and experience on similar projects. After consideration of the quality, equity and price factors, the submission by AECOM received the highest score from the Team. The upset limit fee proposed by AECOM was the lowest submitted by any of the short-listed consultants.

3. **Scope of Work**

The consultant selected for this assignment will be required to complete the following tasks:

- Implement a Public/Stakeholder Consultation Program
- Identify existing deficiencies and constraints
- Determine and evaluate alternative solutions and design concepts
- Prepare a structural appraisal of the Schneider Creek bridge
- Determine utility relocation requirements
- Identify property impacts and acquisition requirements
- Obtain all necessary approvals
- Prepare an Environmental Study Report
4. **Schedule**

Subject to Council’s approval of the consultant assignment, the proposed completion schedule for this assignment is as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background review and preparation of base plans</td>
<td>Spring 2011</td>
</tr>
<tr>
<td>Environmental inventory and data collection</td>
<td>Summer 2011</td>
</tr>
<tr>
<td>Public Information Centre #1</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>Alternative evaluation and preliminary design</td>
<td>Winter 2012</td>
</tr>
<tr>
<td>Public Information Centre #2</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>Environmental Study Report completion</td>
<td>Summer 2012</td>
</tr>
</tbody>
</table>

5. **Consultant’s Upset Fee**

The short-listed consultants were each requested to submit an upset limit fee for services required to complete the Environmental Assessment and Preliminary Design. The upset limit fee proposed by AECOM is $402,612.00 plus applicable taxes. A breakdown of AECOM’s upset fee is shown in Appendix B of this report.

**CORPORATE STRATEGIC PLAN:**

The Region’s consultant selection process supports Focus Area Six – Service Excellence of the Strategic Plan by meeting the objective to ensure services are responsive, efficient, effective and accountable. The selection process is both accountable and transparent.

The reconstruction of Ottawa Street between King Street and Mill Street, when complete, will support Focus Area Five – Infrastructure by ensuring that existing infrastructure is adequately maintained while providing for the needs of planned growth.

**FINANCIAL IMPLICATIONS:**

The Region’s DRAFT 2011 Ten Year Transportation Capital Program includes $5.0 million for this project in the years 2011 to 2015 funded from the Development Charges and Roads Capital Levy Reserve Funds. The upset limit fee of $402,612.00 plus HST to complete the Environmental Assessment and Preliminary Design Study is within the consulting fee allowance provided for in the total budget for this project.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

NIL

**ATTACHMENTS**

Appendix A: Project Key Plan
Appendix B: Breakdown of Consultant’s Fee Estimate

**PREPARED BY:** Peter Linn, Senior Project Manager, Design and Construction

**APPROVED BY:** Thomas Schmidt, Commissioner of Transportation and Environmental Services
APPENDIX A
PROJECT KEY PLAN

OTTAWA STREET (REGIONAL ROAD No. 4)
MILL STREET TO KING STREET
CITY OF KITCHENER
## APPENDIX B
### BREAKDOWN OF CONSULTANT’S UPSET FEE

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Environmental Assessment process</td>
<td>$214,592.00</td>
</tr>
<tr>
<td>2. Preparation of Environmental Study Report</td>
<td>$15,698.00</td>
</tr>
<tr>
<td>3. Public Consultation</td>
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</tr>
<tr>
<td>4. Schneider Creek Bridge Structural Appraisal</td>
<td>$22,354.00</td>
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<td>5. Preliminary Design</td>
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<td>6. Property Impact Plans</td>
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<td>7. Project Management</td>
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<td>8. Disbursements</td>
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<tr>
<td><strong>TOTAL UPSET FEES AND DISBURSEMENTS (excluding HST)</strong></td>
<td><strong>$402,612.00</strong></td>
</tr>
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RECOMMENDATION:

That the Regional Municipality of Waterloo accept the proposal of HSI Inc. for the supply of two (2) high speed turbo blowers for the Kitchener Wastewater Treatment Plant (WWTP) Plant 1 in the amount of $508,367.79 including applicable taxes.

SUMMARY:

The Kitchener Wastewater Treatment Plant (WWTP) consists of two separate treatment plants, Plant 1 (constructed in 1963) and Plant 2 (constructed in the mid-1970s). The 2007 Wastewater Treatment Master Plan recommended upgrades to Plant 2 and construction of a new Plant 3 at the Kitchener WWTP. Plant 1 will be decommissioned upon completion of Plant 3; however, reliable operation of Plant 1, until at least 2017, is essential during the construction of the Plant 2 and Plant 3 upgrades.

Plant 1 uses mechanical aeration equipment that is old, and has already served its useful life. A recently completed condition assessment has determined that the most cost-effective approach for maintaining ongoing reliable treatment at Plant 1 is to remove the existing mechanical aerators and retrofit Plant 1 with a modern, energy efficient fine-bubble diffused aeration system consisting of two (2) blowers and fine bubble air diffusers. This approach is already being utilized for the Plant 2 upgrades currently underway.

The upgrade work at the Kitchener WWTP requires carefully sequenced shutdowns in order to complete equipment installations while maintaining full treatment capacity at all times. Two blowers must be purchased now in order to complete their installation in Plant 1 in advance of sequential shutdowns for the Plant 2 construction planned to commence later in 2011.

In March 2010, following a competitive equipment supply proposal process, the Region purchased a total of 14 high speed turbo blowers manufactured by HSI Inc., including 6 for the Kitchener WWTP, at an average price of $266,583 per blower (including applicable taxes). In December 2010, staff approached HSI Inc. to explore their interest in providing a competitive price to the Region for the two needed Plant 1 blowers. Subsequent to successful negotiations, staff obtained from HSI Inc. a 5% additional volume discount for the additional two blowers compared to the competitive price approved in March 2010. Staff therefore recommends that the Region purchase two additional blowers from HSI Inc. at a total price of $508,367.79 ($254,183.90 per blower) including applicable taxes.
REPORT:

Background

The Kitchener Wastewater Treatment Plant (WWTP) consists of two separate treatment plants served by common preliminary and primary treatment facilities. Plant 1 was constructed in 1963 and Plant 2 was constructed in the mid-1970s. The total capacity of the plant is approximately 120 million litres per day (MLD).

The 2007 Wastewater Treatment Master Plan recommended upgrades to Plant 2 and construction of a new Plant 3 at the Kitchener WWTP to improve the quality of the plant’s effluent. These upgrades will improve water quality in the Grand River, energy efficiency and overall plant reliability, and reduce odour emissions. Plant 1 will be decommissioned upon completion of Plant 3, currently scheduled for 2017. Plant 2 upgrades are currently under construction and the preliminary design of Plant 3 was initiated in 2010. As part of the Plant 3 preliminary design a detailed condition assessment of the whole plant, including Plant 1, was recently completed. Reliable operation of Plant 1, until at least 2017, is essential for the construction of the Plant 2 and Plant 3 upgrades, as Plant 1 will be treating a significant amount of the plant flows (approximately 30 MLD) during these upgrades.

Plant 1 uses mechanical aeration equipment mounted on concrete bridges across the aeration tanks. The mechanical aerators are old, have already served their useful life, and standard replacement parts are no longer available. The support bridges also show signs of corrosion. The recently completed condition assessment has determined that it would not be cost-effective to maintain the existing mechanical aeration equipment and repair the bridges for the next six years. The most cost-effective approach for maintaining ongoing reliable treatment at Plant 1 until all upgrades to the WWTP are completed is to remove the existing mechanical aerators and bridges and retrofit Plant 1 with a modern, energy efficient fine-bubble diffused aeration system consisting of two (2) blowers and fine bubble air diffusers. This approach is already being utilized for the Plant 2 upgrades currently underway and will produce significant performance improvements to the plant effluent earlier than previously forecasted, further improving water quality in the Grand River prior to completion of the Plant 3 upgrades.

