Note Time Change →

Tuesday, September 10, 2013
12:30 P.M.
Regional Council Chambers
150 Frederick Street, Kitchener

1. MOTION TO RECONVENE INTO OPEN SESSION

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

3. DELEGATIONS

4. PRESENTATION
   a) P-13-087, Highway 7&8 Class Environmental Assessment - Preferred Preliminary Design Alternative in New Hamburg
      Chuck Organ and Brenda Jamieson, MTO

5. DEPARTMENTAL PRE-BUDGET PRESENTATIONS
   b) T&ES - Waste Management – J. Arsenault
      See report E-13-116

CONSENT AGENDA ITEMS
Items on the Consent Agenda can be approved in one motion of Committee to save time. Prior to the motion being voted on, any member of Committee may request that one or more of the items be removed from the Consent Agenda and voted on separately.

6. REQUEST TO REMOVE ITEMS FROM CONSENT AGENDA

7. MOTION TO APPROVE ITEMS OR RECEIVE FOR INFORMATION
   a) CR-RS-13-075, Authorization to Expropriate Lands (1st Report) for Manitou Drive Improvements (Fairway Road to Bleams Road), in the City of Kitchener (Approval)
   b) St. Andrews Street and Cedar Street Improvements, St. Andrews Street (Grand Avenue southerly to the City of Cambridge Boundary) and Cedar Street (Osborne Street westerly to the City of Cambridge Boundary) City of Cambridge - Information Package in Advance of Public Consultation Centre (Information)
c) CR-RS-13-077/E-13-106, Nolinor Aviation – Air Terminal Use and Operating Agreement (Approval) 42

d) E-13-109, Proposed Waste Reduction Act and Waste Reduction Strategy (Bill 91) (Approval) 44

e) CR-RS-13-078/E-13-107, Highway 401 Service Centres – Water and Sewer Services (Approval) 60

f) Class Environmental Assessment for the Expansion of the New Hamburg Wastewater Treatment Plant - Information Package in Advance of Public Consultation Centre (Information) 63

g) P-13-081, Monthly Report of Development Activity for July 2013 (Approval) 81

h) P-13-082, Laurel Creek Headwaters Environmentally-Sensitive Landscape Public Liaison Committee Fifth Annual Report 2012 (Information) 85

i) P-13-085, Building Permit Activity January to June 2013 (Information) 98

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8. REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

RAPID TRANSIT

a) E-13-100, ION Logo Recommendation for Rapid Transit 105

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TRANSIT SERVICES

c) E-13-115, New iXpress Route 202 University Avenue – Marketing Campaign 134

WASTE MANAGEMENT

d) E-13-101, Waste Management Master Plan: Study Update and Consultation Series 2 Summary 139

e) E-13-116, Waste Management 2013 Update 146

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g) E-13-103, Drinking Water Quality Management Standard Program Update 156

h) E-13-104, Region of Waterloo Biosolids Strategy – Biosolids Heat Drying Facility 176
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COMMUNITY PLANNING

P-13-086, East Side Lands (Stage 1)
Master Environmental Servicing Plan - Notice of Completion (presentation)

TRANSPORTATION PLANNING

j) P-13-088, Proposed Revisions to the Regional Transportation Impact Study Guidelines

9. INFORMATION/CORRESPONDENCE

a) Council Enquiries and Requests for Information Tracking List

10. OTHER BUSINESS

11. NEXT MEETING – October 1, 2013

12. ADJOURN
<table>
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<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>Planning and Works Committee</strong></td>
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<tr>
<td>October 1, 2013</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>
</tr>
<tr>
<td>October 22, 2013</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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<td><strong>Transportation and Environmental Services</strong></td>
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<tr>
<td>Wed., September 25, 2013</td>
<td>5:00 P.M–8:00 P.M.</td>
<td>St. Andrews Street and Cedar Street Improvements St. Andrews Street (Grand Avenue southerly to the City of Cambridge Boundary) And Cedar Street (Osborne Street westerly to the City of Cambridge Boundary) City of Cambridge - Public Consultation Centre</td>
<td>Southwood Secondary School 30 Southwood Drive Cambridge, Ontario</td>
</tr>
<tr>
<td>Tue., September 24, 2013</td>
<td>5:30 P.M–7:30 P.M.</td>
<td>Class Environmental Assessment for the Expansion of the New Hamburg Wastewater Treatment Plant Public Consultation Centre</td>
<td>Wilmot Recreation Complex Baden, Ontario</td>
</tr>
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</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: T04-40/7&8

SUBJECT: HIGHWAY 7&8 CLASS ENVIRONMENTAL ASSESSMENT - PREFERRED PRELIMINARY DESIGN ALTERNATIVE IN NEW HAMBURG

RECOMMENDATION:

THAT Regional Council endorse the preferred Preliminary Design Alternative developed by the Ontario Ministry of Transportation for Highway 7&8 from Stratford to New Hamburg, as described in Report P-13-087, dated September 10, 2013.

SUMMARY:

The Ontario Ministry of Transportation (MTO) is conducting an Environmental Assessment to study improvements to Highway 7&8 between Stratford and New Hamburg. At a Public Information Centre in July/August, MTO presented the preferred Preliminary Design Alternative (i.e. the “final plan”) for the highway through New Hamburg. This alternative would retain the existing traffic signals at Peel Street/Haysville Road and Bleams Road/Hamilton Road, but widen the highway to six lanes. A grade-separated interchange would also be constructed at Highway 7&8 and Nafziger Road and a seven (7) metre median would be added to the highway to improve safety. These changes are not currently scheduled within MTO’s five-year construction plan.

Regional staff has reviewed this alternative and agree that it addresses the identified transportation problems and opportunities within New Hamburg while imposing minimal impacts to the natural and social environments. The revised plan for the interchange at Nafziger Road avoids property impacts to the Wilmot Recreation Complex.

Township of Wilmot staff has reviewed this report and concur with its recommendations.

REPORT:

Highway 7 & 8 is a 4-lane rural highway that connects directly to the Conestoga Parkway, crosses the Township of Wilmot and continues to the west of the Region of Waterloo. It provides an important transportation link with communities such as Stratford as well as agricultural land uses in Wilmot, Oxford County and Perth County. The highway accommodates commuters, short- and medium-haul freight, agricultural operations and tourist traffic.

The Ontario Ministry of Transportation (MTO) is developing a plan that addresses:

- Capacity, operation and safety needs along the 2-lane and 4-lane sections of Highway 7 & 8 between Stratford and New Hamburg, and through the urban centres of Stratford, Shakespeare and New Hamburg, for the movement of people and goods; and
- Broader transportation connections between the Study Area and other regions in the Province.
Attachment 1 shows the Study Area. MTO has completed the preferred Preliminary Design Alternative and presented it at Public Information Centre (PIC) #6 in July/August. MTO is requesting comments by October 31, 2013.

Within the Region of Waterloo (Wilmot-Easthope Road to Nafziger Road), MTO is proposing to add a seven (7) metre median to improve safety. Additionally, MTO is proposing to make changes to the intersections, as follows:

**Highway 7/8 and Regional Road 1 (Wilmot-Easthope Road) Intersection**
This intersection is currently signalized. MTO is proposing to retain the current intersection with no significant changes.

**Highway 7/8 and Regional Road 3 (Walker Road) Intersection**
This intersection is currently unsignalized and Walker Road is Stop-controlled. MTO is proposing to reconstruct the intersection to support future signalization when warranted. Until that time, all movements will be retained and Walker Road will remain Stop-controlled.

**Highway 7/8 and Peel Street/Haysville Road Intersection**
This intersection is currently signalized. MTO is proposing to retain the existing signalized intersection, widen the highway to six (6) lanes between Peel Street/Haysville Road and Bleams Road/Hamilton Road, and add dual left turn lanes. Some private properties would have to be purchased to implement this alternative (please see Attachment 2).

**Highway 7/8 and Victoria Street Intersection**
This intersection is currently unsignalized. MTO is proposing to convert the intersection to a cul-de-sac but retain access for emergency vehicles (please see Attachment 3).

**Highway 7/8 and Regional Road 4 (Bleams Road)/Hamilton Road Intersection**
This intersection is currently signalized. MTO is proposing to retain the existing signalized intersection, widen the highway to six (6) lanes between Peel Street/Haysville Road and Bleams Road/Hamilton Road and add dual left turn lanes (please see Attachment 3).

**Highway 7/8 and Regional Road 5 (Nafziger Road) Intersection**
This intersection is currently signalized. MTO is proposing to replace this intersection with a grade-separated interchange (please see Attachment 4). The plan for the interchange avoids property impacts to the Wilmot Recreation Complex and also minimize conflicts with potential active transportation facilities along Nafziger Road as proposed in the draft Active Transportation Master Plan.

The “Frequently Asked Questions” document distributed by MTO at the PIC (please see Attachment 5) notes that this project is listed in MTO’s Southern Highways Program under “Planning for the Future”, meaning that it is not part of the current five-year construction plan. During the study, MTO developed future traffic forecasts to 2031. MTO expects that traffic volumes would only require the improvements noted above during the latter part of this timeframe.

**Analysis**

Regional staff most recently commented about this project in Report P-12-109 (October 16, 2012). In that report, staff recommended that MTO select the alternative that is described herein. The alternative being recommended by MTO addresses the identified transportation problems and opportunities within New Hamburg while also imposing the minimum impacts to the natural and social environments. Staff recommends that the preferred Preliminary Design Alternative be endorsed and implemented when traffic conditions warrant.
Regional staff also previously recommended that MTO implement a monitoring program to determine when these improvements will be required. While MTO has not committed to a detailed monitoring program, the Region will continue to monitor traffic at the intersections to inform future discussions about the highway.

Next Steps

The deadline for comments in this round of public consultation is October 31, 2013. A copy of this report will be sent to MTO. The MTO Study Team will review those comments and prepare the Transportation Environmental Study Report for public review during 2014.

Area Municipal Consultation/Coordination

Township of Wilmot staff has reviewed this report and concur with its recommendations.

CORPORATE STRATEGIC PLAN:

The Highway 7/8 Environmental Assessment is consistent with Strategic Objectives 2.2 (Develop, optimize and maintain infrastructure to meet current and projected needs), 3.3 (Optimize existing road capacity to safely manage traffic throughout Waterloo Region) and 3.4 (Encourage improvements to intercity transportation services to and from Waterloo Region).

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Attachment 1 – Study Area
Attachment 2 – Peel Street/Haysville Road Intersection Plan
Attachment 3 – Bleams Road/Hamilton Road Intersection Plan
Attachment 4 – Nafziger Road Interchange Plan
Attachment 5 – Frequently Asked Questions (MTO)

PREPARED BY: Geoffrey Keyworth, Senior Transportation Planning Engineer

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
ATTACHMENT 1 – STUDY AREA
ATTACHMENT 4 – NAFZIGER ROAD INTERCHANGE PLAN
ATTACHMENT 5 – FREQUENTLY ASKED QUESTIONS (MTO)

Highway 788 Transportation Corridor Planning and Class EA Study
Greater Stratford to New Hamburg Area (GWP 13-03-00)

FREQUENTLY ASKED QUESTIONS – July 24, 2013

1. What is the purpose of this study?
   The Highway 788 Transportation Corridor Planning and Class EA study is being undertaken to address longer term transportation problems in the Greater Stratford to New Hamburg area. The study is examining alternatives that will ensure long-term sustainability of the corridor.

2. Why are the proposed Highway 788 improvements required?
   Highway 788 is a significant part of the overall provincial highway network, playing a key role in linking larger communities and supporting economic prosperity across Ontario. A detailed traffic analysis, utilizing origin destination travel survey information and 103 travel zones developed and refined specifically for the study area, determined that from Stratford to New Hamburg there will be a road capacity deficiency in the area road network (includes provincial and municipal roadways) of one lane in both the east and west directions by 2031, and that the required additional lanes should be on a single 4-lane provincial highway to improve mobility and traffic safety.
   West of Stratford there is not a capacity deficiency, but there is a need to link the provincial highway system and opportunity to include safety enhancements.

3. What can the public expect to see when they visit PIC #5?
   PIC #6 is presenting the recommended plan and preliminary mitigation measures and strategies to address potential impacts as well as the evaluation of preliminary design alternatives.

4. What are the next steps after this PIC?
   The recommended plan including environmental protection/mitigation measures and commitments for future action with regard to implementation of the project will be documented in a Transportation Environmental Study Report (TESR). The TESR will be filed for a 60-day review period in 2014.
   When the TESR is filed, notices of the document publication will be mailed to contacts on the Study mailing list and published in local newspapers to explain the review process and identify the locations where the TESR will be available for the review period.

5. What changes were made in response to stakeholder input regarding the information presented at PIC #5?
   In response to stakeholder input, the following aspects of the preliminary design alternatives were refined:
   • The alignment of the Shakespeare south bypass alternative east of Road 110 was shifted slightly to the west to reduce impacts to the large woodlot and to agricultural field operations. This refinement was included in the evaluation that selected the south bypass.
   • A new intersection alternative that provides all-moves with stop signs at Walker Road was generated and selected.
   • An additional interchange alternative at Nafziger Road was generated and selected that locates the westbound off-ramp and on-ramp just west of the existing development along Nafziger Road in order to avoid impacts to the recreational complex soccer fields and better serve the commercial development proposed for this area.
   Undertaking consultation with stakeholders and constructively responding to their input has been a key aspect of the Class EA process for this study. This has been demonstrated by significant additions to the study such as three additional rounds of PICs and special workshops to hear and present refinements to the study as it proceeds. Since stakeholders do not all have the same objectives and concerns, it is not possible for the study team to satisfy all interests when making the tradeoffs necessary in the environmental assessment process. When responding to stakeholder input, the study team has to balance environmental considerations with transportation engineering considerations, recognizing that safety and effectiveness of the transportation system are fundamental to such decisions.

6. What is the recommended plan?
   The recommended plan includes:
   • Southerly bypass of Shakespeare adjacent to the existing GEXR railway corridor, revised to reduce impacts to the large woodlot east of Road 110 and agricultural field operations
HIGHWAY 78E TRANSPORTATION CORRIDOR PLANNING AND CLASS EA STUDY
GREATER STRATFORD TO NEW HAMBURG AREA (GWP 13-00-00)

FREQUENTLY ASKED QUESTIONS – JULY 24, 2013

• 2-lane cross-section with a 5 m two-way centre left turn lane from Highway 8 along Line 32 to Erie Street
• 4-lane cross-section from Erie Street easterly to east study limit, including Erie Street southerly to Perth Line 29, with:
  o 5 m two-way centre left turn lane from Erie Street to west of Shakespeare bypass, from east of Shakespeare bypass to Wilmot / Easthope Road / RR 1 and on Erie Street southerly to Perth Line 29
  o 7 m median for Shakespeare bypass, from Wilmot / Easthope Road / RR 1 to west of Peel Street and from east of Hamilton Road to east study limit
  o 6-lane cross-section from west of Peel Street to east of Hamilton Road to serve these high-traffic at-grade intersections
• Full moves intersections controlled by traffic signals or stop signs on the crossing roads for majority of crossing roads
• Roundabouts at Perth Road 125 where Highway 78E changes direction
• Access to Shakespeare via a full moves intersection controlled by traffic signals at Road 107, a slip-off provision for Highway 78E westbound traffic at the east limit of the village and retention of existing highway access at the west limit of the village
• Access to the east end of Stratford via a Road 109 connection between the south bypass and existing Highway 78E
• Cul-de-sac at several intersections in Stratford, at one intersection in New Hamburg, and for eastbound traffic on the existing highway in Shakespeare at the east limit of the village
• Interchange at Natzinger Road, revised to retain recreational complex soccer fields

7. How was the recommended plan selected?

The recommended plan was selected through a detailed evaluation of the preliminary design alternatives presented at PIC #5 and refined based on the input received. The detailed evaluations considered a broad range of factors, sub-factors and criteria including the natural environment, land use, socio-economic environmental factors, cultural environment factors and transportation factors. Some of the sub-factors and criteria were developed to specifically address stakeholder comments and concerns brought forward during the study process.

8. Why was the Shakespeare south bypass selected?

The key reasons the south bypass preliminary design alternative is preferred are:

• Better addresses transportation objectives of the study:
  o More direct transportation route, effectively directs traffic to primary or major destinations
  o Better diverts traffic from parallel routes because more traffic originates and is destined for the south
  o Does not draw traffic from/to the south through Shakespeare on Road 107
  o Provides rail grade separations for Roads 109, 108 and 107
• Lower impacts on the business area of Shakespeare because better able to attract tourist traffic into the village:
  o Westbound tourist traffic (the predominant direction of tourist, shoppers) is able to “slip off” the south bypass directly into Shakespeare (north bypass westbound must exit at Road 107 and head south)
  o Eastbound tourist traffic can access the village via existing Highway 78E or via the south bypass and Road 107
• Essentially equal overall agricultural impacts as the north bypass:
  o South bypass requires 24 hectares more land, while north bypass displaces 4 more agricultural buildings and impacts 0 more farm property
  o South bypass causes fewer agricultural severances (7 vs 8); furthermore 6 of the south bypass severances involve properties that are already severed by the railway with private crossings that are vulnerable to closure in the event of rail service upgrades
FREQUENTLY ASKED QUESTIONS – July 24, 2013

- Both alternatives potentially land lock the same number of farm parcels (5 parcels) however, the land locked on 2 parcels impacted by the south bypass are forested areas not in use as agricultural field
- Provides rail grade separations for Roads 109, 108 and 107 that better accommodates movement of farm vehicles and improves safety
- Does not introduce north Shakespeare ring road that may support extension of Shakespeare urban boundary for development of agricultural lands

9. Would the Shakespeare north bypass have had less impact if the link between the existing highway and Lorne Avenue was shifted to Road 111 or a point further west?

Refining the best north bypass alternative by using Road 111 as the link to Lorne Avenue impacts approximately 4 hectares less agricultural land, 13 fewer agricultural properties (1 less severance, 12 fewer frontage takings), but impacts approximately 27 more residential properties (including 10 residences displaced) and 6 more commercial properties (including severances and building displacement). In addition, it impacts the Little Lakes Bog and Swamp Area of Natural and Scientific Interest along the existing highway. This refinement was determined to be less preferred than the previous “best” north bypass alternative.

10. How have environmental impacts been addressed in this study?

- The balance between highway inter-regional travel requirements, ongoing access to/from across the highway for existing alignment segments and across the highway for new alignment segments, and environmental protection through avoidance was an integral component of project planning and preliminary design.
- Environmental protection/mitigation will be refined/augmented and incorporated into future Detail Design work which would commence once there is a commitment to fund and program improvements;
- Environmental protection/mitigation best practices will be implemented during Construction; and
- Key environmental mitigation measures are identified on the PIC panels.

11. What are the key agricultural impacts associated with the recommended plan?

The recommended plan results in:
- 100 hectares of agricultural land displaced
- 110 agricultural properties impacted (103 frontage impacts; 7 properties are split/severed, resulting in 5 parcels potentially landlocked)
- 6 agricultural building displaced
- Change in surface drainage to and from right-of-way and severance of field ties or impairment of their outlet
- Loss of other infrastructure such as field ties and farm irrigation systems, wells, septic systems etc.; and interference with special considerations such as approved farm nutrient management plans

12. How have agricultural impacts been minimized, and how will they be mitigated?

The recommended plan minimizes loss of agricultural land by improving existing highway and road facilities for the majority (approximately 75%) of its length. The exception is the Shakespeare south bypass. The recommended plan minimizes the field operation impacts by having the south bypass located immediately adjacent to the rail tracks. In addition, field impacts were further reduced by a slight westerly shift of the section of bypass just east of Road 110.

Mitigation for agricultural impacts will be provided as follows:
- Ongoing Access To/From and Across the Highway for Existing Alignment Segments and Across the Highway for New Alignment Segments
  - Develop highway access management plans in consultation with municipalities.
- Property Requirements
  - Develop detail design and construction methodology (including construction staging plans and access) in compliance with property taking determined prior to commencement of
FREQUENTLY ASKED QUESTIONS – July 24, 2013

detail design, and confirm more specifically, individual property requirements early in the
design process.
- Develop design measures for “restoration” of landscaping and retained entrances that are
  impacted by the project.
- Conduct discussions with impacted property owners, and acquire property:
  - Negotiations carried out on a market value basis
  - Compensation addresses loss of land area; loss/replacement of buildings;
    loss/replacement of other infrastructure such as field tile and farm irrigation systems,
    wells, septic systems etc.; and interference with special considerations such as
    approved farm nutrient management plans.
- Surface and Field Tile Drainage and Stormwater Management
  - Develop design measures to provide for surface drainage across and along the right-of-
    way to address increased flows and water quality.
  - Develop design measures to provide for positive surface drainage and field tile outlet from
    adjacent properties, and to protect adjacent properties from highway drainage impacts.
- Groundwater and Well Impacts
  - Address well replacement as part of property negotiation, and monitor nearby wells for
    water quantity and quality during construction.
  - Respond to well complaints during construction.

13. How will tourist traffic gain access to Shakespeare after the south bypass is constructed?

Access to Shakespeare will be provided by:
- a full moves intersection controlled by traffic signals at Road 107;
- a slip off provision for Highway 7 & 8 westbound traffic at the east limit of the village where the
  bypass diverges from the existing highway; and
- retention of existing highway access at the west limit of the village.

Signage for Shakespeare will be provided at Road 107 and for the slip-off provision where the bypass
diverges from the existing highway at the east end of the village.

14. What are the benefits of the recommended plan to businesses along Lorne Avenue?

The use of an upgraded Lorne Avenue as part of the Highway 7 & 8 corridor will provide much better access
for Stratford businesses to the inter-regional transportation system of Ontario and increased visual
exposure to inter-regional travellers. The continuous left turn lane along Lorne Avenue will provide
excellent access to adjacent commercial properties.

15. How have impacts to the Frytogel Inn been minimized, and how will they be mitigated?

In order to minimize footprint impacts of the highway, the recommended plan:
- Holds the current south edge of highway pavement.
- Utilizes an urban cross-section on both sides of the highway (i.e. curb and gutter with piped
  surface drainage rather than ditches).
- Holds the current highway vertical elevation.

To address foundations concerns:
- During detail design, investigate new technologies for highway construction that may be available
to reduce potential for vibration caused by vehicles on the highway.
- Undertake a foundation condition survey as follows:
  - Undertake pre-construction survey during detail design;
  - Undertake post construction survey;
  - Work with Historical Society to repair damage to foundations if the surveys show it is
    caused by highway construction.
- If during detail design the pre-construction foundations survey shows that the foundations are in
  poor condition, work with the historical society to identify and secure funding for:
  - foundations rehabilitation, or

4
FREQUENTLY ASKED QUESTIONS – July 24, 2013

16. When will the project be built? What are the “considerations” for its implementation?

Highway 7&8 Stratford to New Hamburg is listed in the Southern Highways Program 2012 to 2016 under “Planning for the Future.” The “Planning for the Future” list includes projects that are not part of the current five-year construction plan. They are subject to further study and prioritization for possible future construction. At the present time, there is no timeline or funding for the implementation of the project.

When environmental clearance is obtained for the Highway 7&8 Transportation Corridor Planning and Class EA Study, MTO will designate the highway right-of-way and consider prioritizing the study recommendations against other highway expansion needs throughout the province and programming the Highway 7&8 Study recommendations. Prior to implementation, Detail Design will be undertaken to further detail the recommended plan for construction purposes and the required property for the recommended plan will be acquired. The actual construction timing will be subject to the availability of funding as the forecasted needs over the 20-year planning horizon become realized. There is seldom a single “consideration” for implementation of highway improvements. It will be dependent on a number of considerations as follows:

- Facility Capacity Consideration: Segments of the recommended plan may be required when congested conditions regularly occur during peak periods (i.e. when the quality of effective operation breaks down during periods of heavy use).
- Facility Safety Consideration: Segments of the recommended plan may be required if the reported collision/accident rate becomes higher than the provincial average rate.
- Municipal Development Consideration: Municipal partnerships may be required for implementation of segments of the recommended plan to accommodate municipal development, such as widening of Lorne Avenue in Stratford, or provision of the Natziger Road interchange in New Hamburg.
- Interim Local Improvements Consideration: In addition to the foregoing, interim local improvements to the existing highway may be required to address the condition of items such as the pavement, ditches and culverts/bridges until the recommended plan is implemented.

17. Why are cul-de-sacs being proposed?

A cul-de-sac is required at the Montebello Avenue / Lorne Avenue and Linton Avenue / Lorne Avenue intersections in Stratford given their proximity to the required grade separation of the railway tracks at this location.

Cul-de-sacs are proposed at the Dunlop Place / Lorne Avenue and Scott Street / Lorne Avenue intersections to improve traffic operations and the safety performance for this segment of the highway corridor. Access to Griffith Road is available via Boyd Road and Hamber Street.

Existing Highway 7&8 must be a cul-de-sac in the eastbound direction only where south the bypass diverges at the east limit of Shakespeare. This is because the highway geometrics at this location would otherwise require a partial interchange with associated agricultural property impacts. A partial interchange is not technically warranted given the close proximity of the Road 107 intersection.

Victoria Road in New Hamburg must be a cul-de-sac at Highway 7&8 because both a full-moves intersection and a right-in right-out configuration cause significant traffic weav ing / safety concerns given the close proximity of the Peel Street and Hamilton Street intersections and the high traffic volumes traversing Highway 7&8 through this area.

18. Why are medians proposed?

In New Hamburg, forecasted traffic volumes are higher than the rest of the study area. A median is a necessary safety feature that separates opposing lanes of traffic and reduces head-on collisions.
19. What are the benefits of highway access management?

Access management seeks to limit and consolidate access connections (entrances) along provincial highways while promoting a supporting municipal roadway network that will sustain land use development. The result is a provincial highway network that functions safely and efficiently for its useful life.

The goals of access management are accomplished by applying the following principles:
- Limit and separate direct access connections to provincial highways;
- Provide for appropriate spacing of intersections and signals on provincial highways;
- Preserve the functional intersection / interchange areas. The functional area is the area within the intersection or interchange where motorists are decelerating and manoeuvring into the appropriate lane to stop or complete a turn;
- Remove turning vehicles from through-traffic lanes.

20. How will stormwater management be provided?

The stormwater management strategy for Highway 7&8 has been determined and is detailed on the Preliminary Design plans. Generally, the strategy involves:
- Flat bottom ditches along a majority of the highway right-of-way to provide for storage and address water quality concerns;
- Storm sewer systems for the urbanized sections in Stratford and New Hamburg;
- Stormwater management facility in the vicinity of the Nith River (constructed on segments of properties acquired to accommodate the intersection improvements at Peel / Haysville);
- A commitment to develop positive outlet drainage conditions for surface drainage and field tile systems on adjacent properties during detailed design.

21. What is Detail Design?

The engineering design process is a multi-step process which includes preliminary design, detail design and construction. The Detail Design phase involves transforming the recommended plan into a detailed set of design drawings and specifications to facilitate construction.

22. Will the ministry install advance warning flashers on the approach to the intersection of Highway 7&8 and Peel Street/Haysville Road?

Advance warning flashers are considered for specific types of locations, such as the following:
- Where signals are only visible from a limited distance;
- The transition between a freeway and a road with traffic signals;
- Traffic signals in rural areas several kilometres from other traffic signals and where there are significant downhill modes.

Where those conditions exist, the benefits of this warning device are compared to the risks of drivers responding to the advance warning by speeding up, rather than slowing down. For the Highway 7&8 and Peel Street/Haysville Road intersection, the Ministry has determined that installing advance warning flashers would not provide significant benefit compared to the risks.

The Ministry understands that there are concerns about vehicles on Highway 7&8 stopping at this intersection. The Ministry is in the process of conducting a detailed review of this intersection, including observing traffic signal compliance, evaluating the signal timings, and possibly adjusting them to provide more green time for Highway 7&8. This review is expected to be completed and improvements implemented by mid-August.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: L07-90

SUBJECT: AUTHORIZATION TO EXPROPRIATE LANDS (1st REPORT) FOR MANITOU DRIVE IMPROVEMENTS (FAIRWAY ROAD TO BLEAMS ROAD), IN THE CITY OF KITCHENER

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 reconstruction of Manitou Drive between Fairway Road and Bleams Road, in the City of Kitchener, in the Region of Waterloo as detailed in report CR-RS-13-075 dated September 10, 2013:

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 reconstruction of Manitou Drive and described as follows:

**Fee Simple Partial Taking:**

- Part of Lot 9, Registered Compiled Plan 1490, being Parts 1-4 on Plan 58R-17784, Part of PIN 22595-0088(LT) (35 and 45 Manitou Drive, Kitchener);
- Part of Lot 2, Registered Compiled Plan 1525, being Part 1 on Plan 58R-17788, Part of PIN 22593-0103(LT) (695 Fairway Road, Kitchener);
- Part of Lot 17, Registered Compiled Plan 1489, being Part 1 on Plan 58R-17782, Part of PIN 22617-0039(LT) (107 Manitou Drive, Kitchener);
- Part of Lot 42, Registered Compiled Plan 1525, being Parts 4, 6, and 8 on Plan 58R-17782, Part of PIN 22594-0016(LT) (110 Manitou Drive, Kitchener);
- Part of Lot 41, Registered Compiled Plan 1525, being Part 2 on Plan 58R-17783, Part of PIN 22594-0015(LT) (50 Manitou Drive, Kitchener);
- Part of Lots 39 and 40, Registered Compiled Plan 1525, being Part 6 on Plan 58R-17784, Part of PIN 22594-0014(LT) (38 Manitou Drive, Kitchener);

**Grading Easement:**

- Part of Lot 17, Registered Compiled Plan 1489, being Part 2 on Plan 58R-17782, Part of PIN 22617-0039(LT) (107 Manitou Drive, Kitchener);
- Part of Lot 42, Registered Compiled Plan 1525, being Parts 3, 5, and 7 on Plan 58R-17782, Part of PIN 22594-0016(LT) (110 Manitou Drive, Kitchener);
- Part of Lot 41, Registered Compiled Plan 1525, being Parts 1 and 3 on Plan 58R-17783, Part of PIN 22594-0015(LT) (50 Manitou Drive, Kitchener);
- Part of Lots 39 and 40, Registered Compiled Plan 1525, being Part 5 on Plan 58R-17784, Part of PIN 22594-0014(LT) (38 Manitou Drive, Kitchener);
- Part of Lot 12, Registered Compiled Plan 1490, being Part 2 on Plan 58R-17787, Part of PIN 22595-0047(LT) (25-27 Manitou Drive, Kitchener);
• Part of Lots 12 and 13, Registered Compiled Plan 1490, being Part 1 on Plan 58R-17787, Part of PIN 22595-0048(LT) (21 Manitou Drive, Kitchener);
• Part of Lot 17, Registered Compiled Plan 1525, being Part 2 on Plan 58R-17786, Part of PIN 22594-0006(LT) (28 Manitou Drive, Kitchener); and
• Part of Lot 34, Registered Compiled Plan 1525, being Part 4 on Plan 58R-17785, Part of PIN 22594-0013(LT) (36 Manitou Drive, Kitchener).

Hydro Easement:

• Part of Lot 11, Registered Compiled Plan 1490, being Part 1 on Plan 58R-17786, Part of PIN 22595-0046 (LT) (31-33 Manitou Drive, Kitchener).

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 Manitou Drive (Regional Road 69) from Fairway Road to Bleams Road on November 14, 2012 as detailed in report E-12-104. The project improvements include a roundabout at the intersection of Manitou Drive and Bleams Road, replacement of the Schneider Creek Bridge, a watermain relocation, sidewalks and on-road cycling lanes. Construction is scheduled for the summer of 2015.

Land acquisitions as outlined in the Recommendation will be required from eleven (11) property owners. The acquisitions are fee simple partial takings for road widening purposes, temporary grading easements and a permanent easement for relocation of Waterloo North Hydro utilities.

All of the affected property owners, or their representatives, have been contacted by Legal Services Real Estate staff by one or more of the following means: in-person meeting, telephone, written correspondence and/or e-mail, to discuss the required acquisitions and have been informed of the Region’s intention to commence the expropriation process, including this Report going forward to ensure project time lines are met. All property owners have been provided with the Region’s Expropriation Information sheet explaining the expropriation process. 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. There is also an acquisition of a partial taking, storm sewer easement and temporary grading easement required from the City of Kitchener that has not been included in
the expropriation as a negotiated agreement is expected. Should a negotiated settlement be reached with 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 acquisition the Region assumes all responsibility for the lands.

The Project Area is shown attached as Appendix “A”.

CORPORATE STRATEGIC PLAN:

Two strategic objectives of the Corporate Strategic Plan are to develop, promote and integrate active forms of transportation (cycling and walking), and to optimize existing road capacity to safely manage traffic throughout Waterloo Region.

FINANCIAL IMPLICATIONS:

Transportation and Environmental Services staff advises that the 2013 Transportation Capital Program includes funds of $9.0 million in the years 2013 to 2015 for this project to be funded from the Region Development Charges and Roads Capital Levy Reserve funds. Sufficient funding for the acquisitions outlined within this report is available in the project budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services staff has 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, Property

APPROVED BY: Gary Sosnoski, Commissioner, Corporate Resources
Appendix “B”

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.
REGIONAL MUNICIPALITY OF WATERLOO

St. Andrews Street and Cedar Street Improvements

St. Andrews Street
(Grand Avenue southerly to the City of Cambridge Boundary)

and

Cedar Street
(Osborne Street westerly to the City of Cambridge Boundary)

City of Cambridge

INFORMATION PACKAGE

Public Consultation Centre
Wednesday September 25, 2013
5:00 P.M. to 8:00 P.M.

At

Southwood Secondary School
30 Southwood Drive
Cambridge, Ontario

There is a Comment Sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Public Consultation Centre. All names, addresses and comments will be included in material made available to the general public.
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APPENDIX “A” – TYPICAL SECTIONS AND PLAN VIEWS OF PROPOSED IMPROVEMENTS
APPENDIX “B” – PROPERTY ACQUISITION PROCESS INFORMATION SHEETS
COMMENT SHEET
1. What is the Purpose of this Public Consultation Centre?

The Regional Municipality of Waterloo is proposing improvements to St. Andrews Street from Grand Avenue westerly to the City of Cambridge Boundary and to Cedar Street from Osborne Street westerly to the City of Cambridge Boundary within the City of Cambridge. (Please See Figure 1 - Key Plan of Project Areas.)

St. Andrews Street and Cedar Street are both Regional Roads under the jurisdiction of the Regional Municipality of Waterloo. Sanitary sewers and watermains under these roads are owned and operated by the City of Cambridge. The proposed improvements include road reconstruction, active transportation and transit enhancements, intersection improvements and underground infrastructure replacement or repair.

The proposed improvements on St. Andrews Street and Cedar Street are considered a Schedule ‘A+’ undertaking in accordance with the Municipal Class Environmental Assessment document. This means the project is pre-approved to proceed provided that appropriate public consultation is conducted.

The public is invited to this Public Consultation Centre (PCC) to:

- review the proposed design,
- ask questions of the staff of the Region of Waterloo, City of Cambridge and the consulting engineer IBI Group, and
- provide comments and input regarding the planning and development of improvements.

We ask that you complete the Comment Sheet attached to the back of this Information Package and put it in the box at the Consultation Centre, or send it to the address indicated on the Comment Sheet. Your comments will be considered, along with other information received over the course of the project to assist the Region of Waterloo in completing the design of the proposed improvements.

2. Who is Directing This Project?

The project is being directed by the Regional Municipality of Waterloo through a Project Team consisting of staff from the Regional Municipality of Waterloo and the City of Cambridge, and Councillors Pam Wolf and Gary Price of the City of Cambridge. The engineering consulting firm of IBI Group has been retained by the Region to assist with the design.
FIGURE 1

PCC Location (Southwood Secondary School - 30 Southwood Drive, Cambridge)

Westgate Plaza
3. **Why are We Undertaking This Project?**

Both St. Andrews Street and Cedar Street are Regional arterial roads that provide important transportation links through the City and provide local access to numerous adjacent businesses, public and secondary schools and a number of residential subdivisions and commercial buildings. Through the Region’s Transportation Capital Program, both roads have been identified for improvements to address poor pavement condition, expand and improve active transportation and transit facilities, improve operations at various intersections, and replace or repair deteriorated underground services.

