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

3. DELEGATIONS

   a) James Parkin, MHBC Planning and Melanie Horton, CBM re: CBM Aggregates Bromberg Application ZC-11/08, Lot 33 & 34, Concession 9, 2772 Greenfield Road, Ayr, ON

4. REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

   DESIGN AND CONSTRUCTION

   a) CR-RS-11-052, Authorization to Expropriate Lands (1st Report) for Road Improvements to Trussler Road (Regional Road 70), New Dundee Road (Regional Road 12) to Bleams Road (Regional Road 56), in the City of Kitchener and Township of Wilmot

   b) E-11-079, Consultant Selection - Class EA, Preliminary Design, Detailed Design and Construction Administration and Inspection Services, Weber Street Reconstruction from King Street to Blythwood Road and King Street Improvements from Weber Street to Highway 85 Southbound Ramp, City of Waterloo

   c) E-11-086, Consultant Selection – Class EA, Preliminary Design, Detailed Design and Construction Administration and Inspection Services, Ottawa Street Reconstruction from Mill Street to Imperial Drive, City of Kitchener

   d) E-11-087, Consultant Selection - Detailed Design and Services During Construction for the Preston WWTP Anaerobic Digestion Upgrade, City of Cambridge

   TRANSIT

   e) E-11-081, GRT Customer Issue Report

   f) E-11-088, Fischer Hallman Express Bus Route - Free Service Promotion

   TRANSPORTATION

   g) E-11-059, Highway Traffic Act Legislation and Pedestrian Right-of-Way on Regional Roads

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8. ADJOURN
### NEXT MEETINGS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 6, 2011</td>
<td>1:00 P.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>September 27, 2011</td>
<td>1:00 P.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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</table>
REGION OF WATERLOO
CORPORATE RESOURCES DEPARTMENT
Legal Services

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

DATE: August 16, 2011

FILE CODE: L07-90

SUBJECT: AUTHORIZATION TO EXPROPRIATE LANDS (1st REPORT) FOR ROAD IMPROVEMENTS TO TRUSSLER ROAD (REGIONAL ROAD 70), NEW DUNDEE ROAD (REGIONAL ROAD 12) TO BLEAMS ROAD (REGIONAL ROAD 56), IN THE CITY OF KITCHENER AND TOWNSHIP OF WILMOT

RECOMMENDATION:

THAT The Regional Municipality of Waterloo direct and authorize the Regional Solicitor to take the following actions with respect to the expropriation of lands for the road improvements to Trussler Road, in the City of Kitchener and the Township of Wilmot, in the Region of Waterloo as detailed in report CR-RS-11-052 dated August 16, 2011:

1. Complete application(s) to the Council of the Regional Municipality of Waterloo, as may be required from time to time, for approval to expropriate land, which is required for the road improvements to Trussler Road and described as follows:

   Fee Simple Partial Taking:

   a) Part Lot 1, Concession 1, Block ‘A’, Township of Wilmot, being Part 1, on Reference Plan 58R-16917, PIN 22186-0234(LT) (1040 Huron Road)

   b) Part Lot 1, Concession 1, Block ‘A’, Township of Wilmot, being Part 2, on Reference Plan 58R-16917, PIN 22186-0233(LT) (1465 Trussler Road)

   c) Part Lot 1, Concession 1, Block ‘A’, Township of Wilmot, being Part 3, on Reference Plan 58R-16917, PIN 22186-0232(LT) (1359 Trussler Road)

   d) Part Lot 136, German Company Tract, City of Kitchener, being Part 5, on Reference Plan 58R-16917, PIN 22728-0010(LT) (1434 Trussler Road)

   e) Part Lot 135, German Company Tract, City of Kitchener, being Part 6, on Reference Plan 58R-16917, PIN 22728-0009(LT) (no municipal address)

   f) Part Lots 129, 133 & 134, German Company Tract, City of Kitchener, being Part 9, on Reference Plan 58R-16917, PIN 22728-0005(LT) (no municipal address)

   g) Part Lot 129, German Company Tract, City of Kitchener, being Part 11, on Reference Plan 58R-16917, PIN 22727-0022(LT) (808 Trussler Road)

   h) Part Lot 2, Concession 3, Block ‘A’, Township of Wilmot, being Part 1, on Reference Plan 58R-16920, PIN 22207-0377(LT) (2483 Trussler Road)
2. Serve notices of the above application(s) required by the Expropriations Act;

3. Forward to the Chief Inquiry Officer any requests for a hearing that may be received;

4. Attend, with appropriate Regional staff, at any hearing that may be scheduled;

5. Discontinue expropriation proceedings or any part thereof, in respect of the above described lands, or any part thereof, upon the registration on title of the required documentation to complete a transaction whereby the required interests in the lands are conveyed; and

6. Do all things necessary and proper to be done, and report thereon to Regional Council in due course.

SUMMARY: NIL.

REPORT:

Regional Council approved roadway improvements to Trussler Road from Bleams Road to New Dundee Road, in the City of Kitchener and Township of Wilmot in September, 2009 as detailed in Report E-09-077. The Region is in the process of acquiring all required lands for this project, which is included in the Region’s approved 2011 Transportation Capital Program for construction in 2012. The project consists of replacement of the deteriorated pavement, improvements to the vertical alignment to increase visibility and the provision of paved shoulders for use by cyclists, pedestrians and farm vehicles.

Council originally approved the commencement of expropriation of the subject properties on January 19, 2011 as detailed in report CR-RS-11-001. Due to a clerical error the 3 month deadline to register the expropriation plan was missed with the result that the expropriation process must be initiated anew. This will not delay the timing of the project. Land acquisitions were originally required from (22) property owners. Eleven of the acquisitions have now been completed and the outstanding eleven (11) acquisitions are outlined in the Recommendation and are fee simple partial takings for road widening purposes.

All of the affected property owners have been contacted by Legal Services staff to discuss the required land acquisitions and have been informed of the Region’s intention to proceed with the expropriation process to insure project time lines are met. All property owners have been provided with the Region’s Expropriation Information Sheet explaining the expropriation process, as well as a written offer to purchase the required interest in the lands at the appraised value. A copy of the Expropriation Information Sheet is attached as Appendix “B”. The owners have further been advised it is the Region’s intent to seek a negotiated settlement prior to completion of the Expropriation process and that the process has been commenced only to
ensure possession of the required lands by the date set by Project staff in order to keep the project timeline in place. To date a negotiated settlement to obtain ownership of the required lands has been reached with the owner of one of the above-noted properties but as of the writing of this report this transaction has not been completed and so the property is included in this expropriation. Should a negotiated settlement be reached with other property owners and a conveyance of the required acquisition be completed before the Expropriation process is complete, that property will be dropped from the Expropriation process by the Regional Solicitor.

The expropriation of the lands is on an “as is” basis and upon closing the Region assumes all responsibility for the lands.

The subject lands are shown attached as Appendix “A”.

CORPORATE STRATEGIC PLAN:

One of the goals of the Corporate Strategic Plan is to ensure that the Region maintains and improves the Regional Roads Network.

FINANCIAL IMPLICATIONS:

Transportation and Environmental Services staff advises that the 2011 Transportation Capital Program includes $9,815,000 from 2010 to 2013 for this project all to be funded from the Roads Rehabilitation Reserve Fund. This overall budget provides adequate funding for all land purchases outlined within this report together with tree and fence removals and relocations which will be required for all lands acquired for the project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services staff have been consulted in the preparation of this report.

ATTACHMENTS:

Appendix “A” - Project Area
Appendix “B” – Copy of Expropriation Information Sheet

PREPARED BY: Fiona McCrea, Solicitor

APPROVED BY: Gary Sosnoski, Commissioner, Corporate Resources
Appendix 'A'

TRUSSLER ROAD RECONSTRUCTION
REGIONAL ROAD No. 70
NEW DUNDEE ROAD TO BLEAMS ROAD (SOUTH)
The following information is provided as a general overview of the expropriation process and is not legal advice. For complete information, reference should be made to the Ontario Expropriations Act as well as the more detailed information in the Notices provided under that Act.

Expropriation Information Sheet

What is Expropriation?

Governmental authorities such as municipalities, school boards, and the provincial and federal governments undertake many projects which require them to obtain land from private property owners. In the case of the Regional Municipality of Waterloo, projects such as the construction or improvement of Regional Roads sometimes require the purchase of land from private property owners. In many cases, the Region of Waterloo only needs a small portion of the private property owner’s lands or an easement for related purposes such as utilities, although in certain instances, entire properties are required.

Usually the governmental authority is able to buy the land required for a project through a negotiated process with the affected property owners. Sometimes, however, the expropriation process must be used in order to ensure that the land is obtained within a specific timeline. 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.

IMPORTANT NOTE: The Region of Waterloo tries in all instances to obtain lands needed for its projects through a negotiated agreement on mutually acceptable terms. Sometimes, the Region of Waterloo will start the expropriation process while negotiations are underway. This dual approach is necessary to ensure that the Region of Waterloo will have possession of all of the lands needed to start a construction project on schedule. However, it is important to note that Regional staff continues to make every effort to reach a negotiated purchase of the required lands on mutually agreeable terms while the expropriation process is ongoing. If agreement is reached, expropriation proceedings can be discontinued and the land transferred to the Region of Waterloo in exchange for payment of the agreed-upon compensation.

What is the process of the Region of Waterloo under the Expropriations Act?

- Regional Council considers a request to begin an application under the Expropriations Act to obtain land and/or an easement for a specific Regional project. No decision is made at this meeting to expropriate the land. This step is simply direction for the Region of Waterloo to provide a “Notice of
Application for Approval to Expropriate” to affected property owners that the process has started to seek approval to expropriate the land.

- As stated in the Notice, affected property owners have 30 days to request a Hearing to consider whether the requested expropriation is “fair, sound and reasonably necessary in the achievement of the objectives” of the Region of Waterloo. This Hearing is conducted by a provincially-appointed Inquiry Officer. Prior to the Hearing, the Region of Waterloo must serve the property owner with a Notice setting out its reasons or grounds for the proposed expropriation. **Compensation for lands is not determined at this Hearing.** The Inquiry Officer can order the Region of Waterloo to pay the property owner up to $200.00 as compensation for the property owner’s costs in participating in this Hearing, regardless of the outcome of the Hearing.

- If a Hearing is held, a written report is provided by the Inquiry Officer to the property owner and the Region of Waterloo. Council must consider the Report within 90 days of receiving it. The Report is not binding on Council and Council may or may not accept the findings of the Report. After consideration of the Report, Council may or may not approve the expropriation of the land or grant approval with modifications. A property owner may wish to make written and/or verbal submissions to Council at the time that it is considering the Report.

- If no Hearing is requested by the property owner, then Council may approve the expropriation of the land after expiry of a 30 day period following service of the Notice of Application for Approval to Expropriate.

- If Council approves the expropriation then, within 3 months of this approval, the Region of Waterloo must register a Plan at the Land Registry Office that describes the expropriated lands. The registration of this Plan automatically transfers title of the lands to the Region of Waterloo, instead of by a Deed signed by the property owner.

- Within 30 days of registration of the Plan, the Region of Waterloo must serve a Notice of Expropriation on the affected property owner advising of the expropriation. Within 30 days of this Notice, the property owner may serve the Region of Waterloo with a Notice of Election selecting the valuation date under the *Expropriations Act* for calculation of the compensation.

- In order to obtain possession of the expropriated lands, the Region of Waterloo must also serve a Notice of Possession setting out the date that possession of the land is required by the Region of Waterloo. This date has to be 3 months or more from the date that this Notice of Possession is served on the affected property owner.

- Within 3 months of registration of the Plan, the Region of Waterloo must provide the affected property owner with payment for the full amount of the appraised fair market value of the expropriated land or easement and a copy of the appraisal report on which the value is based. If the property owner disagrees with this amount, and/or claims other compensation and/or costs under the *Expropriations Act*, the compensation and/or costs matter may be referred to a provincially-appointed Board of Negotiation in an effort to reach a mediated settlement and/or an appeal may be made to the Ontario Municipal Board (OMB) for a decision. In any event, the Region of Waterloo continues in its efforts to reach a negotiated settlement with the affected property owner prior to the OMB making a decision.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: August 16, 2011

FILE CODE: C04-30, 5633, 7042, 5489

SUBJECT: CONSULTANT SELECTION – CLASS EA, PRELIMINARY DESIGN, DETAILED DESIGN AND CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES, WEBER STREET RECONSTRUCTION FROM KING STREET TO BLYTHWOOD ROAD AND KING STREET IMPROVEMENTS FROM WEBER STREET TO HIGHWAY 85 SOUTHBOUND RAMP, CITY OF WATERLOO

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consultant Services Agreement with McCormick Rankin Corporation of Kitchener, Ontario to provide consulting engineering services for a Class Environmental Assessment (EA), preliminary design, detailed design, contract administration and construction inspection for Weber Street Reconstruction, King Street to Blythwood Road and King Street Improvements from Weber Street to Highway 85 southbound ramp, City of Waterloo at an upset limit of $268,796 plus applicable taxes for the Class EA, preliminary design and detailed design phases with contract administration and construction inspection to be paid on a time basis.

SUMMARY:

The Region of Waterloo wishes to proceed with the reconstruction of Weber Street, King Street to Blythwood Road in 2013 and proceed with the King Street Improvements from Weber Street to Highway 85 southbound ramp in 2015 in the City of Waterloo. As part of the reconstruction, this project includes consideration of improvements to address poor pavement condition and operational and safety concerns along the corridor at selected intersections and at various accesses to commercial, school and residential properties. In order to meet the 2013 (Weber Street) and 2015 (King Street) construction timeline, an engineering consultant must be hired now to undertake the Class EA, preliminary design, detailed design and construction administration.

An invitation for Letters-of-Interest to provide engineering services was advertised in the Kitchener-Waterloo Record. Ten (10) firms submitted proposals, out of which five (5) were short-listed and invited to submit detailed work plans and fee estimates.

Based on the evaluation criteria, review of the detailed work plans, schedules and upset fees provided, the Evaluation Team recommends that McCormick Rankin Corporation be retained to undertake this assignment at an upset fee limit of $268,796 plus applicable taxes for the Class EA, preliminary design and detailed design phases with contract administration and construction inspection to be paid on a time basis.
REPORT:

1. Background

Weber Street from King Street to Blythwood Road in the City of Waterloo (see Key Plan in Appendix A) is identified in the Region’s 2011 Transportation Capital Program for reconstruction in 2013 in order to address poor pavement condition and operational/safety concerns at the intersections and numerous commercial accesses and school driveways. Planning of these improvements will be completed in accordance with Schedule ‘A+’ requirements of the Municipal Class Environmental Assessment (Class EA).

Weber Street is a four-lane urban roadway from King Street to Blythwood Road in the City of Waterloo with a posted speed of 60km/hour. The abutting land use on Weber Street is a combination of residential and commercial with a number of uncontrolled accesses to the adjacent properties. Currently, sidewalk is inter-dispersed throughout the corridor on both sides and requires infilling to complete the pedestrian corridor. This section of Weber Street is also identified as a Core On-Road route in the Region’s Cycling Master Plan and requires widening of Weber Street to construct the cycling lanes.

The section of King Street from Weber Street to the southbound ramp on highway 85 (see Key Plan in Appendix A) is identified in the Region’s 2011 Transportation Capital Program for improvements in 2015 in order to address operational/safety concerns at the intersections and numerous commercial accesses. Planning of these improvements will be completed in accordance with Schedule ‘A+’ requirements of the Municipal Class Environmental Assessment (Class EA). King Street is a four lane cross-section with a posted speed of 60km/hour. The existing road is in fair to poor condition with sidewalk located on both sides of the road. The abutting land use is industrial, commercial, light industry, institutional and residential.

The intersection of King Street and Weber Street is in need of improvements (channelized right turn lanes at all four corners, and increased storage for the southbound left turn on King Street), along with the intersection of King Street and Blue Springs Drive (extend the storage for southbound and east bound left lanes). The existing infrastructure on Weber and King Streets includes various utilities, watermain, storm and sanitary sewers.