Schedule and Cost

The upgrade work at the Kitchener WWTP requires carefully sequenced shutdowns in order to complete equipment installations while maintaining full treatment capacity at all times. To ensure Plant 1 treatment reliability during the Plant 2 and Plant 3 upgrades, two blowers must be purchased now in order to complete their installation in Plant 1 in advance of sequential shutdowns for the Plant 2 construction planned to commence later in 2011. Subject to Council approval of this blower purchase, staff will also proceed to purchase fine-bubble air diffusers through a competitive equipment supply proposal process. The blower and fine-bubble air diffuser supply contracts will then be novated into a general construction contract to be tendered later this spring for installation during the summer/fall of 2011. The total cost for the Plant 1 upgrade is estimated to be $3,300,000.

Pre-purchase of High Speed Turbo Blowers

In March 2010, following a competitive equipment supply proposal process, the Region purchased 14 high speed turbo blowers manufactured by HSI Inc. at a total cost of $3,355,632.36 plus GST (Council Report F-10-021). These 14 blowers will be installed as part of the ongoing upgrades at
the Waterloo WWTP (8 blowers) and Plant 2 of the Kitchener WWTP (6 blowers at an average price of $266,583 per blower, including applicable taxes). In December 2010, staff approached HSI Inc. to explore their interest in providing a competitive price to the Region for the two needed Plant 1 blowers. Using the same blower equipment already selected for the ongoing upgrades will be beneficial to the Region through simplified operations and maintenance resulting in lower costs. It is also planned to re-use these two blowers in the future Plant 3.

Subsequent to successful negotiations, staff obtained from HSI Inc. a 5% additional volume discount for the additional two blowers compared to the competitive price approved in March 2010. The delivery time for the two new blowers for Plant 1 will be 12 weeks.

Staff therefore recommends that two (2) high-speed turbo blowers be purchased now from HSI Inc. in the amount of $449,883 ($224,941.50 per blower) plus applicable taxes. This price is competitive and the purchase conforms to the Purchasing By-Law Section VII – Items 21 (g) and (i).

CORPORATE STRATEGIC PLAN:

The Kitchener WWTP Upgrades support the Corporate Strategic Plan Focus Areas 1 and 5: Environmental Sustainability and Infrastructure, and the following strategic objectives: effectively use and manage energy resources, protect the quality and quantity of our water sources, and optimize the use of existing infrastructure and ensure it is adequately maintained.

FINANCIAL IMPLICATIONS:

The Draft 2011 Ten-Year Wastewater Capital Program includes a budget of $304,060,000 between 2011 and 2018 for upgrading the Kitchener WWTP, including $20,560,000 in 2011. Approximately $45 million has been allocated for upgrading Plant 2. The remaining $259,060,000 is to be used for the construction of the Kitchener WWTP Plant 3 upgrades, including all temporary work required to maintain plant operations during construction. The $508,367.79 cost of the blowers (including applicable taxes) is within the estimated amount for temporary works included in the overall project budget and will be funded from Regional Development Charges and Wastewater Reserve Funds.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Procurement & Supply Services (Purchasing) Division of the Finance Department was consulted in the preparation of this report.

ATTACHMENTS

None

PREPARED BY: Jo-Anne Ing, Senior Project Manager, Design and Construction

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

DATE: February 15, 2011

FILE CODE: "Insert File Code"

SUBJECT: FAIRWAY ROAD EXTENSION – SERVICING AGREEMENT WITH GRAND RIVER CONSERVATION AUTHORITY AND ROCKWAY HOLDINGS LTD.

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into an agreement with Grand River Conservation Authority and Rockway Holdings Ltd. to provide for installation of sanitary and storm sewer services under the Fairway Road Extension for future potential servicing of lands owned by Rockway Holdings Ltd. and Grand River Conservation Authority, and a storm sewer channel across lands owned by Grand River Conservation Authority to service the Fairway Road Extension, as described in Report No. CR-RS-11-009, subject to such agreement being satisfactory to the Commissioner of Transportation and Environmental Services and the Regional Solicitor.

SUMMARY:

The Region has commenced construction of the Fairway Road Extension. As part of the agreement of purchase and sale with Rockway Holdings Ltd. for a portion of the lands required for Fairway Road, the Region agreed to install sanitary and storm sewer culverts, at Rockway’s sole cost during construction of the road in order to minimize construction costs and avoid future excavation of the road to install services upon the development of adjacent lands owned by Rockway and Grand River Conservation Authority (GRCA). As part of the detailed design of Fairway Road it was confirmed that the Region requires a storm sewer channel would be required across adjacent lands owned by GRCA to provide an outlet for storm drainage from Fairway Road. The proposed agreements set out the details of the services to be constructed, timing for construction and the parties’ respective responsibility for the costs of such services. The sanitary and storm sewer services to be constructed under Fairway Road as part of the project are paid for by Rockway Holdings and later cost-shared with GRCA upon the development of its lands. The construction of the storm water channel across GRCA lands will be paid for by the Region as part of the Project.

REPORT:

Construction of the Fairway Road Extension commenced in September 2010 and is progressing on-schedule and on-budget. At this time it is anticipated that the road and bridge will be available to traffic on or before October 31, 2012.

Storm water collection and discharge design for the project was developed in close collaboration with staff from the Region’s Water Services Division and staff from the GRCA. Region and GRCA staff established a preferred storm water route that travels along the boundary of the GRCA floodplain, adjacent to the GRCA table lands. This route will consist of a shallow grassed swale.

The Region purchased lands and/or easements from Rockway Holdings Ltd. and from GRCA for the Project. Both Rockway and GRCA continue to own adjacent parcels of land. As part of the agreement of purchase and sale between the Region and Rockway, it was agreed that the Region
would construct sanitary and storm sewer service culverts for the future servicing of Rockway’s lands under the Fairway Road Extension, at Rockway’s sole expense, as part of the Project. Construction of these services as part of the Project would reduce costs and avoid future excavation of the new road to provide servicing to potential future development on Rockway’s lands.

Rockway intends to develop its lands and GRCA may develop its lands. An application for a zone change and draft plan of subdivision have been jointly submitted to the City of Kitchener for approval. In order to clarify the rights and obligations of each of the Region, Rockway and GRCA in respect of future servicing of the parties’ respective lands Regional staff have negotiated with representatives of Rockway and GRCA a proposed servicing agreement which may be summarized as follows:

- The Region will design and construct a storm sewer outlet channel and outlet across GRCA lands in an agreed upon alignment and generally in accordance with a preliminary design at the Region’s cost. In the event of future development of Rockway and/or GRCA lands the storm sewer outlet channel and outlet may need to be expanded, however, the Region's contribution to costs is limited to the initial construction cost which meets the minimum requirements of the Region for drainage of Fairway Road;
- As part of the Fairway Road Extension construction project the Region will construct sanitary sewer pipe and storm sewer culverts under Fairway Road, generally in accordance with the design and specifications provided and approved by Rockway and GRCA, all at Rockway’s sole cost. Rockway has provided a letter of credit to secure the costs of construction which shall be paid to the Region upon substantial completion of the Project or Rockway’s connection to the services whichever is earlier;
- This agreement specifically provides that installation of the services and the agreement itself do not in any way fetter the discretion of Regional Council or the GRCA Board in exercising their respective powers and authorities including any planning or servicing approvals in respect of potential future development of the lands;
- Rockway assumes full responsibility and liability for the design of said sanitary and storm water sewer services and their installation once completed and inspected by their consulting engineers.
- Rockway and GRCA have agreed upon their respective shares of the costs of the sanitary and storm sewer services being constructed on their behalf under Fairway Road and the timing for payment of same.