4. **What Road Improvements are Being Considered?**

Proposed improvements on St. Andrews Street include:

- Full depth road reconstruction;
- Widening for on-road bike lanes;
- Widening for westbound left turn lanes at Grand Ridge Drive, Fourth Avenue and Osborne Street as well as eastbound at Southwood Drive;
- Pedestrian/cycling refuge islands at Grand Ridge Drive, Fourth Avenue and Southwood Drive;
- Construction of a 3.0 metre multi-use trail on the west side between Grand Ridge Drive and St. Gregory’s Drive in place of sidewalk;
- Construction of infill sidewalk on the east side between Grand Ridge Drive and Inverness Drive;
- Underground infrastructure replacement or repair (storm sewer, sanitary sewer, watermain) where warranted; and
- Upgrades to Grand River Transit bus stops.

In addition, a minor re-alignment of St. Andrews is proposed near Southwood Drive to accommodate the addition of the multi-use trail and on-road bike lanes in the vicinity of the gas station at Southwood Drive.

Proposed improvements on Cedar Street include:

- Full depth road reconstruction;
- Widening for bike lanes;
- Pedestrian/cycling refuge islands at Grand Ridge Drive, Kent Street, Dale Avenue and at Westgate Plaza;
- Construction of a 3.0 metre multi-use trail on the south side between Kent Street and Dale Avenue and on the north side between Dale Avenue and Westgate Plaza in place of sidewalk;
- Re-alignment of Dale Avenue at the intersection of Cedar Street;
- Underground infrastructure replacement or repair (storm sewer, sanitary sewer, watermain) where warranted; and
- Upgrades to Grand River Transit bus stops.
Cedar Street at Westgate Plaza Improvements
To eliminate conflict points and reduce accident potential at this location, partial removal of the westbound right/through curb lane is proposed to reduce conflict between through traffic and plaza patrons exiting at the main entrance.

Cedar Street and Dale Avenue Intersection
To reduce travel speeds and provide for safer access in and out of Dale Avenue, realignment is proposed on Dale Avenue to create a perpendicular intersection to Cedar Street.

Active Transportation Needs
Based on the approved Regional Transportation Corridor Design Guidelines, the Regional Cycling Master Plan, the 2011 Cycling Facility Map and other relevant policies/practices, the Project Team has identified the following proposed enhancements to the roadway corridor to address active transportation needs:

- Construction of a 1.25 metre designated on-road cycling lane on both sides of St. Andrews Street and Cedar Street within the project limits to provide a continuous cycling facility (Combined vehicle/cycling lanes in one direction are proposed on St. Andrews Street from Fraser Street to Grand Avenue because of the restricted space in this area.)

- Construction of new front-lotted sidewalk on the east side of St. Andrews Street where none currently exists from approximately 60 metres north of Grand Ridge Drive northerly to Fourth Avenue.

   **Note: Snow removal on all sidewalks is the responsibility of the front-lotted landowners as per City of Cambridge by-laws.**

- Proposed 3.0 metre multi-use trail on the west side of St. Andrews Street between Grand Ridge Drive and St. Gregory’s Drive and proposed 3.0 metre multi-use trail on the south side of Cedar Street between Kent Street and Dale Avenue and on the north side between Dale Avenue and Westgate Plaza.

Located in Appendix A are typical cross-sections of the proposed improvements along St. Andrews Street and Cedar Street, plan views of the proposed changes on Cedar Street at the Westgate Plaza and Dale Avenue, as well as plan views of the proposed St. Andrews Street re-alignment at Southwood Drive.

In order to enhance the streetscape and encourage slower speeds, new trees will be incorporated in this project where appropriate and where space permits in the road allowance.

5. **How Does This Project Relate to the Objectives of the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines?**

The proposed improvements conform to the Regional Transportation Master Plan (RTMP) as follows:

- Proposed provision of expanded and improved active transportation and transit facilities, such as infill sidewalk, on-road bike lanes, multi-use trail and bus shelters to provide an integrated and accessible multi-modal transportation system;
• Proposed installation of turn lanes on St. Andrews Street at Grand Ridge Drive, Fourth Avenue and Osborne Street intersections to provide a safe and efficient transportation system;

• The proposed road improvements will be designed in accordance with the Regional Transportation Corridor Design Guidelines.

The RTMP vision of sustainability, encouraging increased transit use and promoting transportation choice are supported by proposed enhancements to the active transportation and transit facilities in the road corridors. Example enhancements are proposed bike lanes on both St. Andrews Street and Cedar Street with proposed pedestrian refuge islands at key locations and a proposed 3.0 metre multi-use trail on both St. Andrews Street and Cedar Street which will provide safer pedestrian and cycling travel within heavily traveled areas on both road sections.

6. Were Roundabouts Considered for this Project?

The Region reviewed roundabout implementation at the St. Andrews Street and Cedar Street intersection using the Roundabout Feasibility Initial Screening Tool. Based on intersection configuration and operation, collision rates, property and utility impacts, and cost, the Region does not recommend a roundabout for this intersection.

7. What are the Property Impact and Acquisition Plans?

The intent of the design process is to minimize the need to acquire property; however the proposed design does require the Region to acquire small strips of property at the St. Andrews Street and Cedar Street intersection as well as on the south side of Cedar Street (along Southwood Secondary School frontage). As the project proceeds, affected property owners will be contacted by Regional Real Estate staff to discuss the necessary property acquisitions and related issues. It is the Region’s standard practice to negotiate agreements of purchase and sale with the affected property owners, based on an independent appraisal of the land’s fair market value. If agreements cannot be reached in time to meet the project schedule, the Region can acquire the needed lands through expropriation. For further information please see the Property Process Information Sheet in Appendix B.

The proposed improvements have been refined by the Project Team to minimize property impacts. Preliminary proposed property acquisitions will be shown on the plans on display at the September 25, 2013 Public Consultation Centre.

8. How Will Private Property, Trees, Driveways and Lawns be Affected?

Private property, driveways and lawns will generally be reinstated to their pre-construction state; however, due to the nature of the work being considered which includes widening of the road at most locations, there will be driveways, parking areas and boulevards (including trees) that will need to be altered from their existing condition. The preliminary extents of these alterations will be shown on the plans on display at the September 25th, 2013 Public Consultation Centre.

This project will likely require some trees to be removed but these will be replaced (two new trees for each one removed) where space permits in the road allowance in consultation with the property owners.

9. Can my Existing Water Service be Upgraded?

If property owners wish to replace their water service from the watermain to the property line with a larger diameter service they are encouraged to have this work included in this project.
Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Cambridge and the property owner, existing water services may be upgraded from the mains under the road to the property line at the property owner’s expense.

Additionally, property owners may wish to consider replacing their water service between the property line and their building at the same time as this construction. If property owners wish to pursue this additional work, please indicate so on the comment sheet and staff will contact you later to discuss how you can make arrangements to have this work completed. The property owner will be responsible for all the costs to replace the water service on private property.

10. Can my Existing Sanitary Service be Upgraded?

If property owners wish to replace their sanitary service from the sewer main to the property line with a larger service they are encouraged to have this work included in this project. Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Cambridge and the property owner, existing sanitary services may be upgraded in size from the sanitary sewers under the road to the property line at the property owner’s expense.

Additionally, property owners may wish to consider replacing their sanitary service between the property line and their building at the same time as this construction. If property owners wish to pursue this additional work, please indicate so on the comment sheet and staff will contact you later to discuss how you can make arrangements to have this work completed. The property owner will be responsible for all the costs to replace the sanitary service on private property.

11. How Will Traffic and Access to Property be Accommodated During Construction?

Due to the nature and extent of the construction work only one direction of traffic will be able to be maintained on St. Andrews Street and Cedar Street for most of the duration of the construction. In addition, there will be times when the construction work will require temporary closures of one or more of the side streets. During all closures or lane restrictions, signage will be placed well in advance of the closure advising of the detour and duration of the closure. A detailed construction staging and traffic management plan will be developed during final design.

The City of Cambridge Fire Department, Waterloo Regional Police and Ambulance Services will all be advised of the traffic restrictions during the construction period. Grand River Transit service will be maintained during construction through the implementation of temporary bus stop locations as required.

Pedestrian access will be maintained (as a minimum) on one side of St. Andrews Street and Cedar Street for the duration of the construction. Where the sidewalk is close to deep excavations, the sidewalk will be separated from the work area by temporary fencing. Signage will be erected in order to direct pedestrians through the project area.

As is customary with Regional Roads under construction, motorists will be advised of the construction timing and traffic restrictions through advance signage and the Region’s web site.
The Contractor will be required to temporarily block access to and from driveways on St. Andrews Street and Cedar Street for short-term periods when completing certain construction operations. For commercial and institutional properties, access will be maintained at all times and additional signage will be provided during construction to provide direction. If only one driveway access exists, the Contractor will endeavour to complete the work across the driveway in two stages where feasible in order to maintain access.

12. When Will Construction Occur?

Construction on St. Andrews Street and Cedar Street is anticipated to commence in 2016 and will be completed in stages likely over two construction seasons to minimize the impacts on area traffic. Detail regarding staging and timing for each road section will be finalized as progression through detailed design occurs and will be communicated to the directly affected property owners well in advance.

13. How will Garbage / Recyclables be Collected During Construction?

For residential properties on St. Andrews Street and Cedar Street, garbage and blue boxes will continue to be picked up at the end of your driveway as usual. When work is occurring in front of your property and garbage collection vehicles do not have access to your driveway on garbage collection day, our Contractor will deliver your garbage and recyclables to an adjacent side street and return the empty containers afterwards. We ask that all residents mark their containers with their address for easy identification.

For properties with private garbage collection, driveway access will be maintained during each stage of construction to provide access for private garbage collection.

14. What About Dust During Construction?

The Region will be monitoring the amount of dust generated by construction activities on a daily basis. When necessary, the Region will ensure that the Contractor uses proper dust suppression measures (i.e. the application of water and/or calcium chloride) in accordance with the Region’s standard practice.

15. What Are the Expected Working Hours During Construction?

In general, construction working hours are from 7:00 a.m. to 7:00 p.m. Monday through Friday, although the Contractor may also work on Saturdays from time to time. There may also be occasions where the Contractor is required to complete a critical work item outside of these normal working hours. Work outside normal working hours must be approved by the Region and the City of Cambridge.

16. Will the Posted Speed Limit Be Increased?

Following construction, the Region will retain the current posted speed limits on both St. Andrews Street and Cedar Street.

17. What is the Estimated Cost of this Project and How Will it be Funded?

The Region of Waterloo is funding the road improvements on this project. The estimated project cost for the proposed St. Andrews Street and Cedar Street improvements, including roadway reconstruction, new curbs, sidewalk and trail, storm sewer works replacement/repair, driveway ramps and boulevard restoration, and landscaping is approximately $9,065,000. The City of Cambridge will be funding the costs for the sanitary
sewer and watermain replacement/repair as well as cost sharing the storm sewer replacement/repair at an estimated cost of $1,560,000.

18. What are the Next Steps on the Project?

Prior to finalizing the design for Regional Council’s approval, the Project Team is asking for the public’s input on the proposed improvements. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments. The Project Team will use the comments obtained from the public during this Public Consultation Centre to refine the proposed design concept in conjunction with other technical data.

19. When Will a Final Decision be Made for this Project?

The Project Team will review the public comments received from the September 25, 2013 Public Consultation Centre and use them as input for recommending a final Design Concept for the St. Andrews Street and Cedar Street Improvements project. This Final Recommended Design Concept will be presented to Regional Planning and Works Committee and Council in early 2014 for approval. In advance of this meeting, letters will be sent to all adjacent property owners and tenants (as well as to all members of the public specifically registering at this Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.

20. How Will I Receive Further Notification Regarding This Project?

Adjacent property owners and members of the public registering at this Public Consultation Centre will receive all forthcoming additional information, and will be notified of any future meetings.

21. How Can I Voice My Comments At This Stage?

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively you can mail, fax or e-mail your comments to one of the Project Team members listed below, no later than October 9, 2013.

We thank you for your involvement and should you have any questions or concerns please contact:

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Project Manager
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22. How Can I View Project Information Following the PCC?

All of the PCC display materials and other relevant project information, notifications of upcoming meetings and contact information is available for viewing at the Region of Waterloo municipal office as identified above. Alternatively, you may visit the Region’s website at www.regionofwaterloo.ca.
Appendix A-1
Typical Cross Section – St. Andrews Street

GRAND AVE TO CEDAR ST.
Appendix A-2
Typical Cross Section – St. Andrews Street
Appendix A-3
Typical Cross Section – St. Andrews Street

GRAND RIDGE DRIVE TO CITY LIMIT
Appendix A-4
Typical Cross Section – Cedar Street

AT WESTGATE PLAZA
Appendix A-5
Typical Cross Section – Cedar Street

SOUTHWOOD DR. TO WOODSIDE AVE
Appendix A-6
Typical Cross Section – Cedar Street
Appendix A-7
Proposed Road Re-Alignment – St. Andrews Street at Southwood Drive
Appendix A-8
Proposed Lane Configuration at Westgate Plaza – Cedar Street
Appendix A-9
Proposed Road Re-alignment – Cedar Street at Dale Avenue
Appendix B-1

Property Acquisition Process Information Sheet

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

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

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

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

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

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

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.
Appendix B-2

Steps Toward Offer of Settlement or Agreement of Purchase and Sale

The general steps towards such an offer are as follows;

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

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

Expropriation

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

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

REGIONAL MUNICIPALITY OF WATERLOO

ST. ANDREWS STREET AND CEDAR STREET IMPROVEMENTS

PUBLIC CONSULTATION CENTRE – SEPTEMBER 25, 2013

Please complete and hand in this sheet so that your views can be considered for this project. If you cannot complete your comments today, please take this home and mail, fax or e-mail your comments by October 9, 2013 to:

Mr. Ken Brisbois, C.Tech
Project Manager
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Telephone: (519) 575-4606
Fax: (519) 575-4430
Email: kbrisbois@regionofwaterloo.ca

Mr. John Perks, P. Eng.,
Project Manager
IBI Group
379 Queen Street South
Kitchener, ON N2G 1W6
Telephone: (519) 745-9455
Fax: (519) 745-7647
Email: john.perks@ibigroup.com

Are you interested in upgrading your water service as part of this project? YES ☐ NO ☐
Are you interested in upgrading your sanitary sewer service as part of this project? YES ☐ NO ☐

Comments or concerns regarding this project:

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Name:  
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Postal Code:  
Phone:  
Email:  

Thank you for your interest and time.

COLLECTION NOTICE

All comments and information received from individuals, stakeholder groups and agencies regarding these projects and meetings are being collected to assist the Region of Waterloo in making a decision. Under the Municipal Act, personal information (such as name, address, telephone number, and property location) that may be included in a submission becomes part of the public record. Questions regarding the collection should be forwarded to the staff member noted above.
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: September 10, 2013  
FILE CODE: L04-20  
SUBJECT: NOLINOR AVIATION – AIR TERMINAL USE AND OPERATING AGREEMENT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo authorize the Commissioner of Transportation and Environmental Services to enter into an agreement, and any subsequent renewals, with Les Investissements Nolinor Inc., carrying on business as Nolinor Aviation (“Nolinor”) and, if required, other third parties as may be contracted by Nolinor, with the form and content of such agreement to be to the satisfaction of the Regional Solicitor to enable Nolinor to carry on a specialized private air charter service from the air terminal building of the Region of Waterloo International Airport;

SUMMARY:

N/A

REPORT:

On or about September 19th, 2013, Nolinor, a Montreal based passenger and cargo services company, is proposing to commence regular charter operations from the Region of Waterloo International Airport. Nolinor will operate under contract to a large mining corporation based in Toronto with operations in Canada’s north. Their main focus is the development of a project located in the Qikiqtani Region of Nunavut on Baffin Island. Air service from points in southern Canada will be crucial to the success of this undertaking.

On behalf of its client, Nolinor will provide frequent private air charter services transporting cargo and personnel to support mining operations in northern Canada. It is anticipated that Nolinor may operate up to four (4) flights weekly depending upon the needs and requirements of its customer. Nolinor has engaged Fliteline Services, a business based at the airport to provide ground handling services for its operations and wishes to process its client’s passengers via the air terminal building. Nolinor operates Boeing 737-200 series aircraft, similar in size to the aircraft currently operated by WestJet for its service to Calgary. It is anticipated the flights will operate during daytime and early evening hours.

This report recommends that the Region of Waterloo enter into an agreement to permit Nolinor to utilize the air terminal facility and associated services such as baggage handling and passenger screening equipment within the terminal. The agreement will permit Nolinor and its contractors to utilize the air terminal facility for the check-in and screening of their personnel.
The agreement will require Nolinor to pay a fee of $15.00 for each passenger embarking from the air terminal. This fee is equivalent to the current fee charged for passengers of regularly scheduled domestic flights operating from the airport. The term of the agreement will be for an initial one year period which may be renewed for additional one year periods depending upon the requirements of Nolinor and its client. The agreement will also contain provisions providing for indemnity of the Region and its employees and a requirement that Nolinor provide a suitable certificate of insurance evidencing it has a policy of insurance which would respond to any insured risks associated with its operations.

CORPORATE STRATEGIC PLAN:

One of the focus areas of the Region’s Corporate Strategic Plan is to support aviation-related activities at the Region of Waterloo International Airport.

FINANCIAL IMPLICATIONS:

The operations that will be undertaken by Nolinor can be facilitated at no additional expense of the airport as the necessary passenger handling, terminal capacity, security and fire protection services are already being provided for existing air services. Nolinor’s operations will result in additional revenues for the airport in the form of passenger processing fees ($15 per passenger), fuel surcharges, aircraft parking, landing fees and vehicle parking fees.

Starting on September 19th, it is expected that there will be 3 weekly flights with possible additional flights being added as required. Additional airport revenues for 2014 as a result of this undertaking are estimated to be approximately $400,000.00, based on 3 weekly flights.

It is anticipated that Nolinor’s operations may also create employment and opportunities for businesses based at the airport and within the Region of Waterloo.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Finance department has been consulted in connection with this report.

ATTACHMENTS

Not applicable.

PREPARED BY: Chris Wood, General Manager, Region of Waterloo International Airport
Jeff Schelling, Solicitor, Corporate

APPROVED BY: Debra Arnold, Regional Solicitor, Director of Legal Services
John Hammer, Director, Transportation
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

SUBJECT: PROPOSED WASTE REDUCTION ACT AND WASTE REDUCTION STRATEGY (BILL 91)

RECOMMENDATION:


SUMMARY: Nil

REPORT:

Background

On June 6th, 2013, the Ontario Minister of Environment introduced Bill 91, the Waste Reduction Act (WRA) and accompanying Waste Reduction Strategy (WRS). This legislation is intended to replace the current Waste Diversion Act (2002) and, if passed, would result in significant changes to how recyclables, organics and residual waste (garbage) are managed and funded in Ontario.

The proposed legislation and strategy is intended to:

- Promote the reduction of waste;
- Make individual producers responsible for end of life management of designated waste products and packaging by shifting costs of diversion from the municipal tax base to the producers of the products and packaging;
- Provide consumers with convenient and accessible diversion services and eliminate surprise "eco-fees" at point of sale;
- Designate new waste streams for recycling and promote more recycling in the Industrial, Commercial and Institutional (IC&I) sectors;
- Improve oversight and accountability of waste diversion by setting mandatory waste reduction and diversion standards, evaluating progress and enforcing performance measures; and,
- Recognize the important role municipalities perform in providing waste diversion services to residents.

The need for new legislation is based on a number of considerations including:

- Waste diversion in Ontario (including the IC&I sector) has leveled off at 25%;
Establishing new waste disposal capacity is undesirable and expensive; Costs associated with waste diversion programs for municipalities continue to increase without corresponding cost recovery mechanisms; and, Stakeholders (municipalities, producers, Province) generally agree that the current framework for cost recovery and funding under the Waste Diversion Act is not working and is in need of reform.

The Province also anticipates that the new legislation and regulatory changes would:

- Attract new investment to create new jobs and foster innovation;
- Reduce environmental impacts (e.g. energy consumption, raw material use, greenhouse gas production) as well as reduce the need for additional disposal capacity; and,
- Provide opportunities to recover the economic value of waste, particularly in the IC&I sector.

**Overview of Proposed Waste Reduction Act and Strategy**

The key components of the proposed Waste Reduction Act are:

**Individual Producer Responsibility (IPR)**

- Establish IPR for the diversion of end of life designated products/wastes whereby individual producers would be legally responsible for ensuring their products and packaging sold in Ontario are properly managed at the end of their life-cycle. The basic premise behind IPR is that the producers are best positioned to reduce waste associated with their products and able to decide the best way to do this economically.
- Existing stewardship programs (e.g. Stewardship Ontario, Ontario Electronic Stewardship) would be transitioned into the new IPR framework over a proposed four (4) year phasing period, starting with electronic waste. The blue box program would be transitioned over a longer period but the existing 50% producer funding cap is to be removed with the expectation that producers would fund a larger share of blue box net costs.

**Diversion of a Wider Range of Wastes/Disposal Bans**

- Paper and packaging supplied into the IC&I sector would be designated as the next waste diversion program as this is considered the largest single unaddressed recycling opportunity in the Province.
- Development of a strategy to increase organics diversion (particularly green bin organics).
- Consideration of additional waste streams for designation (e.g. carpet, construction and demolition).
- Consideration of potential disposal bans for select waste material.

**Municipal Role**

- Municipalities would have the opportunity to collect designated wastes or have the producers collect the waste.
- Mechanisms are included that would require producers to ensure reasonable costs are reimbursed to municipalities for the collection and handling of designated wastes, as well as effective dispute resolution processes.
**Provincial Role**

- Setting of mandatory waste diversion targets, service standards, promotion and education requirements and administrative penalties.
- Clearly define accountability and the specific roles of the Province, municipalities and producers.

**Waste Reduction Authority**

- Transform the existing Waste Diversion Ontario into a new body referred to as the Waste Reduction Authority to provide an independent, robust oversight and compliance framework of producers responsibilities.
- The new Waste Reduction Authority would have the ability to penalize producers for not meeting mandatory waste diversion objectives and targets (i.e. outcomes based approach).
- The intention is to ensure a level playing field for all producers in a competitive environment.

**Potential Municipal Implications**

Under a 100% producer responsibility regime, it is expected that there would be significant changes to how municipalities operate their diversion programs and what materials are collected. A number of key issues, discussed below, will need to be considered from a municipal perspective.

Municipalities will need to negotiate agreements, either individually or as a collective, with producers for payment for collection, processing and associated services related to designated wastes. Although it is anticipated that increases in funding will be realized for waste diversion programs, it remains unclear to what extent. In this regard, it will be critical to negotiate what reasonable costs means to both the producers and municipalities.

Related to funding, the potential exists for municipalities to incur significantly more time and additional administrative costs related to dealing with multiple producers and/or intermediaries. In addition, systems could become fragmented should producers decide to pull waste materials from existing blue box collection or other integrated programs. An unintended consequence could be reduced diversion and increased costs to municipalities as well as the business sector. Mechanisms to mitigate these risks will need to be considered and implemented accordingly.

Another risk that exists under a 100% IPR regime is the potential for producers to look for options to manage their waste products that might not include Region diversion infrastructure. For example, under the proposed act, producers could contract with private sector recycling facilities instead of with a municipally owned/operated facility. In this regard, municipalities will need to ensure that they are fairly compensated for any stranded assets (e.g. materials recycling centre, drop-off depots).

The existing blue box program is a mature curbside program which provides most Ontario residents with convenient, regular collection of recyclable materials (under O. Reg 101/94, municipalities with a population greater than 5,000 residents are mandated to provide a blue box program). Any legislative and ensuing regulatory changes will need to ensure that residents receive the same or an improved level of service and that promotional and educational information continues to be communicated appropriately.
The proposed legislation identifies that any increased costs of recycling are to be embedded into the retail price of the products and packaging. Although this concept (e.g. no more eco-fees at point of sale) is likely to be well received by the public, it is unclear what the financial impact will be to Ontario businesses and importers of products and packaging. Under the proposed scenario, consumers (not taxpayers) would pay for any increased costs associated with the recycling of that particular product or packaging. Given the current fragile economic environment in the province of Ontario, the various interests of business, municipalities, taxpayers and consumers will need to be well balanced.

Costs associated with the collection and disposal of designated materials that make it into the residual waste stream (primarily as residuals from a recycling facility) and the costs associated with litter created by designated materials are not reimbursed under the proposed legislation. Consideration should be given to the fair re-imbursement of municipal costs associated with designated products and packaging remaining in the residual waste stream.

The proposed legislation does not recognize the “4th” R (recovery) and is therefore inconsistent with the Canadian Council of Ministers of the Environment extended producer responsibility policy as well as the US EPA waste policy hierarchy. In order to further drive environmental outcomes, consideration should be given to maximizing material and energy recovery for those materials where no viable option is available for the first three R’s (reduction, reuse, recycling) and recovery should be counted toward diversion targets.

Municipalities are extremely supportive of a provincial organics strategy as presented in the proposed waste reduction strategy. However, delaying consultation/discussion to the longer term (beyond four years) is considered too long to wait given that a significant number of municipalities already operate full scale organics collection programs.

The implementation of disposal bans for designated wastes could prove effective for increasing waste diversion. However, sustainable alternatives for banned materials must be in place as well as appropriate Provincial policy and diversion targets in order to eliminate producers from simply disposing waste in landfills within the Province or in other jurisdictions, where disposal tipping fees are significantly lower than the cost of diversion.

Concluding Comments

Since the release of Bill 91, Waste Management staff, in association with the Ministry of Environment (MOE), Association of Municipalities of Ontario (AMO), the Regional Public Works Commissioners of Ontario (RPWCO), the Municipal Waste Association (MWA) and the Ontario Waste Management Association (OWMA), have been undertaking consultation and reviewing the draft legislation and strategy to determine potential impacts in order to establish comments with respect to suggested future actions. As a result, a joint letter to the MOE from RPWCO, MWA and AMO is provided as attachment 1 and identifies key municipal perspective comments with respect to the proposed legislation.

Staff strongly support the intent of the proposed waste reduction act and accompanying waste reduction strategy as it aligns well with the producer responsibility direction that municipalities have long been advocating. Given the potential implications presented within this report, it is of significant importance that we ensure the continued delivery of efficient and cost effective waste management services to the residents of the Region of Waterloo. Specifically, from a municipal perspective, staff will continue to advocate for waste management policies in the Province that clearly identify incentives that reward waste reduction and shift costs away from taxpayers to those that are responsible for creating the waste.
CORPORATE STRATEGIC PLAN:

This report has been prepared consistent with the Corporate Strategic Objective of Focus Area 1 “Environmental Sustainability: Protect and enhance the environment and particularly action 1.3 “Reducing the Amount of Waste Requiring Landfill.”

FINANCIAL IMPLICATIONS:

Budget implications are unknown at this time.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE: Nil

ATTACHMENTS:

Joint RWPCO, MWA and AMO letter to Director of MOE (September 4, 2013)

PREPARED BY:  Jon Arsenault, Director, Waste Management

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
September 4, 2013

Ms. Wendy Ren
Assistant Director, Waste Management Policy Branch
Ministry of the Environment
135 St Clair Avenue West, Floor 7
Toronto Ontario M4V 1P5
Fax: 416-325-4233

Dear Ms. Ren:

Re: Bill 91: Waste Reduction Act, 2013 (EBR Number 011-9260)
Waste Reduction Strategy (EBR Number 011-9262)

The Regional Public Works Commissioners of Ontario (RPWCO), jointly in association with the Municipal Waste Association (MWA) and Association of Municipalities of Ontario (AMO) appreciate the opportunity to comment on the proposed Waste Reduction Act and Strategy, referenced above. This letter presents a summary of positions and recommendations that are shared by RPWCO, MWA and AMO member municipalities. Our members represent diverse municipalities from across Ontario, each bringing extensive experience in waste reduction programs and having achieved a high degree of success in delivering these programs and consensus on a broad range of critical issues. Additional comments, focused on local priorities, will be provided in separate submissions by individual RPWCO, MWA and AMO members.

Background

The members of RPWCO represent single and upper-tier municipalities that, collectively, provide the full spectrum of Public Works infrastructure and services to over 80% of the population of Ontario. Our work focuses on community and infrastructure building, the wise use and protection of natural resources, growing Ontario’s economy, and responsible fiscal management.

AMO is a non-profit organization representing Ontario municipal governments. AMO supports and enhances strong and effective municipal governments in Ontario and promotes the value of municipal government as a vital and essential component of Ontario and Canada’s political system.
MWA, formerly known as the Association of Municipal Recycling Coordinators, is an incorporated not-for-profit organization formed in 1987 by Ontario waste management professionals to facilitate the sharing of municipal waste reduction and recycling information and experience.

Waste reduction is a key priority for municipalities across Ontario. We have a long history of delivering waste reduction programs and look forward to participating in the next phase of evolution and improvement in these programs.

We join the Ministry in acknowledging that significant progress has been made in Ontario during the past 20 years to reduce the burden of residential waste on our limited landfill capacity and improve the level of service to our communities. We agree with the Ministry that this progress has been driven primarily by municipalities.\(^1\) However, while much has been accomplished, we also agree with a central premise of the Waste Reduction Strategy: current waste diversion in our province has “stalled”. All stakeholders recognize the need to expand the scope of Ontario’s waste reduction systems, improve performance, and re-define the manner in which these systems are financed.

We view the proposed Waste Reduction Act and Strategy as important steps in this process. These initiatives offer the potential to establish full producer responsibility for products and packaging at “end of life”, while at the same time recognizing and enabling a continuing role for municipalities in waste reduction and diversion systems as part of our broader waste management responsibilities. We see these dual objectives as intrinsically linked and essential for the future success of waste reduction in Ontario.

We recognize the challenges inherent in designing and implementing full producer responsibility, and in this regard have already begun a process of reaching out to our partners in industry to initiate a renewed process of consultation, negotiation and collaboration. Paramount in these discussions will be the recognition that all interests — consumers, taxpayers, businesses and municipalities — must be balanced to maximize the benefits of waste reduction for Ontario’s environment and economy. We are committed to working with the Ministry and other key stakeholders to develop a sustainable “made in Ontario” solution that will once again put our Province at the forefront of waste diversion in Canada and internationally.

**Six Core Positions On the Proposed Act**

Six “core positions” that represent the views of RPWCO, MWA and AMO member municipalities on critical issues raised by the proposed Act and Strategy are presented below. In general, these positions are consistent with waste diversion approaches and ideas that Ontario municipalities have been advocating and implementing since inception of the internationally acclaimed Ontario Blue Box system almost 30 years ago. These positions were examined and developed most
recently during two half-day workshops dedicated to the proposed Act and Strategy on August 15-16, 2013 in York Region.

1. **We endorse the Ministry’s initiative to establish a policy and legislative framework for a system of full producer responsibility for products and packaging introduced into Ontario.**

   Our members agree that producers should pay 100% of the cost of efficient collection, transfer and processing of all packaging and printed paper in the waste stream. A great deal has been learned in recent years about producer responsibility in Ontario and several other jurisdictions. We believe our Province is well-positioned to build upon existing infrastructure and use the knowledge of leaders in the private and public sectors to develop a world-class, “made in Ontario” producer responsibility model. While we support the concept of allowing flexibility for producers to determine how producer responsibility programs are established, designed and operated, we require assurance that any program changes will deliver greater waste diversion outcomes and that municipal participants in these programs will be fully reimbursed for the costs of services provided.

2. **We support measures in the proposed Waste Reduction Act and Strategy that recognize and enable the role of municipalities in design and delivery of waste reduction programs.**

   Our members view municipalities as equal partners in waste reduction, and believe that there must be a continued and vital role for municipalities in end-of-life management of products and packaging within an efficient system of full producer responsibility. Municipal curbside and depot collection services represent the public “face” of diversion and recycling in Ontario; these programs are well positioned to continue to manage the essential consumer interface aspects of waste reduction. Curbside collection offers an efficient and integrated strategy for recovering many recyclable materials. Robust and sustainable curbside and drop off systems are essential if diversion rates are to be maintained during the transition to full producer responsibility, and increased thereafter.

It is also important for all stakeholders to recognize the municipal mandate to protect local residents and ecosystems from hazardous discharges that might impact public health, water quality and/or wastewater treatment facilities. Municipalities serve as the “backstop” or drop-off point “of last resort” for designated materials that are not captured in producer-operated programs. Residents often bring these items to municipal depots regardless of other options that are available. Municipal staff are a trusted source of information and almost always, the first point of contact when Ontario residents have questions about “what goes in the box?” or “where can I take my used TV or half empty paint cans?”
3. All waste reduction programs should be operated as efficiently and effectively as possible. It will be critically important to establish a fair and transparent process, open to all key stakeholders to define “reasonable costs” as prescribed in Bill 91.

Bill 91 proposes that the Waste Reduction Authority will be responsible for identifying reasonable costs and compensation formulas should producers and municipalities be unable to reach agreements after negotiations have failed. We believe that a multi-stakeholder process for reasonable cost determination should be established that would enable municipalities and producers to come to agreements in a timely and predictable manner. We understand and appreciate the importance of establishing compensation mechanisms based on “good value” for all municipal diversion programs as part of the shift to full producer responsibility. Additional considerations that must be incorporated into the process of reasonable cost determination include: removal of in-kind contributions to municipalities as a method for producers to meet funding obligations; fair compensation for municipal assets (e.g. MRFs, depots) that may become “stranded” during the transition to full producer responsibility; and fair reimbursement for municipal costs associated with managing designated products and packaging that remain in the waste stream. In return, municipalities will be held accountable for running cost-efficient systems which provide high capture of designated materials and good value to producers.

The vast majority of curbside collection programs are municipally owned and privately operated as a result of competitively tendered contracts following rigorous public procurement procedures. Many of the Material Recycling Facilities (MRFs) in Ontario are privately owned and virtually all are privately operated under contract to municipalities, again through competitive tendering processes. We believe that the Blue Box system in Ontario is already very cost effective. However, we are always interested in exploring ways to make the current and future waste diversion systems operate even better. For many years, municipalities have demonstrated their willingness to improve all operations (e.g., pilot projects, efficiency studies, audits) and have worked closely with many producers and program operators to achieve higher levels of performance.

The cost of waste management infrastructure in Ontario cannot be financed through development charges, therefore all waste management infrastructure, including the construction of MRFs and drop-off sites used for management of designated materials, was financed through our municipal tax payers. We need assurances that any municipal infrastructure “stranded” as a result of future full producer responsibility programs will be properly compensated for in a way which is fair to our local tax payers.

RWPCO, in association with AMO and MWA are initiating discussions with our industry partners, as noted above, to develop a multi-stakeholder process to address key system design and cost

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Waste Reduction Authority process to define reasonable costs and compensation formula is required to be transparent with a consultation period of 90 days and the results posted on the WRA website.
issues. Much of the debate around “best practice” and “reasonable costs” over the past decade has been fraught with acrimony. A resolution of this core cost and compensation issue would signify tremendous progress for waste diversion in Ontario and produce substantial benefits for Ontario taxpayers.

4. A system of targets and standards is required to define and support high levels of performance across a full range of system criteria, addressing both waste reduction and access to services in communities throughout Ontario.

Multi-stakeholder consultations are also required to address targets, standards and future material designations. It is important that the Province establish targets and that the proposed Waste Reduction Authority actively monitor targets for new designated materials in the industrial, commercial and institutional streams. Key concerns related to targets and standards include the need to ensure accessibility to waste reduction programs for citizens across Ontario, including those in small, rural and/or remote communities. The convenience offered by established curbside and depot programs should not be compromised by a reduction in service levels in the future.

Reduction targets must be structured to prevent “cherry picking” of materials or concentration of services in a few major urban centres as a strategy for compliance. We also endorse the notion of setting standards for public education and outreach programs. Our 25 plus years of experience developing and operating programs, administering contracts and working with industry will be invaluable in these kinds of discussions.

It is suggested and anticipated that targets, standards and material designations will be addressed in Regulations under the new Act. An open and transparent process of engagement and discussion as Regulations under the new Act are drafted is a fundamental prerequisite to ensuring that key elements are well designed. We join with other stakeholders in seeking assurance that development of Regulations under the new Act will include active and substantial consultation with all key parties involved.