Improvements under consideration for this project include:

- Full replacement of the existing pavement structure on Weber Street and resurfacing of King Street to improve pavement performance;
- Intersection improvements at King Street and Weber Street intersection (channelized right turn lanes at all four corners, and extend the storage for the southbound left turn on King Street);
- Intersection improvements at King Street and Blue Springs Drive (extend the storage for southbound and east bound left turn lanes);
- Cycling lanes on Weber Street between King Street and Blythwood Road;
- Construction of sections of new sidewalk on Weber street between King Street and Blythwood Road;
- Storm sewer repair/replacement on Weber Street and King Street;
- Watermain replacement on behalf of the City of Waterloo on Weber Street and King Street;
- Sanitary sewer repair/replacement on behalf of the City of Waterloo on Weber Street and King Street;
- GRT bus stop and shelter upgrades on both Weber Street and King Street; and
- Streetscaping enhancements on both Weber Street and King Street.
The Region’s approved 2011 Transportation Capital Program includes funding in the amount of $3,025,000 in 2011-2015 inclusive for the Class EA, preliminary design, detailed design and reconstruction of Weber Street, King Street to Blythwood Road in 2013 and King Street Improvements from Weber Street to Highway 85 southbound ramp in 2015 in the City of Waterloo. The Weber Street budget is $1,320,000 and the King Street budget is $1,705,000. Regional staff is fully committed to other capital projects and therefore staff recommends that an external consultant be hired to complete this project. Staff has determined that it is necessary to commence the engineering for this project now in order to provide sufficient time to complete the design phases, acquire any necessary property and complete utility relocations in advance of construction.

2. Consultant Selection

An invitation for Letters-of-Interest to provide engineering services for this project was advertised in the Kitchener-Waterloo Record on May 6, 2011. Ten (10) consultants submitted Letters-of-Interest. Following a review of the submissions, five firms were short-listed based on their qualifications, and these consultants were asked to submit detailed work plans and upset fee quotes for Class EA, preliminary design and detailed design activities, plus an estimate of fees for contract administration and construction inspection services.

The five short-listed consultants were:

- Stantec Consulting Ltd.;
- Gamsby and Mannerow Ltd.
- McCormick Rankin Corporation
- WalterFedy; and
- MTE Consultants Inc.

The Team involved with the consultant selection consisted of:

John Lee, Project Manager, Design and Construction;
Marcos Kroker, Head, Transportation Rehabilitation Program, Design and Construction; and
Michael Halloran, Project Manager, Design and Construction.

The evaluation criteria used for selecting the successful consultant were in accordance with the Region’s Purchasing By-law 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>
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</thead>
<tbody>
<tr>
<td>Project Approach and Understanding</td>
<td>35%</td>
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<tr>
<td>Experience of the Project Manager</td>
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</tr>
<tr>
<td>Experience of the Project Support Staff</td>
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<tr>
<td>Experience on Similar Projects</td>
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**Equity Factors**

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<tr>
<td>Current Workload for Region</td>
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<td>Local Office</td>
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**Price Factor**

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<tbody>
<tr>
<td>Upset Price</td>
<td>15%</td>
</tr>
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</table>
The Letters-of-Interest submitted by the five short-listed consultants demonstrated a good understanding of the project, capable project teams and experience on similar projects. When considering all quality, equity and price factors, the submission from McCormick Rankin Corporation scored the highest. McCormick Rankin Corporation fee was the lowest price submitted. Based on the above evaluation criteria, including the review of the detailed work plans, project approach, schedules and upset fees provided, the Project Team recommends that McCormick Rankin Corporation be retained to provide Class EA, preliminary design, detail design, contract administration and construction inspection services for this project.

3. **Scope of Work**

For this engineering assignment, the consultant will: undertake a complete review of required infrastructure for existing and future conditions; develop and assess transportation improvement/reconstruction alternatives; conduct a comprehensive public participation program; complete the Class EA, preliminary and detailed design for the road improvements/reconstruction; assess the advantages and disadvantages of different construction staging alternatives; make presentations to City of Waterloo Council and Regional Planning and Works Committee; prepare contract drawings, specifications and tender documents; obtain all necessary agency approvals; assist during the tendering period; provide contract administration and site inspection services during construction; prepare record drawings; and provide post-construction services during the warranty period. A breakdown of the consultant’s upset fee is included in Appendix B attached to this report.

4. **Schedule**

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

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Base Plan, Preliminary Design and Generation of Alternatives</td>
<td>August 2011 – Spring 2012</td>
</tr>
<tr>
<td>Public Consultation Centre</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>Public Input Meeting (if required)</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Council Approval of Recommended Alternative</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Property Acquisition, Utility Relocations, Final Design and Tendering</td>
<td>Fall 2012 – Fall 2013</td>
</tr>
<tr>
<td>Construction Weber Street</td>
<td>Spring to Fall 2013</td>
</tr>
<tr>
<td>Construction King Street</td>
<td>Spring to Fall 2015</td>
</tr>
</tbody>
</table>

5. **Consultant’s Upset Fee**

The short-listed consultants were each requested to submit an upset fee for professional services for public consultation and engineering design, and also requested to submit an estimate of contract administration and construction inspection fees. On road and bridge projects, the time required for contract administration and construction inspection can vary significantly depending on weather conditions, unforeseen developments during construction, contractor performance, and other unknown variables. Because an upset fee does not lend itself well to these types of services, it has been the Region’s practice on road and bridge projects to pay for contract administration and construction inspection services on a time basis. It is recommended that this same practice be followed for this project. For budgetary purposes, staff has estimated the cost of contract administration and construction inspection services to be $221,000 for both projects (Weber Street $97,000 and King Street $124,000) which is based on the preliminary estimate of fees submitted by McCormick Rankin Corporation and a review of costs on similar projects.
The upset limit for McCormick Rankin Corporation to undertake the Class EA, preliminary and detailed design phases of this project is $268,796 (plus applicable taxes) for consultant fees and disbursements. The total estimated project cost for this project including watermain and sanitary sewer work for the City of Waterloo is in the order of $3,025,000. The upset fee of $268,796 represents 8.9% of the estimated construction value which is considered very competitive for a project of this magnitude and complexity. The upset fee includes the assembly of base plans, investigation of various alternatives, co-ordination with concerned agencies, a complete public participation program, Class EA, preliminary design, detail design and preparation of tender documents.

CORPORATE STRATEGIC PLAN:

This project meets the Region’s Corporate Strategic Plan objective to “optimize the use of existing infrastructure and ensure it is adequately maintained” under Focus Area 5 to “provide high quality infrastructure and asset management to meet current needs and future growth”.

FINANCIAL IMPLICATIONS:

The Region’s approved 2011 Transportation Capital Program includes $3,025,000 in years 2011-2015 inclusive for both these projects (Weber Street $1,320,000 and King Street $1,705,000) to be funded from the Road Rehabilitation Reserve Fund, Development Charges Reserve Fund and Roads Capital Levy Reserve Fund.

On July 1, 2010, the new Harmonized Sales Tax (HST) took effect in Ontario replacing the Ontario Retail Sales Tax (PST) and the Federal Goods and Services Tax (GST) on the purchase of goods and services. Municipalities previously received a full rebate of the 5% GST but now benefit from a rebate of 86.46% of the HST paid.

<table>
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<tr>
<td>McCormick Rankin Corporation Total Upset Fees</td>
<td>$268,796.00</td>
</tr>
<tr>
<td>H.S.T (13%)</td>
<td>+$34,943.48</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>$303,739.48</td>
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<tr>
<td>Less: Municipal Rebate of 86.46% of HST</td>
<td>-$30,212.13</td>
</tr>
<tr>
<td>Total</td>
<td>$273,527.35</td>
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The approved 2011 Transportation Capital Program includes $170,000 asp per 2011 TCP for both these projects in 2011 which is sufficient funding to cover the scheduled consultant expenditures in 2011. A combined amount of $3,025,000 is included for the Region’s share of engineering design and construction in the 2011 Transportation Capital Program in years 2011 – 2015. McCormick Rankin Corporation’s total fees for the Class EA, preliminary and detail design and contract administration/construction inspection are within the consulting fee allowance provided for in the total budget for this project, which is all to be funded from the Roads Rehabilitation Reserve Fund, Development Charges Reserve Fund and Roads Capital Levy Reserve Fund.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS:

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

PREPARED BY: John Lee, Project Manager, Design and Construction

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

Key Plan

WEBER STREET (REGIONAL ROAD No. 8)
BLYTHWOOD ROAD TO KING STREET
KING STREET (REGIONAL ROAD No.15)
WEBER STREET TO HWY 85
CITY OF WATERLOO
APPENDIX B

CLASS EA, PRELIMINARY AND DETAILED DESIGN FOR WEBER STREET RECONSTRUCTION FROM KING STREET TO BLYTHWOOD ROAD AND KING STREET IMPROVEMENTS FROM WEBER STREET TO HIGHWAY 85 SOUTHBOUND RAMP, CITY OF WATERLOO

BREAKDOWN OF CONSULTANT’S UPSET FEE

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>1. Project Initiation/Data Collection/Base Plan Preparation</td>
<td>$32,881.00</td>
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<tr>
<td>2. Meetings, Public Consultation Centre, Public Input Meeting</td>
<td>$23,825.00</td>
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<tr>
<td>3. Class EA, Assessment of Intersection Alternatives and Preliminary Design</td>
<td>$31,303.00</td>
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<tr>
<td>4. Detailed Design and Approvals</td>
<td>$93,651.00</td>
</tr>
<tr>
<td>5. Contract Document, Specifications and Tendering</td>
<td>$39,479.00</td>
</tr>
<tr>
<td>6. Project Management</td>
<td>$39,828.00</td>
</tr>
<tr>
<td>7. Disbursements</td>
<td>$7,829.00</td>
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<tr>
<td><strong>Total Upset Fee</strong></td>
<td><strong>$268,796.00</strong></td>
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</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: August 16, 2011

FILE CODE: C04-30, 5377

SUBJECT: CONSULTANT SELECTION – CLASS EA, PRELIMINARY DESIGN, DETAILED DESIGN AND CONSTRUCTION ADMINISTRATION AND INSPECTION SERVICES, OTTAWA STREET RECONSTRUCTION FROM MILL STREET TO IMPERIAL DRIVE, CITY OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into a Consultant Services Agreement with MTE Consultants Inc. of Kitchener, Ontario to provide consulting engineering services for Class Environmental Assessment (EA), preliminary design, detailed design, contract administration and construction inspection for Ottawa Street Reconstruction, Mill Street to Imperial Drive, City of Kitchener at an upset limit of $183,388.75 plus applicable taxes for the Class EA, preliminary design and detailed design phases with contract administration and construction inspection to be paid on a time basis.

SUMMARY:

The Region of Waterloo wishes to proceed with the reconstruction of Ottawa Street, Mill Street to Imperial Drive in the City of Kitchener in 2014. As part of the reconstruction, this project includes consideration of improvements to address poor pavement condition and operational/safety concerns along the corridor at selected intersections and at various accesses to commercial and residential properties. In order to meet the 2014 construction timeline, an engineering consultant must be hired now to undertake the Class EA, preliminary design, detailed design and construction administration.

An invitation for Letters-of-Interest to provide engineering services was advertised in the Kitchener-Waterloo Record. Nine (9) firms submitted proposals, out of which three (3) were short-listed and invited to submit detailed work plans and fee estimates.

Based on the evaluation criteria, review of the detailed work plans, schedules and upset fees provided, the Evaluation Team recommends that MTE Consultants Inc. be retained to undertake this assignment at an upset fee limit of $183,388.75 plus applicable taxes for the Class EA, preliminary design, detailed design phases with contract administration and construction inspection to be paid on a time basis.

REPORT:

1. Background

Ottawa Street from Mill Street to Imperial Drive in the City of Kitchener (see Key Plan in Appendix A) is identified in the Region’s 2011 Transportation Capital Program for reconstruction in 2014 in order to address poor pavement condition and operational/safety concerns at the intersections and
numerous commercial accesses and residential driveways. Planning of these improvements will be completed in accordance with Schedule ‘A’ requirements of the Municipal Class Environmental Assessment (Class EA). Ottawa Street is a four-lane urban roadway from Mill Street to Imperial Drive in the City of Kitchener with a posted speed of 50km/hour. The abutting land use on Ottawa Street is a combination of residential and commercial with a significant number of uncontrolled accesses to the adjacent properties. An intersection pedestrian signal exists near the Kehl Street intersection. Unsignalized intersections exist at Pattandon Avenue, Hoffman Street, Kehl Street and Imperial Drive. Currently, sidewalk is inter-dispersed throughout the corridor on both sides and requires infilling to complete the pedestrian corridor. This section of Ottawa Street is also identified as a Core On-Road route in the Region’s Cycling Master Plan. The pavement structure is in fair to poor condition showing various signs of distress and will require rehabilitation with the 2014 work. The existing infrastructure on Ottawa Street includes various utilities, watermain, storm and sanitary sewers.

The objective of this assignment is to: assess alternatives to address operational deficiencies; complete the Class EA, preliminary and detailed designs, drawings, construction specifications, and cost estimates; identify property acquisition requirements; secure all necessary design approvals; prepare final tendering documentation; and provide construction inspection and contract administration for the project.

Improvements under consideration for this project include:

- Full replacement of the existing pavement structure to improve pavement performance;
- Possible new eastbound left turn lane at Mill Street;
- On-road cycling lanes between Mill Street and Imperial Drive;
- Construction of sections of new sidewalk;
- Isolated storm sewer repair/replacement;
- Watermain replacement on behalf of the City of Kitchener;
- Gas main replacement on behalf of the City of Kitchener;
- GRT bus stop and shelter upgrades; and
- Streetscaping enhancements.

The Region’s approved 2011 Transportation Capital Program includes funding in the amount of $1,766,000 in 2011-2014 inclusive for the Class EA, preliminary design, detailed design and construction of the Ottawa Street Reconstruction from Mill Street to Imperial Drive in the City of Kitchener. The City of Kitchener has also budgeted $400,000 for replacement of their watermain. Regional staff is fully committed to other capital projects and therefore staff recommends that an external consultant be hired to complete this project. Staff has determined that it is necessary to commence the engineering for this project now in order to provide sufficient time to complete the design phases, acquire any necessary property and complete utility relocations in advance of construction. The design and construction of this project will be closely coordinated with the Rapid Transit implementation on Ottawa Street between Mill Street and Charles Street.

2. Consultant Selection

An invitation for Letters-of-Interest to provide engineering services for this project was advertised in the Kitchener-Waterloo Record on May 6, 2011. Nine (9) consultants submitted Letters-of-Interest. Following a review of the submissions, three firms were short-listed based on their qualifications, and these consultants were asked to submit detailed work plans and upset fee quotes for design activities, plus an estimate of fees for contract administration and construction inspection services.
The three short-listed consultants were:

- IBI Group;
- WalterFedy; and
- MTE Consultants Inc.

The Team involved with the consultant selection consisted of:

Michael Halloran, Project Manager, Design and Construction; Marcos Kroker, Head, Transportation Rehabilitation Program, Design and Construction; and John Lee, Project Manager, Design and Construction.

The evaluation criteria used for selecting the successful consultant were in accordance with the Region’s Purchasing By-law and included price as a factor in the selection process. These evaluation criteria and their respective weightings were as follows:

**Quality Factors**

- Project Approach and Understanding: 35%
- Experience of the Project Manager: 20%
- Experience of the Project Support Staff: 15%
- Experience on Similar Projects: 10%

**Equity Factors**

- Current Workload for Region: 3%
- Local Office: 2%

**Price Factor**

- Upset Price: 15%

The Letters-of-Interest submitted by the three short-listed consultants demonstrated a good understanding of the project, capable project teams and experience on similar projects. When considering all quality, equity and price factors, the submission from MTE Consultants Inc. scored the highest. MTE Consultants Inc’s fee was the lowest price submitted. Based on the above evaluation criteria, including the review of the detailed work plans, project approach, schedules and upset fees provided, the Project Team recommends that MTE Consultants Inc. be retained to provide Class EA, preliminary and detailed design, contract administration and construction inspection services for this project.