CORPORATE STRATEGIC PLAN:

Construction of the Fairway Road Extension supports Strategic Focus Area # 5 of the Corporate Strategic Plan to provide high quality infrastructure and asset management to meet current needs and future growth.

FINANCIAL IMPLICATIONS:

As noted in Report F-10-072, approved August 19, 2010, based upon the low tender submission, the estimated costs for Rockway Holdings Limited for construction of storm and sanitary services under Fairway Road are as follows:
The work on behalf of Rockway Holdings (which represents approximately 1% of the total contract value) was included provisionally in the contract at the time of Tender. Rockway Holdings subsequently provided the necessary securities in the full amount of $428,502.02 so that the Region could proceed with the work on behalf of Rockway Holdings. The costs of installing these services will be covered up front by the Region and reimbursed to the Region upon the earlier of substantial completion of the Project or connection to the services by Rockway Holdings.

The Region is responsible to pay for the construction costs of the storm outlet channel, crossing GRCA Lands, to accommodate storm drainage from Fairway Road. These costs are included in the approved budget for the Fairway Road Extension Project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from the Design and Construction Division of the Transportation and Environmental Services Department was consulted in the compilation of this Report CR-RS-11-000
REPORT:

1) The Need for Onboard Video Surveillance Systems for Grand River Transit Vehicles

Since the Region’s assumption of Grand River Transit (GRT) in 2000 the Region has experienced a variety of passenger and employee security related issues. These problems have been experienced on other public transportation systems across North America and there has been an increasing installation and use of video surveillance systems on public transportation vehicles. As an example, the following public transportation systems in Canada have video surveillance systems on their public transportation vehicles:

<table>
<thead>
<tr>
<th>Province</th>
<th>Municipality</th>
<th>Active Vehicles</th>
<th>Equipped Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Calgary</td>
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</tr>
<tr>
<td>ON</td>
<td>Ottawa</td>
<td>1020</td>
<td>3</td>
</tr>
</tbody>
</table>
This technology will enhance the onboard safety and security of travelling customers and employees since transit vehicles are vulnerable to risks which can threaten the health and safety of passengers and employees. In conjunction with existing GRT security staff and the video surveillance available at Regional facilities including transit terminals; these onboard surveillance systems provide the following additional benefits:

- Deter and investigate onboard vandalism, violence and other potential criminal activities;
- Create a feeling of enhanced security among passengers;
- Discourage intimidating and other unwelcome behaviour;
- Help to investigate vehicle collisions and incidents that could result in legal proceedings.

2) Privacy

The Region is governed by the Municipal Freedom of Information and Protection of Privacy Act ("MFIPPA"). This Act regulates the Region’s collection, use, retention, disclosure and destruction of personal information which includes video images recorded of individuals. In general, MFIPPA allows the use of video surveillance equipment if it is used for the purposes of law enforcement or necessary for the proper administration of a lawfully authorized activity.

The Information and Privacy Commissioner of Ontario has released guidelines and decisions to assist public transit providers in implementing video surveillance systems. These guidelines and decisions are not necessarily binding upon the Region. Rather, they provide guidance and suggestions. The current guideline is titled Guidelines for the Use of Video Surveillance Cameras in Public Places (September, 2007) and a recent decision is titled Privacy and Video Surveillance in Mass Transit Systems (a 2008 report regarding video surveillance use on the TTC). This Guideline and decision concluded that based on the unique and multifaceted nature of mass transit systems, a full range of safety and security options are available and permitted including the use of video surveillance equipment. The Commissioner determined that video surveillance was permissible, in general, under MFIPPA since safety and security are essentials components to the proper functioning and administration of a public transit system.

The Guideline and decisions state, however, “Institutions must balance the public benefits of video surveillance against an individual’s right to be free of unwarranted intrusion into his or her life.”

3) GRT Surveillance Systems

The Region currently operates surveillance systems at GRT facilities such as Ainslie Street Terminal, Conestoga Garage, Charles Street Terminal, Highland Hills Mall and Strasburg Garage. These surveillance systems are operated in accordance with the Region’s Policy titled “VIDEO SURVEILLANCE POLICY”. These systems have operated since prior to the amalgamation of Cambridge Transit and Kitchener Transit with the Region without any significant issues or concerns. In 2010, the Region acquired video surveillance systems to be installed on GRT vehicles so that the Region can respond to the ongoing public safety concerns. These systems were originally planned to be implemented on a test basis through installation on 15 vehicles and the balance of systems was to be installed in 2011.
In recognition of the privacy rights of transit customers, a draft Mobile Video Surveillance Policy has been developed in accordance with Information and Privacy Commissioner of Ontario’s Guidelines. This draft policy, which is attached as Appendix A to this Report, is to address the privacy safeguards of storage, retention and access to any images or information captured through the onboard video surveillance system. Of particular highlight, are the following policy safeguards:

- Any information obtained by way of a surveillance system may only be used to assist in protecting the Region, their employees, residents or visitors, assessing a threat to safety and security, or to investigate transit service issues and to protect assets.
- Information collected by recording systems on GRT vehicles will, unless otherwise requested, be routinely erased or recorded over after a period of 60 hours of vehicle operational time.
- Information required for investigative purposes by a law enforcement agency or for public safety, or for the defence of liability claims against the Region will be copied and retained for more than one (1) year.
- All surveillance systems will be reasonably obvious to persons using the vehicle.
- Signage indicating surveillance systems are in operation will be prominently displayed at all entrances and on the inside of the vehicle.
- A Notice of Collection, required under section 29 of MFIPPA, will also be available to the public through the GRT website (www.grt.ca), public directories, or alternate formats such as pamphlets or signage.
- Mobile surveillance systems will be installed or configured to prevent or limit the ability to record beyond the immediate vicinity of the vehicle.
- Surveillance recording equipment monitors, and information storage media will be in a controlled access area restricted from any public or unauthorized viewing.
- Only authorized persons as determined by the Director, Transit Services or designate may access surveillance images or information to support a necessary function.
- All proposed new installations of surveillance systems onboard GRT vehicles and revisions to existing locations are to be submitted for approval. The approval process will examine the need for the equipment recognizing MFIPPA.
- Equipment will not be used for the purpose of monitoring employees.
- All GRT employees will be advised of and required to read and comply with the Mobile Video Surveillance Policy. Notification will be sent to all employees at any given location prior to the new installation of surveillance systems.
- At each site where systems are in operation, a supervisor/manager has been designated to maintain the list of authorized persons. This designate is responsible for ensuring only the listed people have access to video surveillance images or information, recording or storage equipment.
- Release of surveillance images or information requires the approval of the Director, Transit Services or designate. All requests for release of information and all released information will be logged for tracking purposes. Copies of surveillance information will only be released with the signed authorization of the Director, Transit Services.
- Requests from law enforcement agencies or regulatory agencies will normally be in writing. In cases where an appropriate agency requests immediate access for reasons including imminent danger, hot pursuit or serious threat to public and worker health and safety, information may be disclosed by the designated or responsible manager at the facility without a written request. Requests from other public agencies (e.g. Ministry of Labour Investigators, etc.) will be in writing and must identify the legal authority under which the agency is requesting disclosure.
- Individuals requesting access to information under MFIPPA will be directed to the Region’s Freedom of Information & Privacy Advisor in Council and Administrative Services which will process the request in accordance with the legislation.
- All information storage devices will be located in a controlled access area. Storage media capable of being removed from the recording device will be kept in a locked storage container within the controlled access area.
- Where images are captured on computer drives these are to be password protected so only authorized persons can obtain access.
- Information sent via the web or wifi to remote monitoring locations will also be password protected. Storage devices will be securely disposed of in such a way that any personal information cannot be reconstructed or retrieved.
- An annual report summarizing all new on-board installations, as well as all requests for surveillance information and any other related security issues of import will be made to Regional Council.