5. We endorse the formation of a new Waste Reduction Authority to administer and enforce the proposed Waste Reduction Act, provided measures are taken to ensure adequate resourcing and professional, independent governance.

Under the proposed Act, the existing WDO will evolve into a new Waste Reduction Authority (Authority) with significantly expanded authority and responsibility. This includes operating a Registry, enforcement and establishing compensation formulas and reasonable costs that producers will be required to pay to municipalities for collection and management of designated wastes. We acknowledge the need for an agency to assume these roles within a producer responsibility system, but believe that these tasks can be managed only if sufficiently skilled senior resources are in place. These include trained, professional staff with capacity to maintain and analyze independent data sets and make evidence-based decisions. Further, the governance of the Authority must be structured to enable it to function in a manner that is unbiased and fully
independent from all stakeholders. A professional, highly trained, skills-based Board of Directors will be required. Regional and sectorial representation on any committees to be established by the Authority is also recommended.

6. **Mechanisms must be established to ensure that the transition to full producer responsibility, and specific changes contemplated by Bill 91, do not lead to negative consequences related to fragmentation of municipal programs, reduced waste diversion, administrative complexity and excessive costs, all of which would negatively impact the public and producers’ ability to meet their targets.**

The individual producer responsibility model envisioned in the proposed Waste Reduction Act presents a number of risks to municipalities related to administrative complexity and fragmentation of waste reduction programs. Municipalities could incur substantial additional administration costs dealing with multiple producers and/or intermediaries to be compensated for service delivery. Systems could become highly fragmented in a scenario where various producers/intermediaries pull materials away from Blue Box collection and other integrated programs. The result could be reduced diversion and increased costs to municipalities, as well as to Ontario businesses. The net result of Bill 91 must be increased diversion through improved consumer education and program performance. Measures to mitigate these risks should be considered and implemented as required. We also seek assurances that municipal costs for programs will be paid during the transition period, as outlined in Recommendation #4 below.

**Specific Recommendations On the Act and Strategy**

The two half-day municipal workshops on August 15th/16th noted above were used to develop specific requests from our member municipalities for key changes, additions and considerations related to the proposed Waste Reduction Act, the Waste Reduction Strategy, and future Regulations. This work is intended to provide the Ministry with a concise summary of our recommendations in key areas. We have deliberately kept our comments brief at this stage and look forward to providing more detailed information as the consultation process and hearings leading to final adoption of the Bill proceed.

**Bill 91: The Waste Reduction Act, 2013 Recommendations**

1. **A strong municipal role is critical to the success of waste reduction programs.**
   - It is important that the proposed Act be consistent with the Waste Reduction Strategy in recognizing the historic and central role for municipalities in waste diversion in Ontario. The Act should enable individual municipalities to choose the role, if any, they play in waste reduction programs, based on local factors such as interest, capabilities and residents’
expectations while maintaining the integrity of the overall system against harmful fragmentation.

- Municipalities should be able to opt out of providing waste diversion services, should they decide that it is in the best interests of local residents to do so, a position not currently available to municipalities with populations greater than 5,000 because of the requirements of Regulation 101/94.
- Clarification is required regarding potential benefits and disadvantages to municipalities of registering with the new Waste Reduction Authority.
- Municipalities also require clarity on the issue of ownership of materials collected through Blue Box programs. This should include a clear definition of the responsibilities of intermediaries vs. individual producers.

2. Effective processes need to be established to define reasonable costs and ensure expeditious compensation.

- A fair, transparent, multi-stakeholder process should be established to identify principles on which “reasonable costs” will be identified and compensation formulas defined and administered. This process should proceed regardless of whether Bill 91 passes, as the current Municipal Industry Program Committee process is unsatisfactory to all parties involved.
- Any changes to the manner in which municipalities are reimbursed for services delivered must ensure administrative simplicity for all parties.

3. The Waste Reduction Authority must be sufficiently resourced.

- We support creation of a new Authority responsible for enforcement to support changes in Ontario’s waste diversion system.
- The Authority requires adequate resources, including well-trained, professional staff and sufficient funding to maintain independent data sets, monitoring capability and to support evidence based decision making related to costs.
- The Municipal Datacall should be retained and managed by the Authority and expanded to include all designated materials from all sectors in Ontario. This is one of the best data sets on municipal waste management globally, and provides the Province of Ontario and all stakeholders with an outstanding tool for on-going monitoring of waste diversion performance, including designated and non-designated materials, organics, materials processed in energy from waste facilities and disposed of in landfills. This dataset is vital to inform policy development in Ontario in the future.
- The scope of responsibilities currently laid out for the Authority should be carefully considered. Providing policy advice to the Ministry is not considered a required responsibility for the Authority.
- A professional, highly trained, skills-based Board of Directors should be established for the Authority. The Board should be independent from specific, vested interests, as these interests will be represented in decision making through advisory bodies as outlined in the Act. The skills required as a Director of an enforcement body such as the proposed Waste Reduction Authority should be different from those of a producer or recycler.
Authority are quite different from those of Waste Diversion Ontario, which is charged with overseeing funding organizations and program plans.

4. **Payments to municipalities should be ensured during the transition to full producer responsibility.**
   - The Act addresses transition of existing industry funding organizations to new extended producer responsibility or individual producer responsibility programs run by producers and intermediaries. We require assurances from the Ministry that payments from producers for Blue Box collection and other extended producer responsibility programs will not be delayed, interrupted, reduced or compromised in any way during the transition period. Under individual producer responsibility, producer fees should cover 100% of program costs, so that municipal taxes are no longer needed to cover designated material recovery costs. We request development of a firm transition plan that ensures reimbursement flows to municipalities will be maintained until new funding arrangements are in place.

**The Waste Reduction Strategy Recommendations**

5. **Curbside “Blue Box” collection programs should be transitioned to 100% producer funding in a reasonable, yet expeditious time frame.**
   - We support an expedited multi-stakeholder process to facilitate design and implementation of a timely transition to 100% producer funding of the Blue Box program.
   - We recognize that changes in roles and responsibilities may be required and must be carefully considered and evaluated as part of the Blue Box transition process.
   - We are prepared to support harmonization of the list of materials collected by Blue Box programs across the Province as an important step in harmonizing the list of materials collected by programs across Canada.

6. **Municipal Hazardous and Special Wastes programs should all be 100% producer funded.**
   - We recommend that a process to re-instate producer funding for Phase 2 and Phase 3 Municipal Hazardous and Special Wastes materials be initiated as quickly as possible.

7. **Organics diversion planning and implementation should proceed in a timely manner.**
   - Development and implementation of a strategy for diversion of residential organics should proceed quickly; we consider the 4-year time frame proposed in the Strategy to be unnecessarily long in view of the great deal of work that has already been done in this area.
   - The strategy to divert organics from disposal must take into consideration the interests and concerns of rural and northern municipalities.
   - Anaerobic digestion should be designated as an acceptable processing option for achieving organics diversion targets. This process is similar to composting, but through the decomposition process, biogas containing methane (natural gas) is also produced, captured
and used to meet Ontario and municipal green energy targets. The solid digestate produced from anaerobic digestion can be composted or land-spread to add nutrients and carbon structure to Ontario farmland. This process is distinct from thermal energy-from-waste (EFW) technologies.

8. **Industrial, Commercial and Institutional materials diversion needs greater attention.**
- We support the designation of industrial, commercial and institutional (ICI) printed paper and packaging as the first step towards greater ICI diversion, but feel that targets for ICI printed paper and packaging should be set separately from residential targets.
- We are open to discussions regarding the potential roles of individual member municipalities in managing ICI printed paper and packaging and other newly designated materials from small businesses on municipal collection routes.

9. **Other designated materials should be addressed through a phased approach.**
- We support adding more designated materials to the regulatory process in Ontario.
- The Ministry should consider a phased approach to adding materials from the Canadian Council of Ministers of the Environment (CCME) Phase 2 EPR List to those which are regulated for EPR or IPR in Ontario. As an example, generator-funded construction and demolition waste diversion programs should be a priority target.

10. **Disposal bans should be considered under the right conditions.**
- Disposal bans should be implemented as appropriate to support waste diversion goals, provided that robust, sustainable alternatives are available for the diversion of banned materials. Bans should be implemented at transfer stations, energy from waste facilities and landfills in order to ensure the bans do not result in increased export to other jurisdictions. This approach is again consistent with the 2010 RPWCO submission to the Ministry on the review of Waste Diversion Act (EBR #010-8164).

11. **The “4 Rs” waste reduction hierarchy should be followed.**
- Consistent with CCME extended producer responsibility policy, alternative disposal systems including energy from waste systems should be included as the “4th R” (recovery). If a goal of waste reduction and diversion is to extend landfill capacity, materials processed through energy from waste should be counted toward diversion targets, provided they targets recognize the hierarchy of management options — i.e. recovery should be implemented only for materials for which no viable option is available for the first three R’s (reduction, reuse and recycling). We recognize that at this time, 3Rs systems cannot capture 100% of targeted materials.
Future Regulations under the Waste Reduction Act Recommendations

12. Development of Regulations under the Waste Reduction Act should include active consultations.
   - All stakeholders, including municipalities, must be actively engaged in the process of drafting future Regulations. Municipalities understand practical diversion service delivery to Ontario residents. This knowledge and experience is essential to developing a legislative and regulatory framework that will be practical and deliver positive environmental and economic outcomes for Ontario.

13. Waste diversion targets are critical to measuring performance and outcomes.
   - We have consistently called for material-specific waste reduction targets for all designated materials. It is especially important that the Province establish targets and that the proposed Waste Reduction Authority actively monitor targets for new designated materials in the IC1 streams. As mentioned earlier, we believe that separate targets should be set for residential and IC1 printed paper and packaging.
   - Transparent multi-stakeholder consultations will be essential in development of appropriate waste diversion targets.

14. Standards should include accessibility and promotion and education requirements.
   - Standards must be established for accessibility to waste diversion services across Ontario, convenience, and promotion and education requirements for program users.
   - Again, robust and effective multi-stakeholder consultations will be required in development of these standards.

15. Regulation 101/94 should be reviewed as part of this process.
   - We support review of Regulation 101/94 to ensure that it is consistent with the Province’s move toward full producer responsibility and to ensure alignment with the proposed Act.
   - We also request that provisions in the new Waste Reduction Act are in alignment with provisions in other Acts such as the Municipal Act and the Environmental Protection Act.

In closing, members of RWPCO, MWA and AMO view the proposed Waste Reduction Act and Strategy as vital steps toward full producer responsibility for products and packaging introduced into Ontario. In this submission we have outlined modifications that will be required to the new Act and steps that must be taken in development of Regulations and administrative systems that will address concerns of municipalities. We have also stressed the importance of an inclusive engagement process to ensure that all stakeholders in waste reduction work collaboratively for practical, sustainable solutions.
Efforts are underway by RPWCO, in partnership with MWA and AMO, to initiate and participate in discussions with other stakeholders. We look forward to working with the Ministry and our partners in industry to ensure the proposed Act and Strategy support our shared environmental and economic goals.

RWPCO, MWA and AMO would like to thank the Ministry for the opportunity to contribute to this timely and important initiative.

Yours truly,

Monika Turner
Director of Policy
Association of Municipalities of Ontario (AMO)

Shirley McLean, P. Eng
Supervisor, Waste Planning, Halton Region
Chair, Municipal Waste Association (MWA)

Erin Mahoney, M. Eng.
Commissioner, Environmental Services,
York Region
Chair, Regional Public Works
Commissioners of Ontario (RWPCO)
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: L04-20

SUBJECT: HIGHWAY 401 SERVICE CENTRES – WATER AND SEWER SERVICES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo enter into an agreement with HKSC Developments L.P. (“HKSC”), or an affiliated corporation, for the treatment of effluent created from the HKSC service center facilities on Highway 401 in the Township of Puslinch as described in Report CR-RS-13-078/E-13-107 dated September 10, 2013.

SUMMARY:

In 2010, the Province of Ontario embarked upon an upgrade program to redevelop a number of service centers within the Highway 400 and 410 corridors including the two facilities located east of Townline Road in the City of Cambridge. Part of the upgrading includes a requirement that the facilities be connected to new water and sewer systems meeting current provincial standards. HKSC, a private corporation and lessee of the highway corridor lands owned by the Province, is undertaking the development of these stations and is desirous of connecting to the Cambridge municipal water distribution system. Wastewater emanating from these service centers would ultimately be treated at the Galt Wastewater Treatment Plant (“the Plant”) owned by the Region. This report contains a recommendation that the Region enter into an agreement with HKSC to receive effluent from these facilities and impose a one-time Regional fee in connection with the permanent connection in lieu of development charges that would have been payable for similar developments constructed within the Region of Waterloo.

REPORT:

In 2010, the Province of Ontario commenced upgrading its service centers along the 400 and 401 corridors. The two service centers on the eastbound and westbound 401 just east of Townline Road are included in the upgrade program. A key element of the upgrading includes the requirement that these service centers be connected to new water and sewer systems that meet current Provincial standards. HKSC Developments L.P. is the private sector partner that is undertaking the redevelopment, as lessee from the Province of Ontario, of the two service centers located in the Township of Puslinch.
Regional staff has had a number of meetings with HKSC, City of Cambridge staff, Township of Puslinch Staff and representatives from the Ministry of Transportation regarding the requirements for providing a connection to the water and sanitary servicing infrastructure within the Region of Waterloo. Work on the water and sanitary sewer connection is currently underway and the City of Cambridge has granted approval for the execution of a servicing agreement with HKSC. HKSC will be responsible for all necessary infrastructure improvements to permit the connections and will be required to pay a one-time fee to the City of Cambridge of $50,000 to offset the costs of improvements and infrastructure assumption activities on the part of the City as it will assume that the ownership of the distribution infrastructure outside of the lands owned by the Province of Ontario.

It is anticipated that the work of installing the necessary sanitary servicing infrastructure will be completed in October of 2013. The HKSC service centers are already operational and effluent generated from these facilities is currently being trucked offsite outside of the Region of Waterloo pending the completion of the sanitary service connection. It is recommended that a legal agreement be signed by HKSC that will bind HKSC to the provisions of the Region’s Sewer Use By-law. The by-law contains a number of compliance and enforcement measures which ensure that effluent entering the treatment process does not exceed local and provincial standards.

Development that occurs within the boundaries of the Waterloo Region is assessed a development charge in accordance with the Regional Development Charge by-law at the time of building permit issuance. These charges are intended to be utilized to offset the cost of providing municipal services, including water supply and wastewater treatment infrastructure. In this instance, as the location of the service center facilities is outside of the Waterloo Region, no Regional development charge would have been assessed. It is recommended, as a result, that HKSC pay a one time fee of $137,313.05 in lieu of a Regional development charge calculated as follows:

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<th>Area (ft²)</th>
<th>Water DC $2.44/(ft²)</th>
<th>Wastewater DC $1.23/(ft²)</th>
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<td>New Building</td>
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<td>South (east bound)</td>
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<td>$36,612.20</td>
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<tr>
<td>Grand Total</td>
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<td>$137,313.05</td>
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</tbody>
</table>

The requirement to pay this fee will be included in the agreement to be signed by HKSC.

**CORPORATE STRATEGIC PLAN:**

This initiative supports Focus Area 5: Ensure Operational Effectiveness and Efficiency.
FINANCIAL IMPLICATIONS:

Water and sewer service will be paid by HKSC in accordance with the City of Cambridge standard rates for the provision of water and sewer services. The City of Cambridge estimates, based on a projected average flow rate, the monthly cost to HKSC will be approximately $22,400. In addition to any one-time fees that have been assessed by the City of Cambridge, this report recommends implementing a one-time Regional fee of $137,313.05 in lieu of Regional development charges.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Finance department has been consulted in connection with this report.

ATTACHMENTS:

NIL

PREPARED BY: Jeff Schelling, Solicitor, Corporate
               Kevin Dolishny, Senior Project Engineer

APPROVED BY: Gary Sosnoski, Commissioner, Corporate Resources
               Thomas Schmidt, Commissioner, Transportation and Environmental Services
Class Environmental Assessment for the Expansion of the New Hamburg Wastewater Treatment Plant

Public Consultation Centre No. 1
September 24, 2013
5:30 – 7:30 pm
Wilmot Recreation Complex, Baden
Purpose of the Study

- Expand the New Hamburg Wastewater Treatment Plant (WWTP) to 7.8 million litres per day (MLD)
- Complete:
  - Phases 3 and 4 of the Municipal Class EA
  - Receiving Water Quality Impact Study
  - Preliminary Design for the expanded New Hamburg WWTP
New Hamburg WWTP Location and Service Area
Purpose of Public Consultation Centre

- To present the background to this Class EA
- To present an overview of the study work plan and the Class EA process that is being followed
- To answer questions and outline next steps
- To obtain comments and feedback

Public input is an important component of the Class EA process. We welcome your comments and questions.
Background Information: Previous Study Results

- New Hamburg Baden WWTP Class EA (July 1997)
  - Decommission the Baden WWTP and construct a pumping station to deliver wastewater to an upgraded/expanded New Hamburg WWTP (completed by 2002)

- Region’s Wastewater Master Plan (2007)
  - Re-rate the WWTP from 5.2 MLD to 7.8 MLD (Phase 1)
  - Expand the WWTP to 10.5 MLD in 2026 to 2029 (Phase 2)
  - Assess the Assimilative Capacity of the Nith River

- Baden and New Hamburg Water and Wastewater Master Plan Update (2011)
  - Confirmed expansion of New Hamburg WWTP to 7.8 MLD by addition of an additional Sequencing Batch Reactor and other upgrades
  - More detailed River Impact Study required to assess the capacity of the Nith River
The New Hamburg-Baden area is designated as a growth area for both residential and employment land uses in Regional and Township plans. Expansion of the New Hamburg WWTP is necessary to provide wastewater treatment capacity to service the projected growth and to continue to protect the aquatic environment in the Nith River.
Plant Property and Surrounding Area

- Morningside Wastewater Pumping Station
- New Hamburg Wastewater Treatment Plant
- Nith River
Existing Site Layout

- **Filters and UV Disinfection**
- **Sequencing Batch Reactors**
- **Temporary Hauled Waste Receiving / Storage**
- **Emergency Storage Lagoon**
- **Aerobic Digesters**
- **Headworks & Administration Building**
- **Oxbow Discharge to Nith River**
- **Outfall and Parshall Flume**
Projected Population and Flows

- 2011 MP Flow Projection (High Estimate)
- 2013 Class EA Flow Projection (High Estimate)
- 2011 MP Flow Projection (Low Estimate)
- 2013 Class EA Flow Projection (Low Estimate)
Municipal Class EA Process

Phase 1: Identify Problem or Opportunity
Phase 2: Develop and Evaluate Alternative Solutions and Identify Preferred Solution
Phase 3: Develop and Evaluate Alternative Design Concepts for Preferred Solution and Identify Preferred Design
Phase 4: Environmental Study Report (ESR)
Phase 5: Implementation (Design and Construction)

Baden and New Hamburg Water and Wastewater Master Plan Update
Current Class EA Process

We Are Here
Key Work Plan Activities to Assess Environmental Impacts

- Meetings with key review agencies
- Review background data and reports to characterize existing conditions
- Develop inventory of downstream water users
- Conduct detailed field program, including water sampling program, to assess existing conditions in the Nith River and natural environment site conditions
- Undertake modelling to assess impacts of New Hamburg WWTP discharge on the Nith River
- Prepare updated Receiving Water Quality Impact Study of the Nith River
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<tr>
<td>Consider Comments Received at this PCC</td>
<td>October 2013</td>
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<tr>
<td>Update Receiving Water Quality Impact Study</td>
<td>Fall 2013 to Winter 2014</td>
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<tr>
<td>Public Consultation Centre No. 2 (to present alternative design concepts and preferred design)</td>
<td>Spring 2014</td>
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<tr>
<td>Issue Notice of Completion and Place Environmental Study Report on Public Record for 30 Day Review</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>Undertake Preliminary Design</td>
<td>Fall 2014 to Winter 2015</td>
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<tr>
<td>Detailed Design</td>
<td>2015 to 2016</td>
</tr>
<tr>
<td>Construction and Commissioning</td>
<td>2016 to 2019</td>
</tr>
</tbody>
</table>
The Region is Interested in Your Comments

Public input is an important component of the Class EA process. Please deposit your Comment Sheet in the box provided or forward to the Region.

Contact information:

David Arsenault  
Senior Project Engineer  
Regional Municipality of Waterloo  
Transportation and Environmental Services, Water Services  
150 Frederick Street, 7th Floor  
Kitchener, ON N2G 4J3  
519-575-4757, ext. 3682  
DArsenault@regionofwaterloo.ca

Stephen Nutt  
Project Manager  
XCG Consultants Ltd.  
820 Trillium Drive  
Kitchener, ON N2R 1K4  
519-741-5774  
StephenN@xcg.com

Thank You for Input and Participation
Class Environmental Assessment for the Expansion of the New Hamburg Wastewater Treatment Plant

Public Consultation Centre
Class Environmental Assessment for the Expansion of the New Hamburg Wastewater Treatment Plant

Public Consultation Centre
The Regional Municipality of Waterloo (Region) is undertaking a Class Environmental Assessment (EA) for the Expansion of the New Hamburg Wastewater Treatment Plant (WWTP). The New Hamburg WWTP provides wastewater treatment for the communities of Baden and New Hamburg in the Township of Wilmot (Township). Generally, sewage collection and intermediary pumping is the responsibility of the Township, while the final pumping and treatment are the responsibilities of the Region.

In 1997, a Class EA study examined wastewater servicing alternatives for the communities of Baden and New Hamburg. As a result, the formerly independent wastewater systems of Baden and New Hamburg were combined, the Baden WWTP was converted to a pump station, and the New Hamburg WWTP was upgraded to expand capacity and improve the level of treatment. This work was completed by 2002. Based on community growth projections, it was anticipated that another expansion would be needed by about 2016.

Subsequently, the Region completed a Wastewater Treatment Master Plan (WWTMP) in 2007 to identify and evaluate wastewater treatment projects, technologies and servicing strategies to meet its long term needs. The New Hamburg-Baden area is designated as a growth area for both residential and employment land uses, and further expansions and upgrades will be needed over time to accommodate the new growth and increased wastewater flow from the community.

The WWTMP identified a Phase 1 expansion of the New Hamburg WWTP to 7.8 million litres per day (MLD) and a Phase 2 expansion to 10.5 MLD with upgraded treatment as the preferred wastewater servicing alternative. The Master Plan also recommended that the Region update the 1997 Class EA and Nith River assimilative capacity study (water quality impact study) to confirm the level of treatment needed for the expansion.

More recently, in 2011, the Region completed the Baden and New Hamburg Water and Wastewater Master Plan Update. This Master Plan confirmed the strategy for the New Hamburg WWTP, as recommended in the 2007 WWTMP. Planning and design of the expansion is needed to ensure available capacity at the existing WWTP as growth in the community occurs.

The 2013 Class EA focuses on the Phase 1 expansion of the New Hamburg WWTP (i.e., expansion of the WWTP to 7.8 MLD), as recommended by the previous studies noted above.
What are the 2013 Class EA Objectives?

- Confirm the implementation strategy for the Phase 1 works recommended in the 2011 Baden and New Hamburg Water and Wastewater Master Plan Update, including:
  - the expansion of the New Hamburg WWTP to 7.8 MLD by the addition of an additional sequencing batch reactor (SBR) (processing tanks for the treatment of wastewater), increased filter capacity, screening improvements, and other upgrades to meet new regulations
  - the completion of a Receiving Water Quality Impact Study to confirm the capacity of the Nith River to receive additional effluent from the WWTP;
- Complete the preliminary design for the Phase 1 expansion of the New Hamburg WWTP.

Class Environmental Assessment Process

The study is being conducted in accordance with the requirements for a Schedule C project under the Municipal Class Environmental Assessment (EA) (Municipal Engineers Association, June 2000, as amended in 2007 and 2011). The study will complete Phases 3 and 4 of the Municipal Class EA, with Phases 1 and 2 of the Class EA process already completed through the 2011 Baden and New Hamburg Water and Wastewater Master Plan Update.
What are the Next Steps?

Comments and input received from this PCC will be used in the evaluation of alternative designs for the WWTP expansion. A second PCC will be held in 2014 to present the evaluation of alternative design concepts, river impact study findings and the preferred design for the expansion of the WWTP.

The public, stakeholders and government agencies will be notified prior to this second PCC which will solicit public input on the work completed during this phase of the study.

An Environmental Study Report (ESR) will be prepared summarizing the study process and results. The ESR will be made available to the public for a 30 day review and comment period. Following the public review and comment period, and approval by Regional Council, the Region will proceed to detailed design and construction of the WWTP upgrades, which are expected to be completed and in service around 2019.

Opportunities for Public Comment

**We are interested in receiving your input.** If you wish to comment on the Region of Waterloo Class EA for the Expansion of the New Hamburg WWTP, obtain additional information, or be placed on the mailing list to receive future study notifications, please contact either of the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Mr. David Arsenault</td>
<td>Senior Project Engineer</td>
<td>Water Services, Region of Waterloo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 Frederick Street, 7th Floor</td>
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<tr>
<td></td>
<td></td>
<td>Kitchener, Ontario, Canada, N2G 4J3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phone: (519) 575-4757, ext. 3682</td>
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<tr>
<td></td>
<td></td>
<td>Fax: (519) 575-4452</td>
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<tr>
<td></td>
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<td>E-mail: <a href="mailto:darsenault@regionofwaterloo.ca">darsenault@regionofwaterloo.ca</a></td>
</tr>
<tr>
<td>Mr. Stephen Nutt</td>
<td>Consultant Project Manager</td>
<td>XCG Consultants Ltd.</td>
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<tr>
<td></td>
<td></td>
<td>820 Trillium Drive</td>
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<td></td>
<td>Kitchener, Ontario N2R 1K4</td>
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<tr>
<td></td>
<td></td>
<td>Phone: 519-741-5774</td>
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<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:StephenN@xcg.com">StephenN@xcg.com</a></td>
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</tbody>
</table>

Additional information on the Class EA for the Expansion of the New Hamburg WWTP study is posted on the Region’s web site, and will be periodically updated, at: [http://www.regionofwaterloo.ca/en/aboutTheEnvironment/Wastewater2.asp](http://www.regionofwaterloo.ca/en/aboutTheEnvironment/Wastewater2.asp).
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR JULY 2013

RECOMMENDATION:


SUMMARY:

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

- Accepted the following plans of condominiums;
- Draft approved the following plan of condominium;
- Released for registration the following plan of condominium; and
- Approved the following official plan amendment.

REPORT:

City of Cambridge

Plan of Condominium Application 30CDM-13102
Date Accepted: July 9, 2013
Applicant: 860634 Ontario Limited
Location: 405 Holiday Inn Drive
Proposal: To permit the conversion of an existing three storey 30 unit apartment building into 30 residential condominium apartment units.
Regional Processing Fee: Paid June 26, 2013

Plan of Condominium Application 30CDM-13103
Date Accepted: July 19, 2013
Applicant: Mattamy (Hespeler) Limited
Location: 125 Black Bridge Road
Proposal: To permit the development of 13 residential townhouse condominium units.
Regional Processing Fee: Paid July 18, 2013
Plan of Condominium Application 30CDM-13104
Date Accepted: July 25, 2013
Applicant: Granite Homes Cambridge Inc.
Location: 635 Saginaw Parkway
Proposal: To permit the development of 90 residential townhouse condominium units.
Regional Processing Fee: Paid June 24, 2013

Plan of Condominium Application 30CDM-13105
Date Accepted: July 25, 2013
Applicant: Old Galt Lofts Inc.
Location: 24 Cedar Street
Proposal: To permit the conversion of a vacant three storey industrial building into 27 residential apartment condominium units.
Regional Processing Fee: Paid July 9, 2013

Draft Approval of Plan of Condominium 30CDM-13101
Applicant: Aberdeen Homes
Location: 10 Cheese Factory Road
Proposal: To approve the development of 24 residential apartment condominium units and 8 residential townhouse condominium units.
Regional Processing Fee: July 17, 2013
Commissioner’s Approval: July 29, 2013
Came Into Effect: August 19, 2013

Registration of Draft Plan of Condominium 30CDM-09102
Draft Approval Date: June 28, 2010
Phase: Phase 3 (Final)
Applicant: 723033 Ontario Ltd.
Location: 35 Greengate Boulevard
Proposal: To permit the development of 4 residential townhouse condominium units.
Regional Processing Fee: Paid July 15, 2013
Commissioner’s Release: July 25, 2013

City of Kitchener

Official Plan Amendment No. 97
Applicant: 2335945 Ontario Inc.
Location: 445 King Street West
Proposal: To add Special Policy 51 to the existing City Official Warehouse District designation to broaden the range of permitted uses, including permission for the full range of retail uses, residential, increase the maximum floor space ratio of 7.5 and to establish special policy direction of the development of the subject lands.
Regional Processing Fee: Paid July 8, 2013
Commissioner’s Approval: July 17, 2013
Came Into Effect: August 7, 2013
Township of North Dumfries

Official Plan Amendment No. 20

Applicant: J. M. Michael
Location: 1535 New Dundee Road
Proposal: To permit the operation on a golf driving range and accessory land use activities on a 5.16 hectare area of land within an ‘Agricultural Resource Area’.

Regional Processing Fee: Paid June 18, 2013
Commissioner’s Approval: July 31, 2013
Came Into Effect: August 26, 2013

Residential Subdivision Activity January 1, 2013 to July 31, 2013

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<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
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<td>734</td>
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*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

For comparison, the following table has also been included:

Residential Subdivision Activity January 2012 to July 31, 2012

<table>
<thead>
<tr>
<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 Consultations/Coordination:

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

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

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

PREPARED BY: Andrea Banks, Program Assistant

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

DATE: September 10, 2013

FILE CODE: D04-30/LAURELCREEK

SUBJECT: LAUREL CREEK HEADWATERS ENVIRONMENTALLY-SENSITIVE LANDSCAPE PUBLIC LIAISON COMMITTEE FIFTH ANNUAL REPORT 2012

RECOMMENDATION:

For information.

SUMMARY:

Since it was established in 2007 as part of a settlement of the appeal of Regional Official Policies Plan Amendment 22 (designation of the first two Environmentally Sensitive Landscapes), the Laurel Creek Headwaters Environmentally Sensitive Landscape Public Liaison Committee has been meeting regularly throughout each year; in 2012 it met six times. At the April 18, 2013 meeting, the Committee adopted the attached annual report on its activities for the year 2012 for submission to Regional Council as required by its approved Terms of Reference. The annual report is attached and lists some of the Committee’s major achievements in 2012.

REPORT:

On December 4, 2007, Regional Council established the Laurel Creek Headwaters Environmentally Sensitive Landscape Public Liaison Committee pursuant to Minutes of Settlement endorsed by Council on August 23, 2007, and subsequently accepted by the Ontario Municipal Board. The minutes of Settlement resolved the appeal by the Environmentally Sensitive Property Owners (ESPO) and Wilhard Barth of Regional Official Policies Plan (ROPP) Amendment No. 22 which designated the first two Environmentally Sensitive Landscapes (ESLs). The ESL Public Liaison Committee consists of twelve members. Nine are residents or landowners within the Laurel Creek Headwaters Environmentally Sensitive Landscape. The additional three members are representatives of the Waterloo Stewardship Network, an agricultural organisation, and the Ecological and Environmental Advisory Committee. Section 6 of the Committee’s Terms of Reference require submission of an annual report to Council on its activities over the previous year. At the April 18, 2013 meeting, the Committee endorsed Attachment 1 as its fourth annual report to Regional Council.

In 2012 the Committee was made up of the following members:

- Leanne Baer, Wellesley Township landowner
- Wilhard Barth, Wilmot Township landowner
- Bruce Bieth, Wellesley Township landowner
- Dianne Ensing, Wilmot Township landowner, Committee Vice-chair
- Blair McKay, Wellesley Township landowner
- Ed Ries, Wilmot Township landowner
- Jane Schneider, Wilmot Township landowner
- Deb Swidrovich, City of Waterloo landowner
- Kevin Thomason, Wilmot Township landowner
The three other members nominated by their organizations are:

- Ron Weber  National Farmers Union of Canada
- Stephen May   Waterloo Stewardship Network, Committee Chair
- Greg Michalenko  Ecological and Environmental Advisory Committee

At the beginning of 2012, Steve May of the Waterloo Stewardship Network and Dianne Ensing, a Wilmot Township landowner, were re-elected as Committee Chair and Vice-chair respectively. However, in the fall of 2012, Steve May stepped down from the Committee due to a work re-assignment resulting from reduced MNR funding to stewardship programs.

The Public Liaison Committee met six times in 2012. As has been the case in previous years, the primary location for the meetings was the Kitchener-Waterloo Optimist Club’s Camp Heidelberg, Kressler Road, Woolwich Township within the ESL. This annual report documents highlights from the Committee’s fifth year of operation including:

Review of Committee Goals and Objectives - During 2012, the Committee reviewed the genesis of the ESL and the formation of the ESL Committee and its terms of reference (dated July 26, 2007). The Committee also had some discussion regarding its interaction with the area municipalities and particularly with internal divisions or departments such as planning.

Raising Awareness of the Laurel Creek Headwaters ESL - As part of the review of its mandate, the Committee felt that it was important to increase its communications efforts in the community within and adjacent to the ESL. With construction of the new developments backing on to ESL underway, there will soon be a large potential audience interested in learning about the ESL.

ESL survey - Based on the discussions centered around providing information to residents within and adjacent to the ESL, the Committee began drafting a survey to be sent to all residents within the ESL with the intent of discovering what the community’s level of knowledge is about ESL, the work of the ESL Committee, and what the residents might be interested in and/or concerned with regarding the ESL.

Monastery Creek Report - Ongoing streambank erosion and subsequent siltation in Monastery Creek resulted in the preparation of a consultant’s report outlining potential mitigation strategies. In order to assist with costs, an application was made to the Region’s Community Environmental Fund (CEF) program and $4000 was awarded.

Changes to Ontario Stewardship and the Waterloo Stewardship Council - Late in 2012, it was announced that as part of the Ministry of Natural Resources’ Transformation Plan, the Ontario Stewardship Program would be discontinued. The resulting changes within the Waterloo Stewardship Network, included its incorporation as a new legal entity the Waterloo Stewardship Council (WSC). The WSC has expressed interest in maintaining a relationship with the ESL Committee, and nominated a representative to sit on the ESL Committee as a replacement for Steve May who has served as the Chair of the ESL Committee since its inception.

ESL Signs - The final five signs were completed late in 2012. Four of the signs will be placed at key roadside locations indicating the approximate boundary of the ESL, and the last sign will be kept as an extra in the event that a replacement should be required at some time in the future.

Wilmot Line - The Committee determined that one of its areas of efforts should be to enter into the discussions taking place around the management of the Wilmot Line as traffic is perceived to have increased and as adjoining lands in the City of Waterloo are being developed for new subdivisions. The Committee decided to prepare a statement to clearly articulate the issues and to support a multi-jurisdictional approach to managing the road in the future. Subsequently,
Regional Council endorsed an application to the province for funding from the Provincial Places to Grow Implementation Fund. The funding would support completing a study on Balancing Environmental Protection and Transportation Considerations in Environmentally Sensitive Landscapes (Report P-13-055, May 28, 2013). The study would be multi-faceted, involving transportation (vehicular, bicycle and pedestrian traffic, safety, parking and signage), wildlife movement (particularly the extent to which animals are being injured or killed at road crossing locations, and potential mitigation measures) and environmental impacts (e.g. sedimentation, salt and other road-based contaminants on the water quality of Laurel and Monastery Creeks).

Presentations - Throughout 2012, a number of presentations were made to the Committee on matters of concern and interest to the ESL. One of the presentations was made by T. Schwan (MNR) on the Managed Forest Tax Incentive Program (MFTIP) and the Conservation Land Tax Incentive Program (CLTIP). In addition, the Operating Management Plan for Townline Regional Forest, which is located within the ESL, was presented to the Committee by Regional staff Albert Hovingh.