**3. Scope of Work**

For this engineering assignment, the consultant will: undertake a complete review of required infrastructure for existing and future conditions; develop and assess transportation improvement/reconstruction alternatives; conduct a comprehensive public participation program; complete the Class EA, preliminary and detailed design for the road improvements/reconstruction; assess the advantages and disadvantages of different construction staging alternatives; make presentations to City of Kitchener Council and Regional Planning and Works Committee; prepare contract drawings, specifications and tender documents; obtain all necessary agency approvals; assist during the tendering period; provide contract administration and site inspection services during construction; prepare record drawings; and provide post-construction services during the warranty period. A breakdown of the consultant’s upset fee is included in Appendix B attached to this report.
4. Schedule

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Plan, Preliminary Design and Generation of Alternatives</td>
<td>August 2011 – Spring 2012</td>
</tr>
<tr>
<td>Public Consultation Centre</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>Public Input Meeting</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Council Approval of Recommended Alternative</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Property Acquisition, Utility Relocations, Final Design and Tendering</td>
<td>Fall 2012 – Fall 2013</td>
</tr>
<tr>
<td>Start of Construction</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Construction Completion</td>
<td>Fall 2014</td>
</tr>
</tbody>
</table>

5. Consultant’s Upset Fee

The short-listed consultants were each requested to submit an upset fee for professional services for public consultation and engineering design, and also requested to submit an estimate of contract administration and construction inspection fees. On road and bridge projects, the time required for contract administration and construction inspection can vary significantly depending on weather conditions, unforeseen developments during construction, contractor performance, and other unknown variables. Because an upset fee does not lend itself well to these types of services, it has been the Region’s practice on road and bridge projects to pay for contract administration and construction inspection services on a time basis. It is recommended that this same practice be followed for this project. For budgetary purposes, staff has estimated the cost of contract administration and construction inspection services to be $110,000 which is based on the preliminary estimate of fees submitted by MTE Consultants Inc. and a review of costs on similar projects.

The upset limit for MTE Consultants Inc. to undertake the Class EA, preliminary and detailed design phases of this project is $183,388.75 (plus applicable taxes) for consultant fees and disbursements. The total estimated cost for this project is in the order of $2,166,000, including watermain work for the City of Kitchener in the estimated amount of $400,000. The upset fee of $183,388.75 represents 8.5% of the total estimated project cost which is considered very competitive for a project of this magnitude and complexity. The upset fee includes the assembly of base plans, investigation of various alternatives, coordination with concerned agencies, a complete public participation program, Class EA, preliminary design, detail design and preparation of tender documents.

CORPORATE STRATEGIC PLAN:

This project meets the Region’s Corporate Strategic Plan objective to “optimize the use of existing infrastructure and ensure it is adequately maintained” under Focus Area 5 to “provide high quality infrastructure and asset management to meet current needs and future growth”.

FINANCIAL IMPLICATIONS:

The Region's approved 2011 Transportation Capital Program includes $1,766,000 in years 2011-2014 inclusive for this project to be funded from the Road Rehabilitation Reserve Fund.

On July 1, 2010, the new Harmonized Sales Tax (HST) took effect in Ontario replacing the Ontario Retail Sales Tax (PST) and the Federal Goods and Services Tax (GST) on the purchase of goods and services. Municipalities previously received a full rebate of the 5% GST but will now benefit from a rebate of 86.46% of the HST paid.
The approved 2011 Transportation Capital Program includes $31,000 for this project in 2011 which is sufficient funding to cover the scheduled consultant expenditures in 2011. A combined amount of $1,766,000 is included for the Region’s share of engineering design and construction in the 2011 Transportation Capital Program in years 2011 – 2014. MTE Consultants Inc.’s total fees for the Class EA, preliminary and detail design and contract administration/construction inspection are within the consulting fee allowance provided for in the total budget for this project, which is all to be funded from the Roads Rehabilitation Reserve Fund.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

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

PREPARED BY: Michael Halloran, Project Manager, Design and Construction

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

KEY PLAN

OTTAWA STREET (REGIONAL ROAD No. 4)
MILL STREET TO IMPERIAL DRIVE
CITY OF KITCHENER
APPENDIX B

CLASS EA, PRELIMINARY AND DETAILED DESIGN FOR OTTAWA STREET RECONSTRUCTION FROM MILL STREET TO IMPERIAL DRIVE, CITY OF KITCHENER

BREAKDOWN OF CONSULTANT’S UPSET FEE

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Initiation/Data Collection/Base Plan Preparation</td>
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<td>2. Meetings, Public Consultation Centre, Public Input Meeting</td>
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<tr>
<td>3. Class EA, Assessment of Intersection Alternatives and Preliminary Design</td>
<td>$35,600.00</td>
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<tr>
<td>4. Detailed Design and Approvals</td>
<td>$64,100.00</td>
</tr>
<tr>
<td>5. Contract Document, Specifications and Tendering</td>
<td>$8,900.00</td>
</tr>
<tr>
<td>6. Project Management</td>
<td>$29,400.00</td>
</tr>
<tr>
<td>7. Disbursements</td>
<td>$5,100.00</td>
</tr>
<tr>
<td><strong>Total Upset Fee</strong></td>
<td><strong>$183,388.75</strong></td>
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</table>
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

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

DATE: August 16, 2011
FILE CODE: C04-30, 08255

SUBJECT: CONSULTANT SELECTION – DETAILED DESIGN AND SERVICES DURING CONSTRUCTION FOR THE PRESTON WWTP ANAEROBIC DIGESTION UPGRADE, CITY OF CAMBRIDGE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into an Agreement for Professional Consulting Services with CIMA Canada Inc. of Kitchener, Ontario, to provide engineering services during the detailed design and construction phases of the Preston Wastewater Treatment Plant Anaerobic Digestion Upgrade in the City of Cambridge, at an upset fee limit of $635,275 plus applicable taxes.

SUMMARY:

The Preston Wastewater Treatment Plant (WWTP) is located at 395 Montrose Street South in the City of Cambridge. The Preston WWTP Anaerobic Digestion Upgrade is required to replace and upgrade aging equipment and systems which are nearing the end of their service life and in order to: improve the efficiency of the anaerobic digestion process; meet current regulations and codes; and enhance safety, energy efficiency, and reliability of the facility. This capital project will not increase the rated capacity of the treatment process, and is proceeding as a Schedule “A” project under the Municipal Class Environmental Assessment (EA).

A preliminary design has been completed. In order to meet a scheduled 2013 construction start date, a multi-disciplinary engineering consultant must be retained now to undertake the detailed design and construction administration for the digestion upgrade. The consultant selection process was carried out in accordance with the Region of Waterloo’s By-Law 04-093 for the procurement of goods and services, and included price as a factor. When considering all Quality, Equity, and Price Factors, the submission from CIMA Canada Inc. (CIMA) scored the highest. The project team recommends that CIMA be awarded this assignment for an Upset Fee of $635,275.

Subject to Council approval of this consultant assignment, it is anticipated that final design will be completed in 2012 and construction will be completed in 2014. The overall project cost is estimated to be $4,500,000.

REPORT:

1. Background

The biosolids generated by the primary clarifiers at the Preston Wastewater Treatment Plant (WWTP) are stabilized inside two tanks via an anaerobic digestion process, and are then hauled to the Galt WWTP for further processing and dewatering. The anaerobic digestion process also produces digester gas, which is similar in composition to natural gas, and is used by the plant boilers as fuel.
The anaerobic digestion facility dates back to the early 1970’s, and requires refurbishing to replace and upgrade the aging equipment and systems which are nearing the end of their service life, and in order to: improve the efficiency of the anaerobic digestion process; meet current regulations and codes; and enhance safety, energy efficiency, and reliability of the facility. The scope of the capital project was determined during the Preliminary Design phase and includes upgrading or replacement of the following facilities and equipment:

- Two new dual-fuel boilers (digester gas and natural gas);
- New digester mixing equipment;
- New heat exchanger;
- New motor control centre;
- Upgrading, insulating and recoating of digester roofs; and
- Replacement of deteriorated digester building roof.

This capital project will not increase the rated capacity of the treatment process, and is proceeding as a Schedule “A” project under the Municipal Class Environmental Assessment (EA). In order to meet a scheduled 2013 construction start date, a multi-disciplinary engineering consultant must be retained now to undertake the detailed design and construction administration for the digestion upgrade. The overall project cost is estimated to be $4,500,000.

2. Consultant Selection

On May 17, 2011, the Region of Waterloo placed advertisements in the Waterloo Region Record inviting submissions from consultants for this consulting assignment. Nine proponents submitted a Letter of Interest. Each Letter of Interest was reviewed by the consultant selection team consisting of: Phil Bauer, Head Environmental Engineering (Design and Construction Division); Jose Bicudo, Senior Project Engineer, (Water Services Division); and Frank Moffat, Wastewater Treatment Specialist, (Water Services Division). Three proponents were shortlisted:

- AECOM;
- CH2M HILL; and
- CIMA.

The Region invited the three short-listed proponents to submit a Proposal, including a detailed Workplan and Upset Fee. All three short-listed proponents submitted compliant proposals.

The consultant selection process was carried out in accordance with the Region of Waterloo’s By-Law 04-093 for the procurement of goods and services, and included price as a factor. The evaluation criteria were subdivided into Quality, Equity, and Price factors as follows.

**Quality factors**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project approach and Understanding</td>
<td>25%</td>
</tr>
<tr>
<td>Experience of the Project Manager</td>
<td>20%</td>
</tr>
<tr>
<td>Experience of the Project Support Staff</td>
<td>20%</td>
</tr>
<tr>
<td>Experience on Similar Projects</td>
<td>15%</td>
</tr>
</tbody>
</table>
Equity Factors

Current Workload for Region 3%
Local Office 2%

Price Factor
Upset Price 15%

When considering all Quality, Equity, and Price Factors, the submission from CIMA scored the highest overall (including the highest quality score and the lowest upset fee), and therefore, the project team recommends that CIMA be awarded this assignment for an Upset Fee of $636,275.

3. Scope of Work

For this assignment, the consultant will provide professional consulting services during the Detailed Design, Tender, Construction, and Post-Construction phases of the capital project. The consultant shall provide the typical services for a construction project of this scope including: prepare issued-for-tender, issued-for-construction, and record versions of the Contract Drawings and Contract Specifications for one general construction contract. The consultant shall also provide services related to construction cost estimates and cash flow projections, approvals and permits, third-party materials testing and quality control consultants, health and safety reviews, site inspection, equipment acceptance tests, commissioning of new works, a custom operation and maintenance manual, custom training sessions, and administration of equipment warranties.

In addition, the following services are included to address specific requirements for this project:

- Prequalification of General Contractors to ensure suitable qualifications and similar project experience in staging demolition and removal of existing equipment with installation and commissioning of new, specialized equipment, while maintaining uninterrupted operations;
- Preparation and tender of four separate equipment pre-purchase proposals for boilers, heat exchangers, digester mixing equipment, and motor control centres to ensure best value for the Region and timely delivery of specialized equipment;
- Assessment of the capacity at Kitchener WWTP and Galt WWTP to provide additional digestion of the Preston WWTP biosolids during construction;
- Procurement of an MOE Site-Wide Certificate of Approval for Air and Noise in order to meet current regulatory requirements;
- Procurement of Technical Standards and Safety Authority (TSSA) approvals for digester gas safety systems; and
- Post-commissioning operations support to optimize operational efficiency and reliability.

Appendix A provides a breakdown of the Consultant’s upset fee.

4. Schedule

Subject to Council’s approval of this assignment for professional consulting services, detailed design will commence in 2011 to allow for equipment pre-purchases and a general contract tender in 2012. Construction will occur during 2013, and commissioning and post-construction services will be provided during 2014.
CORPORATE STRATEGIC PLAN:

This project meets the Region’s Corporate Strategic Plan objective to “optimize the use of existing infrastructure and ensure it is adequately maintained” under Focus Area 5 to “provide high quality infrastructure and asset management to meet current needs and future growth”.

FINANCIAL IMPLICATIONS:

The Region’s 2011 Ten Year Wastewater Capital Forecast provides a total budget for the "Preston Biosolids Upgrade" of $8,000,000 from 2011 through 2020, of which $4,500,000 is allocated for this project. The consultant’s Upset Fee of $635,275 is within the budget allowance for engineering work and represents approximately 14% of the current project cost estimate. The Upset Fee is considered competitive for a capital project with this magnitude, complexity and specific project requirements.

On July 1, 2010, the new Harmonized Sales Tax (HST) took effect in Ontario replacing the Ontario Retail Sales Tax (PST) and the Federal Goods and Services Tax (GST) on the purchase of goods and services. Municipalities previously received a full rebate of the 5% GST but will not benefit from a rebate of 86.46% of the HST paid.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Total Upset Fees</td>
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<tr>
<td>H.S.T. (13%)</td>
<td>+$82,585.75</td>
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<tr>
<td>Sub-Total</td>
<td>$717,860.75</td>
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<td>Less: Municipal Rebate of 86.46% of HST</td>
<td>-$71,403.64</td>
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<td>Total</td>
<td>$646,475.11</td>
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OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Appendix A – Breakdown of Consultant’s Upset Fee

PREPARED BY:  Susan Karlins, Senior Project Manager, Environmental Engineering

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
### PRESTON WWTP ANAEROBIC DIGESTION UPGRADE

**BREAKDOWN OF CONSULTANT’S UPSET FEE**

<table>
<thead>
<tr>
<th>TASK</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td><strong>Detailed Design Phase</strong></td>
<td></td>
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<tr>
<td>Task 1.1 - Project Management</td>
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<td>Task 1.2 - Design Analysis</td>
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<tr>
<td>Task 1.3 - Specialized Equipment Procurement</td>
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<tr>
<td>Task 1.4 - Coordinate Third-Party Quality Control Consultants</td>
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<td>Task 1.5 - Prequalification of General Contractors</td>
<td>$8,595</td>
</tr>
<tr>
<td>Task 1.6 - Assessment of Kitchener WWTP and Galt WWTP Capacity to provide temporary digestion of Preston WWTP Biosolids during construction</td>
<td>$15,370</td>
</tr>
<tr>
<td>Task 1.7 - 60% Detailed Design</td>
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<td>Task 1.8 - Constructibility Review and Workshop</td>
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<td>Task 1.9 - 90% Detailed Design</td>
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<td>Task 1.10 - 100% Detailed Design</td>
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<td>Task 1.11 - Meetings during Detailed Design</td>
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<td>Task 1.12 - Approvals</td>
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<td><strong>Tender Phase</strong></td>
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<td>Task 2.1 - Tender</td>
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<td><strong>Construction Phase</strong></td>
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<td>Task 3.1 - Contract Administration</td>
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<td>Task 3.2 - Meetings during Construction</td>
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<td>Task 3.3 - Construction Inspection Services</td>
<td>$136,050</td>
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<td>Task 3.4 - Health and Safety Reviews</td>
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<td>Task 3.5 - Start-up and Commissioning</td>
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<td>Task 3.6 - Manuals and Training</td>
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<td><strong>Post-Construction Phase</strong></td>
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<tr>
<td>Task 4.1 - Post-Construction Operational Support and Warranty Administration</td>
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</tr>
<tr>
<td><strong>Total Upset Fee (plus applicable taxes)</strong></td>
<td><strong>$635,275</strong></td>
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TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: August 16, 2011
FILE CODE: M04-50

SUBJECT: GRT CUSTOMER ISSUE REPORT

RECOMMENDATION:
For information.