4) Public Consultation

One suggestion in the Guidelines is that transit providers consult with the public concerning the creation and implementation of a policy. Based on this, staff seeks direction to conduct the following public consultation:

150 Frederick St. Regional Headquarters, Kitchener, ON  (Date and time to be determined)  
Charles St. Transit Terminal, Kitchener ON Transit Terminal (Date and time to be determined)  
Ainslie St. Transit Terminal, Cambridge ON Transit Terminal (Date and time to be determined)  

The primary input that staff will seek from the public will concern implementation and safeguards.

The opportunity for public consultation will extend the implementation of the GRT policy. For this reason, the installation of the test and/or complete video surveillance system will be deferred. This is to ensure that the Region has a policy in place at the same time that any system is installed.

Over the next several months this draft policy and the rationale for installing these safety and security devices will be reviewed with the community through a series of Public Information Centers. Once this community dialogue and policy review is complete the updated Onboard Mobile Video Surveillance Policy will be reported back to Regional Council for approval in advance of the installation of this video surveillance system.

CORPORATE STRATEGIC PLAN:

The implementation of the Mobile Video Surveillance system on GRT buses supports Focus Area 3: Healthy and Safe Communities and Focus Area 5 Service Excellence by ensuring a safe environment for employees and customers while safeguarding their right to privacy.

FINANCIAL IMPLICATIONS:

The approved 2010 GRT Capital Budget includes $1,773,000, to be funded from debentures, for the purchase and installation of the mobile video surveillance system. The initial capital purchase of the surveillance system to outfit 162 (of 218) GRT buses was outlined in Report F-10-065 based on the proposal accepted from Seon Design Inc. at a cost of $755,777.90 including all applicable taxes. It is estimated that over the next four years an additional $750,000 will be required to outfit the remainder of the fleet, install all system communications components and cover extended warranties on the equipment.

It is anticipated that the costs associated with the development and implementation of the GRT Onboard Mobile Surveillance System Policy can be accommodated within the existing capital budget approval.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Consultation occurred with Corporate Resources staff with assistance from both the Information Access & Privacy Advisor and Legal Services.

ATTACHMENTS

Onboard Mobile Video Surveillance Systems Policy (Draft)

PREPARED BY:  E. Gillespie, Director Transit Services

APPROVED BY:  T. Schmidt, Commissioner of Transportation and Environmental Service
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: February 15, 2011  
FILE CODE: C06-60/P&W/WS.11  
SUBJECT: PREPARATION OF THE UPDATED GRAND RIVER ASSESSMENT REPORT UNDER THE CLEAN WATER ACT

RECOMMENDATION:
For Information Only.

SUMMARY:

The Region of Waterloo has undertaken additional technical study and risk assessment that is to be included in an Updated Assessment Report to fulfill the Region's obligations under the Clean Water Act. The risk assessment resulted in the identification of 2750 properties where Significant threats occur and for which risk mitigation measures will be required to be established in the Source Protection Plan (SPP) for the Grand River watershed. This number is slightly higher than that identified in the original Assessment Report; although in neither case does the identification indicate actual impacts to drinking water quality. As part of the consultation on the Updated Assessment Report, notices will be provided to property owners where new Significant threats were identified in the Updated Assessment Report. The draft proposed Updated Assessment Report is scheduled to be released for public comments on April 14, 2011.

REPORT:

Background

The Clean Water Act establishes the legislative framework for undertaking watershed-based source water protection. The purpose of this initiative is to reduce water quality and water quantity risks from threats to drinking water sources. The Clean Water Act and related regulations establish a multiple step process to be undertaken over a number of years to establish a SPP that will contain policies to mitigate risks to drinking water sources. Several recent reports to Regional Council (E-10-082, E-10-012, E-09-110) have provided information on the technical components of the risk assessment which is to be documented in an Assessment Report for each watershed. The Assessment Report provides the technical basis for development of the SPP. The completion of technical work for the Assessment Report and policy development in the SPP is a collaborative effort between municipalities and Grand River Conservation Authority (GRCA) staff. The multi-stakeholder Lake Erie Source Protection Committee (SPC) is responsible for completing the Assessment Report and the SPP.

The Grand River watershed Assessment Report was submitted to the Province on December 20, 2010 and is currently undergoing provincial review. The Region provided formal comments on the Assessment Report to the GRCA (E-10-082). In addition, Region and GRCA
staff have been working on an update to the Assessment Report, as allowed under the Clean Water Act, to include new and updated information. The additional work completed by the Region was funded by the Province through an amended agreement with the GRCA.

This report provides a summary of the work being completed to the Region of Waterloo section of the Updated Assessment Report prior to release of the report for public consultation. It also provides follow-up information regarding the Region’s formal comments on the original Assessment Report and a summary of the status of the development of the SPP.

Assessment Report Status

The Grand River watershed Assessment Report contains a detailed assessment of drinking water sources in the watershed, including a risk assessment for each county, region or single-tier municipal system. Risk was determined by identifying and ranking Threats (existing and future land uses and activities, intake water quality Issues and historic water contamination Conditions) in vulnerable drinking water areas including municipal well head and surface water intake protection areas. In addition, risk is calculated for significant groundwater recharge areas and areas of high vulnerability within the watershed. A risk “score” is calculated for each threat in each vulnerable area and any threat where the risk is calculated to be Significant must have a policy in the SPP to mitigate the risk.

In total, the Assessment report contains 21 chapters and over 1000 pages of text, figures and tables. In September 2010, the Region of Waterloo provided formal comments to the SPC on the proposed Assessment Report (E-10-082) including two recommendations to address Region staff's concerns with the report. The concerns are listed below along with progress on each issue to date.

1. The Region requested that the Province recognize that the legislated method for assessing road-salt impacts is insufficient to meet the Region’s needs for addressing salt threats to drinking water supply wells. The current method proposed by the Ontario Ministry of the Environment (MOE) does not result in the identification of any Significant threats, which is inconsistent with the increasing concentrations of salt in most of the Region’s drinking water systems. The Region and GRCA proposed a “modified method” to assess road salt threats; however, the MOE did not accept the modified method as meeting the applicable provisions of the Clean Water Act. A new “modified method” has been devised for the Updated Assessment Report, based on discussions with MOE and GRCA staff, and will be submitted for MOE’s approval before official submission of the Updated Assessment Report. Notwithstanding this modified method, the Region’s original request should be included as a comment on the Updated Assessment Report as the inadequacy of the prescribed method is still applicable.

2. The Region objected to including e-coli as a Clean Water Act “Issue” for the Brantford surface water system in the Assessment Report. The GRCA and Brantford have re-evaluated the Brantford risk assessment and removed e-coli as an issue for the Brantford intake as part of the original Assessment Report.