In addition to the work carried out in 2012, the report also looks ahead to activities planned for 2013 including

Stewardship Projects - A number of stewardship projects that were started in previous years will require some upkeep and maintenance. Roadside plantings will require tending and with the changed structure of the Waterloo Stewardship Council, these activities may well require volunteer efforts on behalf of the ESL Committee or the coordination of volunteers from the community.

Survey and Newsletter - Once the survey is completed, it will be included with an ESL newsletter distributed to residents within and adjacent to the Laurel Creek Headwaters ESL. The results will be used to inform the Committee as to next steps and future activities to promote stewardship efforts within the community.

The Committee remains active and continues to look for ways to promote the features and stewardship values of the ESL. By working closely with the local residents the Committee seeks to ensure that the special character of the landscape is protected and enhanced. The installation of the final road signs should result in an increased awareness of the ESL and also offers the potential to raise the profile of the ESL with passers by on the major entry points into the ESL.

Area Municipal Consultation/Coordination

The Annual Report will be provided to the City of Waterloo, and the townships of Wilmot, Woolwich and Wellesley. Committee members and support staff have collaborated with Area Municipalities to identify appropriate locations for the installation of the distinctive new ESL signage. A draft copy of this report was circulated to all Area Municipalities.

CORPORATE STRATEGIC PLAN:

The work of the Committee helps achieve the Strategic Objective of preserving sensitive environmental areas within the Laurel Creek Headwaters Environmentally Sensitive Landscape. It also seeks to achieve the Strategic Objective of strengthening and enhancing partnerships with community stakeholders as the Region works to meet the needs and expectations of the community.
FINANCIAL IMPLICATIONS:

The Committee does not have a specific budget allocation at this time. The production of the first ESL signs was financed from the Environmental Stewardship Fund. The Committee meets at the Optimist Club of Kitchener-Waterloo’s facility near Heidelberg and the Planning, Housing, and Community Services Department makes a voluntary contribution to the club to help cover the cost of providing heat and light for the meeting space.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services staff will be consulted with regard to the installation of the new ESL signage on Regional roadsides at entrances to the Laurel Creek Headwaters ESL.

ATTACHMENTS:

Attachment 1 - Laurel Creek Headwaters Environmentally Sensitive Landscape Public Liaison Committee Fifth Annual Report (Spring 2013).

PREPARED BY: Albert Hovingh, Principal Planner, Environmental and Stewardship Planning

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
ATTACHMENT 1

LAUREL CREEK HEADWATERS
ENVIRONMENTALLY SENSITIVE LANDSCAPE

PUBLIC LIAISON COMMITTEE

FIFTH ANNUAL REPORT

Submitted to the Council of
The Regional Municipality of Waterloo

Spring 2013
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Note: All images in this report were taken in and near the Laurel Creek Headwaters ESL and were taken by Deb Lehman who is a resident of the Region of Waterloo and a frequent traveler through the ESL and adjacent countryside.
1. Introduction

The Laurel Creek Headwaters Environmentally Sensitive Landscape Public Liaison Committee was established by Regional Council on December 12, 2007 pursuant to Minutes of Settlement to resolve an appeal by some local landowners of Regional Official Policies Plan Amendment 22 to designate the first two Environmentally Sensitive Landscapes (ESLs), known such as Laurel Creek Headwaters and Blair-Bechtel-Cruickston. The Committee’s mandate is “to serve as a community-based forum to monitor, discuss and provide periodic advice to the Region on how best to implement the objectives of the Regional Planning Policies for the Laurel Creek Headwaters Environmentally Sensitive Landscape (ESL).” It is intended to foster constructive dialogue amongst the Region, local property owners, farmers, local businesses, and other stakeholders and interested parties within the ESL. The Committee also advises Regional staff on how best to implement the ESL policies and address related issues as they arise.

The Committee advises Regional staff on the development of an Implementation Guideline for the ESL. To accomplish this, the Committee is working to:
- develop tools for enhancing natural features within the ESL, and connectivity among them;
- explore opportunities to promote informed private land stewardship to achieve environmental protection and conservation objectives;
- assess impacts resulting from recreational uses or major proposals to extract water within the ESL;
- explore and report on options to fund and purchase lands for conservation purposes; and
- address other relevant issues of concern to residents and property owners within the ESL.

The Terms of Reference require the Committee to submit an annual report of its activities. This is the fourth such annual report to be submitted to Regional Council.

The ESL Public Liaison Committee consists of twelve members. Nine are residents or landowners within the Laurel Creek Headwaters Environmentally Sensitive Landscape. The additional three members are representatives of the Waterloo Stewardship Network, an agricultural organisation, and the Ecological and Environmental Advisory Committee. In 2012 the Committee was made up of the following members:

Leanne Baer  Wellesley Township landowner
Wilhard Barth  Wilmot Township landowner
Bruce Bieth   Wellesley Township landowner
Dianne Ensing  Wilmot Township landowner, Committee Vice-chair
Blair McKay  Wellesley Township landowner

Laurel Creek (photo: D. Lehman) Garter Snake (photo: D. Lehman)
Ed Ries    Wilmot Township landowner
Jane Schneider Wilmot Township landowner
Deb Swidrovich City of Waterloo landowner
Kevin Thomason Wilmot Township landowner

The three other members nominated by their organizations are:

Ron Weber    National Farmers Union of Canada
Stephen May Waterlo Stewardship Network, Committee Chair
Greg Michalenko Region of Waterloo, Ecological and Environmental Advisory Committee

At the beginning of 2012, Steve May of the Waterloo Stewardship Network and Dianne Ensing, a Wilmot Township landowner, were re-elected as Committee Chair and Vice-chair respectively. However, in the fall of 2012, Steve May stepped down from the Committee due to a work re-assignment. Dianne Ensing assumed Committee Chair responsibilities for the duration of 2012.

The Public Liaison Committee met six times in 2012. The Committee is appreciative of the KW Optimist Club for allowing us to use their Camp Heidelberg facilities for our meetings.

Staff from the Region’s Planning, Housing, and Community Services Department provide ongoing support functions to the Committee.

2. **Laurel Creek Headwaters ESL**

Straddling the northern end of the Waterloo Moraine in the Townships of Wellesley, Wilmot and Woolwich and the northwest corner of the City of Waterloo, Laurel Creek Headwaters is a 2,043 hectare rolling landscape punctuated by three small kettle lakes, Bamberg Bog Lake, Paradise Lake and Sunfish Lake. The latter is a rare meromictic lake. Most of the landscape is drained by Laurel Creek and its tributaries, Beaver Creek and Monastery Creek. The western part of the landscape drains to tributaries of Bamberg Creek, and the extreme northern part around Paradise Lake to Martin Creek. Significant reaches of Laurel Creek and its major tributaries support coldwater fisheries.

Rolling topography and extensive wetlands make much of the area unsuitable for agriculture, and so a significant proportion of the landscape has been left in its natural state. The natural areas within this landscape consist of a mix of upland and lowland forest. Upland forests are dominated primarily by Sugar
Maple and Beech. Associated with this are some long-established Hemlock stands. Most of the wetlands are Provincially Significant, and typically consist of fine cedar swamps. Other swamp communities associated with the creek systems consist of high quality Tamarack swamp, Hemlock-Cedar-Balsam Fir-Yellow Birch wetland forest, and Silver Maple swamp. There are also small areas of marsh and open wet meadows. The area has been observed to sustain many significant species of plants and animals.

In addition to a number of farms, the area contains many rural residences on smaller properties. Whether their properties are large or small, however, local landowners demonstrate a commitment to the stewardship of their lands and the natural features upon them.

3. **Activities Undertaken in 2012**

3.1 **Monastery Creek Report**

Ongoing streambank erosion and subsequent siltation problems in Monastery Creek resulted in the preparation of a consultant’s report outlining potential mitigation strategies. However, before any conceptual designs can be prepared based on the recommendations, some discussion is required with the adjoining landowner to get their concurrence. The report also stated that ongoing stewardship by all landowners will be crucial to success of any work undertaken. The report indicated that there is no low cost, low tech approach to solving the problems at Monastery Creek, and that heavy equipment and some major earthwork is required. In order to assist with costs, an application was made to the Region’s Community Environmental Fund (CEF) program and $4000 was awarded.

Run-off and washouts on the development property across Wilmot Line may have aggravated erosion and erosion control in the area needs to be reviewed. It appears that the developers are trying to get some earthworks completed prior to shutdown of operations for migratory bird season.
3.2 Review of Committee Goals and Objectives

During 2012, the Committee reviewed the genesis of the ESL and the formation of the ESL Committee and its terms of reference (dated July 26, 2007). Some discussion was held regarding the distinction between advisory Committees and liaison Committees with regard to their relationship with Regional government. The ESL Committee’s roles and responsibilities include bringing forward stakeholder issues and disseminating information regarding land use issues. The Committee also had some discussion regarding its interaction with the Area Municipalities and particularly with internal divisions or departments such as planning. The Committee wondered how they might best be able to increase communication with Township staff. In particular, the Committee was interested in having information from local townships circulated to the Committee on matters relevant to the ESL. Of particular interest to the Committee was that the townships will be reviewing their Official Plans and this might be an opportunity for ESL Committee and individuals to get involved in process.

Future action in this matter will be to inquire if representatives could speak to the Committee.
3.3 Raising Awareness of the Laurel Creek Headwaters ESL
As part of the review of its mandate, the Committee felt that it was important increase its communications efforts in the community within and adjacent to the ESL. With construction of the new developments backing on to ESL underway, there will soon be a large potential audience interested in learning about the ESL. The Committee wondered about having the City of Waterloo brochure about living next to environmentally sensitive lands reprinted by either the city or by the ESL Committee.

In addition to providing general information to homeowners, the Committee felt that they could pay a role in providing information about the Region’s Community Environmental Fund and potential opportunities for farm and non-farm opportunities to obtain funding.

3.4 ESL survey
Based on the discussions centered around providing information to residents within and adjacent to the ESL, the Committee began drafting a survey to be sent to all residents within the ESL with the intent of discovering the extent of the community’s knowledge about the ESL, the work of the ESL Committee, and what the residents might be interested in and/or concerned with regarding the ESL.

3.5 Changes to Ontario Stewardship and the Waterloo Stewardship Council
Late in 2012, it was announced that as part of the Ministry of Natural Resources’ Transformation Plan, the Ontario Stewardship Program would be discontinued. This resulted in some changes within the Waterloo Stewardship Network, including its incorporation as a unique legal entity named the Waterloo Stewardship Council (WSC). The Council will continue as an independent organization and carry out the same kind of projects as before although there will be some changes required. The WSC is also interested in maintaining a relationship with the ESL Committee, and indicated that they would nominate a representative to sit on the ESL Committee as a replacement for Steve May who has served as the Chair of the ESL Committee since its inception.

3.6 ESL Signs
The final five signs were completed late in 2012. Four of the signs will be placed at key roadside locations indicating the approximate boundary of the ESL, and the last sign will be kept as an extra in the event that a replacement should be required at some time in the future. The Region’s sign installers are prepared to install the signs at previously agreed upon locations, bringing the total number of signs to nine.

3.7 Wilmot Line

<table>
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<th>Jack-in-the- Pulpit (photo: D. Lehman)</th>
<th>Red Trillium (photo: D. Lehman)</th>
<th>Showy Lady’s Slipper (photo: D. Lehman)</th>
</tr>
</thead>
</table>
The Committee determined to adopt a proactive rather than reactive approach to the discussions taking place around the Wilmot Line and that it should be. As part of this endeavour, the Committee decided that it would attempt to get out the message that paving Wilmot Line is an environmental issue. The Committee came to the conclusion that it would be best to have a comprehensive transportation study of the eastern part of the RESL and surrounding areas in order to inform the process.

The concern to the Committee is that they feel the issue is broader than Wilmot Line – it’s the increased use of all roads through ESL as surroundings are developed. How could this be addressed? Can roads in ESL be made less attractive to vehicular traffic? The Committee feels that the Wilmot line is a symptom rather than the issue and that the question is how to protect the ESL as a landscape feature, rather than trying to protect individual features.

The Committee decided to prepare a statement paper to clearly articulate the issues and to recommend a multi-jurisdictional approach to solution. A sub-Committee was struck to develop the position paper and to present the big picture view that could be presented to local councils and eventually to Regional Council for consideration.

3.8 Presentations
Throughout 2012, a number of presentations were made to the Committee on matters of concern and interest to the ESL. One of the presentations was made by Terry Schwan (MNR) on the Managed Forest Tax Incentive Program (MFTIP) and the Conservation Land Tax Incentive Program (CLTIP). The presentation generated discussion regarding tax levels on properties in Waterloo, Wellesley, Wilmot and adjacent areas and how they are affected by management and agricultural practices.

The Operating Management Plan for Townline Regional Forest which is located within the ESL was presented to the Committee by Albert Hovingh (Regional staff). The management plan includes improved access and visibility to the property by means of an addition to the walking trail within the forest and the installation of an informational sign kiosk at the entrance on Cedar Grove Road. Committee members noted that hunting and trespassing are problems within the ESL and that improving access to and increasing the visibility of the Regional Forest might aggravate undesirable use especially by ATVs.

4. Activities Planned for 2013
4.1. Stewardship Projects
A number of stewardship projects that were started in previous years will require some upkeep and maintenance. Roadside plantings will require tending and with the changed structure of the Waterloo Stewardship Council, these activities may well require volunteer efforts on behalf of the ESL Committee or the coordination of volunteers from the community.
4.2. **Survey and Newsletter**
Once the survey is completed, it will be included with an ESL newsletter distributed to residents within and adjacent to the Laurel Creek Headwaters ESL. It is hoped that some useful information can be gleaned and used to inform the Committee as to next steps and future activities to promote stewardship efforts within the community.

5. **Conclusion**
The Committee remains active and is dedicated to promoting the features and stewardship values of the ESL and working with the local residents to ensure that the special character of the landscape is protected and enhanced. The Committee is looking forward to an increased awareness of the ESL as the final roadside signs are installed in 2013.

Respectfully submitted,

Dianne Ensing, Vice-Chair (2012)
Laurel Creek Headwaters Environmentally Sensitive Landscape Public Liaison Committee

April 18, 2013

| Red-bellied Woodpecker (photo: D. Lehman) | American Kestrel (photo: D. Lehman) | Hummingbird (photo: D. Lehman) |
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: D07-40

SUBJECT: BUILDING PERMIT ACTIVITY - JANUARY TO JUNE 2013

RECOMMENDATION:

For information.

SUMMARY:

This interim report on building permit activity in the Region covers the first half of 2013. It reflects building permit data related to new construction (as provided by the Area Municipalities) for the period of January to June 2013, net of cancellations. A subsequent year-end report on building permit activity will be compiled in early 2014, providing a summary of 2013 with comparisons to previous years, and further analysis.

The first half of 2013 showed slight tapering in the overall value of new construction. The total value of new building permits issued across Waterloo Region was $397.6 million, comprised of $128.6 million in the non-residential sector and $269 million in the residential sector. This represents a decrease of 13% from the first half of 2012.

However, residential building permit activity across the Region in the first half of 2013 was generally consistent with the level of activity seen in the first half of 2012. Residential permits were issued for 1,361 units in the first half of 2013, up 9.5% from the 1,243 units in the first half of 2012. The value of these permits decreased 2% to $269 million from $274.5 million. The mix of residential types changed from the first half of 2012, with apartments and semi-detached increasing and singles and townhouses decreasing.

Canada Mortgage and Housing (CMHC) reported that housing starts trended lower in the Region in the first half of 2013 when compared with units built in the same period of 2012. While starts in the first quarter were low, CMHC describes the second quarter as a reversal from the downward trend that started in the fourth quarter of 2011. CMHC projects that single-detached starts will decline by 8%, and apartment starts will decline by 35% in 2013. However, CMHC projects that starts will move higher in 2014 as increases in young adult households, immigrants, downsizing seniors and one-person households will support longer-term apartment construction.

New non-residential floor space decreased 33% to 586,321 square feet from 878,234 square feet in the first half of 2012. The value of non-residential permits issued in the first half of 2013 decreased 30% to $128.6 million from $183.3 million in the same period in 2012. Notable non-residential projects in the first half of 2013 include permits for a $37.5 million science building located at the University of Waterloo, a $15 million addition to an existing warehouse in Waterloo, and a $9.5 million four-storey Homewood Suites Hotel in Woolwich.
REPORT:

Building permit activity is an indicator of the strength of the economy. This report summarizes building activity in both the residential and non-residential sectors for each Area Municipality in Waterloo Region, for the first half of 2013 (January to June). Building activity data for the same period in 2012 is provided for comparison. These figures are compiled by Planning, Housing and Community Services staff, based on data supplied by the Area Municipalities.

Total Value of New Construction

The first half of 2013 showed slight tapering in the overall value of new construction. The total value of new building permits issued across Waterloo Region was $397.6 million, comprised of $269 million in the residential sector, and $128.6 million in the non-residential sector. This represents a decrease of 13% from the first half of 2012. The change in residential and non-residential activity by type is summarized in Figure 1.

Figure 1: Summary of Building Permit Activity (January – June)

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<td></td>
<td>586,000</td>
<td>586,000</td>
<td>-30%</td>
<td>-33%</td>
</tr>
<tr>
<td>Total Value</td>
<td>$457.9</td>
<td>$397.6</td>
<td>$-60.3</td>
<td>-13%</td>
</tr>
</tbody>
</table>

While the total value of new construction in the first half of 2013 is down compared to the first half of 2012, it is consistent with construction activity seen in recent years, as shown in Figure 2, with the exception of two high activity years in 2010 and 2011.
Building Activity in the Non-Residential Sector

There were fewer non-residential building permits issued in the first half of 2013 compared to the same period in 2012. Construction value was higher in Waterloo, Wellesley, Wilmot and Woolwich in the first half of 2013 as compared to the first half of 2012, while construction value was lower in Cambridge, Kitchener, and North Dumfries, as shown in Figure 3 and Figure 4. Overall, the value of non-residential building permits decreased by 30% to 128.6 million from 183.4 million in the first half of 2012. Non-residential building activity can be highly variable from year to year.

The highest construction values for a project in the first half of 2013 by type are:

- **Institutional** - $37.5 million for a science building located at the University of Waterloo
- **Commercial** - $9.5 million for a four-storey Homewood Suites Hotel at 45 Benjamin Road in Woolwich
- **Industrial** - $15 million for an addition to an existing warehouse owned by Ontario Culvert and Metal at 435 Phillip Street in Waterloo

Non-residential floor space was down compared to the same period in 2012 in all Area Municipalities except for Wellesley and Wilmot, as Figure 5 and Figure 6 show. Overall, total floor space decreased by 33% from 878,234 square feet in the first half of 2012 to 586,321 square feet in the first half of 2013.
As illustrated in Figure 7, industrial building permits accounted for 13% of total floor space in the first half of 2013; commercial accounted for 46%; and institutional accounted for 41%. Figure 8 provides a summary of new non-residential floor space by type and by Area Municipality.

Figure 7: Distribution of Non Residential Floor Space in the First Half of 2013

![Pie chart showing industrial (13%), commercial (46%), and institutional (41%) floor space.]

Figure 8: Total New Non-Residential Floor Space (square feet) by Type, January – June

<table>
<thead>
<tr>
<th></th>
<th>Industrial</th>
<th>Commercial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>2,223</td>
<td>4,819</td>
<td>14,799</td>
<td>50,225</td>
</tr>
<tr>
<td>Kitchener</td>
<td>27,159</td>
<td>28,760</td>
<td>34,847</td>
<td>40,170</td>
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<tr>
<td>Waterloo</td>
<td>22,852</td>
<td>19,632</td>
<td>188,726</td>
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<tr>
<td>North Dumfries</td>
<td>28,860</td>
<td>2,700</td>
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<tr>
<td>Wellesley</td>
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<td>Wilmot</td>
<td>1,535</td>
<td>0</td>
<td>1,489</td>
<td>2,724</td>
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<tr>
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<td>43,468</td>
<td>11,504</td>
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</tr>
<tr>
<td>Region</td>
<td>129,664</td>
<td>74,624</td>
<td>345,075</td>
<td>272,240</td>
</tr>
</tbody>
</table>

Building Activity in the Residential Sector

The total value of residential building activity in the first half of 2013 was consistent with the same period in 2012. While residential building activity fell in most Area Municipalities in the first half of 2013, there was greater activity in the City of Waterloo, as Figure 9 and Figure 10 show. Overall, the value of residential building permits decreased by 2% to $269 million from $274.5 million in the first half of 2012.
While the total value of residential building activity in the first half of 2013 was similar to the first half of 2012, the value was achieved through a mix of residential types that was different. Compared to the first half of 2012, the construction value of apartments and semi-detached units increased by 88% and 39% respectively, while the value of singles and townhouses fell by 26% and 37% respectively.

Among high-value residential projects is a 9-storey apartment building with 168 units at 280 Phillip Street in Waterloo, a 16-storey apartment building with 121 units at 200 Old Carriage Drive in Kitchener, and a 4-storey, 56-unit condominium apartment building at 505 Margaret Street in Cambridge.

There was an increase of 118 residential units in the first half of 2013 compared to the same period in 2012. Overall, the number of residential units increased by 9.5% to 1,361 from 1,243 in the first half of 2012. While there was greater activity in the City of Waterloo, new residential units fell in most area municipalities in the first half of 2013, as shown in Figure 11 and Figure 12.

The increase in units from the first half of 2012 is a result of an 83% increase in apartment units and a 61% increase in semi-detached offset by a 28% decrease in singles and 33% decrease in townhouses. In the first half of 2013, 30% (410) of new residential units were single detached, 5% (74) were semi-detached, 12% (159) were townhouse units, and 53% (710) were apartment units, as displayed in Figure 13. Figure 14 provides a summary of new residential units by type and by Area Municipality.
CMHC reported in its Housing Now publication that total starts in the Kitchener-Cambridge-Waterloo CMA (Census Metropolitan Area) were lower in first and second quarters of 2013 when compared with the units built in the same period of 2012. While starts in the first quarter remained low, CMHC describes the second quarter as a reversal from the downward trend observed over the last six quarters. The report states that while there were a greater number of apartment starts in the first half of 2013, they did not offset the fewer starts of all other housing types. CMHC projects in its Housing Market report that single-detached starts will decline by 8% and apartment starts will decline by 35% in 2013. However, CMHC projects starts in 2014 should move higher as increases in young adult households, immigrants, downsizing seniors and one-person households will support longer-term apartment construction.

It is important to note that there are several differences between the statistics reported by CMHC and those found in this report. The first difference is that this report is for all seven Area Municipalities, whereas CMHC reports on the Kitchener-Cambridge-Waterloo CMA which includes only Kitchener, Waterloo, Cambridge, Woolwich and North Dumfries. Secondly, CMHC uses a ‘start’ as the measure of building activity. A ‘start’ is defined as the beginning of construction work on a building, usually when concrete has been poured for the footing. Further, any new housing units created through conversions from industrial uses are not included in the CMHC reports.

Students and Seniors

Residential building permits were issued for 10 student-oriented apartment buildings in the first half of 2013, totalling 1,563 bedrooms. This is up from 654 bedrooms in 10 student-oriented apartment buildings in the first half of 2012. While some student-oriented permits were identified as such on the permit itself, Regional staff identified additional student-oriented permits by their location and built form.

There were no building permits identified as seniors-oriented in the first half of 2013. Seniors-oriented permits are typically identified as such on the permit itself.

Area Municipal Consultation/Coordination

Building permit data are collected by Area Municipal staff and submitted either electronically or in hardcopy. They are compiled by Regional staff for use in Regional development charge calculations, development tracking, forecasts, and reporting. Municipal staff is consulted for verification and insight into the data. Copies of this report have been circulated to the Area Municipalities.
CORPORATE STRATEGIC PLAN:

Tracking and reporting building permit activity contributes to Strategic Focus Area 2: Growth Management and Prosperity

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: David Stubbs, Planning Technician

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

DATE: September 10, 2013

FILE CODE: A02-30/PW

SUBJECT: ION LOGO RECOMMENDATION FOR RAPID TRANSIT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the ION logo, described as Option 2, outlined in Report E-13-100, dated September 10, 2013, as the visual identity of the Region’s rapid transit service.

SUMMARY:

On April 30, 2013, Regional Council approved ION as the brand name of Waterloo Region’s rapid transit service. Following that decision, the Rapid Transit Brand Development Working Group (RT Brand Group), including Quarry Integrated Communications (Quarry), began the process of developing a logo for ION.

A logo is the visual identity of a product or service. It represents the brand in the minds of customers and includes graphics, colours and typeface.

The selection of a logo for ION is an important milestone. The visual identity will help with education and assist in building public awareness before and after the start of rapid transit operations. It will also create excitement for the launch and unify communications as the Region encourages ridership growth and focuses on attracting new customers.

ION is a visionary project that will shape and transform the community for the future by creating new and improved transportation choices. ION will create a seamless, integrated public transit network for Waterloo Region, connecting residents with Grand River Transit (GRT) and iXpress.

The RT Brand Group, together with the Rapid Transit Steering Committee and the Rapid Transit Senior Management Team, recommend the ION logo, described as Option 2 in Appendix 1.0 and shown below, as the visual identity for the Region’s rapid transit service.
This logo builds on the brand equity of iXpress, helping to unite the two transit services into one seamless and cohesive network with GRT. During both the formal focus group research as well as informal feedback received from key community stakeholders, this logo was the most universally accepted.

It registered strong first impressions and word associations with research group participants and there was almost unanimous agreement that this logo best represented the ION brand attributes and connected most with the Region’s family of brands, including the Region of Waterloo, GRT and iXpress logos. Additionally, this logo was described as simple and easy to read.

Finally, the recommended logo successfully met all of the criteria outlined by the Region for creating and selecting the most effective ION logo, including simplicity, timelessness and memorability.

REPORT:

In October 2012, Quarry was retained by the Region to develop a brand for the rapid transit service. Project deliverables included: developing a brand strategy, assisting with public consultation, creating a name and logo for the new service, and establishing the brand guidelines, brand voice and graphic design standards.

Research
More than 4,000 comments gathered from residents on the topic of rapid transit were reviewed by Quarry. The comments were collected from a variety of community meetings and events over the previous three years. Quarry also led a series of workshops and briefings with the RT Brand Group, conducted personal interviews with key stakeholders, reviewed transit brands from across North America and scanned comments from residents in traditional and social media.

Brand Foundation
Three themes – healthy, prosperous and smart – emerged from the research, creating a foundation for the rapid transit brand. For the full brand foundation, see Appendix 2.0.

Brand Names
Following the establishment of the brand foundation, a set of general and Region-specific brand name criteria were created to measure and select the best possible name for the rapid transit service. For the full list of criteria, see Appendix 3.0.

Quarry generated more than 300 names for the new service before ultimately presenting 11 to the RT Brand group in November 2012. One month later, using the brand name criteria as the guide, the RT Brand Group, in partnership with the Rapid Transit Senior Management Team and the Rapid Transit Steering Committee, narrowed the list down to three. Those names – Arc, ION and Trio – were presented to Council in January 2013 and released for public consultation.

Public Engagement
Community feedback was collected through an online survey and three Public Consultation Centres in January 2013. The information gathered identified overall themes, opinions and priorities from the community. Participants could also submit their own name suggestion for the rapid transit service.

ION emerged as the most preferred option after 814 surveys were completed. More than 500 names were also proposed and/or collected from the community. The RT Brand Group examined and reviewed each of these names, creating a new short-list of 20 potential names for the service. Each of the 20 names was then evaluated using the brand name criteria and two finalists were selected.
In February 2013, a phone survey was conducted by PMG Research Inc. (PMG) evaluating the final two names – ION and The Wave. A total of 305 residents from across the region took part. Once again, ION emerged as the most preferred option, with more than two-thirds (66 per cent) saying it matched the brand values outlined by the Region for rapid transit. It also registered strong first impressions, word associations and overall perceptions.

About ION
In April 2013, Regional Council approved ION as the brand name. ION represents the visionary goals of the service and reflects the tech-savvy nature of the community. ION is focused on the future of Waterloo Region and connects directly with GRT and iXpress, creating an easy, family-feel for the entire public transit network.

ION works for both technologies of the transit service – adapted Bus Rapid Transit (aBRT) and Light Rail Transit (LRT) – and feels like a “made in Waterloo Region” solution as it salutes both the academic and scientific communities in the area as well as the pioneering history of electricity in the region. For a full description of the ION brand, see Appendix 4.0.

ION Logo Development
Following Council’s approval, Quarry and the RT Brand Group began working on the logo for ION. Similar to the process used for the brand name, a set of general and Region-specific guidelines were created to evaluate and select the best possible logo for ION.

General Criteria
- Meaningful – ties to the brand and the service.
- Memorable/Distinct – stands out in its surroundings; provides quick identification.
- Simple – easy to read.
- Timeless – doesn’t follow trends; will last for years.
- Scalable – will work at various sizes (from a printed flyer to the side of a train or bus).
- Applicable for use in many media – print, web, video, etc.
- Will work in both colour and black and white.

Region-Specific Criteria
- Works with both technologies – aBRT and LRT.
- Works within the existing brand family – Region of Waterloo, GRT, iXpress.
- Avoids the use of lower case ‘i’ with an upper case ‘ON.’

In June 2013, Quarry presented 10 logos to the RT Brand Group. Each of the logos was evaluated using the above-noted criteria. Following presentations to both the Rapid Transit Senior Management Team and the Rapid Transit Steering Committee, the 10 logos were released for consultation through a series of focus group sessions.

Focus Group Results
Three focus groups were conducted by PMG in July 2013. Participants were representative of the region’s population, including age, gender, ethnicity and place of residence.

The purpose of the research was two-fold: to provide the Region with direction and to identify perceptions of the logo options. The research focused on identifying: first impressions, strengths and weaknesses, fit with the existing brand family, match with the ION brand attributes and possible negative associations or interpretations.

At the beginning of each session, participants reviewed the ION brand as well as the Region’s logo criteria. Participants were then asked to select their top four logo options from the group of 10, before each of the selected logos were evaluated by the group.
In total, across all three groups, five of the 10 logos were identified by the focus group participants as preferred options for the ION logo. One, ultimately, emerged as the most suitable choice.

As identified in Appendix 1.0, ION logo Option 2, was the most universally accepted by the focus group participants. Each of the three groups said the logo was simple, showed movement and stood out amongst the rest.

First impressions of the logo included the following words or phrases:
- Simple, recognizable.
- It flows, readable.
- Clean, catches the eye.
- Easy to identify, gets the point across.
- Reminds me of the iXpress logo.
- Matches the Region’s branding.

Participants identified a number of strengths and perceived weaknesses of the logo, including:

**Strengths**
- Simplicity, easy to read.
- Friendly, good flow.
- Recognizable, two colours match the Region’s colours.
- Timeless, goes with current branding.
- Logo and name all in one, scalable.
- The letters are clear, bold.

**Weaknesses**
- “N” doesn’t stand out, doesn’t look complete.
- Two different shades of blue, shading might not work.
- Hard to read the ION name, might not scale well.

Predominately, participants said this logo connected most with the Region’s current family of brands (Region of Waterloo, GRT and iXpress) as well as the ION brand attributes. In particular, participants said very strongly that this logo paired well with both the iXpress and the GRT logos.

In fact, Grand River Transit was the word most associated with the logo, followed by movement, completion, modern, simple, bold, iXpress, flowing, simple and transit.

The only possible negative associations or interpretations identified were:
- It’s not complete.
- Hurricane symbol.
- ‘LOL’ symbol.

For complete results of the focus group research, see Appendix 5.0.

**Staff Recommendation**
A logo is the visual identity of a product or service. It represents the brand in the minds of customers and helps build awareness, recognition and excitement. For a new service such as ION, the logo will assist with educating the community and help unify communications as the Region focuses on encouraging ridership growth and attracting new customers.
While the selection of a logo is a critical next step for ION, it’s important to note that individual preferences are subjective and emotional. Regardless of which logo is ultimately selected, there will always be some who do not like it. As a result, it’s critical to choose a logo that fits with the ION brand attributes and meets all of the design criteria outlined by the Region.

Initially, the ION logo will serve as a first impression for residents. Once in common use, the design will become less important and the experience the service represents to customers will be paramount.

The RT Brand Group, together with the Rapid Transit Steering Committee and the Rapid Transit Senior Management Team, recommend the ION logo, described as Option 2 in Appendix 1.0, as the visual identity for the Region’s rapid transit service.

This logo was the most universally accepted during both the formal focus group research as well as informal feedback collected from key community stakeholders.
It builds on the brand equity of iXpress, uniting the two transit services into one seamless and cohesive network with GRT.

During the focus group research, this logo boasted strong first impressions and word associations.
There was also nearly unanimous agreement that this logo best represented the ION brand attributes and connected most with the Region’s family of brands, including the Region of Waterloo, GRT and iXpress. Additionally, focus group participants said this logo was simple and easy to read.

Finally, this logo meets all of the criteria outlined by the Region for creating and selecting the most effective ION logo. It is simple, timeless and memorable/distinctive. It is meaningful, applicable to all media and has the ability to scale to various sizes – from one inch to the side of a train or bus.

Next Steps
Once the logo is selected by Regional Council, Quarry and the RT Brand Group will complete the brand development process by finalizing the brand guidelines, brand voice and graphic design standards.

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

FINANCIAL IMPLICATIONS:
In June 2011, Council approved the implementation of the ION rapid transit project, including LRT and aBRT, with estimated capital costs of $818 million, in 2014 dollars and capital funding to be provided by the Province (up to $300 million), the Federal government (one third of eligible project costs to a maximum of $265 million) and the Region ($253 million). The rapid transit project and improvements to conventional transit are financed through an annual tax rate increase of 1.5% for a period of 7 years.

The costs associated with the Development of the Rapid Transit Name and Logo, awarded to Quarry Integrated Communications in October 2012, is $74,951, plus taxes. This amount is accommodated within the overall rapid transit budget.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

This report was prepared with input from Finance, Transit Services, Planning, Housing and Community Services, Corporate Communications, Corporate Publishing and Quarry Integrated Communications.

ATTACHMENTS

APPENDIX 1.0 – ION LOGO OPTIONS
APPENDIX 2.0 – BRAND FOUNDATION
APPENDIX 3.0 – BRAND NAME CRITERIA
APPENDIX 4.0 – THE ION BRAND
APPENDIX 5.0 – COMPLETE FOCUS GROUP RESULTS

PREPARED BY: Kimberly Moser, Manager, Rapid Transit Community Relations

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
APPENDIX 1.0 – ION LOGO OPTIONS

Option 1 – Rationale:
- Suggests a cityscape, poised on the horizon: future-oriented and full of possibilities.
- Arc shape: electricity, in motion.
- Read left to right: suggestive of the evolution of the community (from to home to skyscraper).

Option 2 – Rationale:
- Builds on the brand equity of iXpress.
- Unites the two transit services into a seamless and cohesive system.
- Route-like and multi-dimensional.

Option 3 – Rationale:
- The most symbolic and iconic design.
- Human form: head and shoulders (or legs and body).
- Ribbon-like: symbol of support, membership, community.

Option 4 – Rationale:
- Symbolic of connectivity and community.
- Face-like: happy and positive.
- Route working with what is already there – true integration.

Option 5 – Rationale:
- Constructed from equilateral triangles; triangles are the strongest geometric shape.
- Each side is equally supportive to the others; symbolizes the tri-cities.
- Building blocks: integrated and deliberate.

Option 6 – Rationale:
- Inspired by the route itself; evokes connectivity and a sense of movement.
- Integration: roads, rails; buses and trains + spaces in between.
- Current/flow: water, electricity.
Option 7 – Rationale:
• Classic transit icon: emblematic, European feel.
• Reflective of the route: linear, with ovals in Downtown and Uptown.
• Puts “green” at the centre of our thinking.

Option 8 – Rationale:
• Representative of a transit route, with a starting and end point.
• Border or banner-like.
• Open ends = welcoming; open to newcomers.

Option 9 – Rationale:
• Exuberant passenger: arms stretched upward; open, welcoming.
• Shape reflects route: single path + divided path + seamless.
• Reflects river legacy in the community (mature river, elbows and bends).