SUMMARY:
The attached report provides a comparative summary and analysis of the GRT customer issues for both 2009 and 2010 in each of the following categories:

Operations
Service Delivery
Bus Stop Environment
Fares

Each category is then graphically and numerically divided into the various sub categories along with a brief overview and analysis of the data.

REPORT:
Approximately 3,000 GRT customer service issues are tracked annually through an internal database. These issues include requests for expanded services along with customer suggestions, concerns, complaints or compliments.

The information from the customer database is used for service planning, employee and operational performance management and also to create a monthly trending analysis which is shared with GRT employees to better identify areas which may require increased customer or employee awareness or an operational change to minimize the risk of future recurrences.

Most customer issues are received by telephone or through the GRT website at www.grt.ca. Cases where there is a safety or security concern are forwarded to operations staff or law enforcement for an immediate response. Those issues which require further investigation are referred to transit operational staff to meet with the employees involved and requests for new transit service or transit service adjustments are sent to transportation planning staff. The status of all unresolved issues are then closely monitored to ensure a timely customer follow-up.

In 2010 there were also 121 compliments received and each compliment is forwarded to the employee involved along with a thank you note.

The following is a comparative snapshot of the customer issues by category for 2010 and 2009. This information is also graphically illustrated in the attachment where each of the four categories is profiled and analyzed in greater detail.
In 2010 the number of recorded customer issues decreased slightly while ridership increased to more than 18 million annual trips.

CORPORATE STRATEGIC PLAN:

Strategic Objective – Service Excellence: Foster a culture of citizen centered customer service that is responsive to community needs and suggestions.

FINANCIAL IMPLICATIONS:

The cost of updating and maintaining the GRT customer service database and the analysis of this information is included in the annual operating budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation Planning also utilize this customer information to assist with service planning.

ATTACHMENTS

2010 vs. 2009 GRT Customer Service Trends and Issues

PREPARED BY: Eric Gillespie, Director, Transit Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Summary:

In 2010 the number of GRT customer issues received decreased compared to 2009 (3,035 vs. 3,337). A customer service strategy was launched in 2009 to increase awareness among transit employees of the areas where customers regularly express concerns. In 2010 we have continued this strategy and incorporated some of these strategies into the training regimen for new GRT employees. In addition, more efforts have been made to inform the public of how to use our service, where they can go for information and how to get their issues resolved by GRT. Through this increased awareness along with new technologies, such as the bus stop audio announcements, digital stop displays and onboard GPS, GRT has worked to empower our riders while making our service accessible to members of the public.

2010
Ridership: 18,050,000
Number of Customer Issues: 3035

2009
Ridership: 16,599,974
Number of Customer Issues: 3337

Operations:

43% or 1,327 customer issues in 2010 related to transit operational concerns. These issues include on board incidents/accidents, customers missed at bus stops and driving performance or interpersonal concerns. A graphic summary of these categories is outlined in the chart below. The percentage of customer issues in the operations category has remained stable over the past few years representing 42% – 49% of all customer issues although the number of issues in this category has been decreasing. The information from these issues is used to assist in the development of customer service training, rider awareness programs and a new customer service plan for 2011.
Service Delivery:

Service Delivery related concerns account for 44% or 1,346 of the customer issues received in 2010. Customer concerns regarding bus schedule adherence was the primary issue followed by requests for new service. In 2010, schedule adherence concerns and new service requests were directly related to the increase in ridership among university and college students. Increased enrollment to the universities and colleges along with an increase of high school students and new residents to the region caused some issues with crowded buses and schedule adherence. Changes to route 4 schedule and requests for more service on major routes (7, 8, 9 and iXpress) prompted the number of schedule adherence and new service requests to increase.
Bus Stop Environment:
Issues relating to the bus stop environment category include requests for new stops or shelters and the repair or cleaning of existing bus stop amenities. Bus stop environment issues accounted for 9.4% or 288 of the customer issues in 2010.

Fares:
Most issues in this category relate to the criteria and use of the various transit fare products. In 2010 2.4% or six issues per month were generated in the Fares category.
REPORT:

A new express bus route is being introduced along the Fischer Hallman corridor as part of the transit service expansion being launched in September. This is the first in a series of seven express routes scheduled to be introduced over the next few years to implement the GRT network redesign to better support the rapid transit service. Each of these express routes will service a future aBRT or LRT station.

This first express route (Route 201) operates between the Forest Glen Plaza and University Ave and will eventually service the University of Waterloo LRT station. This route is an ideal launch for the network redesign due to the large number of residential, commercial, business and educational stakeholders along the corridor.

To build on the successful iXpress brand these seven express routes will become part of an integrated iXpress route network. The iXpress station shelters located along these routes will be distinguished using this unique branding and will include digital message boards displaying actual next bus arrival times. These express routes are expected to attract new transit riders based on their fast, frequent and well connected corridor services.

While there is a broader marketing campaign to promote the transit service expansion coming this fall, this new express route will be the focus of an additional promotion to let the stakeholders along this corridor know that the iXpress is now connecting their neighbourhood and will be designed with the goal of attracting them as new transit riders.

Some of the additional awareness includes, Facebook and YouTube promotions, local mailers along the corridor and a media event at an iXpress station, along with other traditional forms of advertising in local media and the Region News. Through targeted promotion people will be invited to try this express service for free during the first week of service in September. The expected lost revenue impact of this week long promotion is estimated at $4,400. In addition there are plans to continue to offer this new iXpress route free each Friday until the end of 2011 which has an additional estimated revenue loss of $12,600.
This offer of free service is intended to entice new riders to try transit and will be monitored as a pilot initiative to determine the effectiveness of using this approach to attract new transit riders.

CORPORATE STRATEGIC PLAN:

The promotion of GRT services supports Strategic Focus Area 3: Sustainable Transportation, specifically 3.1.2 Develop and implement GRT programs to improve access to and use of public transit.

FINANCIAL IMPLICATIONS:

The cost to promote the transit service expansion including the promotion and approximately $17,000 impact of the lost revenue due to offering free access to the new iXpress route can be accommodated in the 2011 Transit Services Operating Budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation Planning were consulted in the development of this marketing strategy and report.

ATTACHMENTS

NA

PREPARED BY: Eric Gillespie, Director, Transit Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
REPORT:

In early 2009, the Region of Waterloo, Ontario Traffic Council, Ministry of Transportation and several municipalities across Ontario began development of Ontario Traffic Manual (OTM) Book 15, Pedestrian Crossing, to be added to the current series of OTM Book guidelines. The development of new OTM Book 15 is intended to provide Traffic Engineering practitioners across Ontario, information on legal requirements, standards, best practices, procedures, guidelines and recommendations for the planning, justification, design, timing and operation of pedestrian safety and controls.

Region staff formed part of the OTM Book 15 steering committee and met numerous times over the course of 2009, 2010 and 2011 to help develop the guideline. In particular, staff promoted roundabouts as effective devices that will improve pedestrian safety and advocated for legislative enhancements to the Highway Traffic Act (HTA) to enhance pedestrian right-of-way and walkability on roadways in Ontario.

OTM Book 15 committee members all recognized a need to fill a critical void in the list of available traffic control devices intended to help facilitate crossing opportunities for pedestrians on Ontario roadways. In response to this void and need to improve the pedestrian environment on Ontario roadways, the committee developed a new device called a Type 2 Pedestrian Crossover or Type 2 PXO. The device is intended to be a recognizable device that will consist of a combination of specialized pavement markings, signs and supporting HTA legislation that will provide road authorities across Ontario a new opportunity to enhance pedestrian mobility. A draft example application illustrating this concept is attached as Appendix A. When introduced, the Type 2 PXO will require motorists to stop and allow waiting pedestrians to cross. Region staff insisted that this device shall, at the discretion of the road authority, be applicable at roundabout crosswalks in Ontario. The committee agreed and will be including guidelines in the manual regarding use of this device at roundabouts. In general, the committee is recommending the device be applied on low speed (60 km/h posted speed or less), 2-lane roadways, channelized right-turns and roundabouts. Therefore, in addition to enhancing pedestrian right-of-way at roundabouts, this device will enable Regional and Municipal staff the ability to enhance pedestrian crossing opportunities on Regional and Municipal roads where appropriate. Proper engineering assessments will be required to ensure the location is suitable for the device and used appropriately. In order for the device to be successful
in the Region of Waterloo, it is vital that the Region and local municipalities work together cooperatively to ensure the device is applied consistently and appropriately across all Regional and Municipal roadways. Subject to proper engineering reviews, Staff envisions potential application of this device on Regional roads such as King Street in St. Jacobs or Queen Street at the Joseph Schneider Haus/Iron Horse Trail crossing/pedestrian refuge island where pedestrian crossing demand exists, but does not necessitate traffic control signals. Staff intends to supplement all roundabout crosswalks with this device as well. Staff is optimistic that appropriate Provincial approvals and legislation will be in place following the provincial election and that the new device could be installed by the spring of 2012.

There are 2 final versions of OTM Book 15 now drafted. Version 2 has the new Type 2 PXO device included in the document and Version 1 does not. Version 2 cannot be released until the Ministry enacts appropriate legislation that would enable road authorities to begin using the device.

Ontario Traffic Council representing the OTM Book 15 committee has forwarded a letter to the Minister of Transportation, Honorable Kathleen Wynne, requesting that consideration be given to proposed Highway Traffic Act legislative changes including the introduction of the new Level 2 PXO traffic control device. We currently await a response from the Ministry of Transportation.

In addition to these developments, the Regional Public Works Commissioners of Ontario (RPWCO) has also finalized a document, Amendments to the Ontario Highway Traffic Act to Support and Promote Active Transportation. This document outlines several recommended legislative changes to the HTA to enhance mobility on Ontario roadways for pedestrians and cyclists. One of the main recommendations outlined in the report requests that consideration be given to amending the HTA to provide right-of-way to pedestrians waiting to lawfully cross the roadway at identified intersections and designated midblock crossings. This recommendation clearly supports the OTM Book 15 committee initiative and the Type 2 PXO forwarded to the Ministry for their consideration. Both committees are also recommending that a definition for “traffic” be included in the HTA to clarify that pedestrians are considered “traffic” in addition to motor vehicles and any other vehicle. Currently this definition is not included in the HTA which leads to ambiguous interpretation of the rules of the road. This change would effectively clarify and reinforce that drivers approaching locations controlled by stop or yield signs are to clearly yield the right-of-way to pedestrians. RPWCO has also forwarded their document to the Ministry of Transportation for consideration as well. Staff is optimistic that the efforts put forth by these two groups will help convince senior officials in the Ministry to act swiftly to enhance pedestrian walkability in Ontario.

Staff has shared information regarding the development of the new traffic control device with traffic representatives from all 7 municipalities, the Police and Grand River Transit that form the Region’s Traffic Coordinating Committee.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to enhance, develop, promote and integrate sustainable and active forms of transportation (public transit, cycling and walking) (Strategic Objective 2.3).

FINANCIAL IMPLICATIONS:

NIL
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS:
Appendix A – OTM Book 15, Proposed Draft Pedestrian Traffic Control Device, Example Application

PREPARED BY: Bob Henderson, Manager, Transportation Engineering

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

DATE: August 16, 2011

FILE CODE: T11-60/ACR

SUBJECT: THE REGION OF WATERLOO 2010 COLLISION REPORT

RECOMMENDATION:

For information.

SUMMARY:

NIL

REPORT:

Introduction

The Region of Waterloo 2010 Collision Report summarizes factors associated with traffic collisions that occurred in 2010. The information presented in this report is based upon vehicle collisions occurring on roads under the jurisdiction of the Region of Waterloo or signalized intersections under the jurisdiction of local municipalities and either investigated by Regional Police or reported at the Collision Reporting Centre.

Appendix A to this report is a copy of the Executive Summary of the 2010 Region of Waterloo Collision Report. The full 2010 Collision Report is available in the Transportation Division of the Transportation and Environmental Services Department, 7th Floor, Administration Headquarters Building. Copies of the full 2010 Collision Report will be circulated to the 7 local municipalities and the Waterloo Regional Police Services for their information and use. The full 2010 Collision Report will also be made available on the Region’s website under Getting Around / Traffic / Collision Reports.

Comparison of 2010 and 2009 Collision Statistics

Comparing collision statistics in 2010 to 2009, the following general observations have been made:

- The total number of reported collisions increased by 4.7% (5547 in 2009 to 5809 in 2010);
- The percentage of reported collisions involving drivers who had consumed alcohol remained the same (2% in 2009 and 2% in 2010);
- The number of collisions involving pedestrians increased from 98 in 2009 to 119 in 2010;
- There were 6 horse-drawn vehicles involved in collisions on the Regional road system in 2010, compared to 5 in 2009;
- The number of collisions involving cyclists increased from 105 in 2009 to 142 in 2010;
- The number of injury collisions increased from 1,196 in 2009 to 1,341 in 2010;
- The number of persons sustaining injuries in collisions increased from 1659 in 2009 to 1870 in 2010;
The number of fatal collisions decreased from 9 in 2009 to 8 in 2010; and
The number of persons sustaining fatal injuries in collisions decreased from 10 in 2009 to 8 in 2010.

Staff suspect that the general increase in overall collisions seen in 2010 was a result of overall collision numbers returning back to normal levels following an exceptional 2009 year. The overall collision trend appears to be continuing downward, despite a growing population.

Exhibit 1 shows the vehicle collision history on Regional roads.

**Exhibit 1: Vehicle Collision History on Regional Roads**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Collisions</th>
<th>Collisions Per 1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>6330</td>
<td>13.8</td>
</tr>
<tr>
<td>2002</td>
<td>6976</td>
<td>14.8</td>
</tr>
<tr>
<td>2003</td>
<td>6657</td>
<td>13.9</td>
</tr>
<tr>
<td>2004</td>
<td>6061</td>
<td>12.4</td>
</tr>
<tr>
<td>2005</td>
<td>5748</td>
<td>11.5</td>
</tr>
<tr>
<td>2006</td>
<td>5688</td>
<td>11.2</td>
</tr>
<tr>
<td>2007</td>
<td>5980</td>
<td>11.7</td>
</tr>
<tr>
<td>2008</td>
<td>5823</td>
<td>10.9</td>
</tr>
<tr>
<td>2009</td>
<td>5547</td>
<td>10.4</td>
</tr>
<tr>
<td>2010</td>
<td>5809</td>
<td>10.7</td>
</tr>
</tbody>
</table>
Collision Ranking

Collision ranking is a tool that helps to identify locations likely to benefit from collision countermeasures. The 2010 collision ranking is based on the difference between the actual and expected number of collisions that occurred at each Regional intersection and midblock location between 2006 and 2010. The location with the largest difference between the actual and expected number of collisions over 5 years is ranked as #1, with #2 having the second largest difference and so on.

The Region of Waterloo collision prediction model is based on average collision rates for Regional roads with certain characteristics. Generally the Region’s expected collision rates are based on 5 years of collision data in order to have enough data to determine reliable expected collision rates. For intersections, the collision rate is given in terms of collisions per million vehicles entering the intersection (Coll/MVE) and it varies by the Average Annual Daily Traffic (AADT), the type of traffic control (stop, signal or pedestrian signal) and number of legs at the intersections (3 or 4 leg). For midblock locations, the collision rate is given in terms of collisions per million vehicle-kilometres (Coll/MVKm) and it varies by AADT and the type of municipality (city or township).

The 2010 collision ranking provides a snapshot of locations experiencing more collisions than expected over 5 years. Some locations that are highly ranked (close to #1) may have collision patterns that could be mitigated through countermeasures.

Appendix B lists the first 100 ranked collision locations. Exhibit 2 lists the first 10 ranked locations. Staff will review 5 years of collision data for each location ranked from #1 to #10 to determine if there is a collision pattern that could be mitigated through countermeasures. In addition, staff routinely review all locations where a fatal collision has occurred and also those intersections that have a high actual vs. expected collision ratio.