In addition to these concerns, it was noted that the North Paris Well Field wellhead protection areas (WHPA) covered a considerable portion of the Township of North Dumfries and overlapped the Region’s WHPA for Ayr. The GRCA has updated the delineation of the North Paris Well Field and the WHPAs are now more realistic and do not overlap Region of Waterloo WHPA. These modified areas will be included in the Updated Assessment Report.
Updated Assessment Report

Municipalities and the GRCA are completing additional technical studies for an Updated Grand River Assessment Report, to incorporate new technical data and meet the evolving requirements of the Clean Water Act. In the Region of Waterloo, this work included the following tasks:

- updating the vulnerability assessments for aquifers, for the Mannheim Water Treatment Plant surface water intake on the Grand River, and for several well systems to address changes in classification, new guidance from the MOE and/or Peer Review comments on the original mapping;
- updating the Region’s threat inventory to address changes in guidance/regulations from the MOE;
- gathering additional detailed threat information to confirm the presence of threats on existing properties; and
- revising the risk assessment using the updated threat information and vulnerability mapping.

Table 1 provides a detailed breakdown by well field of the total number of properties with Significant threats. In total, 2750 properties have been identified as having Significant threats. This value is slightly higher than the number of properties identified for the original Proposed Assessment Report (2691) and reflects changes in the protection areas and methods as described above. The number of properties with Significant threats increased in approximately half (21 of the 39) of the well fields whereas the remaining well fields had lower numbers of properties or the numbers stayed the same. There was neither a substantial change in the types of threats identified nor substantial change in numbers at any individual well field. As noted in report E-10-082, the identification of Significant threats does not necessarily indicate any impact to the water supply as this assessment only looks at the potential for impact. It is also important to note that the majority of the significant threats are related to water quality Issues and Region staff are undertaking additional monitoring/assessment, are implementing land-management programs or treatment upgrades to address each Issue.

The draft proposed Updated Assessment Report is scheduled to be approved by the SPC for public consultation on April 14, 2011 and submitted to the Province on June 30, 2011. Notification letters will be sent to property owners that were identified as having Significant threats on their properties. Comments on the report are to be provided within the 30-day public commenting period.

Progress with the Grand River Source Protection Plan

Development of the SPP is the next step in the Clean Water Act process. The GRCA has formed a project team including staff from the Region of Waterloo to develop discussion papers that can be used by all municipalities in the Grand River watershed for policy development. It is anticipated that there will be at least one discussion paper for each of the 19 water quality threats prescribed in legislation. The discussion papers will provide a list of implementation options for each of the threats. Workshops will be held with stakeholders to provide input into the options available to address each threat. It is anticipated that the discussion papers will be completed by June 2011 and will then be provided to each municipal or conservation authority that has been identified to take the lead in development of risk mitigation policies. It is anticipated that development of policies and public consultation on the policies will occur in the fall. Consultation on the SPP is scheduled to occur in March 2012 to facilitate submission of the SPP to the MOE by the August 2012 deadline.
The Regional Official Plan may need to be amended once the SPP is approved by the MOE. The MOE continues to promote that municipalities establish and implement source water protection programs, including policies in their official plans, for their drinking water supplies in advance of approval of the SPP.

CORPORATE STRATEGIC PLAN:

The Region of Waterloo’s inclusion and support of the Grand River Assessment Report under the Clean Water Act, 2006 supports the Corporate Strategic Plan Focus Area 1: Environmental Sustainability by “protecting and enhancing the environment”.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Table 1: Enumeration of Significant Threats by Wellfield

PREPARED BY: Eric Hodgins, Manager, Hydrogeology & Source Water

APPROVED BY: Thomas Schmidt, Commissioner, Transportation & Environmental Services
Table 1: Enumeration of Significant Threats by Wellfield for the Updated Assessment Report

<table>
<thead>
<tr>
<th>Well Field</th>
<th>Total Number of Significant Threat Activities</th>
<th>Total Number of Properties with Significant Threats</th>
<th>Total Number of Properties with Significant Threats Related to Issues</th>
<th>Drinking Water Quality Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayr</td>
<td>1</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>Baden</td>
<td>135</td>
<td>70</td>
<td>64</td>
<td>Nitrate</td>
</tr>
<tr>
<td>Blair Road</td>
<td>3</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>Branchton Meadows</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>Salt</td>
</tr>
<tr>
<td>Clemens Mill</td>
<td>16</td>
<td>11</td>
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<td></td>
</tr>
<tr>
<td>Conestogo</td>
<td>43</td>
<td>34</td>
<td>0</td>
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</tr>
<tr>
<td>Dunbar Road</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Elgin Street</td>
<td>130</td>
<td>106</td>
<td>105</td>
<td>Salt, TCE</td>
</tr>
<tr>
<td>Elmira</td>
<td>25</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Erb Street</td>
<td>8</td>
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<tr>
<td>Fountain Street</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
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<tr>
<td>Foxboro Green</td>
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<td></td>
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<tr>
<td>Greenbrook</td>
<td>201</td>
<td>177</td>
<td>174</td>
<td>Salt</td>
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<tr>
<td>Heidelberg</td>
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<td>14</td>
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<tr>
<td>Hespeler</td>
<td>114</td>
<td>108</td>
<td>106</td>
<td>Salt (H3), Salt &amp; Nitrate (H4)</td>
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<tr>
<td>Lancaster</td>
<td>14</td>
<td>8</td>
<td>0</td>
<td></td>
</tr>
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<td>Linwood</td>
<td>19</td>
<td>17</td>
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<tr>
<td>Mannheim</td>
<td>615</td>
<td>357</td>
<td>350</td>
<td>Nitrate (K23, K24 &amp; K26)</td>
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<tr>
<td>Maryhill</td>
<td>32</td>
<td>24</td>
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<td>Middleton</td>
<td>893</td>
<td>795</td>
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<td>New Dundee</td>
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<td>New Hamburg</td>
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<td>Parkway</td>
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<td>293</td>
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<td>Pinebush</td>
<td>143</td>
<td>124</td>
<td>107</td>
<td>Salt (G5)</td>
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<td>Pompeii / Forwell</td>
<td>20</td>
<td>8</td>
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<td>Roseville</td>
<td>24</td>
<td>21</td>
<td>0</td>
<td></td>
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<tr>
<td>Shades Mill</td>
<td>26</td>
<td>11</td>
<td>0</td>
<td></td>
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<tr>
<td>St. Agatha</td>
<td>173</td>
<td>128</td>
<td>127</td>
<td>Nitrate</td>
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<td>St. Clements</td>
<td>45</td>
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<td>Strange Street</td>
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<td>14</td>
<td>7</td>
<td>Salt (K10A)</td>
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<td>Strasburg</td>
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<td>Waterloo North</td>
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<tr>
<td>Wellesley</td>
<td>9</td>
<td>4</td>
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<td></td>
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<tr>
<td>West Montrose</td>
<td>6</td>
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<td>Willard</td>
<td>33</td>
<td>26</td>
<td>0</td>
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<tr>
<td>William Street</td>
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<tr>
<td>Wilmot Centre</td>
<td>164</td>
<td>92</td>
<td>90</td>
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<tr>
<td>Woolner</td>
<td>8</td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Grand River Intake</td>
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<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Some properties lie in areas of overlapping protection zones and are ranked and counted separately for each well field. Total number of significant threat properties with overlaps removed equals 2750.
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Water Services

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

DATE: February 15, 2011          FILE CODE: E04-80/MOE.QTY; C06-60/PW/WS.11

SUBJECT: 2010 ANNUAL WATER QUALITY REPORT FOR THE REGION OF WATERLOO
RURAL AND INTEGRATED WATER SYSTEMS

RECOMMENDATION:
For information only.

SUMMARY: NIL

REPORT:
Background
To meet the reporting requirements under Ontario Regulation 170/03, the Region issues an Annual Water Quality Report by February 28 each year and an Annual Summary Report by March 31.