Option 10 – Rationale:
• “Flag-like” – representative of a place and pride of place.
• Doors and windows: representative of transit vehicles: open, welcoming.
• Suggests an equation or relationship between elements.

APPENDIX 2.0 – BRAND FOUNDATION

Healthy
• For the Region as low emissions and shared transportation help create compact, walkable communities.
• For the individual as efficient, low-stress transit encourages behaviours that contribute to personal well-being.

Prosperous
• For the Region as smart urban design attracts businesses and talent, enhancing the community with new employment opportunities, revenue and services.
• For the individual as low-cost choices and/or decreased dependence on a car enhances personal wealth.

Smart
• For the Region as the planning process, while complex, has been smooth, integrated and future-focused.
• For the individual as the outcome is a liveable, walkable community with new and improved transportation choices.
APPENDIX 3.0 – BRAND NAME CRITERIA

General Criteria
- Meaningful, and full of meaning, with the ability to unwrap multiple meanings and inspiration over time.
- Easy to pronounce, memorable, inspiring, distinctive/ownable.

Region-Specific Criteria
- Aligned with the brand foundation: healthy, prosperous, smart.
- Able to work for both technologies: aBRT and LRT.
- Fits within existing brand family: Region of Waterloo, Grand River Transit, iXpress.
- Feels like a "Made in Waterloo Region" solution.
- Helps tell the Rapid Transit story: useful now and in the future (pre/post-construction).
- Short and sweet: can be read as the train or bus passes by.
- Works beyond Cambridge, Kitchener and Waterloo: connects the townships and other communities outside the Region.

APPENDIX 4.0 – THE ION BRAND

Means:
- 'Going' in Greek.
- An atom with a net positive or net negative electrical charge.
- Go + electricity = rapid transit; always in motion or movement.

Feels:
- Brief, memorable, unique.
- Action-oriented and efficient; innovative and tech-savvy.
- Declarative statement when pronounced: “I on.”

Other considerations:
- Links to iXpress – offers a family feel within the Region's transit system.
- Salutes/ties to the academic/scientific communities; heritage of electricity.
APPENDIX 5.0 – COMPLETE FOCUS GROUP RESULTS

The following includes the findings from a qualitative research study with Waterloo Region residents regarding the 10 logo options for the rapid transit service.

Methodology
- To participate, residents were required to live in one of the three cities, have some awareness of the upcoming rapid transit service, and be at least 18 years of age or older.
- A total of three focus groups were held on July 9, 2013.
- The groups were representative of the population, including age, gender, ethnicity, and residence.
- Details of the participants are as follows:

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</tr>
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<td>45+</td>
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<td>5</td>
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</tr>
</tbody>
</table>

Short-listing the Logo Options:
- Participants were asked to select their top 4 choices
- Total number of times each logo was selected (across all 3 groups)

![Logo Selection Results]
Overview of ION Logo Option 1:
This logo was selected by two of the three groups. It was the most polarizing of the short-listed logos, with participants either loving it or hating it.

Those who loved it thought the logo was commanding, easy to read, and that it draws attention. Those who hated it thought the logo was too aggressive, harsh and blocky.

Most participants said this logo did not connect with the Region’s current brands (Region of Waterloo, GRT, iXpress) or the ION brand name criteria.

- **Initial Perceptions:** I like the arch, too square, looks like buildings, looks like a hat, I like it, a little cheesy, feels aggressive, looks like it says 100%, don’t like that it is all one colour, stands out, reminds me of the move TRON, futuristic.
- **Strengths:** a lot of symbolism, unique, commanding, draws your attention, distinctive, easy to read, makes a statement, clean cut, futuristic.
- **Weaknesses:** too blocky, sterile, harsh, missing colour, too futuristic, corny, doesn’t match existing brand, looks aggressive.
- **Connections to Existing Brand:**
  - “That’s a 100% match for me.”
  - “It works really well with the GRT because of the corners.”
  - “I find the opposite. I don’t think it matches at all.”
  - “It works for me. It’s still my favourite one.”
  - “It does not fit.”
- **Words Associated with Logo:** buildings, moon, space, Japanese anime, travel, hat, science fiction, fountain pillars, space travel, insignia for a car, horizon, Dick Tracey’s hat, foreign language.
- **Possible Negative Associations/Interpretations:**
  - Star Trek.
  - That it says 100%.
  - An unhappy face.
  - Not communicating transit.

Overview of ION Logo Option 2:
Compared to the other logos, this one was the most universally accepted and was favoured by all three groups. Participants said the logo was simple, showed movement and that it stood out amongst the rest.

There was profound agreement that this logo connected most with the Region’s current brands (Region of Waterloo, GRT, iXpress) as well as the ION brand name. In particular, participants in all three sessions said this logo paired well with the iXpress and GRT logos.

A notable concern was that the “n” looked unfinished to some, however, most attributed that to artistic style.

- **Initial Perceptions:** simple, stands out, you can tell it says ‘ION’, recognizable, it flows, reminds me of the iXpress logo, it almost looks like it’s moving, I like it, matches the Region’s branding, evokes emotion, readable, clean.
• **Strengths:** simplicity, easy to read, friendly, good flow, the two colours match the Region’s, recognizable, goes with current branding, logo and the name are all in one, timeless, scalable, the letters are clear, bold.

• **Weaknesses:** ‘N’ doesn’t stand out, doesn’t look complete, two different shades of blue, hard to read the ION name, shading might not work, might not scale well.

• **Connections to Existing Brand:**
  - “It reminds me very much of iXpress.”
  - “It is the most consistent amongst all of them.”
  - “The colours are an obvious match.”
  - “It has a slant like the GRT and iXpress logos.”

• **Words Associated with Logo:** Grand River Transit, completion, movement, modern, bold, roundabout, train tracks, iXpress, flowing, simple, transit, my bus pass.

• **Possible Negative Associations/Interpretations:**
  - The LOL symbol.
  - That it’s not complete.
  - Hurricane symbol.

### Overview of ION Logo Option 4:

This logo was only selected by one group. Those who liked the logo in the beginning, continued to like it at the end.

Although they liked the logo, participants did not feel it connected with either the Region’s existing brands (Region of Waterloo, GRT, iXpress) or the ION brand name criteria.

Participants said it was more connected to a yogurt manufacturer, a disabled symbol and/or reminded them of a power button.

• **Initial Perceptions:** font looks like wingdings, that’s awful, looks like a power button, logo can’t stand on its own, I don’t think it says ION, ice cream place has one of those logos, symbolic, it would be an ok logo, why did we pick that?

• **Strengths:** good representation of transit, nice use of colours, interesting, unique.

• **Weaknesses:** not recognizable, looks like a power button, not good enough to stand by itself, doesn’t match Region’s brand.

• **Connections to Existing Brand:**
  - “It looks weak compared to the others.”
  - “It just doesn’t do it for me; doesn’t fit at all.”
  - “Absolutely not.”
  - “You look at this and wonder what it is.”
  - “This logo is weak compared to the other designs.”
  - “It’s obvious what the other logos are for. Then, there’s this one.”

• **Words Associated with Logo:** power button, disability sign, ice cream, Yogen Früz, frozen yogurt, not transit, off button.

• **Possible Negative Associations/Interpretations:**
  - Power button.
  - Yogen Früz.
  - That it’s not transit.
Overview of ION Logo Option 6:
At the beginning of each session, this logo was strongly supported by most participants and was chosen by all three groups. At the end of each session, however, the majority of participants said they no longer preferred it.

Words used to describe the logo included: retro, sloppy and 70’s. Several people made connections between this logo and the old Toronto Blue Jays uniforms as well as the movie Boogie Nights.

Participants said this logo had the least connection to both the Region’s current brands (Region of Waterloo, GRT, iXpress) as well as to the ION brand name criteria.

- **Initial Perceptions:** symbolizes a three-line electric track, screams 1970’s, I like it, should be a dot over the ‘I’, shows movement, confusing transit, lack of clarity, it looks sloppy to me, like an Atari game, reminds me of a roundabout, looks like a kitchen burner, it’s like New York transit.
- **Strengths:** eye catching, pleasant to look at, youthful, shows motion, artistic, identifies with transit, connects together, colours work well together, can read the ION name.
- **Weaknesses:** looks dated, not unique, cannot read ION name, looks like a neon sign, cannot read the letter ‘i’, sloppy, doesn’t match Region’s branding, colours are not strong, not recognizable from a distance.
- **Connections to Existing Brand:**
  - “Does not match as well as some of the others.”
  - “It’s just too different to match even one of them.”
  - “It’s like a game of ‘one of these things doesn’t belong here.’”
  - “I feel like it’s better because it doesn’t match.”
  - “I don’t think it fits well with the others.”
  - “Is there a reason it has to be like the rest?”
- **Words Associated with Logo:** Toronto Blue Jays, retro video games, sports, TRON, Nintendo, gas station, Boogie Nights, advertising, 70’s, race track, Adidas, electricity, billboard.
- **Possible Negative Associations/Interpretations:**
  - 70’s pornographic move.
  - Acid trip.
  - Toronto Blue Jays.
  - Maze.

Overview of ION Logo Option 9:
Most participants said this design was reasonable and it was selected by all three groups. The logo also had staying power, with most who liked it at the beginning of a session still liking it at the end.

Participants said this logo connected with both the Region’s brands (Region of Waterloo, GRT, iXpress) as well as the ION brand name criteria. Some said the logo highlighted ties to the Region’s German heritage (offset dot is reminiscent of an umlaut) and most liked the use of colour.

A consistent complaint with this design was the offset dot on the “i.” Additionally, a number of participants said this logo reminded them of the Waste Management logo.
• **Initial Perceptions:** looks like it's moving, dot over the ‘i’ isn’t where it should be, European style, memorable, simple, I like the blue and green combination, intestines, hard to tell it's ION, catchy to the eye, short, relate it to the iXpress, a bit confusing.

• **Strengths:** ‘n’ is distinctive, good use of colour, recognizable, would look good when moving, clean, shows movement, bold, unique, artistic, good use of symbolism.

• **Weaknesses:** placement of the ‘i’ looks off, seems unbalanced, ION doesn’t stand out, doesn’t seem complete, colours don’t blend.

• **Connections to Existing Brand:**
  - “I think it fits in.”
  - “There’s something with it, yes.”
  - “Not completely.”
  - “Too much green to fit.”
  - “Kind of yes, kind of no.”

• **Words Associated with Logo:** German symbol, a person on the train, European, intestines, Oktoberfest, Waste Management, worms, motion, a snake, movement, rollercoaster, Cambridge Transit.

• **Possible Negative Associations/Interpretations:**
  - IOU.
  - Waste Management.
  - Roundabout.
  - ‘SOS’ or ‘SS” when viewed sideways.

**Logo Selection by Focus Group Participants:**

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<th>Beginning of Session</th>
<th>End of Session</th>
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<td>![Logo]</td>
<td>18</td>
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Matching the ION Logo Design Criteria:

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<td>Meaningful</td>
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<td>Memorable/Distinctive</td>
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<td>Scalable</td>
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<td>Applicable to many media</td>
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TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: A02-30/PW

SUBJECT: RECOMMENDED INTERCHANGE MODIFICATIONS AT NORTHFIELD DRIVE AND HIGHWAY 85

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the recommended interchange modifications at Northfield Drive and Highway 85, as per Report E-13-110, dated September 10, 2013.

REPORT:

ION, the Region of Waterloo’s rapid transit service, is moving forward, with construction starting in 2014 and operation beginning in 2017. As part of the early ION functional design, the Highway 85 interchanges at Northfield Drive were proposed as full-movement, signalized intersections. Since then, Regional staff have been working with the Ministry of Transportation of Ontario (MTO) to develop a design that will maintain access to/from Highway 85, provide safe and efficient traffic operations, accommodate active transportation and provide efficient ION service in the area.

A number of design variations for the Northfield Drive at Highway 85 interchanges were developed, considered, and evaluated. Based on those reviews by Regional staff, the following modifications on Northfield Drive at the Highway 85 interchanges are recommended:

- Convert the northbound and southbound Highway 85 interchanges at Northfield Drive to right-in and right-out only
- Convert the Kumpf Drive/Barta at Northfield Drive intersection to right-in and right-out only
- Provide a U-turn at the intersections of Northfield Drive/Parkside Drive and Northfield Drive/Colby Drive
- Accommodate cycling lanes, sidewalks, and pedestrian crossing facilities on Northfield Drive between the rail corridor and Colby Drive

Consultation with MTO, City of Waterloo staff, and Waterloo Fire Rescue has taken place and written support for these modifications has been received from all three groups. Staff will continue to work with these groups through future design phases.

Reasons for the Modifications

Operating under a signalized condition at the Highway 85 at Northfield Drive interchanges would degrade traffic operations at the ramps, therefore adversely affecting Highway 85 operations and creating safety concerns.
The proposed changes were evaluated based on the following criteria:

- Traffic operations of the Highway 85 at Northfield Drive interchange
- Traffic operations of Highway 85 mainline
- Traffic operations of the surrounding area
- Impacts to travel patterns
- Effective Light Rail Transit operations
- Effective Grand River Transit operations
- Accommodation of active transportation facilities

**Evaluation of Impacts**

There will be minor travel pattern and traffic operations impacts as a result of the modifications. Transit operations and active transportation facilities will improve.

**Area Travel Patterns**

**Left Turn from Northbound Highway 85 to Eastbound Northfield Drive:**

This movement primarily serves trips coming from the south, in Waterloo or Kitchener, that are travelling to places such as the industrial areas along Northfield Drive or to RIM park. This movement is fairly light with 90 AM peak hour vehicles and 60 PM peak hour vehicles. The primary alternative for this movement is to exit at the King Street North and Highway 85 interchanges in Waterloo or Woolwich and travel via either King Street North or Bridge Street West. Due to the low volume of displaced trips, this closure is not expected to have a significant impact on traffic operations throughout the area.

**Left Turn from Eastbound Northfield Drive to Northbound Highway 85:**

This movement primarily serves trips coming from the west in Waterloo, such as Northlake or Lakeshore, that are travelling to points in the north such as St. Jacobs or Elmira. This movement is fairly light in the morning with 50 AM peak hour vehicles, and moderately busy in the evening with 130 PM peak hour vehicles. The primary alternative for this movement is to travel via Weber Street or Benjamin Road to the King Street North Highway 85 interchange in Woolwich. Due to the relatively low volume of displaced trips, this closure is not expected to have a significant impact on traffic operations throughout the area.

**Left Turn from Southbound Highway 85 to Westbound Northfield Drive:**

This movement primarily serves trips coming from the north, such as St. Jacobs or Elmira, that are travelling to points in the west, such as Northlake or Lakeshore. This movement is very light with only 30 AM peak hour vehicles and 20 PM peak hour vehicles. The primary alternative for this movement is to exit at the King Street North Highway 85 interchange in Woolwich and travel via either Weber Street or Benjamin Road. Due to the very low volume of displaced trips, this closure is not expected to have a significant impact on traffic operations throughout the area.

**Left Turn from Westbound Northfield Drive to Southbound Highway 85:**

This movement primarily serves trips coming from places such as the industrial areas along Northfield Drive or RIM park, that are travelling to points south in Waterloo or Kitchener. This movement is busy in the morning with 180 AM peak hour vehicles, and very busy in the evening with 400 PM peak hour vehicles. The primary alternative for this movement is to travel via either King Street North or Bridge Street West to the King Street North and Highway 85 interchanges in Waterloo or Woolwich. The opposite movement (southbound left) has a much lower traffic
volume which indicates that many of these trips are not for fixed regular travel, or have viable alternatives. Due to the high volume of displaced trips, it is expected that some impact will occur to area intersections. The greatest operational impact will be at the intersection at King Street North and Northfield Drive.

Traffic Operations

With the removal of all left turns at the Highway 85 interchange ramps at Northfield Drive, the level of service of the two ramps is expected to improve. In addition, it is expected that some trips currently turning left onto the Highway 85 interchanges at Northfield Drive will use the adjacent interchanges located at King Street North in Waterloo and in Woolwich. The level of service, at these interchanges, with these additional trips remains acceptable with most movements at a level of service “D” or better.

ION Operations

By eliminating two signalized intersections and four conflicting movements, ION will operate with reduced delays improving overall rapid transit travel times.

Grand River Transit Operations

By eliminating two signalized intersections from the Highway 85 interchanges, it is possible to include a pedestrian crossing facility adjacent to the rail corridor on Northfield Drive. This crossing will allow GRT stops to be located directly adjacent the Northfield Drive LRT station. This vastly improves GRT/LRT integration at this station.

Accommodation of Active Transportation Facilities

The elimination of the westbound and eastbound left turns leads to the elimination of their respective left turn lanes on Northfield Drive. These lanes traversed the bridge over Highway 85 and restricted the available cross section. With the removal of these left turn lanes it will be possible to provide bicycle lanes and sidewalks on the bridge. This closes a significant gap in the planned Regional and City of Waterloo active transportation networks.

Waterloo Fire Rescue

The existing access for the Waterloo Fire Station located on 150 Northfield Drive West will not be impacted. In addition, Waterloo Fire Rescue will have the following three options to continue to operate within existing standards with the removal of all left turns. First of all, fire trucks can turn left across the rapidway as the curb separating the rapidway from general traffic can be mounted by fire trucks. Next, fire trucks can use the rapidway for travel to avoid any potential congestion on Northfield Drive. Lastly, fire trucks can operate contra-flow in general traffic to avoid turning across the rapidway.

Public Consultation

A Public Information Centre (PIC) to present these modifications was held on June 27, 2013.

Location: Albert McCormick Community Centre  
Address: 500 Parkside Drive, Waterloo  
Time: 4 p.m. to 8 p.m.

In advance of the PIC, letters were sent to property owners in the adjacent neighbourhoods in
the City of Waterloo. The letters, which were mailed out on June 14, 2013, invited them to participate in the PIC.

Newspaper advertisements promoting the PIC were included in the Waterloo Chronicle (June 19, 2013), Waterloo Region Record (June 21, 2013), and the Kitchener Post (June 21, 2013). Road signs advertising the PIC were posted from June 13-28, 2013.

Social media and the Rapid Transit website were also used to invite residents to participate in the PIC.

Public Consultation Results

The PIC was well attended. In total, 37 residents and business owners participated in the PIC, with 16 submitting comments. A summary of the comments received is as follows:

- Support the modifications – 10 responses (62.5%)
- Against the modifications – 2 responses (12.5%)
- Suggested concerns with the modifications – 2 responses (12.5%)
- No statement of support or concern – 2 responses (12.5%)

A compilation of written comments received from the public is provided in Attachment B.

The following is a brief summary of the concerns raised by the participants and the recommended mitigation measures:

- **Traffic flow impacts as a result of the removal of left-turns:** The removal of left turns at the northbound and southbound Highway 85 interchanges will be mitigated by the provision of U-turns at the intersections of Northfield Drive/Colby Drive and Northfield Drive/Parkside Drive.

- **Complexity of U-turns:** U-turns will be appropriately signed and given advanced turn signals. The rapidway will act as a median and provides sufficient width (approximately 8 metres) to allow drivers to wait and make the U-turn comfortably.

- **Increased congestion:** Some movements currently occurring at the Northfield Drive Highway 85 interchanges will be displaced to the King Street North Waterloo and Woolwich Interchanges. There is sufficient road capacity to accommodate the displaced trips at these interchanges. The level of service at the Northfield Drive Interchanges is expected to improve.

- **Design and impact of future Northfield Drive development:** As part of the development approvals process, developers are required to submit Transportation Impact Studies and recommend mitigation efforts to ensure traffic operations remain within acceptable levels of service.

- **Location and design of active transportation facilities:** User-friendly active transportation facilities will be accommodated as appropriate within the available road allowance. Designs will be refined through the DBFOM procurement process and continuing discussions with MTO.

The project team also responded to questions and concerns at the PIC and will take the input into consideration as they continue to work with the Ministry of Transportation of Ontario (MTO).
The report supports Focus Area 3.1 of Council’s Strategic Focus: Develop an implementation plan for light rail transit including corridor and station area planning.

FINANCIAL IMPLICATIONS:

In June 2011, Council approved the implementation of the RT project, including LRT and aBRT, with estimated capital costs of $818 million, in 2014 dollars, with capital funding to be provided by the Province (up to $300 million), the federal government (one third of eligible project costs to a maximum of $265 million) and the Region ($253 million). The RT project and improvements to conventional transit are financed through an annual tax rate increase of 1.5% for a period of 7 years.

The costs associated with the Northfield Drive at Highway 85 Interchange Modifications are contained within the DBFOM contract and will be included in that component of the overall project. Costing of this component will not be fully calculated until the RFP closes and the preferred proponent is selected.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation Planning, Planning, Housing and Community Services

ATTACHMENTS

Attachment A – Northfield Drive at Highway 85 Interchange Modifications
Attachment B – Summary of written comments submitted during PIC

PREPARED BY: Danielle Tobey, Rapid Transit Planner
Masood Mirza, Senior Project Manager, Rapid Transit Engineering

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
<table>
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<tr>
<th>Record</th>
<th>City</th>
<th>Comments</th>
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<tr>
<td>1</td>
<td>Unknown</td>
<td>It would have been great to see some eye-level and aerial views similar to the LRT session at Knox on June 25. Both groups work for the Region, right? The developer of the NCR property needs to be watched more closely. No one is coordinating tourism related signs with the MTO. The sum of the individual parts of the collective planning efforts do not add up to the whole situation and all of the many details. Given the closeness of the NCR property - what the developer does or does not do will greatly impact the congestion on Northfield at Highway 85. Why wait until the pinch points get problematic?</td>
</tr>
<tr>
<td>2</td>
<td>Unknown</td>
<td>Does not impact our business Ultra Mtg</td>
</tr>
<tr>
<td>3</td>
<td>Waterloo</td>
<td>Good to see ION focus for terminal two stations, proper treatment required to get uptake in employment areas with appropriate bus and active transit connections. 400 peak rush hour car impact = 2-3 full LRT vehicles. Public may nonetheless push for new ramps as U-turn use is tricky (if not properly handled) and new for our area. Pedestrian AND CYCLING facilities (including intersections) is key for ION and active transit future growth, DO NOT COMPROMISE THEM for the sake of single occupancy.</td>
</tr>
<tr>
<td>4</td>
<td>Waterloo</td>
<td>Elimination of left hand turns at expressway not practical - will significantly alter traffic flow on Northfield and cause additional congestion at other interchanges. Re-think pedestrian and bicycle access to one side to continue left hand turns</td>
</tr>
<tr>
<td>5</td>
<td>Unknown</td>
<td>I really like that the current temporary lights on the overpass won’t be permanent. I especially look forward to there being better accommodation to cross the expressway for cyclists and pedestrians. Thank you for this and I look forward to seeing the next stage.</td>
</tr>
<tr>
<td>6</td>
<td>St. Jacobs</td>
<td>Great idea</td>
</tr>
<tr>
<td>7</td>
<td>Waterloo</td>
<td>The LRT will be of no interest or use for us</td>
</tr>
<tr>
<td>8</td>
<td>Waterloo</td>
<td>I look forward to a bike ride down Northfield that isn’t utterly terrifying. I fully support any change that helps the efficient flow of the LRT and its thousands of passengers</td>
</tr>
<tr>
<td>9</td>
<td>Unknown</td>
<td>This is quite a mess. The alternative route 85 southbound is terrible.</td>
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<tr>
<td>10</td>
<td>Kitchener</td>
<td>Clear signage for alternative routes is required. Strongly supportive of bike lanes along Northfield</td>
</tr>
<tr>
<td>11</td>
<td>Kitchener</td>
<td>The protection of cyclists on the Northfield corridor is crucial.</td>
</tr>
<tr>
<td>12</td>
<td>Kitchener</td>
<td>Ensure sufficient pedestrian crossing at RT ROW. Decrease merge angle at highway to reduce speeds at ramps to ensure cyclist and pedestrian safety. Make sure bike lanes are installed on Northfield.</td>
</tr>
<tr>
<td>13</td>
<td>Unknown</td>
<td>A U-turn is not my favourite manuver. I would probably avoid it. Clearly marked signs indicating the alternative routes would be very appreciated. Also, room for bike lanes or multi-use trails is important as well.</td>
</tr>
<tr>
<td>14</td>
<td>Waterloo</td>
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<tr>
<td>It has come to my attention that there is a proposal on the table to remove the left-turn lane from Northfield Dr. On the highway overpass and replace it with bike lanes as part of the development of the new Northfield LRT station in north Waterloo. I strongly support this proposal. I have been told that there is some opposition to this proposal and that I should alert the powers that be of my support for it. I do not know to whom I should direct these comments, hence this message. I humbly request that you direct me to the proper place and/or pass along my support to those who need to hear it. Thanks for your consideration. I am an owner-occupier and part of a family of four who live at 404 Lakeview Dr., Waterloo N2L4Z6. Our family uses that overpass very frequently by both car and bike (sometimes with our children in tow!). That overpass is currently very dangerous for cyclists and I would very much like to see bike lanes on it. Moreover, the need for bike lanes will become more desperate when the Northfield LRT station comes into service.</td>
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<th>15</th>
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<tr>
<td>Thank you for the public meeting of last Thursday concerning modifications to Northfield Drive around the Highway 85 interchange. Overall, I am supportive of the changes and pleased to see that the simple solution of simply disallowing left turns was considered. In thinking about the area, I've realized an unorthodox solution to the problem of providing good pedestrian mobility through the area. Briefly, rather than sidewalks on both sides of the street, instead there should be a &quot;centrewalk&quot; (for want of a better term) right down the middle. So from north to south, the bridge would carry:- Northfield Drive Westbound - LRT Westbound (Southbound to Fairview) - &quot;centrewalk&quot; - LRT Eastbound (Northbound to Conestoga) - Northfield Drive Eastbound. The pedestrian centrewalk would be completely uninterrupted from where the LRT curves onto Northfield over to the intersection with Colby/Conestogo. At each end it could be accessed by signalized crossings - part of the Northfield/Colby/Conestogo intersection at the East end, and at the rail crossing at the West end. Although this may seem like extra crossing - in particular, pedestrians would have to cross half of Northfield twice in order to just walk along Northfield - consider the comparison: Standard sidewalk: narrow, immediately next to high speed, frequent road traffic; must cross four right turns; path will divert slightly from straight in order to cross right turns. Centrewalk: wider due to having just one combined instead of one on each side of the road; immediately next to LRT lanes which provide a buffer against loud and dangerous road traffic (LRT won't jump the kerb); no crossings except for signalized crossings at either end; path will be absolutely straight and uninterrupted. If necessary/desirable LRT could have a railing separating it from pedestrian traffic. Note that there are absolutely no pedestrian destinations along either side of Northfield between Kumpf/Barta and Colby/Conestogo; Kumpf/Barta are close enough to the rail crossing that a signalized intersection at the rail crossing can provide convenient access to that road/driveway. I'd be interested in your thoughts on this idea. I'm convinced that any issues can be dealt with in detailed design.</td>
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<td>16</td>
<td>Unknown</td>
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Nice to have PIC located close to the area in question, could have had better exterior signage though. - Comment sheets need e-mail address, fax numbers or ways to follow-up if you didn't have time to fill out the form onsite. - Information boards were helpful and so were staff. - Plans to close some of these turning lanes on Northfield Drive are quite dramatic. Given that signals have just been installed at some of these intersections why couldn’t they just be left as signalized intersections? - Main issue for me isn’t so much road access in the area - it is access to the LRT. Being a rural resident, where am I going to park to get on the LRT? The Northfield Station has one of the highest potentials to lure people onto the Rapid Transit network due to its proximity to the Lakeshore, Beechwood, Laurelwood, Columbia Forest, and Conservation Drive neighbourhoods - each with thousands of residents. Local bus routes are weak and as GO Train stations have consistently proven, when provided with convenient, affordable parking people will gladly drive or cycle the first kilometer or two and then take rail transit into the core areas. Personally, I am a rural resident and the opportunity for residents of St. Jacobs, Elmira, St. Clements, Hiedelberg, Linwood, Bamberg, Hawkesville, Wellesley, etc. to use this station as their entranceway to the cities is huge. Much the same way so many Waterloo folks park at Yorkdale Mall and take the TTC Subway downtown because they don’t like to drive in the city, the same potential exists here at Northfield Station. In fact, given the large Mennonite population in the surrounding area who need easy ways to get to the hospital and around the cities the Northfield LRT Station should include (like most area businesses including Sobey’s, Home Depot, Conestoga Mall, etc.) a driving shed for horse and buggy parking - something that would be truly unique in the world of rapid transit stations but also guaranteed to be heavily used at this station! This station is also one of the closest to the huge St. Jacob’s Farmer’s Market and the need/potential to address the thousands of daily visitors to the market just a kilometer or so away needs to be addressed. As well, with the Expressway exits and off ramps located so close to the Northfield Station the unique opportunity and the ability to link the LRT to Expressway users is significant. The full to capacity Carpool areas along major highways across the province attest to the success of connecting people and changing driving habits if the opportunity is presented to them. There is a huge potential here to link the LRT to the tens of thousands of daily Expressway users.

The TTC has done a fabulous job with their Kiss’N’Ride systems at key subway stations such as Finch Station where significant ridership begins or ends their journey, need to carpool, be picked up/dropped off, etc. If we are going to truly be successful at luring people out of their cars and onto the Rapid Transit system to build ridership we are going to have to do more than just build some platforms along the route. Key transit stations such as Northfield Station are going to have to include enhanced facilities such as parking, passenger pickup/drop off areas, driving sheds, extensive bicycle parking (perhaps even covered and secure), etc. This is not a station that many people will walk to however, thousands of people live within just a couple of kilometers - often with few other transportation choices in the area. If we want ridership we are going to have to do more than provide some iXPress Bus Routes. GO Transit has had learn the hard way, and has proven that there is a significant demographic that will take transit but demands the convenience - or if one lives in Wellesley - the necessity of driving to the transit station to access the network. There is an immediate opportunity to work
with the developers of two massive developments adjacent to the Northfield Station currently in the planning stages and underdevelopment to develop these enhanced station features and amenities. The window is rapidly closing though as they seek final approvals. The Region needs to work with these developers to see what might be possible to addressing the needs outlined above in a win-win-win manner as this station could be one of the Region’s biggest assets/opportunities to lure people out of their cars and onto the Rapid Transit network. However, if nothing happens and the station is nothing more than a cement platform isolated in an industrial park/auto dealerships it will be one of the biggest lost opportunities in the Region and thousands of people will likely continue to commute about in their cars having little other viable choice from this part of the Region.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013  FILE CODE: T17-02

SUBJECT: NEW iXPRESS ROUTE 202 UNIVERSITY AVE - MARKETING CAMPAIGN

RECOMMENDATION:
For information.

SUMMARY:
A new iXpress route, the 202, was recently launched to operate along the University Avenue corridor between the Boardwalk and the Conestoga Mall in Waterloo. This report summarizes the marketing campaign for this new express service. The campaign includes offering free service on the 202 each Friday until the end of the year. Additionally there are plans to advertise this service, initially through the “Get There Faster” campaign (see attached), on buses, in shelters, through a Facebook contest (at the GRT facebook page), cinema advertising, and through the delivery of local mailers along the corridor, along with other traditional forms of advertising in local media including the Region News.

REPORT:
A new iXpress bus route was recently introduced along the University Avenue corridor as part of the September 2, 2013 transit service expansion. This is the second in a series of seven express routes being introduced over the next few years to implement GRT’s network redesign to better support the rapid transit service. The first transit express network route was successfully introduced in 2011 serving the Fisher Hallman Rd and Columbia St corridor. Each of these seven express routes will eventually serve a future aBRT or LRT station.

The route 202 operates between the Boardwalk and Conestoga Mall along Erb St. and University Ave. and will eventually serve the University of Waterloo and Conestoga Mall LRT stations. This route is an ideal candidate for the transit network redesign since it serves a number of residential, commercial, business and educational stakeholders along this express corridor.

To build on the successful iXpress brand these seven express routes will become part of an integrated iXpress network. The iXpress station shelters located along these seven routes are distinguished using this unique brand and 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.

To raise awareness of this newest express service there will be ads on buses, in shelters, cinemas, newspapers and a household mailer to residents living along this corridor based on the attached “Get There Faster” campaign. Also, similar to what was done in 2011 a free Friday promotion will be offered each week on the route 202 until the end of the year. Transit staff also plans to be on site at the Boardwalk, Conestoga Mall and the Universities in the coming weeks to promote the benefits of this new route and a Facebook contest based the characters from the “Get There Faster” campaign.
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 September 2, 2013 transit service expansion, including the in-house developed Route 202 campaign, along with the lost revenue from the free Friday service (estimated at $5,000) has been budgeted for in the 2013 Transit Services Operating Budget.

ATTACHMENTS

Get There Faster sample advertisements

PREPARED BY: Eric Gillespie, Director, Transit Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
GET THERE FASTER.
WITH GRT’S NEW 202 iXPRESS

Head to work, school or play with the new 202!
Travelling between The Boardwalk and Conestoga Mall, the new 202 runs
along the Erb Street and University Avenue corridors 7 days a week.
Ride for FREE every Friday through December, 2013.
GET THERE FASTER.
WITH GRT’S NEW 202 iXPRESS

Head to work, school or play with the new 202!
Travelling between The Boardwalk and Conestoga Mall, the new 202 runs
along the Erb Street and University Avenue corridors 7 days a week.
Ride for FREE every Friday through December, 2013.
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Head to work, school or play with the new 202!
Travelling between The Boardwalk and Conestoga Mall, the new 202 runs
along the Erb Street and University Avenue corridors 7 days a week.
Ride for FREE every Friday through December, 2013.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: E20-40

SUBJECT: WASTE MANAGEMENT MASTER PLAN: STUDY UPDATE AND CONSULTATION SERIES 2 SUMMARY

RECOMMENDATION: For Information

SUMMARY: Nil

REPORT:

Background

Implementation of the recommendations contained in the original 1986 Waste Management Master Plan (WMMP) have resulted in more than a threefold increase in the amount of material diverted from landfill disposal between 1995 and 2011 amidst a population increase of nearly 35% over the same period. Building upon the successes and experience gained over the last 25 years, the Region is embarking on the development of a renewed strategy to guide waste management services over the next 20 years.

A new master plan study was initiated in April 2012 to establish a long-term strategic direction for sustainable waste management options that are consistent with the Region’s corporate and strategic vision over the next 20 years. Updates have been provided to the Planning and Works Committee in September 2012 (E-12-088) and February 2013 (February 26, 2013 Memo to Committee).

The objectives of the updated WMMP include:

- Achieving meaningful involvement and public consultation early and throughout the process;
- Ensuring decision-making processes are accessible, traceable & transparent;
- Identifying continued improvements to existing waste reduction and diversion programs;
- Identifying a recommended residual waste management strategy;
- Considering partnerships with other municipalities, the private sector and the province;
- Being strongly aligned with the Region’s corporate and strategic vision;
- Balancing regional dynamics (e.g., rural/urban differences);
- Remaining flexible to respond to changes in policies, technologies, growth and the composition of the waste stream; and
- Meeting the needs of the community into the future.

Scope of Work and Status Update

The scope of work for the WMMP study includes the following tasks.

Task 1 - Develop a Mission Statement and Guiding Principles (COMPLETE)
Task 1 was completed in June 2012, and the Mission Statement and Guiding Principles were endorsed by the Steering Committee and Stakeholder Group and published on the study web page. The study web page is accessible via the following link http://www.regionofwaterloo.ca/en/aboutTheEnvironment/Wastemanagementmasterplan.asp

**Task 2 - Develop a Communication and Consultation Plan** (COMPLETE)

Task 2 involved the development of a Communication and Consultation Plan to provide sufficient and meaningful public, stakeholder, and agency consultation throughout the study. This task was completed in June 2012, and the Communication and Consultation Plan was endorsed by the Steering Committee and Stakeholder Group and published on the study web page. The plan includes traditional consultation means such as Public Information Centres (PIC’s), which were leveraged using other engagement tools such as social media, online surveys and public outreach within the community. Consultation Series 1 focused on current waste management services and diversion programs, and was held in Fall 2012. A summary of Consultation Series 1 activities and feedback was presented in the February 26, 2013 Memo to Committee. Consultation Series 2 was conducted in Spring/Summer 2013, following the completion of Task 5 below, and focused on garbage disposal. A summary of Consultation Series 2 activities and feedback is provided later in this report.