Exhibit 2: First 10 Ranked Collision Locations for 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>2010</th>
<th>Location</th>
<th>Municipality</th>
<th>5-year Collisions</th>
<th>Actual</th>
<th>Expected</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>OTTAWA ST AT HOMER WATSON BLVD</td>
<td>KIT</td>
<td>197</td>
<td>99</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>KING ST AT FOUNTAIN ST</td>
<td>CAM</td>
<td>103</td>
<td>28</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>COURTLAND AVE/FAIRWAY RD AT MANITOU DR</td>
<td>KIT</td>
<td>104</td>
<td>40</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>FRANKLIN BLVD AT CAN-AMERA PKWY</td>
<td>CAM</td>
<td>133</td>
<td>71</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>EAGLE ST N BTWN HESPELER &amp; Industrial</td>
<td>CAM</td>
<td>77</td>
<td>16</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>UNIVERSITY AVE E BTWN Regina &amp; WEBER</td>
<td>WAT</td>
<td>73</td>
<td>18</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>OTTAWA ST AT FISCHER-HALLMAN RD</td>
<td>KIT</td>
<td>134</td>
<td>79</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>PINEBUSH RD BTWN FRANKLIN &amp; Wayne</td>
<td>CAM</td>
<td>55</td>
<td>5</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>16</td>
<td>KING ST AT FAIRWAY RD</td>
<td>KIT</td>
<td>100</td>
<td>54</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>18</td>
<td>WEBER ST AT UNIVERSITY AVE</td>
<td>WAT</td>
<td>104</td>
<td>60</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

There were 2 locations (rank 9 and 10) moving into the 2010 top 10 ranking. Staff undertook a preliminary review of collision trends at these 2 locations. Staff developed 5 year timeline collision plots for these 2 locations that are presented in Appendix D. Staff will review these collisions in more detail to determine factors contributing to collisions and to develop countermeasures where appropriate.
As mentioned, each location is ranked according to the difference between the actual and expected number of collisions over a 5 year period. It should be understood that there are a number of factors that can impact rankings. The most influential factors typically include the total number of collisions over a 5 year period and the AADT volume. A slight change to either value at any given location can certainly influence rankings, especially when there are 3400 locations to be ranked.

Generally traffic volumes at any given location are stable and predictable; however, slight changes can occur annually in traffic volumes resulting in adjustments to annual AADT volumes. Approximately 250 to 300 intersections and 100 to 150 midblock sections are counted each year. The information obtained from these counts assist staff in developing AADT volumes for all 3400 ranked locations. In the context of 3400 locations, a year to year shift of ± 50 in overall ranking is a relatively small change.

**Roundabouts**

The first full year of roundabout operation occurred in 2005. We do not yet have established collision rates for roundabouts because collision rates continue to fluctuate. Once roundabout collision rates have stabilized, staff will include each roundabout location in the overall rankings. At this time Exhibit 3 shows details of the total number of collisions and the total number of injury collisions at roundabout locations.

### Exhibit 3: Collisions at Roundabout Locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Opened</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erb Street and Erbville Road / Ira Needles Boulevard, Waterloo</td>
<td>Nov. 04</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Townline Road and Can-Amera Parkway, Cambridge</td>
<td>Dec. 04</td>
<td>2</td>
<td>16</td>
<td>4</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Sawmill Road and Arthur Street, Woolwich</td>
<td>Jun. 06</td>
<td>*0</td>
<td>*11</td>
<td>3</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Fountain Street and Blair Road, Cambridge</td>
<td>Oct. 06</td>
<td>*0</td>
<td>*4</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Can-Amera Parkway and Conestoga Boulevard, Cambridge</td>
<td>Nov. 06</td>
<td>*0</td>
<td>*0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Ira Needles Boulevard and Highview Drive / Trussler Road, Kitchener</td>
<td>Nov. 06</td>
<td>*0</td>
<td>*0</td>
<td>0</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Ira Needles Boulevard and Highland Road, Kitchener</td>
<td>Nov. 06</td>
<td>*0</td>
<td>*1</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Fischer-Hallman Road and Huron Street, Kitchener</td>
<td>Oct. 07</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>*1</td>
<td>0</td>
</tr>
<tr>
<td>Fischer-Hallman Road and Seabrook Drive, Kitchener</td>
<td>Oct. 07</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>*0</td>
<td>0</td>
</tr>
<tr>
<td>Victoria Street and Ira Needles Boulevard, Kitchener</td>
<td>Dec. 07</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>*0</td>
<td>0</td>
</tr>
<tr>
<td>University Avenue and Ira Needles Boulevard, Kitchener</td>
<td>Dec. 07</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>*0</td>
<td>0</td>
</tr>
<tr>
<td>Pinebush Road and Thompson Drive, Cambridge</td>
<td>Aug. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
</tr>
<tr>
<td>Lancaster Street and Bridge Street, Kitchener</td>
<td>Nov. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
</tr>
<tr>
<td>Ira Needles Boulevard and The Boardwalk, Kitchener</td>
<td>Sept. 10</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Fountain Street and Dickie Settlement Road, Cambridge</td>
<td>Nov. 10</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* Note: denotes partial year

1008961
Although collisions at roundabouts increased in 2010, staff note that traffic volumes at roundabouts also increased by an average of 5.4% in 2010. Roundabouts situated along Ira Needles Boulevard saw increases in traffic volume of up to 24%. The overall collision increase seen at roundabouts appears to coincide with the general overall Region-wide increase in collisions seen in 2010. Intersections retrofitted with roundabouts continue to operate with approximately 70% fewer injury collisions. The overall average roundabout injury collision rate continues to be lower than the average injury collision rate seen at comparable traffic signals.

2009 Countermeasures Program

Appendix C to this report summarizes collision trends and recommended countermeasures for the first 10 ranked collision locations identified in the 2009 Collision Report. It also notes where countermeasures have already been implemented.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to optimize use of existing infrastructure (Strategic Objective 5.1).

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A – Executive Summary of the 2010 Region of Waterloo Collision Report
Appendix B – Collision Ranking
Appendix C – 2009 Top 10 Collision Locations and Countermeasures Program
Appendix D – Collision Timeline Plots

PREPARED BY: Mike Jones, Supervisor, Traffic Engineering

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
EXECUTIVE SUMMARY
2010 COLLISION REPORT

A total of 5809 reported traffic collisions occurred on Regional roads or signalized intersections in 2010. These collisions resulted in the following statistics:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Collisions</td>
<td>5809</td>
<td>5547</td>
<td>5823</td>
<td>5980</td>
<td>5688</td>
</tr>
<tr>
<td>Number of Fatal Collisions</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Number of Injury Collisions</td>
<td>1341</td>
<td>1196</td>
<td>1359</td>
<td>1355</td>
<td>1398</td>
</tr>
<tr>
<td>Number of Collisions Involving Pedestrians</td>
<td>119</td>
<td>98</td>
<td>119</td>
<td>122</td>
<td>107</td>
</tr>
<tr>
<td>Number of Collisions Involving Cyclists</td>
<td>142</td>
<td>105</td>
<td>128</td>
<td>128</td>
<td>114</td>
</tr>
<tr>
<td>Number of Persons Injured in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>1862</td>
<td>1649</td>
<td>1874</td>
<td>1817</td>
<td>2041</td>
</tr>
<tr>
<td>Number of Persons Sustaining Fatal Injuries in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Percentage of Collisions Occurring at Intersections</td>
<td>64%</td>
<td>57%</td>
<td>58%</td>
<td>57%</td>
<td>59%</td>
</tr>
<tr>
<td>Day with Highest Number of Collisions</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
</tr>
<tr>
<td>Month with Highest Number of Collisions</td>
<td>December</td>
<td>January</td>
<td>February</td>
<td>February</td>
<td>October</td>
</tr>
<tr>
<td>Time of Day with Highest Number of Collisions</td>
<td>17:00</td>
<td>16:00</td>
<td>17:00</td>
<td>17:00</td>
<td>17:00</td>
</tr>
<tr>
<td>Most Common Collision Type</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
</tr>
<tr>
<td>Most Frequently Recorded Improper Driving Action</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
</tr>
<tr>
<td>Percentage of Alcohol-Related Collisions</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Horse-Drawn Vehicle Collisions</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>
### APPENDIX B

**COLLISION RANKING**

**LEGEND**

- **Tcon** = traffic control (TS=traffic signal, SS=stop sign, AWS=all-way stop sign)
- **F** = fatal collisions in 5 years
- **PI** = personal injury collisions in 5 years
- **PD** = property damage collisions in 5 years
- **NR** = non-reportable collisions (property damage less than $1000) in 5 years
- **Total Coll** = total collisions in 5 years
- **2010 Vol** = average annual daily traffic (veh/day)
- **Link Length** = length of road section in kilometres (for midblock locations)
- **Coll Rate** = expected average 5-year collision rate (collisions/million vehicles entering) or (collisions/million vehicle-kilometres)
- **Expect # Coll** = expected number of collisions in 5 years
- **Diff** = difference between total number of collisions and expected number of collisions in 5 years

<table>
<thead>
<tr>
<th>2006 to 2010 (5 yr.) Rank</th>
<th>2005 to 2009 (5 yr.) Rank</th>
<th>Geo ID</th>
<th>Location</th>
<th>Mun</th>
<th>Tcon</th>
<th>F</th>
<th>PI</th>
<th>PD</th>
<th>NR</th>
<th>Total Coll</th>
<th>2010 Vol</th>
<th>Link Length</th>
<th>Coll Rate</th>
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<td>97</td>
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<td>KIT</td>
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2009 TOP 10 COLLISION LOCATIONS AND COUNTERMEASURES PROGRAM

<table>
<thead>
<tr>
<th>2009 Rank</th>
<th>Location</th>
<th>Municipality</th>
<th>5-year Collisions</th>
<th>Actual</th>
<th>Expected</th>
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<td>Ottawa Street at Homer Watson Boulevard</td>
<td>Kitchener</td>
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<td>Kitchener</td>
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<td>127</td>
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<tr>
<td>5</td>
<td>Pinebush Road between Franklin Boulevard and Wayne Avenue</td>
<td>Cambridge</td>
<td></td>
<td>63</td>
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<tr>
<td>6</td>
<td>University Avenue East between Regina Street and Weber Street</td>
<td>Waterloo</td>
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<td>71</td>
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<td>10</td>
<td>Courtland Avenue / Fairway Road at Manitou Drive</td>
<td>Kitchener</td>
<td></td>
<td>93</td>
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</tr>
</tbody>
</table>

1. Ottawa Street at Homer Watson Boulevard, Kitchener

Ottawa Street (Regional Road 4) at Homer Watson Boulevard (Regional Road 28) experienced 163 collisions in 5 years (2005 to 2009) including 55 turning movement collisions where 22 were expected and 100 rear-end collisions where 39 were expected.

In February 2001, staff installed a red-light camera to mitigate angle-type collisions. Installation of the red-light camera has resulted in a reduction of angle collisions at this intersection.

In 2004, staff assessed the feasibility of providing fully-protected left-turn phasing on all approaches to this intersection and determined that, at that time, this type of phasing would result in unacceptable increased delays to motorists.

As part of the Region's on-going LED traffic signal conversion program, the perimeter of all traffic signal head backboards were supplemented with 3M reflective tape in April 2007. Reflective tape accentuates the traffic signal head backboard to create a more conspicuous traffic signal head especially during night-time conditions. Research indicates that this countermeasure can reduce night-time overall collisions and more specifically, rear-end collisions.

As part of the Region's pedestrian countdown signal (PCS) pilot project, staff installed PCS at this intersection on September 30, 2008. It is anticipated that PCS will reduce pedestrian collisions.

On August 28, 2008 Regional Council approved an Ottawa Street Transportation Study, Elmsdale Drive to Imperial Drive, in the City of Kitchener. The unusual collision patterns along Ottawa Street between Strasburg Road and Homer Watson Boulevard appear to be linked to the concentration of traffic through the intersection of Ottawa Street at Homer Watson Boulevard related to the desire to get on and off Highway 7 & 8. A project team has identified alternatives for review including planning, operational and corridor improvement alternatives.
On February 2, 2011, Regional Council approved the installation of a roundabout at the intersection which is anticipated to be operational in the year 2015. Along with the roundabout installation, additional improvements to highway ramp terminals and a second roundabout at the Ottawa Street / Alpine Road intersection has also been approved for installation. Its anticipated that these additional improvements will also occur in 2015.

2. Eagle Street between Hespeler Road and Industrial Road, Cambridge

There were 97 collisions on Eagle Street (Regional Road 39) between Hespeler Road (Regional Road 24) and Industrial Road in 5 years (2005 to 2009). Of the 97 collisions, 57 were turning-movement collisions and 3 were angle collisions. When these types of collisions occur on midblock road sections with commercial development they typically involve a vehicle entering or exiting area development. A cluster of these types of collisions are occurring at the accesses to 2445 / 2465 / 2475 Eagle Street and 2386 / 2396 Eagle Street.

As part of the Eagle Street, Hespeler Road to Concession Road / Speedsville Road Environmental Assessment which was approved in 2008, staff have redesigned the existing median islands on Eagle Street to mitigate collisions in this vicinity. It was anticipated that these modifications would be constructed in 2012. However, Rapid Transit staff are assessing Eagle Street as a future rapid transit route and as such the 2012 works have been delayed until their assessment is complete.

3. Franklin Boulevard at Can-Amera Parkway, Cambridge

Franklin Boulevard (Regional Road 36) at Can-Amera Parkway (Regional Road 80) experienced 123 collisions in 5 years (2005 to 2009). Of the 123 collisions, 62 were rear-end collisions where 29 would be expected and 40 turning-type collisions where 16 would be expected.

A Class Environmental Assessment was approved by Council on March 24, 2010 for road improvements on Franklin Boulevard from Pinebush Road to Myers Road. The improvements include an approved roundabout at the Franklin Boulevard / Can-Amera Parkway intersection. It is anticipated that the roundabout will be complete in 2015.

4. Ottawa Street at Fischer-Hallman Road, Kitchener

Ottawa Street (Regional Road 4) at Fischer-Hallman Road (Regional Road 58) experienced 127 collisions in 5 years (2005 to 2009). Of the 127 collisions, 78 were rear-end type collisions where 31 were expected and 31 were turning type collisions where 18 were expected.

The Ottawa Street / Fischer-Hallman Road intersection is part of a current Class Environmental Assessment which is looking at road improvements on Fischer-Hallman from Ottawa Street to Bleams Road including a roundabout at Ottawa Street and Fischer-Hallman Road. However, the Class Environmental Assessment is on hold pending the assessment of a Transit Corridor Study along Fischer-Hallman Road. It is anticipated that the Class Environmental Assessment will continue in early 2012.

In the fall of 2009, staff constructed a continuous curb-lane on Fischer-Hallman Road from Ottawa Street to Activa Avenue.
5. **Pinebush Road between Franklin Boulevard and Wayne Avenue, Cambridge**

Pinebush Road between Franklin Boulevard and Wayne Street experienced 63 collisions in 5 years (2005 to 2009). There were 53 turning movement collisions where 1 was expected. Previous analysis shows that the majority of the above collision types are occurring at the accesses to the commercial plazas on the northwest and southwest corners of the Pinebush Road / Franklin Boulevard intersection. The collisions typically involve a vehicle entering or exiting the development through vehicle queues.

On March 24, 2010 Regional Council approved the Franklin Boulevard, Pinebush Road to Myers Road Environmental Assessment which includes the extension of the centre median from Franklin Boulevard to Wayne Avenue. Part of the approval also includes the installation of a roundabout at the Pinebush Road / Franklin Boulevard intersection. It is anticipated that the earliest construction of the median extension will be in 2014.

The median extension is expected to significantly reduce the collisions occurring at the accesses to the commercial plazas on the northwest and southwest corners of the Pinebush Road / Franklin Boulevard intersection.