A total of 52 Water Quality Reports for the period January 1, 2010 to December 31, 2010 have been prepared, one for each location supplying water to the distribution system and for the distribution systems operated by the Region in the Townships of Wellesley and North Dumfries. These reports are presented in the Region’s 2010 Annual Water Quality Report. The key finding of this report is that municipal drinking water delivered by the Region during 2010 met the necessary requirements under the Safe Drinking Water Act. The report will be placed in the Councillors’ Library by February 28, 2011, and will also be forwarded to the cities and townships within the Region.

Annual Water Quality Report
The purpose of the 2010 Annual Water Quality Report is to provide a comprehensive document on all the water quality data. The Ministry of the Environment (MOE) has established six criteria to be included in the report:

1. a brief description of the drinking water systems including a list of water treatment chemicals used;
2. a summary of any reports made to the MOE under the Safe Drinking Water Act (SDWA) (18(1)) Duty to report adverse test results or the O.Reg. 170/03 Section 16 (16-4) Duty to report other observations;
3. a summary of the result of tests required under this O.Reg. 170/03 or a Certificate of Approval or a MOE Order; or the most recent results taken;
4. a description of any corrective action under the O.Reg. 170/03 Schedule 16 Reporting adverse test results and other problems, Schedule 17 Corrective Action (Large Municipal Residential) and Schedule 18 Corrective Action (Small Municipal Residential);
5. a description of any expenses incurred to install, repair or replace required equipment;
6. a statement on when the Annual Summary Report will be issued (required by March 31).
In accordance with the Regulation, the Region ensures that a copy of the Annual Water Quality Report is provided to the MOE Director, is available free of charge from Water Services, and is posted on the Region's website. The Region has been publishing annual water quality reports since 1994.

**Ontario Drinking Water Quality Standards**

The MOE established the water quality sampling and analytical requirements through their SDWA, Regulation 170/03, 169/03, various regulation amendments, certificates of approval and MOE orders. There are three types of drinking water quality standards, objectives and guidelines:

1) health-related standards, to protect public health;
2) aesthetic objectives, and
3) operational guidelines to ensure efficient treatment and distribution of the water.

**Water Quality Monitoring Programs**

Water samples are collected from all Regional water sources throughout the year, using the sampling protocols established by the MOE. Most of these samples are analyzed at the Regional Laboratory. The bacteriological quality of each water supply is tested once a week. Testing for chemical and physical analyses is done in accordance with the regulation, acts, certificates of approval and MOE orders. The quality of the water is continuously monitored at many strategic locations throughout the Region using the computerized telecommunication system known as Supervisory Control and Data Acquisition System (SCADA) located at the Mannheim Water Treatment Plant. The MOE also checks the quality of the Region’s water every year during their Annual Inspections Program. Wellesley and North Dumfries Water Distribution Systems are included with their respective supplies. The results of these analyses are presented in the 52 reports.

In 2010, there were two water quality issues that are continued from 2009. Firstly, a reclassification of the Middleton wellfield required an interim operating protocol (MOE approved) to be continued while a capital upgrade is completed. Secondly, unusually high THM results detected in the West Montrose distribution system are being addressed in accordance with the regulation and an Environmental Assessment of the facility initiated.

In 2008, changes to the regulations were made to include health-related lead sampling requirements for distribution systems. For each individual distribution system, sampling was required of residential, non-residential and distribution sites, with the number of samples needed based on population. Within the changes to the regulation, the opportunity exists to reduce the number of samples required and the frequency of sampling based on two consecutive rounds of results being below the maximum acceptable concentration for lead. After the final round of sampling in 2009 and further regulation changes, all 8 of the Region’s systems have now qualified for reduced sampling. Future sampling will occur every 3rd year and the number of samples will be reduced to half in all 8 of our systems: Wellesley, St. Clements, Linwood, Heidelberg (Wellesley side), Roseville, Branchton Meadows, Lloyd Brown and Ayr.

The remaining Local Municipalities will be issuing separate Annual Water Quality Reports for their Water Quality Monitoring on the distribution system which includes their lead testing results.

**CORPORATE STRATEGIC PLAN:**

The Annual Water Quality Report supports Focus Area 6: Service Excellence.
FINANCIAL IMPLICATIONS:
Nil

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
The Public Health Department has reviewed this report and is in agreement with its conclusions.

ATTACHMENTS:
Nil

PREPARED BY: Olga Vrentzos, Manager, Operations and Maintenance, Water Services
APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: February 15, 2011

FILE CODE: C06-60/E13-20/8797-20

SUBJECT: KITCHENER WASTEWATER TREATMENT PLANT 1 UPGRADES – EXTENSION OF CONSULTANT’S ASSIGNMENT

RECOMMENDATION:

That the Regional Municipality of Waterloo extend AECOM’s consulting assignment for the Pre-Design of the Kitchener Wastewater Treatment Plant Upgrades (Planning & Works Report E-10-071 of June 22, 2010) to include engineering services for the detailed design and services during construction for Plant 1 Upgrades at an additional upset fee limit of $330,000.00 plus applicable taxes at a grand total of $2,428,275 plus applicable taxes.

SUMMARY:

The Region has retained AECOM (Report E-10-071, dated June 22, 2010) to develop a comprehensive Site-Wide Facility Plan to define a program of upgrades for the Kitchener WWTP that can reliably meet performance objectives for a 20-year time frame. It is planned that, with the construction of the new Plant 3, Plant 1 will be decommissioned in approximately 2017. Until this time, however, Plant 1 must remain in service to provide capacity to treat existing flow.

Plant 1 was constructed in 1963, and has been operating for almost 50 years. AECOM has recently completed a detailed condition assessment of this facility and found that the aeration system in Plant 1 may not last until 2017, when Plant 1 will be decommissioned. Plant 1 uses mechanical aeration equipment mounted on concrete bridges across the aeration tanks. The mechanical aerators are old and have already served their useful life. The support bridges show signs of corrosion and extending its life until Plant 1 is decommissioned is not recommended. The Region has reviewed with AECOM the condition of the aeration equipment and the support bridges, and determined that it would not be economical to maintain this equipment and repair the bridges for the next six years. The safest and more economical solution for providing treatment at Plant 1 until all upgrades to the WWTP are completed is to remove the bridges and retrofit the system with diffused air.

It is recommended that AECOM’s consulting assignment for the Pre-Design of the Kitchener Wastewater Treatment Plant Upgrades (Planning & Works Report E-10-071 of June 22, 2010) be extended to include engineering services for the detailed design and services during construction for Plant 1 Upgrades at an additional upset fee limit of $330,000.00 plus applicable taxes, at a grand total of $2,428,275 plus applicable taxes.

REPORT:

Background

The Kitchener Wastewater Treatment Plant (WWTP) comprises of two separate treatment plants served by common preliminary and primary treatment facilities. Plant 1 was constructed in 1963, and has been operating for almost 50 years. Plant 2 was constructed in the mid-1970s. The total
capacity of the plant is approximately 120 million litres per day (MLD).

The 2007 Wastewater Treatment Master Plan recommended upgrades to Plant 2 and construction of a new Plant 3 to improve the quality of the plant’s effluent. These upgrades will improve water quality in the Grand River, energy efficiency, overall plant reliability, and reduce odour emissions. Plant 1 would be decommissioned upon completion of construction of Plant 3, currently scheduled for 2017. Plant 2 upgrades are under construction (Council Report F-10-093 of November 24, 2010), and the pre-design of Plant 3 was initiated in 2010 by AECOM, the selected Consultant for this assignment (Planning & Works Report E-10-071 of June 22, 2010).