As part of the consultation plan, the Region hosted an Intermunicipal Workshop in June 2012. Waste management representatives from several neighbouring municipalities including the Cities of Brantford, Guelph, Hamilton, London, Counties of Brant, Oxford, Wellington, Norfolk and Region of Halton to engage in an open dialogue regarding common challenges, opportunities, leading practices, and to explore opportunities for future collaboration.

**Task 3 – Develop Projections** (COMPLETE)

Projections for diversion rates and diversion streams, residual waste production and landfill capacity were developed in consideration of evolving demographics, housing patterns, diversion patterns, waste composition and market share of Industrial, Commercial and Institutional (ICI) waste. The evaluation concluded that the remaining capacity in the Waterloo Landfill is approximately 18 years in a status quo scenario, and may vary between 16 and 20 years dependant on the variables listed above. This task was completed in September 2012, and documented as Interim Report No. 1. The report was endorsed by the Steering Committee and Stakeholder Group and published on the study website.

**Task 4 – Document Baseline Conditions** (COMPLETE)

This task established a baseline for decision-making. Areas of focus include current Waste Management services and infrastructure, current waste profile and generation rates, relevant concurrent Regional studies (e.g. Biosolids Master Plan Implementation), other municipal waste management plans and initiatives, potential partnership opportunities (Inter-Municipal Workshop summary) and waste management policy and regulation. This task was completed in September 2012, and documented as Interim Report No. 2. The report was endorsed by the Steering Committee and Stakeholder Group and published on the study website.

**Task 5 – Identify and evaluate alternatives** (COMPLETE)

This task includes the following:

- generation of a list of waste management alternatives for residual waste (i.e. garbage) processing and disposal, including consideration of technologies such as mechanical, biological and thermal processes, co-processing with other waste streams and energy and resource recovery;
• development of an evaluation methodology that incorporates the principles of the Region’s Environmental Sustainability Strategy, and considers both local and global impacts;

• review of opportunities and constraints related to present and future program delivery.

This task was completed through Summer 2013, and documented in Interim Reports Nos. 3-6. These reports were endorsed by the Steering Committee and Stakeholder Group and published on the study website.

**Task 6 – Identify Preferred Strategy (UNDERWAY)**

The preferred strategy will build upon waste reduction and diversion programs currently in place, and will identify new and expanded diversion programs and a high-level direction for future residual garbage disposal. Public feedback received during Consultation Series 1 and 2 will be carefully considered and incorporated into the preferred strategy. Recommendations will be documented in the WMMP Final Study Report to be presented to Council in Fall 2013.

**Task 7 – Implementation Plan (UNDERWAY)**

A staged implementation plan will be developed and included in the WMMP Final Study Report. The plan will include a schedule of next steps for delivery of the preferred strategy.

**Summary of Consultation Series 2 Activities and Feedback**

The second consultation series was conducted in the Spring/Summer of 2013 and included provision of information through print and online media, public information centres (PIC’s) and collecting feedback through a survey. These activities were initiated in May and concluded in mid-July.

The goals of Consultation Series 2 were to:

- Provide the public with an opportunity to evaluate future garbage disposal technologies;

- Collect feedback on the best option to manage the Region’s garbage when the landfill is full;

- Collect feedback on what new Regional policies should be considered to complement the implementation of the preferred garbage disposal technology.

Four PIC’s were hosted in Cambridge, Kitchener, Wilmot Township and Waterloo. The PIC’s were strategically located for convenience and accessibility for residents throughout Waterloo Region. Attendance at the PIC’s is detailed in the table below (as recorded on the sign-in sheets). However, it is noted that actual attendance was likely 20% to 25% higher as not all residents signed in.

<table>
<thead>
<tr>
<th>Information Event Location</th>
<th>Date</th>
<th>Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region of Waterloo Community Health &amp; Public Services, Cambridge</td>
<td>June 10</td>
<td>22</td>
</tr>
<tr>
<td>Kitchener City Hall, Kitchener</td>
<td>June 11</td>
<td>27</td>
</tr>
<tr>
<td>Wilmot Recreation Complex, Township of Wilmot</td>
<td>June 12</td>
<td>20</td>
</tr>
<tr>
<td>Knox Presbyterian Church, Waterloo</td>
<td>June 13</td>
<td>18</td>
</tr>
</tbody>
</table>

In addition to the PIC’s, Consultation Series 2 also included the implementation of an on-line survey to solicit feedback on the following topics:
- Garbage Disposal Technology Evaluation Process: participants rated the evaluation process based on the fatal flaw analysis, sustainability evaluation and life cycle assessment;

- Preferred Garbage Disposal Option: participants ranked disposal technology options, including thermal treatment, mechanical biological treatment and landfill, in order of preference;

- Possible New Regional Policy Considerations: participants voted on what new policies should be considered to complement garbage disposal in the Region; and

- Other Ideas: participants provided their own ideas related to garbage disposal and waste management.

Table 2: Survey Respondents

<table>
<thead>
<tr>
<th>Survey Access Point</th>
<th>Surveys Completed</th>
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</thead>
<tbody>
<tr>
<td>On-line</td>
<td>182</td>
</tr>
<tr>
<td>Hard copy</td>
<td>7</td>
</tr>
<tr>
<td>PIC Interactive Boards</td>
<td>22</td>
</tr>
</tbody>
</table>

As shown in Table 2, a total of 182 residents completed the survey online and 7 residents completed the survey in hardcopy format. An additional 22 residents answered the survey questions through the interactive display boards at the PIC’s, for a total of 211 responses.

Garbage Disposal Technology Evaluation Process

Respondents were asked to rate the process developed for the study to evaluate future garbage disposal technologies. Results are shown in Figure 1. 50% of residents (119 individuals) responded that they were satisfied with the evaluation process. An additional 19% (46 individuals) reported being very satisfied with the evaluation process and 25% (61 individuals) remained neutral on the topic. A total of 3% of respondents (eight individuals) felt somewhat satisfied and 3% (seven individuals) stated they were not satisfied with the evaluation process.

Figure 1: Satisfaction with the evaluation process
Garbage Disposal Options

Three garbage disposal options were determined to possess all of the “must-have” criteria identified in the fatal flaw analysis, and a sustainability evaluation and life cycle assessment were performed for each of these options to evaluate local and global impacts, respectively. The options include:

- Thermal Treatment: use of heat to convert garbage into carbon dioxide, water and heat. Before treatment, recyclables and large items are removed. While thermal treatment significantly reduces the volume of waste, the ash that is left over must be disposed or used in another process. Thermal treatment can generate a significant amount of energy.

- Mechanical Biological Treatment (MBT): use of a combination of mechanical separation and digestion to process waste. Recyclables and large items are first removed. Following separation, the remaining waste is treated biologically to produce compost, fertilizer and biogas. MBT can generate a moderate to significant amount of energy.

- Landfill: compaction and burying of garbage in lined cells. Materials in a landfill decompose and produce landfill gas. Landfill gas is collected and can be used to generate a moderate amount of energy.

Preferred Garbage Disposal Option

Respondents were asked to rank the three garbage disposal technologies (thermal treatment, mechanical biological treatment and landfill) in order of preference. Results are shown on Figure 2. The most preferred technology was thermal treatment at 66% (144 individuals). Mechanical biological treatment was most preferred by 33% (69 individuals) of respondents and 6% (12 individuals) felt that landfill was the most preferred option. The least preferred option for 82% (166 individuals) of survey respondents was landfill. Thermal treatment was second at 9% (20 individuals) and 7% (15 individuals) chose mechanical biological treatment as their least preferred option.

Figure 2: Garbage disposal technology options with preferences
Respondents who chose landfill as the most preferred option provided comments pertaining to the complexity of the information presented, as well as suggestions to make the blue box and green bin mandatory and a suggestion to get rid of the green bin program. Several respondents noted that the environment and social aspects were more important considerations than economic implications. Several respondents also pointed to thermal treatment having been proven to be successful in other countries making it a good choice. Respondents noted that thermal treatment took up less space than landfills and also produced energy which was an obvious advantage compared to other technologies. Mechanical biological treatment was stated numerous times to be the most balanced option, since it would take up less space than a conventional landfill and does not contribute to air pollution like the other options. Mechanical biological treatment was also favoured because respondents had heard about the success of this technology in other areas and it was an economical choice. Several mentioned that mechanical biological treatment was the best choice as thermal treatment relies on waste input and therefore does not encourage people to reduce waste.

**Possible New Regional Policy Considerations**

Finally, residents were asked if the Region should consider new waste management policies, including:

1) a policy that would allow export of residential garbage from the Region,
2) a policy that would allow import of residential garbage into the Region, and
3) a policy to restrict disposal of Industrial, Commercial and Institutional (ICI) waste in the Region.

The majority surveyed responded No to the first policy question (73%, 154 individuals), Yes to the second policy question (66%, 135 individuals), and were more closely split between Yes (54%, 108 individuals) and No (45% 90 individuals) on the third policy question.

Many respondents stated that it was important that the Region continue to manage waste within its borders; the Region is currently seen as a leader in waste management, and exporting waste, particularly to a landfill outside the Region, would change this reputation. Respondents who felt that a garbage export policy should be considered pointed to this option as a cost savings measure, or stated that waste export to a treatment (or energy from waste) facility could be considered, but not to a landfill.

Many respondents who selected Yes to policy question 2 provided conditions for their response. Respondents felt that waste import should be considered if required to achieve capacity or economies of scale for a new treatment (or energy from waste) facility in the Region.

Regarding policy question 3, many respondents identified that it was important that restrictions should be aimed at encouraging IC&I to reduce the amount of waste produced. It was suggested that restrictions be placed on the types of materials, rather than the amount of materials, and that diversion programs, including education, be expanded to include IC&I. Respondents identified the risk of illegal dumping and the possibility that waste would be disposed of unsafely, or in an environmentally damaging way if restrictions were implemented. It is important that economic development be supported in the Region, and several respondents identified that businesses should not be discouraged from operating in the Region by restrictions. One respondent identified that IC&I waste restrictions should be implemented provincially, not regionally, so that the decision does not affect the local economy.
Other Ideas

The survey provided an opportunity for respondents to offer additional comments. Many survey respondents appreciated the opportunity to share their opinions and state their input on the WMMP. Common suggestions included introducing garbage bag limits, implementing the green bin organics program in multi-residential dwellings and apartment buildings, as well as increasing accountability, e.g., creating mandatory by-law to use blue bin program for residents and businesses. Other suggestions included looking to neighbouring cities and municipalities for waste policy examples and demand for selecting the option that is best for the environment and health over costs. Overall, respondents seemed very satisfied with the level of information provided with a few exceptions stating the information was too simplified.

A full summary report of the Consultation Series 2 activities has been prepared and will form part of the WMMP final study report to be presented in the fall of 2013.

Schedule

The WMMP Study is proceeding on schedule and on budget, and will be completed in Fall 2013.

CORPORATE STRATEGIC PLAN:

The new WMMP supports the Corporate Strategic Plan Objective 1.3 of “Reducing the Amount of Waste Requiring Landfill”.

FINANCIAL IMPLICATIONS:

The Council-approved 2013 Waste Management Ten Year Capital Program includes a total budget of $429,000 over the years 2012 to 2013 for the new WMMP. This funding is sufficient to complete the new WMMP.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Nil

PREPARED BY: Donna Serrati, Manager Engineering & Programs, Waste Management

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

DATE: September 10, 2013

FILE CODE: A01-20(A)

SUBJECT: WASTE MANAGEMENT 2013 UPDATE

RECOMMENDATION:

For Information.

SUMMARY:

NIL

REPORT:

The Waste Management Division is responsible for a wide variety of programs and services related to the collection and disposal of the Region's residential waste, and operation of residential waste diversion and recycling programs. The Waste Management Division operates an engineered landfill at the Waterloo Waste Management Centre and a bulk waste transfer facility located at the Cambridge Waste Management Facility as well as six small vehicle transfer stations located throughout the Region.

The programs and services offered by the Region are funded by revenue generated from landfill tipping fees, sale of recyclables, landfill gas utilization royalties, funding from Stewardship Ontario and Regional property taxes. In 2013, the Region’s net property tax levy for waste management services is $127 per household or about $2.44 per week. This cost per household is at the lower end while offering a comparable or enhanced level of service to residents in comparison to similar sized municipalities as identified in Figure 1 (Appendix A).

As presented in this report, significant revenue challenges exist across the entire waste management industry that are impacting our ability to properly fund the services and programs we provide.

Landfill Tonnage and Revenue:

As previously identified during the 2013 budget process and through periodic financial reports, a general trend of lower landfill tonnage has been observed across the entire waste industry (both public and private sectors) since the 2008 recession. The anticipated return of landfill tonnage to levels seen prior to 2008 has not materialized and is mainly due to:

- the continuation of a weaker economy;
- an observable transition to a lighter (less dense) residual waste stream;
- increased waste exporting from the Region by the private sector;
- improved diversion efforts in all sectors; and,
- the reduction of waste generation at source.
The 2013 budget assumes 100,000 tonnes of commercial waste will be received for landfill disposal. Based on year-to-date data, the current projection for commercial tonnage is approximately 40,000 tonnes below forecast, resulting in a projected revenue shortfall of approximately $3 million. The history of tonnage landfilled and tipping fees is provided in Figure 2 (Appendix A). Prior to 2008 increasing tipping fees did not result in any substantial change in annual tonnage. This suggests that changes to tipping fees do not result in significant variation in tonnage either up or down. Post 2008 tonnage does decrease but appears to be primarily related to a weaker economy and increased exporting.

As the Region has no mandate to control the flow of waste generated in the non-residential sector, a significant portion of tonnage generated in the industrial, commercial and institutional (IC&I) sector is managed by the private sector. In recent years, there has been an increase in the number of waste transfer facilities in the Region as well as companies involved in waste hauling. The IC&I waste is handled through a variable tipping fee structure based on tonnage and/or contract duration (i.e. volume discounts) and is transferred through local waste transfer stations to landfills outside the Region. A surplus of disposal capacity continues to exist within southern Ontario and the northern United States with tipping fees as low as $10/tonne in Michigan and in the $30 to $40/tonne range in southwestern Ontario for private sector landfills. The Region’s current landfill tipping fee is $74/tonne. However, from a revenue perspective, it is important to differentiate between public and private landfills when considering tipping fees. Publically owned facilities are in the business of covering disposal costs as well as to obtain additional revenue to pay for residential waste diversion programs and also need to consider the long term costs of ensuring sustainable ways to continue to dispose of wastes in the future. On the other hand, private sector landfills own significantly more landfill capacity than the public sector and charge what current market conditions allow. In the current economic environment and competitive market place, private sector landfills have the ability to set a much lower cost per tonne fee and at the same time, they do not need to cover costs associated with municipal diversion programs or consider any future costs to replace capacity once a landfill is full. Given the above, the Region has attempted to maintain a balance of offering a reasonable tipping fee and convenient service for the local business sector while not being the cheapest disposal option.

At present, about 1/3 of the residual waste generated in Ontario (approximately 4 million tonnes) is disposed of in landfills outside of the Province, primarily in Michigan. In the absence of Provincial policy restricting residual waste from leaving Ontario, coupled with the ongoing surplus of cheap landfill disposal capacity in the private sector, it is anticipated that a continued decline in the amount of commercial waste for landfill disposal will be observed.

These revenue/tonnage issues are not unique to the Region of Waterloo. Other municipalities in the Province that own disposal capacity are facing similar challenges and, in the absence of other funding mechanisms, have either:

1. Reduced their reliance on landfill revenue over time by maintaining higher tipping fees and offset the revenue loss through increases to the tax levy. This approach also results in reserving landfill disposal capacity for residential waste, deferring expensive capital investment for future waste disposal capacity and providing for a stable funding source for operating residential collection, diversion and disposal programs.

2. Kept a lower tipping fee (or some form of tiered tipping fee) to try and maintain a stable tonnage and revenue stream. Although this approach may provide a more consistent year to year revenue stream, the revenue generated is much less and only covers the cost of landfill disposal and does not assist in offsetting costs for diversion programs.
During the 2014 Budget process, staff are not recommending a tipping fee adjustment as it would not guarantee any significant increase in landfill tonnage and could ultimately have the adverse impact of generating even less revenue while filling up the Regional landfill sooner. Further, it is evident given the current market conditions, that revenue from commercial tipping fees will likely continue to erode and attempting to estimate where commercial tonnage stabilizes is challenging.

**Waste Diversion Operations and Revenue:**

Although increased waste diversion is beneficial (reduces reliance on raw materials, reduces greenhouse gas emissions and conserves landfill capacity), it is also more costly than landfilling due to a significantly greater amount of handling, processing and hauling of materials to market. In many cases, in order to stimulate diversion, tipping fees for waste diversion programs tend to be lower than landfill disposal (e.g. yard waste and brush) or non-existent (municipal and hazardous special waste) yet the operating costs of the programs are significantly greater than landfill disposal. Not only are these programs essential for ensuring protection of the environment, in many cases they are also mandated through Provincial policy or by site operating permits.

Aside from partial funding for existing producer responsibility programs (e.g. blue box program, electronic waste, municipal hazardous and special waste, tires), only the blue box program currently provides additional revenue from the sale of recyclable materials to offset program costs.

Annual budget estimates for the revenue of the sale of recyclables are based on historical trends of average commodity prices. However, continued price volatility has been observed since it is largely dependent on market conditions. For example, in 2009 the revenue from blue box material sales reached a low of $2.0 million and two years later, a high of $5.09 million in 2011. For 2013 we are projecting revenue in the range of $3.0 million which is about $1.0 million less than forecast. In any event, it should be noted that even in years when significant recycling revenue has been observed, a negative program net-cost is typical, once the costs of collection and processing are taken into account. A graph showing the volatility in blue box revenue and tonnes marketed over the last ten years is presented as Figure 3 (Appendix A).

**Cost Containment Measures:**

Waste Management staff continually engage in the process to review costs, service levels and fees as well as best practices in the waste industry. The decline in commercial tonnage has been an issue since the early 1990s and staff has responded to and continue to respond to this challenge. In this regard, a comprehensive list of efficiency improvements and revenue adjustments was developed as part of recent budget processes. In 2012, savings of approximately $400,000 were identified through initiatives such as a switch to a two stream blue box collection practice, beneficial landfill use of mixed broken glass, eliminating the composter give away program. As part of the 2013 budget process, a further base budget adjustment of about $1.14 million was identified and implemented including the introduction of a minimum fee at the transfer stations, deferral of the shingle diversion program, closing small vehicle transfer stations on statutory holidays, eliminating eleven household hazardous waste event days and the distribution of additional free blue boxes.

As with operating expenditures, similar effort has been made by staff with deferrals and reductions in the capital budget area. Examples include the deferral of the expansion of the
Green Bin Program to apartments, rebuilding instead of replacement of major landfill equipment at substantial savings (2013 estimated savings of $800k), reduction in the size of Waste Management fleet and deferral of vehicle and equipment replacement when possible (deferrals total $1.87 million in 2013 and approximately $2 million in 2014).

While commercial landfill disposal tonnage levels are down, fixed costs related to landfill disposal have not been largely impacted as the same level of resource allocation (staff and equipment) is required throughout the day in order to meet compliance with the landfill’s site operating permit and regulatory standards. In this regard, activities such as landfill spotting, heavy equipment operation (e.g. dozers and compactors), litter picking at and around the site and daily cover placement are still necessary regardless of the tonnage of material received for landfill. Despite the drop in IC&I tonnage, it should be noted that the residential landfill tonnage has remained relatively consistent at around 95,000 tonnes per year.

Regardless of the drop in commercial landfill tonnage, a noticeable operational and program shift away from landfill disposal activities towards waste diversion has been observed as the number of customer visits and materials handled at Waste Management Division sites has remained consistent. This has required an adjustment in operating and administrative practices to respond to new or expanded levels of service while maintaining appropriate staffing levels. Specifically, Figure 4 (Appendix A) indicates that staffing levels have remained consistent or decreased proportionately in comparison to the number of service level/program expansions over the past 15 years, including the consolidation of collection services at the Regional level in 2000. Since 1993, staffing levels have decreased by approximately 24 FTEs while customer transactions have increased from about 170,000/year to 460,000/year.

It should also be noted that this Region is seen as having implemented or developed best practices in many areas of Waste Management including the marketing of recyclables, contract management and provision of contract clauses related to non-performance and fuel surcharge for collection and hauling contracts. Some of these practices have been emulated in other municipalities. OMBI and Waste Diversion Ontario (WDO) data further demonstrates the continued efficiency and effectiveness of our programs with costs at or below median when compared to other municipalities. As an example and as shown in Figure 5 (Appendix A), the Region of Waterloo reflects a higher residential diversion rate at a lower cost per tonne in comparison to other OMBI members.

Staff are continuing to review potential budget adjustments for 2014 and beyond, including options such as changes to operating hours/days and curbside collection policy changes (e.g. bi-weekly collection, bag limits, etc.) and will report back as part of the 2014 budget process. However, any alterations to existing service levels, programs and contracts require consideration of existing contract obligations, regulatory requirements and labour relations impacts and must also be cognizant of recommendations stemming from the soon to be completed Waste Management Master Plan. At this time, the full closure of the four rural transfer stations, as presented as part of last years budget process, remains as the single most viable cost reduction for the Waste Management Division. Notwithstanding the above, Staff continue to look at options to improve efficiency and effectiveness.

In summary, with the continued high level of site activity, shift of operational activities from landfill disposal to waste diversion, and continued curbside residential landfill tonnage remaining at consistent levels, the revenue shortfall observed in the commercial sector does not directly result in a corresponding reduction in operating expenditures. Further, it is anticipated that any proposed 2014 budget increase to account for the revenue shortfalls projected for 2013, would still maintain the household impact within the lower cost range in comparison to similar sized municipalities.
Future Budget Adjustments/Impacts:

Some potential budget adjustments and impacts to the Waste Management budget that will require consideration beyond 2013 include:

- **Waste Management Master Plan (WMMP):** a new WMMP will be completed and submitted for Council approval later this fall that is anticipated to identify opportunities and direction for new programs as well recommend post-diversion residual waste management strategies, all of which will have budget implications but are unknown at this time;

- **Extended Producer Responsibility:** significant changes to program operation and funding mechanisms could occur however the timing and budget impact is unknown at this time (Note: Additional details with respect to the proposed waste reduction act and waste reduction strategy are provided in Report E-13-109);

- **Green Bin Program Optimization:** the additional cost for Green Bin processing and hauling when the contract with Guelph commences in October 2013 with full impact in 2014. In addition, one of the initial outcomes of the WMMP that has already been identified, and as a follow up to a green bin update report in May (Report E-13-071), will be consideration of implementing new curbside collection policies such as bag limits or bi-weekly garbage collection to assist in increasing green bin participation; and,

- **MPAC Re-assessment:** consultation is still ongoing over the potential to re-asses the property value of active landfills in the Province (including the Waterloo Landfill Site) which could lead to an increase in tax assessment. The impact and timing are unknown at this time.

**CORPORATE STRATEGIC PLAN:**

This report has been prepared consistent with the Corporate Strategic Objective of Focus Area 1 “Environmental Sustainability: Protect and enhance the environment and particularly action 1.3 “Reducing the Amount of Waste Requiring Landfill.”

**FINANCIAL IMPLICATIONS:** Nil

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:** Nil

**ATTACHMENTS:**

Appendix A – Trends and Comparisons

**PREPARED BY:** Jon Arsenault, Director, Waste Management

**APPROVED BY:** Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A – Trends and Comparisons

Figure 1
Household Impact Comparison

Figure 2
Landfill Tonnage & Tipping Fee History

Figure 3
Recyclable Tonnage & Revenue History

Figure 4
Summary of Staffing & Transaction Activity
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

SUBJECT: FUTURE APPROACH TO WASTEWATER OPERATIONS 2016 – 2020

RECOMMENDATION:

THAT the Regional Municipality of Waterloo appoint two (2) Regional Councillors to an Evaluation Team to review and recommend a preferred approach for the wastewater service delivery as described in Report E-13-102 dated September 10, 2013.

SUMMARY:

The current wastewater service agreement between the Region and the Ontario Clean Water Agency (OCWA) is now halfway through its five-year period. A review of the current contract status and service delivery options (internal operations, external operations with OCWA, and Request for Proposal) is warranted prior to the expiration of the current contract on December 31, 2015. An evaluation team is to be created to review and recommend a preferred approach for the wastewater service delivery. The Region is to appoint two Regional Councillors to the Evaluation Team.

The Regional wastewater facilities have been operated and maintained by the Ontario Clean Water Agency (OCWA) since 1994. Prior to the expiration of the last contract in 2010, a team comprised of Regional Councillors and staff from Water Services, Human Resources, Finance and Legal conducted an extensive review and evaluation of the various modes of service delivery. The potential modes of service delivery reviewed included internal operations by the Region, external operations by OCWA, and a competitive Request for Proposal process.

Using a selection framework, the preferred approach was to continue the external operations with OCWA. On the direction of Regional Council, contract negotiations were held with OCWA for a five-year operation and maintenance contract. The negotiation process was observed and vetted by Deloitte and resulted in a fair and risk-based contract that is set to expire on December 31, 2015.

REPORT:

1.0 Background

The Region of Waterloo is responsible for the provision of municipal wastewater treatment services within its Regional boundaries. The Region owns and operates thirteen Wastewater Treatment Plants (WWTPs) with design capacities varying from 130 to 123,000 m\(^3\)/day. In addition, the Region has responsibility for six sewage pumping stations and a centrally-located biosolids management facility. Responsibility for the wastewater collection system generally remains with the local municipality, with the exception of the Townships of Wellesley and North Dumfries which are owned and operated by the Region.
The Region assumed responsibility for the wastewater treatment function in 1973 through the creation of Regional Government. When the responsibility for wastewater treatment was transferred to the Region, it was decided that the MOE would continue to operate the facilities and the Region would assume full administrative, financial and legal responsibility. This arrangement continued for twenty years until January 1, 1994, when the responsibility for operations was transferred to a newly created Crown Corporation, the Ontario Clean Water Agency (OCWA).

The introduction of OCWA prompted the Region to review its role in wastewater treatment. The Region entered into an interim operating agreement with OCWA for a three year period. During this time, the Region assessed the present service agreement, opportunities for improvement, and initiated a request for proposal process.

The competitive process culminated with the Region entering into a five year service agreement with OCWA to operate and maintain the Region’s wastewater treatment facilities. The agreement covered the years 1998 to 2002 and resulted in an improved level of service and an overall lower operating cost. This contract was extended for a three year period until 2005.

In 2004, the Region conducted a detailed evaluation of the service delivery options, including internal operations with Regional staff, external operations with OCWA and Request for Proposal. The evaluation recognized impacts to the service agreement related to new infrastructure, changes to regulations and transfer of the biosolids program to the Region. The scope of services had increased as several plants were expanded and new treatment facilities had been constructed or transferred to the Region. In addition, new risks were impacting the service contract such as hydro deregulation, new stringent regulations, the administration of the land application program, introduction of a hauled waste program and market conditions. As a result of this review, the preferred approach was to continue with external operations and the Region extended the contract with OCWA to 2010.

2.0 Current Situation

In 2009, the Region conducted a second evaluation to review the various service delivery options given the major upgrades at the Regional wastewater facilities and changes in legislation and market conditions. From the evaluation, it was recommended to continue with external operations and renegotiation a new service agreement with OCWA. Regional Council approved a new 5-year contract with OCWA detailed in report E-10-054 with a provision for a 5 year renewal.

3.0 Future Activities

To ensure the Region’s interests are protected, a review of current contract status and delivery options is to be undertaken. An evaluation team will review three possible service delivery options including internal operations with Regional staff, external operations with OCWA and a Request for Proposal process. The objective of the review is to select the preferred approach which achieves the best possible value for the Region. The evaluation will consider the following technical, environmental and social factors:

i) background on wastewater service delivery;
ii) current market conditions for contract services;
iii) current status of the wastewater capital program;
iv) changes to legislative requirements and reporting; and,
v) the advantages and disadvantages of different approaches;
It is anticipated that an evaluation team comprised of two (2) Regional Councillors and staff from the Water Services, Finance, Legal Services and Human Resources will be formed. The team will review the current contract status, assess the implications of these key factors, develop a selection framework for the various service delivery options and recommend a preferred approach.

The project team will complete the review of the service delivery options and selected a preferred approach over the next 9 months. Implementation plans for the preferred approach will also be developed. The recommendation on the preferred approach will be presented to the Council by the end of 2013 or early 2014 to ensure sufficient time to implement the recommendation prior to the end of the current service agreement.

**CORPORATE STRATEGIC PLAN:**

Ensuring continual wastewater operation supports Corporate Strategic Plan Focus Area 3: Protect and Enhance the Environment and Focus Area 5: Ensure Operational Effectiveness and Efficiency.

**FINANCIAL IMPLICATIONS:**

An extension of the existing contract eliminates the need for a competitive selection process which is estimated to cost in the range of $1 million. The 2013 Ten Year Wastewater Capital Program includes a total combined budget of $0.8 million for the review and implementation of the preferred approach for the wastewater service delivery. The 2015 Wastewater Ten Year Capital Program will be updated to reflect the implementation of the preferred approach.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

The Finance Department, Legal Services, Human Resources and Corporate Services Department have been consulted in preparation of this report.

**ATTACHMENTS:** NIL

**PREPARED BY:** Khalid Mehmood, Manager, Engineering & Wastewater Programs

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

DATE: September 10, 2013

FILE CODE: L04-20/C06-60/PWC/WS.11

SUBJECT: DRINKING WATER QUALITY MANAGEMENT STANDARD PROGRAM UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo receive the minutes from the annual Management Review of the Drinking Water Quality Management System as required, under Ontario Regulation 188/07.

SUMMARY:

This report provides an update on the Region’s full accreditation received April 1, 2013, full on-site completion of an external audit in January 2013, and the results of the 2012 management review in connection with the provincial Drinking Water Quality Management Standard (DWQMS):

REPORT:

Background

Under the Safe Drinking Water Act, 2002, owners of municipal drinking water systems are required to obtain a Municipal Drinking Water Licence to operate a drinking water system. For the Ministry of Environment (MOE) to issue a Municipal Drinking Water Licence, there are five prerequisites. The owner is required to have an established Drinking Water Quality Management System, an accredited operating authority, an approved Financial Plan, valid Permit(s) to Take Water and Drinking Water Works Permit(s). The requirements for the DWQMS were released by the Province in October 2007 and were legislated under Ontario Regulation 188/07. The DWQMS provides a framework for the development and implementation of a quality management system for drinking-water systems. The DWQMS follows the ISO management system standards through the adoption of the ‘Plan-Do-Check-Improve’ cycle and brings a strong focus to the concepts of internal audit, measurement, monitoring and maintenance. The standard requires that owners of municipal drinking-water systems create an operational plan based on 21 elements and identify roles and responsibilities at all levels within the organization that have input to the operation of its drinking-water system.

The key requirements of the DWQMS are as follows:

- Establish and endorse a DWQMS policy;
• Complete a risk assessment and implement adequate controls;
• Define roles, responsibilities, and authorities including owners, top management and the DWQMS Management System Representative;
• Establish competency and training requirements for personnel whose work affects water quality;
• Establish procedures for communication;
• Ensure reliable, consistent procurement of supplies and services:
• Monitor water quality parameters and equipment performance:
• Establish emergency response procedures;
• Conduct internal audits and annual reviews; and
• Provide continuous improvement.

Another key component of the DWQMS is the mandatory participation in an accreditation program for the purpose of determining whether an operator of a drinking water system has a compliant management system. The accreditation program requires an annual third party audit. The audit cycle involves a comprehensive on-site audit in the first year of a three year cycle followed by two off-site surveillance audits in the second and third years. The ministry has designated two new accreditation bodies under the Safe Drinking Water Act, 2002: QMI-SAI Global and NSF International Strategic Registrations (NSF-ISR). Prior to receiving full accreditation, a full on-site audit must be successfully completed.

Full Accreditation Status

The new accreditation body, NSF-ISR, performed a desk-top audit in 2012 and followed with a full on-site audit in January 2013. The Region was successful in obtaining full accreditation for the DWQMS on April 1, 2013. The grant of accreditation implies that the drinking water facilities operated by the Region meets the operating standards of the DWQMS as defined by the MOE and a copy of the DWQMS verification audit is attached in Appendix A.

During the audit, there were 13 minor non-conformances that are to be addressed before the next audit. These minor non-conformances, the associated corrective actions and timelines were reviewed during the interim management review undertaken July 11, 2013, (Appendix C - Semi-Annual Management Review 2013). All minor non-conformances are to be addressed by December 31, 2013.

Management Review

One of the requirements for accreditation is to conduct a management review every twelve months. The management review occurred December 19, 2012, at the Mannheim WTP and included the compliance group (Frank Infante – Supervisor, Process and Compliance, Peter Clarke – Water Quality Specialist, Michael Mortimer – Water Quality Specialist, Tim Walton – Supervisor, Process and Compliance), Dave Young – Director, Health Protection & Investigation, Public Health and top management who as defined by the QMS procedure are Thomas Schmidt – Commissioner, Transportation and Environmental Services, Nancy Kodousek – Director, Water Services and Olga Vrentzos – Manager, Operations and Maintenance. The purpose of the management review is to evaluate the quality management system for suitability, adequacy and effectiveness, as well as to follow-up on previous management reviews, staff suggestions and review of status of management action items identified throughout the year. There were no significant issues identified and no staff suggestions. As part of the annual management review process, top management is required to provide the results of the management review, identify
deficiencies and note decisions and action items to the system owner, Regional Council. The minutes from the management review along with the identified deficiencies, decisions and action items can be found in Appendix B: QMS Management Review 2012 Meeting Minutes.

Infrastructure Maintenance

An overview of the infrastructure maintenance performed on the Region’s water supply systems and North Dumfries and Wellesley distribution systems is to be presented to Regional Council. Element 15 of the DWQMS requires that the operational plan document a summary and monitor the effectiveness of the Operating Authority’s infrastructure maintenance, rehabilitation and renewal programs for the systems and to communicate these programs and updates to the Owner. Asset management and maintenance management programs have been established to ensure repair and replacement of all water system infrastructure including instrumentation calibration, diesel pump operations and well rehabilitation. The overview of the infrastructure maintenance will be presented in a separate report scheduled for later this fall.

CORPORATE STRATEGIC PLAN:

Compliance with the Safe Drinking Water Act and DWQMS Focus Area 5: Ensure Operation Effectiveness and Efficiency to enhance responsibility and transparency to citizens.

FINANCIAL IMPLICATIONS:

The cost for the Full Scope accreditation site audit for all 16 RMOW systems was $14,000. The audit required the auditors to conduct on site audits for each system which was completed over a four day period. The cost of this audit included travel time and time spent on site. Audits for 2014 and 2015 will be off-site surveillance audits which involve confirming that the non-conformances have been dealt with. The cost should be around $5,900 each year. The total cost for the three year audit cycle is approximately $25,800.

All related costs to the Municipal Drinking Water License, including maintenance have been charged to the 2013 Water Supply Operating Budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A – DWQMS Verification Audit 2013
Appendix B - Minutes from 2012 Annual Management Review
Appendix C - Minutes from 2013 Semi-Annual Management Review

PREPARED BY:  Olga Vrentzos, Manager, Water Operations and Maintenance
APPROVED BY:  Thomas Schmidt, Commissioner, Transportation & Environmental Services
APPENDIX A

The Regional Municipality Of Waterloo
2069 Ottawa Street South
Kitchener, Ontario N2E 3K3 CAN

C0123481

Audit Type
DWQMS Verification Audit
21-JAN-2013 - 24-JAN-2013

Lead Auditor
Kishor Desai

Team Auditors
Rose Johnson

Standard
Ontario's Drinking Water Quality Management Standard

Recommendation
Ontario's Drinking Water Quality Management Standard : Registration pending CARs
APPENDIX A

Executive Summary
Ontario’s Drinking Water Quality Management Standard

OA personnel involved in the on site audit demonstrated cooperation and commitment to the program. Population of the Region of Waterloo is receiving safe drinking water through a very complex interface of Operating Authorities and ownership combination as well as numerous intake treatment locations. This high level of complexity is well managed for the critical outcome of safe drinking water services.