6. **University Avenue East between Regina Street and Weber Street, Waterloo**

University Avenue between Regina Street and Weber Street experienced 71 collisions in 5 years (2005 to 2009). Of the 71 collisions, 28 were rear-end collisions where 21 were expected, and angle / turning movement collisions account for 46%. Our analysis shows that the majority of the angle / turning collision types are occurring at the accesses within this section of Weber Street.

Staff are currently assessing the potential for a median island and access consolidation to address collisions along this section of University Avenue.

7. **King Street at Fountain Street, Cambridge**

King Street at Fountain Street experienced 85 collisions in 5 years (2005 to 2009). Of the 85 collisions, 44 were turning-type collisions where 10 were expected and 17 were sideswipe collisions where 3 were expected.

Currently, an Environmental Assessment is underway which encompasses the King Street / Fountain Street intersection. The proposed solution includes the construction of a roundabout at the King Street / Fountain Street intersection with a realignment of the Shantz Hill Road / Fountain Street intersection. It is anticipated that improvements at this intersection will improve collisions of all types.

8. **Ottawa Street at Westmount Road, Kitchener**

Ottawa Street at Westmount Road experienced 98 collisions in 5 years (2005 to 2009). Of the 98 collisions, 54 collisions were rear-end type collisions where 23 were expected and 28 were turning-movement type collisions where 13 were expected. Analysis completed in 2004 indicated a noticeable collision trend which showed that 58% of the turning-movement collisions involved a vehicle making an eastbound left-turn. On May 9, 2006, staff activated an eastbound fully-protected left-turn signal phase to address this collision problem. The frequency of collisions involving a vehicle making an eastbound left-turn has decreased significantly. To date, there has been only 2 collisions involving an eastbound left-turning motorist.
In July 2003 staff installed 3M reflective tape around the perimeter of all primary traffic control signal heads on all approaches to the intersection. By April 2007, all remaining traffic control signal heads were supplemented with 3M reflective tape. Research indicates that this countermeasure can reduce night-time overall collisions and more specifically, rear-end collisions.

Staff believe that countermeasures implemented to date at this location are impacting the intersection operation positively. This intersection continues to drop in the rankings. In fact this intersection now ranks #47 in the 2010 Collision Report.

9. Hespeler Road at Langs Drive / Sheldon Drive, Cambridge

Hespeler Road at Langs Drive / Sheldon Drive experienced 103 collisions in 5 years (2005 to 2009). Of the 103 collisions, 60 were rear-end collisions where 27 were expected, and angle / turning movement collisions account for 17%.

Staff installed 3M reflective tape around the perimeter of all primary traffic control signal heads on all approaches to the intersection. Research indicates that this countermeasure can reduce night-time overall collisions and more specifically, rear-end collisions.

In June 2010, staff arranged the installation of a red-light camera for northbound Hespeler Road at Langs Drive / Sheldon Drive. Red-light cameras at other intersections in the Region have resulted in a reduction of angle collisions at those intersections. To date there has not been an angle collision involving a northbound motorist disobeying the red signal indication. This intersection now ranks #17 in the 2010 Collision Report. Staff will continue to monitor collisions at the Hespeler Road Langs Drive / Sheldon Drive intersection.

10. Courtland Avenue / Fairway Road at Manitou Drive, Kitchener

Courtland Avenue / Fairway Road at Manitou Drive experienced 93 collisions in 5 years (2005 to 2009). Of the 93 collisions, 73 collisions were rear-end type collisions where 23 were expected. Our reviews shows that approximately 50% of the rear-end collisions involved a motorist turning right from Manitou Drive.

The intersection is scheduled for improvements in 2011 which includes design improvements to the right-turn channelized island from Manitou Drive onto Fairway Road. It is anticipated that the new channel design will reduce rear-end collisions.
REPORT: E-11-084

REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Transportation

TO: Jim Wideman and Members of the Planning and Works Committee
DATE: August 16, 2011
FILE CODE: T01-20/1
SUBJECT: SPEED LIMIT ON SNYDER’S ROAD (REGIONAL ROAD 1), TOWNSHIP OF WILMOT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended, to:

a) Remove from Schedule 18 Rates of Speed, 70 km/h Maximum Speed on Snyder’s Road (Regional Road 1) from Nafziger Road (Regional Road 5) to 50 metres West of Brenneman Drive;

b) Add to Schedule 18 Rates of Speed, 60 km/h Maximum Speed on Snyder’s Road (Regional Road 1) from Nafziger Road (Regional Road 5) to 50 metres West of Brenneman Drive;

in the Township of Wilmot as outlined in report E-11-084, dated August 16, 2011.

SUMMARY:

NIL

REPORT:

In response to concerns received from citizens regarding the posted speed limit in front of Sir Adam Beck Public School and Waterloo-Oxford Public School, Regional staff reviewed the speed limit on Waterloo Street / Snyder’s Road in the Township of Wilmot between New Hamburg and Baden. Regional staff undertook a speed survey in April 2011 on Snyder’s Road between Nafziger Road and the westerly leg of Brenneman Drive. The results of the speed survey indicated that the average travel speed of motorists was 65 km/h.

Figure 1 illustrates the existing and proposed speed limits.
Staff placed signs on Snyder’s Road in June 2011 indicating that a speed limit change was proposed and requested comments from the public. The signs generated responses via a website and telephone calls from 53 people, of whom, 49 are in favor and 4 are opposed to the proposed change. Those in favor of the proposed change stated that the change is positive for the safety of the school children walking along Snyder’s Road while those opposed to the change noted that there are sidewalks in place for the students to walk.

The Township of Wilmot supports the proposed speed limit change.

In addition to the concerns raised by citizens, the Waterloo Region District School Board has also forwarded the following 3-part motion, attached as Appendix A, to Regional staff on July 20, 2011:

“1. That the Waterloo Region District School Board request that the Regional Municipality of Waterloo amend its Traffic By-law to lower the posted speed limit on Snyder’s Road West from 70 kph to 60 kph, from Nafziger Road to the 50 kph zone at the western edge of the Baden community, effective September 1, 2011; and

2. That the Regional Municipality of Waterloo complete the construction of the pedestrian sidewalk on the north side of Snyder’s Road West from approximately Brenneman Drive to Christian Street in the Baden community in the current construction year; and

3. That the Regional Municipality of Waterloo coordinate the re-construction of Snyder’s Road West with the Township of Wilmot, the Waterloo Region District School Board and the community.”
In response to part 1 of this motion, Regional staff is recommending the reduction of the 70 km/h posted speed limit speed to 60 km/h between Nafziger Road and 50 metres west of Brenneman Drive. In response to part 2 of this motion Regional staff is presently undertaking a functional design study for the installation of this sidewalk. The construction of this sidewalk cannot be completed in 2011 as there are water courses and other issues that need to be investigated and resolved that will likely take until early 2012. The construction of this sidewalk will be considered in 2012. In response to part 3 of this motion Regional staff deferred the resurfacing works on Snyder’s Road between Nafziger Road and the Baden water tower to 2012 at the request of the Waterloo Region District School Board. Staff will consult with the Township of Wilmot and the Waterloo Region District School Board prior to commencing roadway works in 2012.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to optimize the use of existing infrastructure (Strategic Objective 5.1).

FINANCIAL IMPLICATIONS:

The cost to modify signing is approximately $500 and is provided for in the sign maintenance budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

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

ATTACHMENTS:

Appendix A – Correspondence from Waterloo Region District School Board

PREPARED BY: Satinderjit Bahia, Engineering Technologist (Traffic)

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
July 20, 2011

Ms. Kris Fletcher
Director, C & A S / Regional Clerk
Regional Municipality of Waterloo
2nd Floor, 150 Frederick Street
Kitchener, Ontario N2G 4J3

Re: Motion of the Waterloo Region District School Board requesting the Regional Municipality of Waterloo to amend the Regional Traffic By-law with respect to lowering the posted speed limit on Snyder’s Road West and to complete a section of pedestrian sidewalk on the same roadway.

Dear Ms. Fletcher:

Please find attached a Report and Recommendations adopted by the Waterloo Region District School Board on June 27, 2011. The motion is in three parts and reads as follows:

1. That the Waterloo Region District School Board request that the Regional Municipality of Waterloo amend its Traffic By-law to lower the posted speed limit on Snyder’s Road West from 70 kph to 60 kph, from Nafziger Road to the 50 kph zone at the western edge of the Baden community, effective September 1, 2011; and

2. That the Regional Municipality of Waterloo complete the construction of the pedestrian sidewalk on the north side of Snyder’s Road West from approximately Bremnerman Drive to Christian Street in the Baden community in the current construction year; and

3. That the Regional Municipality of Waterloo coordinate the re-construction of Snyder’s Road West with the Township of Wilmot, the Waterloo Region District School Board and the community.

It is our understanding that subsequent to the preparation of this report, Regional Transportation staff met with staffs from the Township of Wilmot and the Board and agreed to bring forward a Staff Report with a recommendation regarding lowering the posted speed limit on Snyder’s Road West between Nafziger Road and approximately Bremnerman Drive, from 70 km/h to 60 km/h. Should this be the case, the first part of the Board’s motion will have been addressed; however, the Board Report might be useful support for Regional Council’s consideration.
Should you have any questions, please do not hesitate to contact me.

Sincerely,

Linda Fabi  
Director of Education and Secretary

Enclosure

cc:  Kathleen Woodcock, WRDSB  
     Ken Seiling, RMOW  
     Jayne Herring, WRDSB  
     Marilyn Marklevitz, WRDSB  
     Chris Smith, WRDSB  
     Mike Murray, RMOW  
     Gary Sosnoski, RMOW  
     Thomas Schmidt, RMOW
TO: Jim Wideman and Members of the Planning and Works Committee

DATE: August 16, 2011

FILE CODE: T01-20/4

SUBJECT: NO PARKING ON BLEAMS ROAD (REGIONAL ROAD 4), TOWNSHIP OF WILMOT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended, to add to Schedule #1 “No Parking Anytime” on both sides of Bleams Road (Regional Road 4) from 860 metres east of Queen Street (Regional Road 12) to 1060 metres east of Queen Street (Regional Road 12) as outlined in report E-11-085 dated August 16, 2011.

SUMMARY:

NIL

REPORT:

In a continuing effort to improve service and safety on the Regional road system for pedestrians, cyclists and motorists, Transportation Engineering is recommending that “No Parking Anytime” be installed on both sides of Bleams Road from 860 metres east of Queen Street to 1060 metres east of Queen Street.

Regional staff have received concerns regarding motorists parking on either side of Bleams Road in the vicinity of 1544 Bleams Road, primarily during the fall harvest season to visit the Shantzholm Family Farm which attracts a high number of patrons between mid-September and the first of November of each year. The Shantzholm Family Farm has various activities to attract patrons, including a corn maze, straw maze, farm animals, and assortment of fall produce for purchase, including a pick your own pumpkin patch.

The main concerns resulting from attending patrons parked along Bleams Road are as follows

- Low visibility of pedestrians amongst park vehicles, especially for westbound motorists approaching 1544 Bleams Road over the vertical crest curve;
- Concerns of motorists parking on Bleams Road and forcing pedestrians to walk along the side of the road amongst other high speed vehicles travelling on Bleams Road; and
- Farm equipment operators not being able to traverse Bleams Road safely due to parked vehicles restricting the roadway width.

Although on-site parking is available, patrons continue to park on both sides on Bleams Road. The property owner suspects this may be due to the existing parking area being located at the back of the property owner’s home; a distance away from the activities. It was noted that the property owner has agreed to improve on-site parking. Transportation Planning staff have granted permission for the property owner to construct another access for on-site parking at 1524 Bleams Road.
The following figures show the proposed no parking anytime from 860 metres east of Queen Street to 1060 metres east of Queen Street.

**Figure 1 - Proposed No Parking on Both Sides of Bleams Road**

![Figure 1 - Proposed No Parking on Both Sides of Bleams Road](image1)

**Figure 2 – Proposed No Parking on Both Sides of Bleams Road**

![Figure 2 – Proposed No Parking on Both Sides of Bleams Road](image2)
Staff sent out questionnaires to nearby residents in November 2010 indicating that a change to the parking on Bleams Road was proposed and requested comments. The questionnaire generated 4 responses, 2 of whom were in favor and 2 of whom were opposed to the proposed change. Those in favor of the proposed changes agreed that the change is positive for the safety of the pedestrians and motorists. Those opposed to the changes noted that the signs would not increase safety as motorists should already be aware of their surroundings with regards to parked vehicles.

The Township of Wilmot is in agreement with the proposed parking amendment.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to optimize the use of existing infrastructure (Strategic Objective 5.1).

FINANCIAL IMPLICATIONS:

The cost to modify signing is approximately $1000 and is provided for in the sign maintenance budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

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

ATTACHMENTS:

NIL

PREPARED BY: Satinderjit Bahia, Engineering Technologist (Traffic)

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

DATE: August 16, 2011

FILE CODE: C06-60/PWC/WS.11

SUBJECT: BIOSOLIDS MASTER PLAN UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the Biosolids Master Plan Update including its recommended actions as itemized in Report E-11-067, dated August 16, 2011;

AND THAT the Commissioner of Transportation and Environmental Services be authorized to issue the Notice of Completion, and to provide the Biosolids Master Plan Update Report for public review and comment for a 30-day period in accordance with the Municipal Class Environmental Assessment Process.

SUMMARY:

The Region initiated a study in 2010 to update the previous Biosolids Master Plan (BMP) completed in 2003. The updated BMP builds on the strategy recommended in the 2003 BMP and provides an overall plan for the upgrade and expansion of facilities to ensure:

(i) adequate biosolids processing capacity at the Region’s wastewater treatment plants (WWTP) to the year 2041; and
(ii) the preferred strategy is environmentally sustainable, economically viable, and can be maintained in the long term.

Based on a thorough assessment of biosolids management needs in the Region, and taking into consideration recent changes in planning, regulatory, environmental and technologies, and also comments received from the public, agencies and other stakeholders, the preferred biosolids management strategy for the Region was completed. The implementation schedule is summarized in Appendix A.

REPORT:

Background

In January 2010, the Region initiated a study to update the previous BMP completed in 2003. Since the completion of the 2003 BMP a number of planning, technical and regulatory changes have impacted the biosolids management strategy proposed in the 2003 plan.

Requirements for increasing energy efficiency have significantly influenced the approach to biosolids management over the last decade. As a direct result, biosolids management practices have evolved considerably to more complex processes that include energy recovery systems. In addition, rapidly changing economic variables (i.e.: fuel price, lack of alternate combustible resources) and recognized environmental concerns (i.e.: climate change, greenhouse gas emissions, disposal on agricultural land, etc.) have been observed on a worldwide scale over the last several years. These
changing factors have also had a significant impact on biosolids treatment technologies, capital and operating costs and ultimately on the natural and human environment. Consequently, electricity and fuel prices are now considered the key factors taken into account when planning for biosolids management and upgrading an existing system to meet future growth capacities and regulatory requirements. Biosolids management strategies that have integrated energy recovery have been recently used by major municipalities across Europe. In North America, larger cities such as Los Angeles, Philadelphia and Vancouver are only beginning to adopt a similar approach to planning biosolids management strategies for the future.

The updated BMP builds on the strategy recommended in the 2003 BMP and further recognizes that biosolids are a valuable renewable resource and if properly managed can help reduce the Region’s carbon footprint. The updated BMP provides an overall strategy: (i) for upgrading and expanding the Region’s biosolids facilities to ensure adequate biosolids processing capacity at the Region’s WWTPs; (ii) embodies the Region’s sustainability goals, principles and environmental focus; (iii) builds on best practices; (iv) incorporates innovation, diversification and flexibility; and (v) protects the unique features and resources of the Region for the community now and in the future.

Based on the work summarized in this report, and comments received from the public, agencies, and other stakeholders throughout the project and at the two series of Public Information Centres (PICS) held in June 2010 and May 2011, the preferred biosolids management strategy until the year 2041 was completed. Other recommendations to improve project delivery and realize savings to the capital program in the Region were also made.