The Plant 3 pre-design includes the completion of a detailed condition assessment of the whole plant and development of a comprehensive Site-Wide Facility Plan. The condition assessment was recently completed and it recommends several upgrades to Plant 1, so that it could remain operational until 2017. Satisfactory operation of Plant 1 is considered essential for the construction of Plants 2 and 3 upgrades, as it will be treating a significant amount of the plant flows (or approximately 30 MLD) during these upgrades.

Plant 1 uses mechanical aeration equipment mounted on concrete bridges across the aeration tanks. The mechanical aerators are old, have already served their useful life, and standard replacement parts are no longer available. The support bridges show signs of corrosion and extending its life until Plant 1 is decommissioned is not recommended. The Region has reviewed with AECOM the condition of the aeration equipment and the support bridges, and determined that it would not be economical to maintain this equipment and repair the bridges for the next six years. The safest and more economical solution for providing treatment at Plant 1 until all upgrades to the WWTP are completed is to remove the bridges and retrofit the system with diffused air.

The recommended solution for upgrading Plant 1 will include purchase of equipment that will be later re-used in Plant 3 such as the air blowers. This option will also realize significant performance improvements to the plant effluent earlier than previously forecasted, further improving water quality in the Grand River prior to completion of the Plant 3 upgrades.

It is anticipated that the detailed design for the Plant 1 upgrades will commence immediately upon receiving Regional Council approval for extending the Plant 3 pre-design assignment to also include the Plant 1 upgrades. It is expected construction at Plant 1 will start approximately in June 2011.

Extension of Consultant’s Assignment and Upset Limit

Upgrades of Plant 1 are time sensitive as keeping the plant operating under compliance during the ongoing Plant 2 upgrades and the future construction of Plant 3 is essential. AECOM is familiar with the plant as it is undertaking the engineering works for the Plant 3 upgrades and can provide consulting services at a lower cost than other consultants.

An upset fee of $330,000.00 plus applicable taxes was negotiated for consulting fees and disbursements for the Kitchener WWTP Plant 1 Upgrades with AECOM. The negotiated fee represents approximately 10% of the overall Plant 1 Upgrades costs, which is considered competitive for a project of this nature. Therefore, the Project Team recommends that the current consulting assignment for the pre-design of the Kitchener Wastewater Treatment Plant (WWTP) Plant 3 Upgrades be extended to include engineering services for the detailed design and services during construction for Plant 1 Upgrades. A breakdown of the consultant’s upset fee is included in Appendix A attached to this report.
Scope of Work

The scope of engineering work for the Plant 1 Upgrades includes:

- Confirmation of design concept, including site survey, process modeling, review of options and facilitation of a design scoping workshop with the Region and OCWA;
- Equipment pre-selection and pre-purchase (blowers and diffusers);
- Preparation of detailed design, with reviews at 50% and 95%;
- Provision of services during tender period;
- Contract administration and site inspection services; and
- Post construction services.

Schedule

Subject to Council’s approval of this report, the proposed schedule is approximately eleven (11) months commencing February 2011 and ending in December 2011.

CORPORATE STRATEGIC PLAN:

The Kitchener WWTP upgrades supports the Corporate Strategic Plan Focus Areas 1 and 5: Environmental Sustainability and Infrastructure; and the following strategic objectives: effectively use and manage energy resources, protect the quality and quantity of our water sources, and optimize the use of existing infrastructure and ensure it is adequately maintained.

FINANCIAL IMPLICATIONS:

The Draft 2011 Ten-Year Wastewater Capital Program includes a budget of $304,060,000 between 2011 and 2018 for upgrading the Kitchener WWTP, including $20,560,000 in 2011. Approximately $45 million has been allocated for upgrading Plant 2, including the construction of a new UV Disinfection Facility and Effluent Pumping Station. The remaining $259,060,000 is to be used for the construction of the Kitchener WWTP Plant 3 upgrades part of this assignment. The preliminary estimated cost for the upgrades of Plant 1, including engineering fees, is $3.3 million plus applicable taxes. The costs for upgrading Plant 1 are within the project allowance in the current budget and will be funded from Regional Development Charges and Wastewater Reserve Funds.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Finance Department, Procurement & Supply Services (Purchasing).

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

Appendix A – Breakdown of Consultant’s Upset Fee

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Fees</th>
</tr>
</thead>
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<td>Task 1</td>
<td>Confirm design concept</td>
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<tr>
<td>Task 2</td>
<td>Equipment pre-selection</td>
<td>$13,963</td>
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<td>Task 3</td>
<td>Detailed design</td>
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<td>Task 4</td>
<td>Tendering</td>
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<td>Task 5</td>
<td>Services during construction</td>
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<td>Task 6</td>
<td>Post-construction services</td>
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<tr>
<td><strong>Total Consultant Upset Fee</strong></td>
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<td><strong>$330,000.00</strong></td>
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REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Water Services

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

DATE: February 15, 2011

CODE: E03-20/4930-10; C04-30

SUBJECT: CONSULTANT SELECTION FOR THE WEST MONTROSE WATER SUPPLY SYSTEM CLASS EA

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consulting Services Agreement with AECOM Canada Ltd. of Kitchener, Ontario, to provide consulting engineering services for undertaking the West Montrose Water Supply System Class Environmental Assessment (EA) preliminary design and disinfection upgrades, at an upset limit of $478,215 plus applicable taxes, as per Report E-11-019, dated February 15, 2011.

AND THAT the Regional Municipality of Waterloo grant pre-budget approval, for this phase of the project, prior to approval of the 2011 Ten Year Water Capital Program.

SUMMARY:

In 1995, the Region started a Class EA to address deficiencies associated with the West Montrose Water Supply System. Based on recommendations from the EA, upgrades were completed in 1999. Since that time the water supply system has continued to have operational challenges associated with both water quantity and quality. The existing wells have had challenges meeting the water demands of the West Montrose community resulting in water being trucked in from other Regional supplies.

This study will review the current water supply and treatment for the community, and develop and recommend a solution which will ensure a reliable water supply for the community in the short and long-term. In parallel to the EA process, the Region has requested that the consultant complete an upgrade to the disinfection process at the water treatment plant to improve disinfection and reduce impacts of disinfection by-products in the treated water.

A request for Expression of Interest to provide engineering services by prospective consultants was advertised in the Kitchener-Waterloo Record and on the Region’s Website. Based on the Region’s consultant selection policy, which includes a review of the Expression of Interest, detailed work plans, schedules and upset fee cost, the consultant selection team recommends that AECOM Canada Ltd. of Kitchener, Ontario be retained to undertake this assignment at an upset fee limit of $478,215 plus applicable taxes.

Completion of this assignment is expected to be in late 2012, after which the preferred alternative for water supply for West Montrose, as identified in this EA, will be further pursued.

REPORT:

Background
The original water supply system in West Montrose was constructed by a private developer in 1988.
Between 1992 and 1994, the developer and the Region jointly operated the system. The Region assumed complete ownership of the system in 1994 and started an EA in 1995 to address issues associated with the system.

The existing system consists of four infiltration wells, iron and manganese removal and cartridge filters, water storage reservoir, chlorine disinfection and high lift pumping station.

Upgrades were completed in 1999, which included the installation of additional treatment equipment and the construction of a new infiltration well.

During higher demand periods, supplemental water is needed to ensure adequate supply. The water supply is from GUDI wells which require more robust operating protocols.

The scope of this project is to complete a schedule C Class Environmental Assessment (EA) for the West Montrose water supply system. The consultant will identify and evaluate alternative solutions for the future water supply, including the examination of the current wells, review of new potential groundwater supplies in the area and examination of connecting to an existing Regional water supply system. Evaluations will be based on environmental, cultural, social, natural, technical and economic criteria.