Personnel competency and practices for related continual improvement, use of SCADA to manage complexity, capital budget process and internal audit planning are considered strength of this Operating Authority. The issues identified are considered minor and with systemic approach to root cause analysis, corrective and preventive action(s) OA potentially can readily improve its management system. Continual improvement pegged to outcome characteristics of the core services and use of variable measurements are strongly recommended. For detailed non conformities and opportunities for improvement please refer to relevant sections of this report.

Opportunities
Ontario’s Drinking Water Quality Management Standard

Through DWQMS program OA personnel have achieved common understanding and consistency in delivery of safe drinking water. System documentation has assisted in achieving this outcome. Negative feedback from public as one of the important stakeholder is very minimum. OA personnel are well engaged with other OA’s interfacing in delivering services within the Region of Waterloo.

Corrective Action Request Summary By Type
Car Type | Car Count
MINOR | 7

Corrective Action Request Summary By Standard Clause
Standard Clause | Car Count
Communications | 1
Document & Records Control | 1
Essential Supplies & Services | 1
Infrastructure Maintenance, Rehabilitation & Renewal | 1
Measurement & Recording Equipment, Calibration & Maintenance | 1
Organizational Structure, Roles, Responsibilities, Authorities | 1
Sampling, Testing & Monitoring | 1

Corrective Action Requests
CAR No | Type | Auditor Name
A0293614-1 | MINOR | Kishor Desai

Discussed with: Frank Infante
## APPENDIX A

### Statement of Requirement

**PLAN – The Operational Plan shall:**

- describe the organizational structure of the Operating Authority including respective roles, responsibilities and authorities,
- delineate corporate oversight roles, responsibilities and authorities in the case where the Operating Authority operates multiple subject systems,
- identify the person, persons or group of people within the management structure of the organization responsible for undertaking the Management Review,
- identify the person, persons or group of people, having Top Management responsibilities required by this Standard, along with their responsibilities, and
- identify the Owner of the subject system.

**DO –** The Operating Authority shall keep current the description of the organizational structure including respective roles, responsibilities and authorities, and shall communicate this information to Operating Authority personnel and the Owner.

### Statement of Nonconformity

Requirements for organizational structure, roles, responsibilities and authorities are not effectively documented and not implemented.

### Objective Evidence

- Capital budget, design and construction personnel involved are not included in the organization chart and responsibilities and authorities. (2) Authorities, as documented and understood by the Process/SCADA Operators interviewed is not clearly distinguished from responsibilities.

### Location of Finding

- Opr. Plan element #5 and SOP document # 500126 and (i) Process/SCADA Operators audited during on site verification.

### CAR No

<table>
<thead>
<tr>
<th>J0233414-2</th>
<th>Type</th>
<th>MINOR</th>
</tr>
</thead>
</table>

### Standard & Clause

| DWGMS, Communications | Discussed with Frank Infante and Peter Clarke |

### Auditor Name

Kishor Desai

### Statement of Requirement

**PLAN – The Operational Plan shall document a procedure for communications that describes how the relevant aspects of the Quality Management System are communicated between Top Management and:**

- the Owner,
- Operating Authority personnel,
- Suppliers, and
- the public.

**DO –** The Operating Authority shall implement and conform to the procedure.

### Statement of Nonconformity

Documented requirements are not effectively implemented.

### Objective Evidence

- (1) Clear evidence of communicating Infrastructure Maintenance, Rehabilitation and Renewal programs is lacking (2) No evidence of DWGMS relevant communication to the capital works contractors. (3) (i) For customer inquiry # 83959 required response time of 24hr was not met. (ii) For customer inquiry # 83566 action taken was not recorded in Hanson data base.

### Location of Finding

- (1) Reports submitted to the Regional Council (2) Capital work contracts (3) Customer Service Inquiry data base (Hanson).

### CAR No

<table>
<thead>
<tr>
<th>J0233414-3</th>
<th>Type</th>
<th>MINOR</th>
</tr>
</thead>
</table>

### Standard & Clause

| DWGMS, Essential Supplies & Services | Discussed with Frank Infante |

### Auditor Name

Kishor Desai

### Statement of Requirement

**PLAN – The Operational Plan shall:**

- identify all supplies and services essential for the delivery of safe drinking water and shall state, for each supply or service, the means to ensure its procurement, and
- include a procedure by which the Operating Authority ensures the quality of essential supplies and services, in as much as they may affect drinking water quality.

**DO –** The Operating Authority shall implement the procedure.

### Statement of Nonconformity

Procedures for essential supply and services are incomplete and not effective.
## APPENDIX A

<table>
<thead>
<tr>
<th>CAR No</th>
<th>Objective Evidence</th>
<th>Location of Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>J0293814-4</td>
<td>1) Capital work contracts (2) spot service procurement records (3) Drinking water</td>
<td>1) Capital work contracts (2) spot service procurement records (3) Drinking water</td>
</tr>
<tr>
<td></td>
<td>chemicals receiving records</td>
<td>chemicals receiving records</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard &amp; Clause</td>
<td>DWQMS, Infrastructure Maintenance Rehabilitation &amp; Renewal</td>
<td>Discussed with Frank Infante and Ranze Albasel</td>
</tr>
<tr>
<td>Auditor Name</td>
<td>Kishor Desai</td>
<td></td>
</tr>
<tr>
<td>Statement of Requirement</td>
<td>PLAN – The Operational Plan shall document a summary of the Operating Authority's infrastructure maintenance, rehabilitation and renewal programs for the subject system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>QQ – The Operating Authority shall:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) keep the summary current,</td>
<td></td>
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<tr>
<td></td>
<td>b) communicate the programs to the Owner, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) monitor the effectiveness of the maintenance program.</td>
<td></td>
</tr>
<tr>
<td>Statement of Nonconformity</td>
<td>Equipment preventive maintenance was not performed at a claimed frequency.</td>
<td></td>
</tr>
<tr>
<td>Objective Evidence</td>
<td>Monthly preventive maintenance record for Sept. and October 2012 for chlorine pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCP/SHCP 1-1 (CP) at Comstock well house was not available in CMMS data base.</td>
<td></td>
</tr>
<tr>
<td>Location of Finding</td>
<td>CMMS data base for preventive maintenance.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAR No</th>
<th>Standard &amp; Clause</th>
<th>Auditor Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>J0293814-5</td>
<td>DWQMS, Document &amp; Records Control</td>
<td>Rose Johnson</td>
<td>MINOR</td>
</tr>
<tr>
<td></td>
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<td>CAR No</td>
<td>Standard &amp; Clause</td>
<td>Auditor Name</td>
<td>Type</td>
</tr>
<tr>
<td>J0293814-6</td>
<td>DWQMS, Sampling, Testing &amp; Monitoring</td>
<td>Rose Johnson</td>
<td>MINOR</td>
</tr>
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<td>CAR No</td>
<td>Standard &amp; Clause</td>
<td>Auditor Name</td>
<td>Type</td>
</tr>
<tr>
<td>J0293814-7</td>
<td>DWQMS, Measurement &amp; Recording Equipment, Calibration &amp; Maintenance</td>
<td>Rose Johnson</td>
<td>MINOR</td>
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</tbody>
</table>
APPENDIX A

Objective Evidence
Iron testing units SN 00390D0057018 & 00390D0057019 - past due for calibration (due October 2012)

Location of Finding
Operator testing kits

Corrective Action Information and Instructions

See NSF-ISR Policies for Accredited Registration Services for corrective action information and instructions. (Available in the "Standards and Policies" section of NSFOnline)

Also, submit all corrective actions through NSFOnline. For instructions on how to use NSFOnline, please click "Help" in the upper right-hand corner. If you require any assistance in accessing your NSFOnline account, please contact your Registration Specialist (Anastasia Hyciw de Reijke email: ahyciwderiejk@nsf-isr.org).

Site Information

Industry Codes
IAF - CQS27

Scope of Registration

Sites included in the Corporate or Sampling contract, but do not provide support to this location
Standard: Ontario's Drinking Water Quality Management Standard

<table>
<thead>
<tr>
<th>Customer</th>
<th>Address</th>
<th>Scope</th>
<th>List Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Regional Municipality Of Waterloo - C0121477</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Roseville Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121478</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Linwood Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121479</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>New Dadder Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121480</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Conestogo River Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121481</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Heidelberg Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121482</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Foxboro Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
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<tr>
<td>The Regional Municipality Of Waterloo - C0121483</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>St. Clements Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
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<tr>
<td>The Regional Municipality Of Waterloo - C0121484</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Wellesley Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
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<tr>
<td>The Regional Municipality Of Waterloo - C0121485</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Maryhill Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
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<tr>
<td>The Regional Municipality Of Waterloo - C0121486</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Ayr Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
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<tr>
<td>The Regional Municipality Of Waterloo - C0121487</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Conestogo Golf Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
<tr>
<td>The Regional Municipality Of Waterloo - C0121488</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>Brakelton Drinking Water System, OAP 011, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
</tbody>
</table>

NSF International Strategic Registrations | www.nsf-isr.org

1/30/2013 5 | 11
### APPENDIX A

<table>
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<tr>
<th>Customer</th>
<th>Address</th>
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<th>List Status</th>
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</thead>
<tbody>
<tr>
<td>The Regional Municipality Of Waterloo - C0121878</td>
<td>2069 Ottawa Street South, Kitchener, Ontario, Canada</td>
<td>West Manse Drinking Water System, OAP 001, Entire Full Scope Accreditation</td>
<td>APPLY</td>
</tr>
</tbody>
</table>

**Terminology**
- **LIST**: The site holds a valid certificate
- **NALIST**: The site is associated with a listed site
- **APPLY**: The site has applied for certification or is associated with a site that has applied for certification.

The decision to certify has not been made yet.
### Opportunities for Improvements

#### Ontario's Drinking Water Quality Management Standard

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Observations / Auditor Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-01</strong></td>
<td>Location of OFI QMSR and Water Quality Specialist; Discussed With Frank Infante and Mike Mortimer; <strong>Description</strong> Opportunity exist in clearly identifying CCP violation events and it’s record and reference in Ops, plan/reference documents. Further this records to be considered as a quality record for control purposes and control characteristics are documented in the QMS. Reporting requirement for CCP violation could be explicitly documented in the OFPs. Plan/reference procedure as these events are reported to various positions and entities in the Operating Authority organization and the owners.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-01</strong></td>
<td>Location of OFI Document Control (forms); Discussed With Mike Mortimer; <strong>Description</strong> Consider the value of adding “Uncontrolled When Printed” to forms to be used in QMS e.g. Distribution Chlorine Residual form?</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-02</strong></td>
<td>Location of OFI QMSR; Discussed With Frank Infante; <strong>Description</strong> Opportunity is available to simplify endorsement of the top management and owner by having a signature page rather than council resolution.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-02</strong></td>
<td>Location of OFI Records Management; Discussed With Mike Mortimer; <strong>Description</strong> It could be beneficial to cross-reference procedures with QMS Records List.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-03</strong></td>
<td>Location of OFI Essential supply and services procedure; Discussed With Frank Infante and John Melfi; <strong>Description</strong> Opportunity exists to document internal chemical transfer (from bulk container to flat bed truck tank, transportation to delivery location and unloading into well house dedicated tank(s)) to avoid any contaminants.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-03</strong></td>
<td>Location of OFI All sites - asset tags; Discussed With Mike Mortimer; <strong>Description</strong> It could be beneficial to review asset identification tags for consistency with CMMS/SCADA.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-04</strong></td>
<td>Location of OFI Continual Improvement procedure; Discussed With Frank Infante; <strong>Description</strong> Consider inclusion of preventive action(s) within the continual improvement procedures.</td>
</tr>
<tr>
<td><strong>Opportunities for Improvements (DWQMS)-04</strong></td>
<td>Location of OFI All sites - measuring equipment/instruments; Discussed With Mike Mortimer; <strong>Description</strong> It could be beneficial to clarify the requirement of applying calibration stickers to measuring equipment/instruments (Currently the practice is inconsistent).</td>
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</tbody>
</table>
### General Information

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<thead>
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<td>Operating Authority:</td>
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</tr>
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<td></td>
<td>The Regional Municipality Of Waterloo</td>
</tr>
<tr>
<td></td>
<td>2069 Ottawa Street South</td>
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<td>Kitchener, Ontario N2E 3K3</td>
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<td>Accreditation Option</td>
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<tr>
<td>Date of Previous Systems Audit:</td>
<td>June 4, 2010</td>
</tr>
<tr>
<td>Date of Previous On-Site Verification Audit:</td>
<td>This is the first on site audit.</td>
</tr>
</tbody>
</table>

### Processes

- Frank Infante
  Supervisor of Process and Compliance
  519-575-4757 X 3160 (office)
  519-778-1007 (mobile)
  frank@region.waterloo.on.ca
  www.region.waterloo.on.ca

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1/30/2013

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## APPENDIX A

### Summary of Findings

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Finding</th>
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<tbody>
<tr>
<td>1. Quality Management System</td>
<td>C</td>
</tr>
<tr>
<td>2. Quality Management System Policy</td>
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<td>3. Commitment and Endorsement</td>
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<td>4. Quality Management System Representative</td>
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<td>5. Document and Record Control</td>
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<td>6. Drinking-Water System</td>
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<td>7. Risk Assessment</td>
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<td>8. Risk Assessment Outcomes</td>
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<td>9. Organizational Structure, Roles, Responsibilities, and Authorities</td>
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<td>10. Competencies</td>
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<td>11. Personnel Coverage</td>
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<td>12. Communications</td>
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<td>13. Essential Supplies and Services</td>
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<tr>
<td>14. Review and Provision of Infrastructure</td>
<td>C</td>
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<td>15. Infrastructure Maintenance, Rehabilitation &amp; Renewal</td>
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<tr>
<td>16. Sampling, Testing &amp; Monitoring</td>
<td>Mn</td>
</tr>
<tr>
<td>17. Measurement &amp; Recording Equipment, Calibration &amp; Maintenance</td>
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<td>18. Emergency Management</td>
<td>C</td>
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<td>19. Internal Audits</td>
<td>C</td>
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<td>20. Management Review</td>
<td>C</td>
</tr>
<tr>
<td>21. Continual Improvement</td>
<td>OFI</td>
</tr>
</tbody>
</table>

**MJ** Major Non-Conformity. The auditor has determined one of the following:

(a) a required element of the DWQMS has not been incorporated into a QMS;
(b) a systemic problem with a QMS is evidenced by two or more minor conformities; or
(c) a minor non-conformity identified in a corrective action request has not been remedied.

**Mn** Minor Non-Conformity. In the opinion of the auditor, part of a required element of the DWQMS has not been incorporated satisfactorily into a QMS.

**OFI** Opportunity for Improvement. Conforms to requirement, but there is opportunity for improvement.

**C** Conforms to requirement.

* Not Applicable to this audit

* Additional Comment added by auditor in the body of the report.
## APPENDIX A

### Verification of CARs For Ontario's Drinking Water Quality Management Standard

<table>
<thead>
<tr>
<th>Have you verified the effectiveness of all previous CARs? (List all new CAR's that you initiated in this report because you did not verify effective implementation of a previous CAR)</th>
</tr>
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<tbody>
<tr>
<td>Yes. see the notes below</td>
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</table>

<table>
<thead>
<tr>
<th>Discuss your evaluation in detail.</th>
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<tbody>
<tr>
<td>(1) J0293811-1: QMS Procedure for communication #500135 was reviewed for accepted action. The amendment is considered effective against the NC issued at the previous audit.</td>
</tr>
<tr>
<td>(2) J0293811-21: Document revision form #989680 and Staff suggestion form #989681 are now controlled and control characteristics are identified on the forms. (b) Criteria for control of documents of external origin is now documented in the procedure documents such as drawings, equipment, manuals, MSDS etc.)</td>
</tr>
<tr>
<td>(3) essential supply and services list now includes distribution system components (pipe, fittings, valves and hydrants etc.)</td>
</tr>
</tbody>
</table>

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APPENDIX B

Water Services

QMS Management Review 2012

Meeting Minutes

DATE: December 19th, 2012
TIME: 1:00 – 3:00pm
PLACE: MANNHEIM TRAINING ROOM

PRESENT
Thomas Schmidt
Nancy Kodousek
Olga Vrentzos
Kathy Taylor

Frank Infante
Mike Mortimer
Tim Walton
David Young - PH

ABSENT
Peter Clarke

1) QMS Implementation Status and Agenda

Frank provided an overview on the QMS status. The purpose and objectives for the Management Review is to evaluate the effectiveness and appropriateness of the QMS and to address any deficiencies.

2) QMS Policy Review and Approval

The amended QMS policy was reviewed and approved by the management review team. Policy amendments clearly identify the intended objectives and conform to DWQMS requirements, in accordance with QMS Policy Procedure DOCS#981236). The amended policy (DOCS#381423) will be included in the 2013 Management Review report to council.

3) DWQMS Management Review Requirements

All Management Review items required by the DWQMS and the procedure (DOCS#500605) were discussed, via presentation format (DOCS#1321791)

Refer to the Agenda (DOCS #1329072) for a detailed description of topics and speakers.

4) Roundtable Discussion

The review allowed for open discussion throughout the presentations. The following comments were noted as Action Items.

I. Management Review reports to Owner

To be communicated to council after NSF audit.

Action: Nancy K. /Olga V. to prepare 2013 Management Review Report

Timeline: 2013

II. Incidents of Regulatory Non-Compliance
APPENDIX B

Water Services

QMS Management Review 2012

Meeting Minutes

A procedure is required to address flow meter verification accuracy, variance and corrective action. A protocol must be identified to confirm that corrective action taken has restored the flow meter’s accuracy within an acceptable range.

Action: Frank I.

Timeline: January 31, 2013 (to be submitted to MOE Inspector)

III. DWQMS Procedure Amendments

a. Element 14 - Review and Provisions of Infrastructure

Procedure has been amended to address internal audit NC issue (draft).

Final approval is required.

Action: Water Services (O&M, Engineering and Planning and Hydrogeology and SW)

Timeline: 2013

b. Element 15 - Infrastructure Maintenance, Rehabilitation and Renewal

Procedure has been amended to accurately reflect current practices (draft)

Final approval is required.

Action: Water Services (O&M, Engineering and Planning and Hydrogeology and SW)

Timeline: 2013

IV. Infrastructure Renewal

Weber Street watermain replacement is scheduled for 2013. As the street is being widened the watermain will be replaced.

Action: Nancy K./Olga V. to provide reference documents to QMS team.

Timeline: 2013

V. Adverse Water Quality Incidents

a. Chloramine Adverse Events

Water Operations and Maintenance management personnel will consider if chloramine exceedances (>3.0 mg/L) reporting regulatory relief is feasible during events where the corresponding upstream free chlorine analyzer indicates a concentration within the 1 to 2 mg/L, suggesting that the chloramine exceedance is most likely false. Regulatory relief may result in a significantly reduced number of chloramine AWQI’s.

Action: Tim W.

Timeline: 2013
APPENDIX B

Water Services

QMS Management Review 2012

Meeting Minutes

VI. Middleton Off Spec Water Procedure (DOCS#1203021)

An interim plan is in place to address Off Spec Water situations during Site Acceptance Testing. Once fully commissioned then a permanent UV (off spec) SOP will be implemented. The SOP has been amended in draft. Final approval is required.

Action: O&M management staff

Timeline: 2013

VII. Critical Control Limits and Response Actions

Starting August 1, 2012 tracking of Critical Control Limits (CCL) for the purpose of the management review (summary of deviation from critical control point limits and response actions) has changed as per procedure (DOCS#1127653) to accurately reflect the current response practice.

VIII. IUS Operational Plan Updates Pending

a. Middleton system description to include AOP/Disinfection (draft) - to be fully implemented upon commissioning.

Action: Frank I.

Timeline: 2013

b. Erb Street Well System and Reservoir

The Stantec report (DOCS#1343556) demonstrates that primary disinfection is achieved within the transmission main and reservoir. Wells W6, W7 and W8 are no longer the treated entry points. Waiting for official MOE approval before implementing new disinfection approach.

Action: Frank I.

Timeline: 2013

IX. Mannheim filters ESTW will go through MOE approvals and once finalized plan can be updated.

Action: Tim W.

Timeline: 2013

5) NEXT STEPS

- Confirm the effectiveness of the Non Conformance Corrective Actions
- Update the appropriate document control locations
- Verification audit (NSF)
- Obtain Full Scope- Entire DWQMS accreditation upon successful audit
- The next semi-annual Management Review will be scheduled in June 2013 with Nancy, PH and QMS Team. Thomas will attend annual review.
APPENDIX C

Water Services

Semi-Annual QMS Management Review 2013

Meeting Minutes

DATE:    July 11, 2013
TIME:    2:00 – 4:30pm
PLACE:   MANNHEIM BOARD ROOM

PRESENT

Nancy Kodousek    Frank Infante
Olga Vrentzos    Matt Bender
David Young - PH  Peter Clarke

ABSENT

Tim Walton

1) QMS MANAGEMENT REVIEW

Frank provided a summary the Management Review purpose and objectives- to evaluate the
effectiveness and appropriateness of the QMS and to address any deficiencies.

2) QMS POLICY REVIEW AND APPROVAL

The QMS policy (DOCS#981236) was reviewed and it was agreed that the latest amendments are
appropriate.

3) DWQMS MANAGEMENT REVIEW REQUIREMENTS

Management Review items required by the DWQMS and the procedure (DOCS#500605) were
discussed.

4) ROUNDTABLE DISCUSSION

Management Review discussion conducted as per presentation (DOCS#1425356) and agenda (DOCS
#1428160).

5) PREVIOUS ACTION ITEMS

The status of the following 2012 Management Review (DOCS#1332928) action items was reviewed:

I. Management Review reports to Owner

   To be communicated to council after NSF audit.

   Action: Nancy K./Olga V. to prepare 2013 Management Review Report
   Status: To be completed by fall 2013

Document Number: 1432141    Version: 1    1of4
APPENDIX C
Water Services

Semi-Annual QMS Management Review 2013

Meeting Minutes

II. Incidents of Regulatory Non-Compliance

A procedure is required to address flow meter verification accuracy, variance and corrective action. A protocol must be identified to confirm that corrective action taken has restored the flow meter’s accuracy within an acceptable range.

Action: Frank I.
Status: Complete

III. DWQMS Procedure Amendments

a. Element 14- Review and Provisions of Infrastructure

Procedure has been amended to address internal audit NC issue (draft). Final approval is required.

Action: Water Services (O&M, Engineering and Planning and Hydrogeology and SW)
Status: Complete

b. Element 15- Infrastructure Maintenance, Rehabilitation and Renewal

Procedure has been amended to accurately reflect current practices (draft). Final approval is required.

Action: Water Services (O&M, Engineering and Planning and Hydrogeology and SW)
Status: Complete

IV. Infrastructure Renewal

Weber Street watermain replacement is scheduled for 2013. As the street is being widened the watermain will be replaced.

An updated summary of capital projects to be obtained from D&C.

Action: Nancy K.
Status: See action item 6) ii.

V. Adverse Water Quality Incidents

Chloramine Adverse Events

Water Operations and Maintenance management personnel will consider if chloramine exceedances (>3.0 mg/L) reporting regulatory relief is feasible during events where the corresponding upstream free chlorine analyzer indicates a concentration within the 1 to 2 mg/L, suggesting that the chloramine exceedance is most likely false. Regulatory relief may result in a significantly reduced number of chloramine AWQI’s.

Action: Tim W. (Applying for regulatory relief)
Status: To be completed before end of 2013
APPENDIX C
Water Services

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Meeting Minutes

VI. Middleton Off Spec Water Procedure (DOCS# 1203021)
An interim plan is in place to address Off Spec Water situations during Site Acceptance Testing. Once fully commissioned then a permanent UV (off spec) SOP will be implemented. The SOP has been amended in draft. Final approval is required.
Action: O&M management staff
Status: Complete

VII. IUS Operational Plan Updates Pending
Middleton system description to include AOP/Disinfection (draft) - to be fully implemented upon commissioning.
Action: Frank I.
Status: Complete

VIII. Erb Street Well System and Reservoir
The Stantec report (DOCS#1343556) demonstrates that primary disinfection is achieved within the transmission main and reservoir. Wells W6, W7 and W8 are no longer the treated entry points. Waiting for official MOE approval before implementing new disinfection approach.
Action: Frank I.
Status: Complete

IX. Mannheim Filters ESTW
Will go through MOE approvals and once finalized plan can be updated.
Action: Tim W.
Status: MOE agrees in principle. Waiting for final approval.

6) VERIFICATION AUDIT NON-CONFORMANCE ACTION PLAN
The Non-conformance 2013 Verification Audit Action Plan implementation status was reviewed (refer to DOCS# 1394074). Action items are on track to be completed by target dates.

7) ACTION ITEMS:
   i. UPS Testing
Due to UPS failures resulting in non compliance issues (see DOCS# 1425356 slide#21 ) testing and maintenance should proactively be conducted (included as part of PMs) to minimize the potential re-occurring failures.
Action: Systems Group
Timeline: December 2013
APPENDIX C
Water Services

Semi-Annual QMS Management Review 2013

Meeting Minutes

ii. Capital Works
Capital Works (current and future) will be summarized, in consultation with appropriate groups (D&C, Engineering Services etc.) for annual management review (December 2013).
Action: Frank Infante
Timeline: December 2013

iii. Essential Services- Chemical Delivery Verification
Personnel ordering water treatment chemicals are responsible for confirming certificate of approval (CofA) prior to delivery and bill of lading (BoFL) after delivery.
Action: Frank Infante/Tim Walton
Timeline: July 31st, 2013

iv. Flood Protocol
Review and testing of existing well flooding response protocol is required.
Action: Frank Infante/O&M Supervisors and other Water Service personnel as applicable
Timeline: December 2013

8) NEXT STEPS
• Full Risk Assessment (September 25, 2013)- to include various groups
• Implementation of NC corrective action plans prior to deadline
• Confirm the effectiveness of the Non Conformance Corrective Actions
• Update the appropriate document control locations
• Annual Internal audit (Fall 2013)
• The next Management Review will be scheduled in December 2013
• Continual improvement
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: E13-20/8320; C06-60

SUBJECT: REGION OF WATERLOO BIOSOLIDS STRATEGY - BIOSOLIDS HEAT DRYING FACILITY

RECOMMENDATION:

THAT the Region Municipality of Waterloo direct staff to:

a. Expand the investigation of biofuel opportunities in support of the Ontario Ministry of Energy report “Making Choices - Reviewing Ontario’s Long Term Energy Plan” (July 2013);

b. Update the 2011 Biosolids Master Plan with consideration of synergies with outcomes from Region’s Waste Management Master Plan and other Regional Policies including opportunities beyond the Regional boundary;

c. Take no further steps to pursue the P3 application for implementation of a Biosolids Heat Drying Facility including suspension of any site selection works pending the completion of the Biosolids Master Plan update as recommended in Report E-13-104 dated September 10, 2013 and approval of a preferred option for management of the biosolids by Regional Council;

d. Inform P3 Canada and the public of the proposed update of the Biosolids Master Plan; and

e. Develop a work plan and schedule for the completion of the Biosolids Master Plan update and report back to Council in early 2014.

SUMMARY:

NIL

REPORT:

2011 Biosolids Master Plan Background

In August 2011, the Region completed the Biosolids Master Plan (BMP) (Report E-11-067 dated August 16, 2011). The 2011 BMP provides a strategy to manage the Region’s biosolids until the year 2041, addressing planning, technical, environmental, safety and regulatory changes.
The 2011 BMP strategy is based on the volume reduction approach and recognizes biosolids as a valuable renewable resource, which if properly managed can help reduce the green house gas production in the Region. The 2011 BMP objectives were to develop a Region-wide sustainable strategy to support the Region’s Corporate Environmental Sustainability Strategy and to manage biosolids within our Regional boundary.

The 2011 BMP included the following components:

- A new central heat drying facility for anaerobically digested biosolids to be completed by 2021;
- A new enhanced digestion system to be installed at the Ayr WWTP by 2018;
- New co-generation facilities to be installed at the three largest WWTPs for electricity generation following completion of ongoing upgrades at these plants between 2018 and 2023.

**P3 Canada Fund**

In 2009, the Federal government created a Crown Corporation called P3 Canada that offers financial incentives in support of alternative delivery methods for large public infrastructure projects. These incentives are up to 25 percent of the construction cost of the project and are funded by the P3 Canada Fund. Based on this opportunity, Regional staff initiated early implementation of the heat drying facility recommended in the 2011 BMP by using an alternative delivery method that would include a partnership with the private sector. In August 2012, Regional Council endorsed the Region’s application to Round 4 of the P3 Canada Fund seeking financial support for up to 25 percent of the construction cost of this facility (Report E-12-078 dated August 12, 2012). Regional Council also approved three separate studies in support of the P3 Canada application: Business Case Analysis, Technical Assistance for the Business Case, and Class Environmental Assessment (Class EA). The first two studies have been completed and the draft Business Case was approved by Regional Council for submission to P3 Canada (Report E-13-037 dated March 19, 2013).

The Heat Drying Facility Class EA was also initiated early to determine the preferred location for the facility recommended in the 2011 BMP. Two main criteria identified in the BMP for the location selection were the availability of a source of waste heat and Regionally owned land. Waste heat from an existing industry or co-generation facility would off-set operating costs of the heat drying facility by reducing the need of natural gas for generation of heat. Use of land owned by the Region would reduce land procurement time and costs, and use land already zoned for the implementation of a public facility. Upon evaluating 11 potential locations for the facility, the Cambridge and Waterloo Waste Management Centres were short-listed as preferred sites.

Due to the feedback on the Class EA, Regional staff received Regional Council approval to undertake additional steps for communicating the project to the public (Report E-13-065 dated May 28, 2013). This additional work would extend the completion of the Class EA to late 2013, early 2014. Based on recommendations from P3 Canada, the Region re-submitted its P3 Canada application for Round five to be evaluated in June 2014.

**Current Biosolids Management**

In August 2012, Regional Council approved a contract to manage the Region’s biosolids from its three largest WWTPs as an interim strategy until the Heat Drying Facility would be built (Report F-12-061 dated August 29, 2012). This contract provides biosolids disposal services for a five year period (January 1, 2013 to December 31, 2017) with an option to renew for five additional one year terms (last term ending December 31, 2022). The average annual cost for this contract is $3.2 million at a base cost of $92.38 per wet tonne.
2011 BMP Objectives

The central Heat Drying Facility recommended in the 2011 BMP is the preferred strategy for managing biosolids from the Region’s larger WWTP, out of all the alternatives evaluated for the Region’s long term biosolids management. It is financially and environmentally sustainable, reliable, flexible and has minimal impact on the community. The 2011 BMP was based on the following objectives:

- Support the Region’s Corporate Environmental Sustainability Strategy;
- Manage Region’s wastes within the Regional boundaries;
- Provide flexibility with end product and continue to reduce biosolids volume;
- Support population and employment growth identified in the Province of Ontario Places to Grow Plan.

Upon considering feedback from the public and from political representation from the Region and local municipalities, which included comments on these objectives, opportunities have emerged that could impact the implementation of the preferred solution recommended in the 2011 BMP. Consideration of these opportunities, summarized below, would require an update of the current BMP.

Opportunities

The Ontario Ministry of Energy released a discussion paper in July 2013 and is currently reviewing its long term energy strategy to provide energy, "Making Choices – Reviewing Ontario’s Long Term Energy Plan". The strategy takes into account the current mix of different sources of energy utilized within the province and identifies the proposed future energy sources. It identifies that bioenergy plays a key role in providing energy both now and into the future, and will continue to be an important source of energy. The 2011 BMP had already considered opportunities for bioenergy including the opportunity for co-generation at three wastewater treatment plants, the potential for using the final product from the heat dryer as a biofuel and use of waste heat from facilities using biofuel for offsetting operating costs at the heat drying facility. These initiatives are in line with the Green Energy Act and the discussion paper.

After the completion of the BMP in 2011, the Region initiated in April 2012, a new Waste Management Master Plan (WMMP) (Report E-12-023 dated February 28, 2012). The WMMP is evaluating a number of new technologies and programs for managing solid waste. Several of the alternatives under the WMMP have considered synergies with the biosolids management plan, including

- Energy recovery technologies;
- Co-processing green bin organic material with biosolids;
- Exporting the Region’s waste for processing outside of the Regional boundaries.

Energy recovery technologies of waste have evolved significantly, and have one of the lowest environmental and social impacts. Opportunities may exist where processing solid waste and biosolids in a single facility would reduce the financial impacts of constructing and operating the facility due to higher economy of scale. Combination of green bin organic waste with biosolids would allow additional production of methane gas at the facility, which is a biofuel that can be, used for offsetting other processes such as a Heat Drying Facility. The potential of processing the Region's wastes outside of Regional boundaries is being explored and may allow more flexibility in contracting out the management of the Region’s wastes. This approach allows opportunities for partnerships with municipalities or others that have capacity to accommodate the Region’s wastes.
With the opportunities noted above further exploration of combined Waste and Biosolids Management is warranted.

**Recommendations and Next Steps**

The Region advanced the implementation of the 2011 BMP recommendations to explore the opportunity of obtaining financial support from the Federal government program called P3 Canada Fund. However, a review of Regional BMP directives, emerging biofuel opportunities, and synergies with the WMMP or other parties has identified potential opportunities to revisit the 2011 BMP. As some of these concepts were not included in the 2011 BMP, an update of this master plan will be required. Based on this, Regional staff recommends that the following actions be taken:

- Expand the investigation of biofuel opportunities in support to the Ontario Ministry of Energy report “Making Choices - Reviewing Ontario’s Long Term Energy Plan” (July 2013);
- Update the 2011 Biosolids Master Plan with consideration of synergies with outcomes from Region’s Waste Management Master Plan and other Regional policies;
- Take no further steps to pursue the P3 application for implementation of a Biosolids Heat Drying Facility including suspension of any site selection works pending the completion of the Biosolids Master Plan update as recommended in Report E-13-104 dated September 10, 2013 and approval of a preferred option for management of the biosolids by Regional Council;
- Inform P3 Canada that the Region will no longer pursue the application for Round 5 of the P3 Canada Fund;
- Develop a work plan and schedule for the completion of the Biosolids Master Plan update and report back to Council in early 2014.

The existing Council approved interim biosolids strategy will allow the Region to manage its biosolids until the end of 2022. Therefore, there is sufficient time for updating the Region’s BMP as recommended above without impacting the implementation of the final biosolids strategy. Based on the current schedule for completion of the Waste Management Master Plan, it is anticipated to bring a work plan forward in early 2014 to outline the schedule for updating the Biosolids Master Plan.

**CORPORATE STRATEGIC PLAN:**

The Region’s Biosolids Master Plan supports the Corporate Strategic Plan Focus Areas 1 and 2: Environmental Sustainability, and Growth Management and Prosperity, respectively; and the following strategic objectives: Reduce greenhouse emissions and work to improve air quality in Waterloo Region, protect the quality and quantity of our drinking water sources, and develop, optimize and maintain infrastructure to meet current and projected needs.

**FINANCIAL IMPLICATIONS:**

The Region 2013 Wastewater Capital Program included $45 million between 2013 and 2022 for the implementation of the Heat Drying Facility based on a Public-Private Partnership approach (P3) with support from P3 Canada. This Program assumes the commissioning of this facility by 2017. As the Region will no longer pursue P3 Canada support at this stage, the Region will include in the 2014 Wastewater Capital Program funding from the biosolids management strategy recommended in the 2011 BMP, which assumes the commissioning of the facility by 2021. The 2014 operating budget will also be adjusted to reflect these changes. Funding for the proposed BMP update will also be determined and included in the 2014 Wastewater Capital program.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
NIL

ATTACHMENTS
NIL

PREPARED BY:  Kaoru Yajima, Senior Project Engineer
Nancy Kodousek, Director, Water Services

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

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

From: Rob Horne,
Commissioner of Planning, Housing and Community Services

Subject: EAST SIDE LANDS MASTER ENVIRONMENTAL SERVICING PLAN (MESP) – UPDATE TO REPORT NO. P-13-086

This memo provides an update on the status of the East Side lands with the City of Cambridge, and as it relates to Regional staff Report No. P-13-086.