Public and Stakeholders Involvement

The following is a chronology of the opportunities for public involvement during the BMP Update:

- **February 2010: Notice of Commencement**
  Advertisements were placed in local newspapers and in the Region’s Water Services web page informing the public of the commencement of the BMP Update. In addition, the local area municipalities, potential concerned area municipalities, neighbouring municipalities, provincial agencies, federal agencies, First Nations and the Grand River Conservation Authority (GRCA) were also notified by letter.

- **Steering Committee Meetings**
  The scope of work of the steering committee was to comment on and give directions to the project team on the development of the BMP Update. It consisted of the project consultant, assigned regional councilors, and representatives of the Region’s Water Services, Design and Construction, Planning and Waste Management, and councilors from local area municipalities. A total of five steering committee meetings were held throughout the project. Comments made by committee members were documented in meeting minutes and incorporated in the BMP Update.

- **Stakeholder Committee Meetings**
  The scope of work of the stakeholder committee was to provide advice and feedback to the BMP Update Project Team at key milestone points over the course of the study. The intent of having a stakeholder committee was to include broad community representation in the review process. Accordingly, the stakeholder committee included the project consultant, representatives of the Region’s Water Services, representatives from business/industry (Kitchener-Waterloo Chamber of Commerce, Sustainable Waterloo, concerned citizens), environment and public health (Ministry of the Environment, Grand River Conservation Authority, Region of Waterloo Public Health and University of Waterloo), agriculture (Ministry of Agriculture, Food and Rural Affairs, Waterloo Federation of Agriculture), community-at-
large (Waterloo Region Food Round Table, Foodlink Waterloo Region) and representatives of local area municipalities. A total of three stakeholder committee meetings were held throughout the project. Comments made by committee members were documented in meeting minutes and incorporated in the BMP Update.

- June 2010 and May 2011: Notice of Public Information Centres
  Advertisements were placed in local newspapers and in the Region’s Water Service web page informing the general public of the PICs, and requesting input from interested parties on the BMP update.

- June 21, 22, and 23, 2010: Public Information Centres
  The PICs were held in the St. Jacob’s Community Centre (St. Jacobs), Region’s Administration Building (Kitchener), and New Dundee Community Centre (New Dundee). Information presented included a review of the Region’s current biosolids management practices and biosolids management options in terms of processes, technologies, and end uses. Comments received from attendees of the PICs are summarized below.

- May 4, 5, and 10, 2011: Public Information Centres
  The PICs were held in the Wilmot Recreation Complex (Baden), David Dunward Centre (Cambridge), and Waterloo Recreation Complex (Waterloo). Information presented included an overview of short-listed strategies and the results of the evaluation process, including the preferred biosolids management strategy. Comments received from attendees of the PICs are summarized below.

- May 26, 2011: Waterloo Region Landfill Liaison Committee (WRLLC)
  Upon request of the WRLLC a meeting was held to present information to the committee on the BMP Update. Information presented included an overview of the preferred strategy.

- Summer/Fall, 2011: Notice of Completion
  Upon Council approval, advertisements will be placed in the local newspapers and Region’s Water Services web page on August 2011 informing the general public of the 30 day review period for the Final Report. All comments received will be considered in the project and become part of the Update project file.

**June 2010 PIC Summary**

Only six people attended the three PICs. Participants were primarily concerned with the land application of biosolids, emission of odours and impacts on soil and water quality from emerging contaminants, and interest on opportunities for green energy projects. One participant rated protection of the natural environment, impact on society, and sustainability of the infrastructure as the most important factors to be considered when selecting the best option for the management of biosolids in the Region.

**May 2011 PIC Summary**

Approximately 20 people attended the three PICs. Concerns expressed by the attendees were similar to the ones in the June 2010 PICs. Individuals also expressed concern regarding the quality of dried product from the heat drying facility. It was indicated that the Region should carefully review safety issues based on the records of other operating facilities, and develop and implement an outreach plan aimed at achieving public acceptance of the final product. It was also suggested to move up the timeline for the co-generation from biogas at the Waterloo, Kitchener, and Galt WWTPs. One other comment was related to the decommissioning of the biosolids storage lagoons at the Kitchener WWTP which is being addressed under the Kitchener WWTP Upgrades project and therefore not part of the long term BMP.
BMP Strategy

The preferred alternative to address biosolids management in the Region is to continue to improve biosolids quality, further reduce its volume and environmental impacts, and generate energy. This strategy includes the installation of a single heat drying facility to dry the dewatered cake produced at the Kitchener, Waterloo, and Galt WWTPs, which represents approximately 90% of the biosolids produced in the Region. The Waterloo WWTP will receive biosolids from St. Jacobs, Conestogo, Heidelberg, and Wellesley WWTPs, while the Galt WWTP will continue to receive biosolids from the Preston WWTP. A new digestion system that raises the temperature of biosolids up to approximately 70 °C will be installed at the Ayr WWTP to treat biosolids generated in Ayr, New Hamburg and Hespeler WWTPs. The dried product from the heat drying facility will be land applied as solid and eventually marketed in the future as a fertilizer or as fuel, while the biosolids processed at Ayr will be land applied as liquid. The addition of thermal processes to the management of biosolids in the Region will result in the production of “Class A” biosolids that can be registered under the Canadian Food Inspection Agency and sold as a fertilizer. Biosolids generated at the Elmira WWTP will continue to be landfilled because of quality issues. This preferred strategy produces high quality biosolids at a significantly reduced volume that do not necessarily need to be land applied in the future. It provides diversity and flexibility to the management of biosolids in the Region when compared to other strategies that rely more substantially on direct land application.

Heat drying is a well proven technology and an effective biosolids management option that reduces volume, is economically attractive, and gives flexibility for the end use of the dried product. It can be applied to agricultural land, sold as a fertilizer, or used as renewable fuel for cement kilns or for emerging energy recovery processes. Thermal drying to create a value-added product has seen steady growth in the U.S. since the mid 90’s. Over the last five to seven years, many of the dryer system manufacturers have developed low temperature (120 -175°C) belt dryers that have less complex and safer materials handling systems. One manufacturer alone has delivered 25 of these systems worldwide since 2003. Installations in Europe have demonstrated the systems can be operated on a continuous basis with minimum risks. Safety monitoring systems and controls are configured to automatically shut the systems down in the event of operations problems.

The location of the heat drying facility will be defined through the Class Environmental Assessment study (Class EA) to be initiated upon completion of the BMP. However, the possibility of locating the heat drying facility at one of the Region’s landfills offers a unique opportunity to significantly offset the energy requirements for the operation of the heat dyers through the use of waste heat and hot water from facilities currently using landfill gas in their processes. Details regarding project implementation, including delivery method and financing, size/phasing, and safety measures for the facility will also be addressed in more details during the Class EA study.

The preferred strategy includes the installation of co-generation facilities at the Kitchener, Waterloo, and Galt WWTPs. Co-generation engines will use biogas produced at the anaerobic digestion process to generate electricity and heat. The projected biogas production rates and power costs make co-generation financially viable at these WWTPs. It is expected that co-generation will offset operating and maintenance costs related to biosolids processing by approximately 60 to 70% on average at these plants. The simple payback period for the co-generation facilities is approximately 9 years.

The preferred strategy also takes into account storage needs to operate a robust biosolids management program. Typically, two to four days of storage at peak future biosolids production rates is included for dewatered cake at each of the larger WWTPs prior to additional processing. About 30 days of dried product storage onsite will be provided at the heat drying facility. Additional storage requirements would be provided and managed by the end use contractor. The implementation schedule is summarized in Appendix A.
In addition to upgrading and expanding current biosolids facilities, the BMP also recommends a number of other actions to improve project delivery and savings to the capital program in the Region:

- The co-generation facilities at Kitchener, Waterloo, and Galt WWTP can be constructed and operated under a similar agreement the Region’s Waste Management Division currently has with Toromont Energy Ltd., modeled through a public-private partnership;

- The centralized heat-drying facility and new digestion system in Ayr can be constructed under a Design, Build, Finance, Operate and Maintain model, also modeled through a public-private partnership.

Public-private partnership transfers construction and operating risks to the private sector, maximizes access to private sector innovation and experience, generally results in faster construction time, provides single-point accountability, results in fewer construction claims and generally provides long-term financial stability related to construction and operating costs. This model has been used by the Region (co-generation facility owned by Toromont Energy Ltd. at the Waterloo landfill) and other municipalities in Ontario. Under this model, the private sector accepts more of the risk and is responsible for meeting the standards established by the Region through a procurement process that will be defined through the Class EA study to be initiated upon completion of the BMP.

**Interim Strategy**

The Region currently has biosolids contracts in place that will expire in December 31, 2012, for the dewatered biosolids (corresponding to approximately 90% of the biosolids produced at the Region), and in December 31, 2015, for the liquid biosolids. It is recommended that the liquid biosolids contract be extended until completion of the upgrades at the Ayr WWTP biosolids management system proposed in the BMP Update, which will be part of a separate Planning and Works Committee Report. An interim strategy will be implemented in 2013 to consolidate all existing dewatered biosolids contracts until completion of the heat drying facility proposed in the BMP.

The interim strategy consists of onsite dewatering at Kitchener, Waterloo, Galt, and Elmira, as recommended in the preferred BMP strategy, and contracting out the hauling, storage and final disposal of dewatered biosolids. The Region might consider an alternate disposal method to land application in the new contract (e.g. composting, lime stabilization, incineration, etc. at existing private or municipal facilities in South Western Ontario), which would provide more diversity and flexibility to the management of biosolids as compared to the current situation. Biosolids generated at the Elmira WWTP will continue to be landfilled.

**Next Steps**

Following Council approval, the BMP Update report will be placed for the 30 day public review starting August 29, 2011, in accordance with the Municipal Engineers Association Class Environmental Assessment Process.

**CORPORATE STRATEGIC PLAN:**

Completing the Biosolids Master Plan Update supports the Corporate Strategic Plan Focus Areas 1 and 5: Environmental Sustainability and Infrastructure, respectively; and the following strategic objectives: improve air quality in Waterloo Region, effectively use and manage energy resources, protect the quality and quantity of our water sources, optimize the use of current infrastructure and ensure it is adequately maintained, and provide infrastructure needed to accommodate planned growth.
FINANCIAL IMPLICATIONS:

The current biosolids annual operating cost is approximately $5.3 million and will increase in the next two to three years to about $6 million once the dewatering facilities at Manitou Drive, in Kitchener, and at Waterloo are completed.

The estimated capital cost for the preferred strategy is approximately $100 million in the next 12 years. The estimated annual operation and maintenance cost is approximately $12 million in 2041. This results in a 30-year present worth cost of $211 million, or approximately $1,200 per dry ton of biosolids. The preferred strategy has the lowest life-cycle cost as compared to the other short-listed strategies.

In 2012, the Region will initiate the respective Class EA Studies for the implementation of the different projects recommended in the BMP Update. This will take into account the possibility of public-private partnerships for the financing, construction and operation of major facilities proposed in the BMP Update, with the potential of optimizing the cash flow significantly. User rate impacts will also be evaluated based on the outcome of the Class EA.

The Region’s approved 2011 Wastewater Ten Year Capital Program currently includes a total of $36.5 million for upgrades and expansion of the biosolids processes at the Region’s WWTPs. These costs will be updated in future Capital Programs based on the selected project delivery and implementation approach.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Region’s Planning, Housing and Community Services Department has been involved in the development of this master plan.

ATTACHMENTS

Appendix A – Implementation schedule

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

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
# APPENDIX A – Implementation schedule for the preferred strategy

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

DATE: August 16, 2011

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR JUNE 2011

RECOMMENDATION:


SUMMARY:

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

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

REPORT:

City of Cambridge

1. Draft Approval of Plan of Condominium 30CDM-10105
   Applicant: Scott Hube
   Location: 273 to 295 St. Andrews Street
   Proposal: To permit the conversion of 2 existing townhouse buildings to 12 residential condominium ownership units.
   Processing Fee: Paid May 18, 2011
   Commissioner’s Approval: June 15, 2011
   Came Into Effect: July 6, 2011

2. Draft Approval of Plan of Condominium 30CDM-10104
   Applicant: AAK Development Group
   Location: 25 Concession Street
   Proposal: To permit the development of 49 apartment condominium units.
   Processing Fee: Paid June 17, 2011
   Commissioner’s Approval: June 30, 2011
   Came Into Effect: July 21, 2011

3. Registration of Draft Plan of Condominium 30CDM-10106
   Draft Approval Date: December 3, 2010
   Phase: Phase 2
   Applicant: Preston Meadows
   Location: 505, 535, 565 Margaret Street
   Proposal: To permit the development of 18 townhouse and 61 apartment units.
   Processing Fee: Paid June 27, 2011
   Commissioner’s Release: June 29, 2011
4. **Registration of Draft Plan of Condominium 30CDM-09102**

   Draft Approval Date: June 28, 2011  
   Phase: Phase 1  
   Applicant: 723033 Ontario Ltd., o/a Pidel Homes  
   Location: 35 Greengate Boulevard  
   Proposal: To permit the development of 7 to 12 townhouse units.  
   Processing Fee: Paid June 20, 2011  
   Commissioner’s Release: June 28, 2011

**City of Kitchener**

1. **Registration of Draft Plan of Subdivision 30T-01201**

   Draft Approval Date: July 17, 2003  
   Phase: Stage 5  
   Applicant: Activa Holdings Inc.  
   Location: Huron Road  
   Proposal: To permit the development of 16 townhouse and 50 multiple residential units.  
   Processing Fee: Paid May 3, 2011  
   Commissioner’s Release: June 7, 2011

2. **Registration of Draft Plan of Subdivision 30T-01201**

   Draft Approval Date: July 17, 2003  
   Phase: Stage 16  
   Applicant: Activa Holdings Inc.  
   Location: Huron Road  
   Proposal: To permit the development of 34 townhouse units.  
   Processing Fee: Paid May 20, 2011  
   Commissioner’s Release: June 7, 2011

**City of Waterloo**

1. **Draft Approval of Plan of Condominium 30CDM-11402**

   Applicant: TD Properties Ltd.  
   Location: 28 Elgin Street  
   Proposal: To permit the conversion of 17 apartment units to condominium ownership.  
   Processing Fee: Paid June 15, 2011  
   Commissioner’s Approval: June 30, 2011  
   Came Into Effect: July 21, 2011

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

   Draft Approval Date: February 22, 2011  
   Phase: Entire Plan  
   Applicant: Pepbridge Development GP Inc.  
   Location: 42 Bridgeport Road East  
   Proposal: To permit the development of 55 apartment and 5 commercial units.  
   Processing Fee: Paid June 27, 2011  
   Commissioner’s Release: June 29, 2011
Township of North Dumfries

1. Modification to Draft Plan of Subdivision 30T-05301

   Applicant:  839685 Ontario Inc. and 828543 Ontario Inc.
   Location:  Hilltop Community, Ayr
   Proposal:  To make a revision in the Revision Box to reflect a clerical error, and modify conditions to draft approval to reflect the current lot and block numbering, and to delete conditions that are no longer required.
   Processing Fee:  Not applicable due to nature of modification.
   Commissioner’s Approval:  June 3, 2011
   Came Into Effect:  Immediately

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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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<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
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*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

Area Municipal Consultation/Coordination

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

This report reflects actions taken by the Commissioner in accordance with the delegation By-law adopted by Council consistent with the streamlining objectives reflected in Focus Area A: Manage Regional Growth to Enhance Quality of Life in the Corporate Strategic Plan.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

PREPARED BY:  Andrea Banks, Program Assistant

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

DATE: August 16, 2011

FILE CODE: D10-70 (A)

SUBJECT: COMMUTER CHALLENGE 2011

RECOMMENDATION:

For information.