As part of the Class EA, the Consultant will identify the preferred solution for water supply to West Montrose. The final recommended solution along with documented accounts of the public input process will be filed in an Environmental Study Report. Upon completion of the EA study, preliminary design of the recommended solution will be developed, and all major treatment and equipment needs as well as distribution system connection requirements will be identified.

In parallel to the EA process, the consultant will also be examining options for upgrading the existing disinfection process at the West Montrose Water Treatment Plant. The current disinfection method of chlorine addition reacts with organics in the raw water supply resulting in elevated levels of the disinfection by-products. The scope of this work includes design and construction of the recommended disinfection upgrades.

**Consultant Selection**

A Request for Expressions of Interest to provide consulting engineering services for the West Montrose Water Supply Class EA and Preliminary Design was advertised in the Kitchener-Waterloo Record and on the Region’s Website on November 16, 2010. The Region received seven submissions of Expression of Interest and four firms were short listed based on the Quality and Equity Factors, and asked to submit detailed work plans and upset fees for this assignment. The four short listed consultants were:

- AECOM Canada Ltd.;
- Associated Engineering;
- Stantec Consulting Ltd.; and
- XCG Consultants Ltd.

The Project Team involved in the consultant selection consisted of:

J. Cavalcante, Manager, Engineering and Planning, Water Services  
R. Wootton, Senior Hydrogeologist, Hydrogeology and Source Water, Water Services  
S. Karlins, Senior Project Manager, Environmental Engineering, Design and Construction  
T. Walton, Supervisor, Process & Compliance, Water Services  
P. Law, Project Engineer, Engineering and Planning, Water Services
The evaluation criteria used for selecting the successful consultant were consistent with the Region’s Purchasing By-Law and consultant selection policies. The evaluation criteria and their respective weightings were as follows:

**Quality Factors (80%)**
- Project Approach and Understanding (25%)
- Experience of the Project Manager (20%)
- Experience of Project Support Staff (20%)
- Experience on Similar Projects (15%)

**Equity Factors (5%)**
- Current Regional Workload (3%)
- Local Office (2%)

**Price Factor (15%)**
- Upset Price (15%)

The Expressions of Interest and Detailed Work Plans submitted by the consultants demonstrated a good understanding of the project, capable project teams and experience on similar projects. After reviewing the Expressions of Interest, Detailed Work Plans, schedules, and upset fees, AECOM Canada Ltd. had the highest overall score. Based on this evaluation, the project team recommends that AECOM Canada Ltd. be retained to undertake this assignment at an upset fee limit of $478,215 plus applicable taxes.

**Scope of Work**

The scope of work for this assignment includes:

- Class EA Framework Preparation;
- Local Groundwater Source Review;
- Needs Assessment for the Water System;
- Identification of Alternatives to Satisfy Needs;
- Selection of Preferred Alternative;
- Final EA Report;
- Preliminary Design; and
- Disinfection Upgrades.

**Schedule**

Subject to Council’s approval of this assignment, the proposed schedule for the study is approximately eighteen (18) months commencing in March 2011 and ending in August 2012.

**Consultant Upset Limit**

The upset limit for consulting fees and disbursements for the Montrose Water Supply System Class EA and preliminary design is $478,215 plus applicable taxes. A breakdown of the successful consultant’s upset fee is included in Appendix A attached to this report.

**CORPORATE STRATEGIC PLAN:**

The West Montrose Water Supply System Class EA and preliminary design supports the Corporate Strategic Plan Focus Area 5: “Infrastructure” by “Providing high quality infrastructure and asset management to meet current needs and future growth”.
FINANCIAL IMPLICATIONS:

The draft 2011 Ten Year Water Capital program includes a total combined budget of $5,400,000 for the implementation of the West Montrose water supply system, including $600,000 in the year 2011-2012 which is sufficient for the planned work.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Appendix A: Breakdown of consultant’s upset fee

PREPARED BY: Pam Law, Project Engineer, Water Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
### Breakdown of Consultant’s Upset Fee

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Class EA Framework Preparation</td>
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<td>Step 2</td>
<td>Local Groundwater Source Review</td>
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<td>Step 3</td>
<td>Needs Assessment for the Water System</td>
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<td>Identification of Alternatives to Satisfy Needs</td>
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<td>Step 8</td>
<td>Disinfection Upgrades</td>
<td>$78,379</td>
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<td><strong>$478,215</strong></td>
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Regional Council directed staff to review the feasibility of constructing a commuter parking lot at 41 Woolwich Street South (previously the location of the Challenger Restaurant / Breslau Hotel) to determine parking demand in the area. Regional Council subsequently approved the establishment of a project team for the commuter parking lot project at their February 4, 2009 meeting. The project team included representation from Regional Council and staff, City of Kitchener staff and Township of Woolwich staff. The project team reviewed the need for a commuter parking lot in the Victoria Street–Highway 7 corridor and investigated several locations. Although the Township had concerns about directing traffic onto a local road, especially down Woolwich Street where much time and effort had been taken to redirect traffic, the team agreed that 41 Woolwich Street South was the preferred location for constructing a pilot commuter parking lot.

As a pilot project, the main goals were to:

- Study the demand for carpooling from the Region of Waterloo to the Guelph area;
- Support the development of new commuting patterns in the Highway 7 corridor; and
- Build demand and work with the Ministry of Transportation (MTO) to create a commuter parking lot close to the Fountain St interchange on new Highway 7.

The Region completed the construction of the commuter parking lot at 41 Woolwich Street South in Breslau, Township of Woolwich, in January 2010. The lot is about 300 metres south of Victoria St / Highway 7 on Woolwich Street. The lot was constructed with a gravel surface as the plan is that this lot would be a temporary facility. It consists of 25 parking spaces with lighting to improve security and safety.

A signing plan was created and implemented prior to the parking lot opening. Four directional signs were installed: eastbound and westbound on Victoria Street, southbound on Ebycrest Road, and northbound on Woolwich Street. In addition, an entrance sign was installed at the commuter parking lot driveway. On January 15, 2010 a media release regarding the opening of the Breslau Commuter Parking Lot was sent to all local media and posted on the Regional website to promote the use of the parking lot. A one-page flyer was also created and sent to the
University of Guelph and several businesses in the City of Guelph to announce the opening and promote the use of the parking lot.

**Observations**

The Region has conducted about 35 random utilization counts during different times of the day at the Breslau Commuter Parking Lot in 2010 and in early 2011. The counts indicate that there is some demand for parking in the area. The data gathered during April and May 2010 shows that 12-16 and 6-9 spaces were occupied in the morning and afternoon, respectively. Seasonal variation in the parking lot usage has also been observed with winter counts being lower. The data gathered in December 2010 shows that 1-8 spaces were occupied daily in the Breslau Parking Lot.

**Next Steps**

Observations indicate there is some demand for commuter parking in the area, and that the existing parking supply is sufficient at this time. Regional staff will:

- Continue to monitor the parking lot usage;
- Continue to promote the use of the parking lot;
- Consult with the Township of Woolwich, and City of Kitchener and report to Regional Council, if future demand warrants additional parking; and
- Work to secure a permanent location closer to the new Highway 7 and Fountain Street area.
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<th>Request</th>
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<td>01-Dec-09</td>
<td>P&amp;W</td>
<td>Staff report on obtaining changes to Highway Traffic Act to give right of way to pedestrians</td>
<td>Transportation and Environmental Services</td>
<td>May-2011</td>
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