SUMMARY:

The annual Commuter Challenge is the Region’s most intensive outreach event for sustainable transportation. It encourages participants to commute for a week on foot, by bike, by bus, in a carpool, or by teleworking. This year’s event saw a 94% increase in participation attracting 1,355 more participants than in 2010. The continued dedication of participating organizations, their workplace coordinators and local media coverage, contributed to the success of this year’s Commuter Challenge.

The Challenge is sponsored and organized by the Region’s Transportation Demand Management (TravelWise) and Grand River Transit (GRT) staff teams. To help promote the Challenge, staff offered Regionally-sponsored prizes as well as technical support to organizations participating in the event. In 2011, the Commuter Challenge involved an outreach gear-up event, a lunch and learn presentation, special daily events and competitions, promotional booths, radio ads, Facebook ads, twitter, blog entries, media interviews and newspaper articles. The Bike to Work breakfast attracted roughly 120 cyclists at its two locations and Challenge participants reduced the region’s overall carbon footprint by 33,650 kilograms during the week.

For the second year in a row, Waterloo Region placed first in Ontario and second in Canada in our population category. Plans for 2012 are already being developed, as the Commuter Challenge continues to be a very popular community event.

REPORT:

The Region of Waterloo measures its Commuter Challenge success by the total number of registered participants, Waterloo Region’s participation rate and the total number of organizations represented and by the event’s total reduction in carbon dioxide (CO2) emissions.

For the second year in a row (see Table 1), Waterloo Region placed first in Ontario and second in Canada in the Commuter Challenge for our population category. Taking place between June 5 and 11, the 12th annual event attracted a total of 2,795 participants – an increase of 94% over last year’s 1,440 participants. This is a significant success since from 2007-2010 Waterloo Region’s participation did not exceed 1,500. This year’s challenge also saw an increase in participating organizations with 68 taking part compared to 60 in 2010. We reduced our community’s CO2 emissions by 33,650 kilograms, a 23% increase from last year’s reduction of 27,158 kilograms.

The national Commuter Challenge re-designed their website in 2011 to make it easier to join and track trips. These online improvements helped the Region to increase the number of participants. It
is also likely that interest in the Commuter Challenge was enhanced this year because of higher gas prices and the public’s interest in the rapid transit project.

Table 1
Population 500,000 – 1,000,000

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Commuter Challenge Promotions

On May 7, 2011 the Transportation Demand Management (TravelWise) team hosted “Gear up for Summer” in Uptown Waterloo; an event that offered free bike tune-ups, helmet fitting, trail and transit maps, booths from vendors promoting sustainable transportation and a “Taste of CAN-BIKE” course. The three hour event was the first promotional event for the Commuter Challenge and attracted roughly 200 people.

A lunch ’n’ learn session was held for workplace coordinators on May 6, 2011 to review the new website and the events of the week.

During the Region’s EcoFEST and Health Fair events, TravelWise promoted the Commuter Challenge and the benefits of active commuting. At EcoFEST, TravelWise used a children’s activity to engage parents and children in discussions about walking, cycling and taking transit to school and to work and GRT promoted transit routes, hybrid buses, and the Bus ‘n’ Bike program. TravelWise also attended Wilfrid Laurier University’s “Hawk Walk” event. Each event included a display and information on Grand River Transit, CAN-Bike courses and Ontario’s cycling skills manual, as well as carpooling, CarShare and Bus ‘n’ Bike information. GRT’s transit and cycling maps were provided as an incentive to participants. Over 190 maps were distributed to workplaces and the public to promote the Commuter Challenge.

In 2011, the Commuter Challenge radio ads focused on the active living component of sustainable transportation. Also in 2011, a Facebook advertisement was used for the first time. The ad was shown 1,520,798 times over a fourteen day campaign and received 195 clicks. “2 for 1 Transit” Tuesday would benefit from more promotion in 2012.

Commuter Challenge Events

Bike to Work Day

On June 8, 2011 the Region of Waterloo hosted bike to work breakfasts outside of the Clay and Glass Gallery in Uptown Waterloo and in downtown Kitchener’s Victoria Park. The two events attracted around 120 commuter and recreational cyclists for a coffee and light breakfast. Cyclists in Uptown Waterloo came from along the Laurel Trail, the Iron Horse trail and Erb Street West. Cyclists in Victoria Park came by the Iron Horse trail, Park Street and from Courtland Avenue.
2-for-1 Transit Tuesday

June 7, 2011 was Grand River Transit’s 2-for-1 Transit Tuesday. This event rewards regular GRT customers and attracts new riders by having two people ride for the price of one. GRT estimates that approximately 300 people took part in 2011.

Great Commuter Race

The City of Kitchener held its 2nd annual Great Commuter Race on June 7, 2011. The City of Kitchener challenged local Councillors and staff, as well as members of the Kitchener Cycling Advisory Committee (KCAC) to a 4.5 kilometre race from Highland Hills Mall to Kitchener’s Civic Square using different types of transportation. Duncan Class, a committee member, won the race on his electric bike in a time of 12 minutes. Bart Forwell, Chair of the KCAC, came in second in a Toyota Prius carpool with a time of 15.5 minutes. Jessica Romero a committee member arrived third on GRT in just over 18 minutes. And finally, City of Kitchener Councillor Yvonne Fernandes rode her bike along the Filsinger Park trail system and through Victoria Park to arrive in 18 minutes. The event demonstrated that transit and cycling is a convenient mode of transportation for commute trips and errands. Using trails is also a comfortable option for those still gaining confidence for on-road cycling.

Briefcase Boogie

The Region of Waterloo held its inaugural “Briefcase Boogie.” Rob Horne, Commissioner of Planning, Housing and Community Services invited Regional staff to walk or jog from the Region’s 99 Regina Street offices in Uptown Waterloo to 150 Frederick Street in Downtown Kitchener. This event showed how walking can be a practical commuting option and even for inter-office travel. The 3.6 kilometre event was attended by 16 employees and took between 20 and 45 minutes to complete.

Walk to Worship

New to the 2011 Commuter Challenge was a partnership with Greening Sacred Spaces, which organized and promoted a “Walk to Worship.” Ten faith communities participated this year and 447 participants travelled 4,500 kilometres sustainably. The event was well received by participants and its success is thanks to the efforts of the Green Sacred Spaces coordinator. Waterloo Christian Reformed Church and Highland Baptist Church had the highest participation rates.

Local Winners – Participation Rates

The Commuter Challenge would not succeed without the dedication of its workplace coordinators and participating organizations. The following organizations achieved winning participation rates in their size categories.

1-24 Employees
1. REEP Green Solutions and Edissi Fine Arts – 100%
2. Sustainable Waterloo – 90%
3. WESA – 79%

25 - 50 Employees
1. KW YMCA Immigrant and Employment Services - 53%
2. Peace Works Technology Solutions – 26%
3. Crown Attorney’s office – 24%
51 - 100 Employees
   1. The Working Centre – 74%
   2. ANSYS Canada - 28%
   3. CIGI - 15%

101 – 500 Employees
   1. Ontario Teachers Insurance plan – 41%
   2. Grand River Conservation Authority and Desire2Learn – 36%
   3. Mondial Assistance- 30%

501+ Employees
   1. City of Waterloo – 22%
   2. Wilfrid Laurier University - 17%
   3. University of Waterloo and The Economical Insurance Group – 10%

Internally, the Region of Waterloo had a 27.8 % increase in participation with 230 participants tracking trips and 259 registered. Although the Region had more participants tracking trips than in 2010 when 140 took part, the collective CO2 emissions and burned calories were lower. In 2011 staff collectively saved 2,318 kilograms of CO2 emissions (3,952 kilograms of CO2 in 2010) and burned 191,000 calories (237,655 calories in 2010). This decrease could be the result of shorter commutes and a higher mode share of carpooling and transit over cycling and walking during the week. Also, the website used a different online tool for commute tracking, which could have affected results. The Region of Waterloo placed 5th in its category of 501+ Employees with 7.7% of total employees participating.

Lessons Learned

The Region had the most successful Commuter Challenge to date. Some of the lessons learned in 2011 include the following:

*Continue the early promotion of Commuter Challenge*: As recommended from 2010, TravelWise hired a winter co-op student for 2011 to start planning and marketing the Commuter Challenge. The “Gear Up for Summer” event helped launch the main promotions period a month before the Challenge. In 2012, it would be valuable to host additional launch events to further increase participation and awareness. TravelWise currently attends several events during the spring season. If services like bike courses and tune-ups could be provided at these other events they could serve a similar purpose.

*Bike to Work Breakfast location in Cambridge*: The Bike to Work breakfast has proven to be a successful Commuter Challenge event. The Victoria Park and Clay and Glass Gallery locations were well received by participants this year. TravelWise recommends expanding this event to Cambridge in 2012.

*Establish standards for tracking for Walk to Worship trips*. Not all places of worship tracked their trips in the same way. For 2012, the TravelWise team will meet in person with the Walk to Worship coordinator to ensure consistent tracking definitions amongst all places of worship.

*Request a “How did you find out about the Commuter Challenge” question on the National Commuter Challenge registration page*. The additional information provided by this question would help TravelWise to further refine its marketing of the Commuter Challenge.
Area Municipal Consultation/Coordination

The Cities of Waterloo and Kitchener were active participants in the 2011 Commuter Challenge. The City of Waterloo won first place in the 501+ employee category. Regional staff presented highlights of the Commuter Challenge, the Commuter Challenge trophy, and a certificate of achievement to the City of Waterloo at their July 25, 2011 Council meeting. The City of Kitchener hosted the second annual “Great Commuter Race.” The City of Kitchener and the Region coordinated their media releases and TravelWise promotions of the event. The success of each “Bike to Work Day” breakfast relied on the cooperation of the host City and on City services.

CORPORATE STRATEGIC PLAN:

By encouraging and promoting the use of sustainable transportation through friendly competition the Commuter Challenge decreased CO2 emissions over the week of June 5, 2011 by 33,650 kilograms. This supports the Region’s improved air quality objective (Focus Area 1), the promotion of active forms of transportation (Focus Area 2) and the optimal use of existing investments in transit and cycling lanes (Focus Area 5).

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Grand River Transit was consulted for this report and they are in concurrence with its review of the 2011 Commuter Challenge.

ATTACHMENTS

NIL

PREPARED BY: John Hill, Principal Planner, Transportation Demand Management  
Sanchari Quader, Principal Planner, Transportation Demand Management  
Katherine Glowacz, Student Planner, Transit Development

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
MEMORANDUM

To: Chair Jim Wideman and Members of the Planning and Works Committee
From: Atif Mehmood, Transportation Planning Engineer
Subject: PARTICIPATION IN THE 2011 TRANSPORTATION TOMORROW SURVEY

The Ministry of Transportation Ontario (MTO), in conjunction with other municipalities in the Greater Golden Horseshoe area, is undertaking the 2011 Transportation Tomorrow Survey (TTS). The survey is administered for MTO by the Data Management Group, which is a consortium operating out of the University of Toronto. The TTS has been conducted every five years since 1986, and the Region participated in 1996 and 2006. The survey collects demographic and travel information on:

- Household characteristics, including dwelling unit type, number of persons in household, and number of available vehicles;
- Personal characteristics, such as age, sex, employment status, and possession of a driver’s licence;
- Nature of trips (i.e., start time, purpose, origin, and destination); and
- Mode of travel (i.e., auto, transit, bicycle, or walk) and detailed transit routings.

The TTS data also provide information on Regional travel patterns, such as the number of Regional residents commuting to other communities and the number and household location of people commuting to the Region. Finally, it will provide a “snapshot” of travel behaviour in 2011 that can be compared with 1996 and 2006 data to determine trends and changes.

These survey data are very useful in the development of the Regional travel demand forecasting model that was used in preparing the 2010 Regional Transportation Master Plan. The Regional travel demand forecasting model is continually improved with the most up-to-date information to better understand and plan for the future infrastructure needs of the Region.

The Region of Waterloo will again be participating in the 2011 Transportation Tomorrow Survey. The survey will be conducted by the Data Management Group via telephone or online, according to each household’s preference. It will cost $217,000 over three years to conduct the 2011 TTS in the Region, and MTO will cover 65% of these costs, therefore the Region’s financial contribution will be $75,950. The Region’s funding for this project has been accounted for in both the 2011 and 2012 Transportation Capital Programs.

The official start date of the TTS is September 7, 2011, but some households may be contacted for training purposes in mid to late August. Each household that will be contacted will receive a registered letter (see Appendix A) approximately two weeks before their telephone call date. The survey results are expected in early 2013 and will be reported to Regional Council.

If you require additional information, please do not hesitate to contact me at 519-575-4834.
The Transportation Tomorrow Survey is an important travel survey, conducted on behalf of your municipality, other municipalities in central Ontario, and the Province of Ontario. Every five years for the past 25 years in the Greater Toronto Area, and since 1996 in many surrounding areas, this survey has collected travel information of persons in your community to keep pace with changing transportation needs.

Your household has been randomly selected to represent your community in the current survey. A professional interviewer will contact you in the next two weeks and ask you to spend about 10 minutes answering our questionnaire. However, if you prefer, you can complete the survey online at tts2011.ca using your secure access code or by calling in at 1-800-xxx-xxxx. More details are provided overleaf.

It is important that your household take part in this survey to assist the planning of transportation services to meet your future needs as well as the needs of your community. Information collected in the past has been used to forecast future road usage and plan public transit services in your area.

All information collected will be kept strictly confidential. Your responses will be combined with other responses in your area and used to identify travel patterns. No information will be released in any way that could be traced to your household.

If you have any questions, please call the Ministry of Transportation at 1-800-268-4686, or visit our web site at tts2011.ca.

Your household’s involvement in this project is critical to its overall success. Please advise other members of your household of this opportunity to participate in the development of transportation services in your area and throughout central Ontario, so they too will be prepared to take part.

Thank you for your assistance.
2011 Transportation Tomorrow Survey

How it works

A sample list of the questions to be asked is shown below and you can participate in the survey three ways:
1. You may choose to fill out the survey online by going to our secure website www.tts2011.ca and using the access code listed on the first page. If you commence the survey online and require assistance, we also provide phone-in support between 9 a.m. and 9 p.m. Monday to Friday and Saturday from 10 a.m. to 2 p.m. at xxx-xxx-xxxx.
2. You may also choose to give us a call at xxx-xxx-xxxx during those same hours and one of our professional interviewers will be happy to conduct the survey with you over the telephone.
3. If we have not heard from you, your household will be contacted within the next two weeks by a professional interviewer. On weeknights, the calls will be made between 5:30 p.m. and 9:30 p.m. If the interviewer calls on a Saturday, it will be between 10:00 a.m. and 5:00 p.m.

Survey Questions

Most of the questions asked will be about you and your household’s travel on the previous weekday. We will only be collecting trip data for persons 11 years of age or older. We would like to know specific information about where and when trips were taken by each member of your household. This information, collected from approximately 150,000 households in Central Ontario, will give us a better picture of changing travel patterns to assist in the planning of improved transportation services in your area.

Here is a sample of the questions asked:
A. About your household
   • Type of building (house or apartment)
   • Number of people
   • Number of vehicles available for personal use
B. About each person
   • His/her age
   • Does he/she have a driver’s license?
   • What is the address of his/her workplace or school?
C. About each trip made by each person on the previous day
   • From where, to where?
   • Reason for making the trip (e.g. shopping)
   • Start time of the trip
   • Mode of transportation (bus, car, bicycle, etc.)

A trip is a one-way journey from one location to another by any form of motorized transportation or bicycle. We will request some information on walking, but only for trips to and from work or school. These details provide an understanding of how members of a household interact with the transportation system. This level of understanding leads to better estimates of future needs for road and transit as your area grows.

Authority for collection of this information has been obtained from each of the Regional and Local governments participating in this survey. Confidentiality of this information is protected under the Freedom of Information and Protection of Privacy Act.
## COUNCIL ENQUIRIES AND REQUESTS FOR INFORMATION

### PLANNING AND WORKS COMMITTEE

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