On September 3, 2013, City staff recommended to the City of Cambridge General Committee that the MESP be approved (please see Attachment 1 of this memo), and that the financial and other implementation details subsequently be finalized. Regional staff worked with Cambridge staff to develop a very similar staff report, which also recommends the approval of the MESP at this time, followed by the resolution of detailed implementation matters (Regional Report No. P-13-086).

On September 3, 2013, the General Committee of the City of Cambridge deferred a decision on the East Side Lands Master Environmental Servicing Plan (MESP). General Committee requested City staff to report back to City Council on September 9, 2013, in particular on the time required to finalize the financial details to implement the MESP, focusing on the respective financial responsibilities of the City and the Region. The actual deferral motion passed by the City of Cambridge General Committee was as follows:

“THAT based upon the scope and level of detailed information provided in the MESP especially in respect to infrastructure costs and financial implications, Report P/13-52 BE DEFERRED TO PERMIT THE FOLLOWING:

1. Make the required final minor changes to the East Side Lands MESP, Community Plan, financial analysis and all related documents;
2. Release the East Side Lands MESP, Master Drainage Plan, Community Plan, Freeport Creek and Tributary to the Grand River Subwatershed Study and financial analysis to the public for review and comments after the final revisions are completed;
3. Hold a subsequent public consultation session about the East Side Lands MESP and related documents by the end of 2013;
4. Begin negotiations between Cambridge Staff, the Region, the Province, other benefitting municipalities and potential partners to discuss development of a financial plan which will allow implementation of the MESP; and
5. Report back to Cambridge Council following the discussions with the stakeholders and adjacent municipalities.

DEFERRAL CARRIED
THAT STAFF REPORT BACK TO THE COUNCIL MEETING OF MONDAY, SEPTEMBER 9, 2013 ON HOW LONG IT WILL TAKE TO GATHER INFORMATION AND BRING A REPORT BACK ON THE EAST SIDE LANDS.

CARRIED”

As of the date of writing this memo, Cambridge City Council has not made a final decision on whether to approve the MESP at this time. However, should Cambridge Council decide to defer a decision at its September 9, 2013 meeting, Regional staff would make the following recommendation to Planning and Works Committee on September 10, 2013 in place of the Regional staff Report No. P-13-086 recommendations:

“That Regional Council defer consideration of the East Side Lands Master Environmental Servicing Plan pending a report from Regional staff by the end of 2013, updating Regional Council on progress made with the City of Cambridge and other stakeholders on implementation issues, including financial considerations, at that time.”

The advancement of the East Side lands to development-readiness has been identified for over a decade as a key priority to ensure our community is well positioned to attract new economic development, and to create new opportunities for existing businesses to expand. The importance of advancing the East Side lands was most recently re-confirmed by an economic development report commissioned by all of the Region’s Municipal Chief Administrative Officers and tabled with all Municipal Councils in the Region of Waterloo.

The East Side Lands Prime Industrial Strategic Reserve focuses on creating available large lots to the market of 8 hectares (20 acres) or more for major employment purposes. At the present time, less than five such properties of this size have been identified in the entire Region, and in varying stages of development readiness. Consequently, the ability of our community to attract this type of major new investment continues to be limited to the land choices currently available.
THAT the East Side Lands Master Environmental Servicing Plan (MESP) be approved in principle;

AND THAT Cambridge staff be directed to negotiate with the Region, other benefitting municipalities and potential partners to discuss the development of a financial plan that will allow implementation of the MESP, and report back to Cambridge Council for approval of the fiscal plan;

AND THAT any required final minor changes to the East Side Lands MESP, Community Plan and all related documents be completed prior to providing the documents for public review.

AND THAT Cambridge Council agrees that once the final minor changes have been made to the MESP and Master Drainage Plan, that the Regional Municipality of Waterloo can issue the Notice of Completion and file the East Side MESP and Master Drainage Plan for a minimum 30 day public review in accordance with the Municipal Class Environmental Assessment process;

AND THAT the Community Plan, Freeport Creek and Tributary to the Grand River Subwatershed Study, and financial analysis are also made available for public review during the 30 day review period required for the MESP and Master Drainage Plan under the Environmental Assessment Act;

AND THAT after review of the Freeport Creek and Tributary to the Grand River Subwatershed Study by the Cambridge Environmental Advisory Committee and the public, a subsequent City staff report shall be prepared to the Grand River Subwatershed Study with recommendations regarding its implementation;

AND THAT after the public review period has been completed for the Master Drainage Plan a subsequent City staff report shall be prepared for Cambridge Council’s consideration about the Master Drainage Plan with recommendations regarding its implementation.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: September 10, 2013

FILE CODE: D07-30

SUBJECT: EAST SIDE LANDS (STAGE 1) MASTER ENVIRONMENTAL SERVICING PLAN - NOTICE OF COMPLETION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) Report and supporting documentation, including Option 3b as the Preferred Option, as described in the East Side Lands (Stage 1) MESP prepared by Dillon Consulting Limited, and as summarized in Report P-13-086, dated September 10, 2013;

THAT the Regional Municipality of Waterloo issue the Notice of Completion and file the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) Report and supporting documentation for a minimum 30 day public review in accordance with the Municipal Class Environmental Assessment process;

THAT the Regional Municipality of Waterloo continue to support the planning for and implementation of the Regional infrastructure recommended in the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP);

THAT the Regional Municipality of Waterloo request that the City of Cambridge take the following actions:

a) Immediately initiate an Official Plan Amendment and Zoning By-law Amendment for the “Quick Start” Lands (as shown on Attachment 8) so that the lands are designated, zoned and serviced to a target date of 2015;

b) Include the City of Cambridge’s water and wastewater, stormwater and transportation projects recommended in the East Side Lands (Stage 1) MESP in the City’s Capital Budget for future years; and

c) Following the minimum 30 day public review, initiate an update to the City of Cambridge Development Charges By-law of the East Side Lands (Stage 1) MESP and incorporate the City infrastructure identified in the East Side Lands (Stage 1) MESP in the Capital Program;

AND THAT the Regional Municipality of Waterloo continue to work with the City of Cambridge to advance the East Side Lands (Stage 1) to final development readiness.

SUMMARY:

The Region of Waterloo, the City of Cambridge and the Grand River Conservation Authority (GRCA), in conjunction with the City of Kitchener and the Township of Woolwich, have worked together to prepare the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) to guide the development of lands within the Stage 1 lands of the East Side Lands.
The Stage 1 lands (see Attachments 1 and 2) include 477 gross hectares (1,179 gross acres) of land designated in the new Regional Official Plan as Prime Industrial Strategic Reserve (PISR). Of this area, approximately 252 gross hectares (622 gross acres) were designated as part of Regional Official Policies Plan Amendment No. 28 in 2007. This MESP will advance the Stage 1 lands through the Municipal Class Environmental Assessment (EA) process towards development readiness for new employment opportunities.

A key element in attracting and retaining employers in a competitive global economy is ensuring that the Region has an adequate supply of development ready employment land. Regional Council recognized the importance of development-ready employment land in the Region’s 2011-2014 Strategic Plan by including the action to advance the East Side Employment Lands to development readiness. City of Cambridge staff, in their report to the City’s General Committee on September 3, 2013, also noted the importance of bringing the East Side lands to development readiness.

The East Side Lands are strategically located in proximity to Provincial Highways (401, 8, and 7), the CPR rail line, a future GO Transit station in Breslau and the Region of Waterloo International Airport. The recent opening of the Fairway Road Bridge has better connected the East Side Lands with the broader region and the future construction of Highway 7 will also improve connectivity to the East Side Lands. It is expected that the area will increasingly become a key location to attract employers with recent announcements by Toyota to expand its Cambridge facility, the Region’s new Airport Master Plan (currently underway) and future plans for Light Rail Transit. At full build out, the Stage 1 lands, (approximately 300 net hectares (741 net acres) are expected to accommodate development supporting approximately 8,000 new jobs and increase Regional and City of Cambridge property tax revenue annually by $6-8 million dollars.

The following aspects of the East Side Lands (Stage 1) are particularly noteworthy:

- Opportunity to address current shortage of large lots for employment uses in the Region of Waterloo;
- Regional Council began to designate the Stage 1 Lands in 2009, creating the Prime Industrial Strategic Reserve (PISR) lands in the City of Cambridge, south of the Region of Waterloo International Airport in the Regional Official Plan;
- The East Side Lands create opportunities for both existing businesses and new businesses;
- Canada’s Technology Triangle (CTT) has been actively supporting and promoting these lands being made development-ready, as did the consultants who recently completed the review of economic development in the Region on behalf of the Regional and all seven area municipalities;
- Infrastructure investment can be phased so that the entire capital investment can be staged over a number of years;
- The Provincial government has significant land holdings in the Stage 1 Lands and is actively working with the Region and the City of Cambridge to complete the East Side Lands (Stage 1) MESP and advance their lands to market.

The Project Team, including staff from the City of Cambridge and the GRCA, unanimously supported the selection of Option 3b (see Attachment 3) as the Preferred Option. Staff from the City of Kitchener and Township of Woolwich has advised they are also supportive of Option 3b as the Preferred Option.

The Freeport Creek and Tributary to the Grand Sub-Watershed study has been completed as part of this MESP for a portion of the Stage 1 lands west of Fountain Street, with the goal of providing the necessary environmental impact analysis. Regional Council approved the final draft of the sub-watershed study to the extent that it addresses matters of Regional interest, on August 22, 2013.
East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP)

On November 24, 2010 Regional Council retained Dillon Consulting Limited (Dillon) to provide consulting services for the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) and Community Plan. The MESP is being co-managed by the Region of Waterloo, the City of Cambridge and the Grand River Conservation Authority (GRCA). The MESP advances the lands through the Municipal Class Environmental Assessment (EA) process towards development readiness to provide for new employment opportunities. The MESP was conducted in accordance with the Municipal Engineers Association Class Environmental Assessment Process (2007) including public consultation and preparation of the MESP Report.

The primary focus of the MESP is on the Stage 1 lands (see Attachment 1), which are strategically positioned north of Highway 401 near the Region of Waterloo International Airport. The MESP also considered the impact on infrastructure from the Broader East Side Lands area to be developed beyond 2031. The Stage 1 lands include the 477 gross hectares (1,179 gross acres) of land designated in the new Regional Official Plan as Prime Industrial Strategic Reserve (PISR). Of this, approximately 250 gross hectares (618 gross acres) were designated as part of the Regional Official Policies Plan (ROPP Amendment No. 28). The Stage 1 lands also include the Study Area for the subwatershed study for Freeport Creek and the area that drains directly to the Grand River, which is included as a technical appendix to the MESP.

The MESP provides a comprehensive, integrated approach to answer the broader questions about the necessary transportation, environmental, water and wastewater servicing, sub-watershed, stormwater management and community planning information required to inform specific development applications.

The Preferred Option

Five servicing options to provide water, wastewater and transportation infrastructure for the Stage 1 lands were developed as part of the MESP and presented at the second PIC. The proposed options were evaluated against the following criteria: development and sustainability, cost, land use, socio-economic and cultural environment, natural environment and transportation.

The Regional and City infrastructure required to implement the Preferred Option is included as Attachments 5, 6 & 7. The estimated base cost for the new infrastructure is approximately $110 million, which includes both Regional and City capital costs. The costs will not all be incurred up front as infrastructure will be phased in as required to support development. The capital costs for the Regional infrastructure identified is between approximately $10 and $50 million. These projects are included in the Region’s 2013 capital program and can be funded by development charges. The City’s infrastructure is not yet included in their capital program and will need to be addressed as part of the City’s development charge By-law update, which is expected to be complete by the end of 2013.

Throughout the MESP, a comprehensive consultation program was conducted which included three Public Information Centres (PICs). Approximately 100 people attended each of the three Public Information Centres (PICs). Participants included local residents, business owners, engineering / planning consultants, landowners and developers. Sessions for property owners in the study area were also convened.

Next Steps

Subject to Regional Council approval of the recommendations of this report, a Notice of Completion of the MESP and supporting documentation will be filed according to Class EA requirements, by means of advertisements in local newspapers, the Region’s website and mailings to affected
property owners and others who requested notice, municipalities and agencies. The Notice of Completion will be made available for a minimum 30 day public review period.

After the completion of the MESP, several important next steps must follow to implement the Preferred Option 3b, including the completion of EA requirements for specific projects by the applicable municipality. In addition, the City of Cambridge must amend its Official Plan, Zoning By-law and Development Charges By-law. As the majority of the implementation falls under the jurisdiction of the City of Cambridge, Regional Staff recommend Regional Council request City of Cambridge Council prioritize these next steps and to budget for them accordingly.

The Region, the City of Cambridge, the Township of Woolwich, the City of Kitchener and potential partners are already in discussions to develop a detailed implementation plan. Once the detailed implementation plan is developed, Regional staff will bring the plan back to Regional Council.

REPORT:

One of the key elements of implementing the Regional Growth Management Strategy and the Region’s Strategic Plan, is planning for the development of the East Side Community and ensuring the availability of new employment lands. In 2006, the Region of Waterloo, in co-operation with the Prosperity Council of Waterloo Region and economic development officers from the local municipalities completed an “Industrial and Business Park Vacant Land Inventory and Demand Analysis.” This report identified the need to expand the ROPP’s City Urban Area designation to provide for 300 net hectares (741 net acres) of fully serviced land in parcels greater than 8 hectares (20 acres) in size.

In June 2007, Regional Council approved Regional Official Policies Plan Amendment No. 28 (ROPPA 28) to designate approximately 150 net hectares of land for large lot employment uses. As a result of an Ontario Municipal Board (OMB) Settlement additional land west of Fountain Street and south of Allendale Road, and east of Speedsville Road were included. In June 2009, Regional Council adopted the new Regional Official Plan (ROP) which includes the land designated as part of ROPPA 28, plus additional land for a total of approximately acres 300 net hectares (741 net acres) as Prime Industrial Strategic Reserve (PISR) (please see Attachment 2).

The main purpose of the PISR designation is to ensure that an adequate supply of development ready employment land is available within the Region of Waterloo for new large-lot manufacturing or business park uses requiring municipal water and wastewater services. Lands designated as PISR will be developed in parcels 8 hectares (20 acres) or greater unless otherwise restricted by design limitations associated with environmental features, property configurations, the provision of new roads or existing development. It is anticipated that some smaller lots will result due to these design limitations.

To continue to advance the PISR lands towards development readiness, a Master Environmental Servicing Plan (MESP) was identified as the preferred way to address the outstanding studies and the Environmental Assessment work required. Given the multi-jurisdiction, multi-disciplinary approach to a MESP, the Region worked with the City of Cambridge and the Grand River Conservation Authority to develop the Terms of Reference for East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) and Community Plan. The City of Kitchener and the Township of Woolwich were also consulted throughout the development of the MESP.

In addition to designating the land, a number of other related Regional initiatives to advance the development of the Broader East Side Lands, have been completed over the past few years, including the Wastewater Treatment Master Plan and associated AECOM East Side Servicing Review, environmental monitoring of the East Side Watersheds, and completion of the Regional Transportation Master Plan.
**East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP)**

On November 24, 2010 Regional Council retained Dillon Consulting Limited (Dillon) to provide consulting services for the East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) and Community Plan. The MESP is being co-managed by the Region of Waterloo, the City of Cambridge and the Grand River Conservation Authority (GRCA) in consultation with the City of Kitchener and the Township of Woolwich.

Master Environmental Servicing Plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) looks at related transportation, water and sewer infrastructure required to provide servicing and permit the development of the Stage 1 lands. Integrating the planning of infrastructure with the subwatershed study process allows for the full impact of decisions to be evaluated and understood.

This MESP describes a set of infrastructure projects that are distributed geographically over the study area and may be implemented over a period of time. Projections of timing for individual infrastructure projects are contained in the MESP. These projections of timing and cost are not binding and the individual infrastructure projects can be constructed when they are actually needed at the discretion of the City of Cambridge and the Region of Waterloo. The suggested ownership of each individual infrastructure project (City/Region) is also not binding and discussions will continue to occur on ownership after completion of the MESP.

The group of infrastructure projects presented in the MESP are related through the purpose of providing a servicing and transportation strategy for the East Side Lands (Stage 1) with full recognition of the impacts to the environment. This MESP provides a comprehensive, integrated approach to determine the necessary transportation, environmental, water and wastewater servicing, subwatershed, stormwater management and community planning information required to inform specific development applications. A Staging of Development Plan is also included which confirms the ability to service the “Quick Start” lands of approximately 85 net hectares (210 net acres) in the short term with minimal infrastructure and expense (see Attachment 8) as well as flexible staging options to respond to development demand. It is estimated that the “Quick Start” lands could be designated in the City of Cambridge Official Plan and be appropriately zoned, serviced and ready for development in 2015.

Throughout the MESP process, a comprehensive consultation program with the public, landowners and government agencies was conducted which included three Public Information Centres (PICs). There were a number of issues identified throughout the consultation including: impact to natural features and wells, flooding / drainage issues, traffic, maintaining Riverbank Drive as a Scenic Heritage Road, land use compatibility, need for employment lands / economic competitiveness and access issues for specific development lands.

**The Preferred Option**

Five servicing options to provide water, wastewater and transportation for the Stage 1 lands were developed as part of the MESP and presented at the second PIC. As required by the Class EA process, the options were evaluated against the following criteria: development and sustainability, cost, land use, socio-economic and cultural environment, natural environment and transportation.

The Preferred Option of the Project Team (Region, City and GRCA staff and consultants) to provide water, wastewater and transportation servicing for the Stage 1 lands is Option 3b (see Attachment 3). This option was selected as preferred as it provides full municipal water and wastewater servicing to the Stage 1 and Creekside lands, a north-south transportation connection through the East Side lands from Middle Block Road to King Street East, reduces traffic on Riverbank Drive, provides two municipal roads for the Creekside lands, avoids impacts to a Provincially Significant
Wetland and Core Environmental Feature, and avoids structural and operational impacts to the Regional Operations Centre complex. The evaluation results summary table for all options is included as Attachment 4.

For a list of all infrastructure projects (both Region and City) required to implement the Preferred Option, please see Attachments 5, 6 & 7. The estimated base cost for the new infrastructure specifically required for this option is approximately $110 million, which includes both Regional and City capital costs. The capital costs for the Regional infrastructure identified is between approximately $10 and $50 million. Infrastructure will be phased in as required to support development and not all of the costs will be incurred upfront.

The following Regional water and wastewater infrastructure projects are required to implement the Preferred Option and are included in the 2013 Capital Program:

- 450 mm watermain along Fountain Street (from Kossuth Road to Maple Grove Road), (Schedule A);
- Forcemain to direct wastewater to the Preston Wastewater Treatment Plant (Schedule A+ Pre-approved); and,
- Proposed new Regional Sewage Pump Station (SPS#2) and Forcemain to Kitchener Wastewater Treatment Plant (Schedule B).

For Schedule A, A+ and B projects (with the exception of the pumping stations), the MESP satisfies the EA requirements and no further EA work is required. For the pumping stations and forcemain, further EA work is required including an Environmental Study Report. The Regional EA for the Region’s pumping station (SPS#2) and forcemain to the Kitchener Wastewater Treatment Plant is currently underway (refer to Report E-13-021) and is anticipated to be complete by the end of 2014. It is expected the pumping station will be operational by 2017. The 2013 Capital Program includes the pump station SPS #2 and the forcemain to the Kitchener WWTP.

The transportation infrastructure projects required to implement Option 3b are included in Attachment 5. Upgrades to Fountain Street and Maple Grove Road are also required and were assumed in the analysis as they were identified in the Regional Transportation Master Plan and are already budgeted as part of the Region’s 10 Year Transportation Capital Program.

Timing for the proposed infrastructure projects is based on the anticipated rate of uptake and development of the Stage 1 area of about 20 hectares per year. Since it is intended to only construct infrastructure as it is required to service development areas, the construction projects will be spread over the planning period for financial considerations and for managing cash flow. As it is not possible to dictate or predict where and when development will occur within the Stage 1 lands, the staging plan for constructing infrastructure to support this development is flexible and can be adjusted accordingly throughout the planning period. The proposed timing for each of the individual infrastructure projects should be regularly reviewed and updated based on the actual and anticipated development patterns within the Stage 1 lands. In this way, the servicing of the area can be synchronized with the actual development.

**Water and Wastewater Servicing**

The main objective of the Water and Wastewater component was to develop a water and wastewater servicing strategy for the Stage 1 lands, including: alignment and size of major trunk water mains; connection and impacts on the Integrated Urban Water System (IUS); the need for other ancillary facilities such as pumping stations, pressure reducing valves (PRVs), re-chlorination stations, alignment, size and depths of major sanitary trunk sewers; and location, size and depth of required pumping stations.

The proposed infrastructure is to be planned in a timely, systematic, cost-effective manner while minimizing environmental impacts. Infrastructure is also being planned to take into account future development (oversizing) of the balance of the East Side Lands. All options for water and
wastewater servicing were developed to build on and leverage the existing system.

The MESP recommends that the existing water supply mains be used to supply water to the Stage 1 lands. Timing for some water main extensions will be dependent on absorption rates of employment lands in the Stage 1 area and adjacent lands. Given the existing transmission and distribution system in the Stage 1 area, phasing of water servicing for specific areas can be accomplished through construction of local mains, as required, as shown on Attachment 6. All areas of the Stage 1 lands can be serviced for water by extending the existing system. Timing for some of the proposed water projects will be dependent on other infrastructure improvements, such as road improvements.

The MESP recommends directing wastewater via gravity and City pumping station (SPS #1) to the Preston Wastewater Treatment Plant (PWWTP) in the interim until the Regional Pumping Station (SPS #2) is constructed. The ultimate long term plan is to direct wastewater from the Stage 1 lands to the Kitchener Waste Water Treatment Plan via the Regional Pumping Station. This was confirmed as part of the Region’s Wastewater Treatment Master Plan (2007). Since 2011, the Region has been diverting wastewater flows generated in the Industrial Road Area of the City of Cambridge from the Preston Waste Water Treatment Plant (PWWTP) to the Galt Waste Water Treatment Plant to free up capacity at the PWWTP. Through the MESP, sufficient capacity was confirmed at the PWWTP to accommodate the Stage 1 lands as well as other planned development in the PWWTP catchment area (see Attachment 7 for the list of wastewater projects).

**Transportation**

Transportation analyses related to the East Side Lands has occurred over the past several years, including the completion of the Regional Transportation Master Plan (RTMP) in 2010. The RTMP included recommendations for several transportation projects in the 0 to 20 year frame that are key to the East Side Lands Transportation Network. The RTMP also included preliminary long-term transportation needs of the East Side Lands by identifying key corridors that require protection and widening. The MESP built upon previous studies to provide recommendations for an internal collector road system and connections to Regional Roads.

The MESP recommends a North-South collector from Middle Block Road, crossing Allendale Drive through to the Creekside lands connecting to King Street. Based on the detailed evaluation, the North-South collector to King Street will distribute traffic and reduce demand on Riverbank Drive while providing improved network connectivity for transit, walking and cycling. Other local roads may be considered through individual development applications. As development applications are submitted, more detailed transportation analysis will need to occur to recommend required intersection improvements and to confirm planned capital project timing.

The widening of Fountain Street, Maple Grove Road, and various intersection improvements are also required to service the area. These Regional projects were assumed in the analysis as they were identified in the Regional Transportation Master Plan and are budgeted as part of the Region’s 2013 10 year Transportation Capital Program funded by Regional Development Charges. Additional City of Cambridge transportation infrastructure projects required to implement Option 3b are included in Attachment 5.

Upgrades and the widening of Speedsville Road have been identified in the list of infrastructure projects required to implement the preferred option. Regional and City staff have been in discussions and the MESP does not need to finally resolve this matter. The financial analysis completed for the infrastructure projects includes both scenarios for Speedsville Road (City ownership and Region ownership). The costs to upgrade Speedsville Road between Eagle Street and Maple Grove Road to support the East Side Lands are estimated to be in the range of $40 million. The allocation of these costs will be part of the ongoing discussions.
“Quick Start” Lands and Staging of Development

In order to respond to the potential for immediate development demands, lands that can be easily serviced with minimal infrastructure are identified on Attachment 8 and are referred to as the “Quick Start” lands. Approximately 85 net hectares (210 net acres) adjacent to Fountain Street can be serviced by gravity sanitary sewer mains without the need for any pump stations, force mains or significant road upgrades. Depending upon the extent of servicing and the specific area, it is estimated that the capital cost to service these “Quick Start” lands would be between $1.5 million and $5 million. This “Quick Start” infrastructure could continue to be used for servicing throughout the Stage 1 development period (until 2031) and beyond if needed.

The area west of the “Quick Start” lands extending towards Riverbank Drive could be serviced with on-site, wastewater pumping stations feeding into the gravity sewers previously identified with the “Quick Start” lands. Localized road improvements may be needed to service this area.

The infrastructure projects associated with the “Quick Start” lands are City of Cambridge projects and are marked with an asterisk (*) on Attachment 8. All fall under Schedules A (pre-approved projects) or A+ (pre-approved but require public consultation before implementation). These EA requirements are satisfied by the MESP. They are all City projects and no further EA work will be required. Following completion of the MESP, the City could proceed with detailed design and implementation subject to financing. It is estimated that the “Quick Start” lands could be designated in the City of Cambridge Official Plan and be appropriately zoned, serviced and ready for development in 2015.

Master Drainage Plan

The Master Drainage Plan (MDP) has been prepared as part of the MESP and is presented as supporting documentation to the Freeport Creek and Tributary to the Grand River Sub-Watershed Study. The purpose of the MDP is to identify and address drainage related issues associated with the existing and proposed land uses within the Stage 1 lands. The MDP has been initiated in order to assess, evaluate, prioritize and select the preferred stormwater management alternatives for the Stage 1 lands and has been completed in accordance with the Municipal Class Environmental Assessment process. The MDP satisfies the Phase 1 and Phase 2 requirements on the Environmental Assessment Act (i.e. up to the selection of the preferred solution).

The MDP includes recommendations regarding stormwater management facilities, infiltration galleries and specific methods to address any potential chloride impacts. However, it should be noted that a variety of stormwater management models can be implemented.

The Master Drainage Plan will be available for the required 30 day public review period. The City of Cambridge will be bringing forward a report to Cambridge Council after the public review period with recommendations regarding its implementation, among other matters.

Freeport Creek and Tributary to the Grand River Sub-Watershed Study

The Freeport Creek and Tributary to the Grand River Sub-Watershed Study covers the southwestern portion of the East Side Lands in the north part of Cambridge and a small contiguous area of Kitchener. The subwatershed study will guide development of the area roughly bounded by Highway 8, the Regional Operations Centre, Fountain Street, Middle Block Road and the Grand River. Freeport Creek flows from the rear of the Regional Operations Centre toward the Grand River. The “Tributary to the Grand” comprises three smaller tributaries: Allendale Creek which flows east-west between Middle Block Road and Allendale Road, and Riverbank Creek located in the floodplain between Riverbank Drive and the Grand River and the Walter Bean Trail Tributary. The remainder of the Stage 1 lands were previously studied and approved through the completion of the Hespeler West Sub-Watersheds Study (PEIL, 2004) and Summary Report (2004).
The Freeport Creek and Tributary to the Grand River Sub-Watershed Study, as well as the 2004 Hespeler West Sub-Watersheds Study and Summary Report identify significant environmental features to be protected and managed within the areas potentially to be affected by the development of the Stage 1 lands and assesses their ecological function and sensitivity to potential development impacts.

On August 22, 2013, Regional Council approved the *Final Draft, Freeport Creek and Tributary to the Grand Watershed Study* (Aquafor Beech, July, 2013) pursuant to Regional Official Plan policy 7.F.6 to the extent that it addresses matters of Regional interest, and more specifically:

a) That Regional staff collaborate with City of Cambridge and Grand River Conservation Authority staff to incorporate policies in the City’s planning documents for the East Side Lands to implement a Groundwater Management Plan pursuant to the Source Water Protection policies in the Regional Official Plan and the proposed Sourcewater Protection Plan that would, among other matters:

   i) Maintain the quantity and distribution of groundwater recharge through the design of stormwater management facilities and buried infrastructure;
   ii) Require Salt Impact Assessments that include consideration of the design of storm water management facilities to reduce need for winter de-icing practices for plans of subdivision, new employment and multiple-unit residential land uses;
   iii) Require Salt Management Plans that mitigate the risks of winter de-icing for all new employment and multi-unit residential land uses with large parking lots;
   iv) Consider requiring the accreditation of private winter maintenance contractors through the Smart About Salt™ program; and
   v) Implement a Groundwater Monitoring Program to assess changes to the shallow water table as a result of development and verify that the pre-development water balance is being maintained as imperviousness increases and also document whether local private wells are adversely affected by ongoing development.

b) That the following revisions to the mapping of the Greenlands Network within the study area be incorporated in a future amendment to Map 4 of the Regional Official Plan:

   i) Identify woodland areas shown in Attachment A as proposed additions to Significant Woodlands and Core Environmental Features;
   ii) Identify the Lower Freeport Creek Wetland Complex as a proposed addition to the northern end of the Grandview Woods Environmentally Sensitive Policy Area (ESPA 73) as shown in Attachment B;
   iii) Identify the Freeport Marsh Core Environmental Feature, as shown on Attachment C, as a proposed new Environmentally Sensitive Policy Area, and
   iv) Identify the Middle Block Swamp Core Environmental Feature, as shown on Attachment D as a proposed new Environmentally Sensitive Policy Area.

c) That staff continue to work with City of Cambridge staff to reflect linkages and Supporting Environmental Features identified in the sub-watershed study in the City’s planning documents.

d) That staff continue to collaborate with staff of the City of Cambridge, City of Kitchener, and Grand River Conservation Authority to implement recommendations for the protection, stewardship, enhancement, and monitoring of the Greenlands Network.
The final Freeport Creek and Tributary to the Grand River Sub-Watershed Study will be available for the 30 day public review period required for the MESP and Master Drainage Plan.

Community Plan

The East Side Stage 1 Lands Community Plan integrates the findings of the subwatershed studies, Master Drainage Plan, transportation, servicing studies and is intended to be implemented through future City of Cambridge Official Plan and Zoning By-law amendments.

The Community Plan is a City-led planning process and has been developed for the Stage 1 lands based upon a balanced approach to providing for diverse employment opportunities and supporting the long term prosperity within the Region of Waterloo while enhancing the cultural, environmental and social community.

Public and Stakeholder Consultation

The following is a chronology of the opportunities for public and stakeholder consultation:

- **May 30, 2011 - Notice of Commencement**
  Advertisements were placed in local newspapers informing the public of the commencement of the East Side Lands (Stage 1) Master Environmental Servicing Plan and Community Plan. In addition, the area municipalities, relevant agencies, landowners within the Study Area and First Nations were notified by letter.

- **Project Team Meetings**
  The MESP was co-managed by Region, City of Cambridge and GRCA staff. The Project Team consisted of representatives from the consultant team, the Region’s Planning, Housing and Community Services Department, Transportation and Environmental Services Department, and the Region of Waterloo International Airport. Staff from the City of Cambridge and the GRCA were also represented and staff from the City of Kitchener and Township of Woolwich were also consulted at relevant points in the project. A total of nine Project Team Meetings were held throughout the project in addition to numerous meetings with relevant staff to address specific issues.

- **Public Information Centres (PICs)**
  A total of three PICs were held at École Secondaire Père-René-de-Galinée on Maple Grove Road in Cambridge. The PICs were advertised in the local papers and individual notice was sent to landowners within the Stage 1 Study Area, First Nations and anyone who requested notice.

  The first Public Information Centre (PIC) was held on June 14, 2011 to introduce the project, present background information and identify next steps. The PIC was an open house format with a presentation.

  The second PIC was held on June 26, 2012. The PIC was an open house format with a presentation and opportunity for questions and answers. The purpose of the meeting was to respond to issues identified at the first PIC, present the servicing and transportation options and evaluation criteria and seek public input. Draft environmental mapping was also presented for comment.

  Landowners within the Prime Industrial Strategic Reserve area and the developer of the Creekside lands were invited to a special meeting with the consultants and members of the Project Team to give them an opportunity to review the panels and ask questions.
The third and final PIC was held on January 31, 2013 and followed the same format as the second PIC. The purpose of the meeting was to present and seek input on the Preferred Option and the detailed evaluation.

- **Spring 2013: Notice of Completion**

  Upon Council approval, advertisements will be placed in the local newspapers and the Region’s website informing the general public of the 30 day review period for the Final Report. Notice will be sent to those individuals who requested to be notified at PIC #3. All comments received will become part of the project file.

**Summary of Public Information Centres (PICs)**

Approximately 100 people attended each of the PICs. Participants included local residents, business owners, engineering / planning consultants, landowners and developers. There were a number of issues identified throughout the consultation including: impact to natural features and wells, flooding / drainage issues, traffic, Riverbank Drive as a scenic heritage road, desire to maintain agricultural land, and use compatibility, need for employment lands / economic competitiveness, questions / concerns about timing of development and access issues for specific development lands (Creekside). A detailed summary of the comments and responses from PICs 1-3 is appended as Attachment 10.

**Fiscal Impact Analysis**

A Fiscal Impact Analysis was prepared as part of the East Side MESP to understand the costs associated with developing the Stage 1 lands as well as the associated economic benefits. The analysis looked at the costs of infrastructure required to implement the Preferred Option, with and without amortization as well as the associated tax revenues. Regional and City of Cambridge staff worked together and agreed on the infrastructure and cost assumptions used in the analysis.

The City of Cambridge will use the Fiscal Impact Analysis as the basis for proposing updates to their Development Charges By-law. This process is expected to start this year and be complete by the end of 2013. Regional staff will continue to work with the City of Cambridge on detailed aspects (e.g. infrastructure responsibilities) and the development of a financial plan.

**Other Employment Lands in Proximity to East Side Lands**

- **Boxwood Subdivision**

  The Boxwood Business Park includes approximately 44 hectares (110 acres) of serviced industrial land the City of Cambridge and is expected to be offered in the fall of 2013. The lands are located east of the Toyota assembly plant and south east of the PISR lands. The Boxwood Business Park is the next phase of the Cambridge Business Park expansion and land is zoned for general industrial use, allowing manufacturing, processing, production assembly and some office uses. The Boxwood Business Park will make available lots ranging in size from 1- 20 acres and will complement the larger parcels within the PISR land expected to be ready for development in 2013.

- **Creekside Lands**

  The Creekside (Phase 1) lands are approximately 30 net hectares (74 acres) and are located south of the PISR lands, west of Fountain Street and north of King Street East (please see Attachment 9). These lands have been within the Urban Area boundary for many years and currently only permit agricultural uses and golf related uses. At the request of the developer and the City, there is a deferral on the designation of the property in the City’s recently adopted Official Plan, which is currently under appeal. The Creekside lands are included in the Stage 1 Study Area for the
purposes of the Study Area boundary for the Freeport Creek and Tributary to the Grand Subwatershed Study. The Creekside (Phase 1) lands were also considered as part of some of the servicing and transportation options. Ultimately, the Preferred Option included connecting the Creekside lands in the overall servicing and transportation solution identified.

The Creekside lands have a number of issues that have somewhat delayed them from developing for more urban uses, including limited / constrained access, servicing, and outstanding work related to the natural environment. The Creekside lands, however, do represent an opportunity for the shorter term location of future employment uses subject to the resolution of these issues. On July 8, 2013, the City of Cambridge adopted amendments to the 1999 and 2012 Official Plans to permit a variety of employment uses with limited retail and open space lands. Regional staff is prepared to approve the Official Plan Amendments once Regional Council has approved the MESP and supporting documentation.

The MESP includes a substantial amount of technical work to answer some of the broader questions about how the Creekside lands can develop, including a plan for two municipal roads that provide access to the property, completion of the subwatershed study work required to designate the developable land in the City of Cambridge Official Plan and a plan for municipal water and wastewater services. As determined through the MESP, the PWWTP has available capacity to provide wastewater servicing to the Creekside lands.

**Next Steps**

Subject to Regional Council approval of the recommendations of this report, a Notice of Completion of the MESP and supporting documentation will be issued according to Class EA requirements, by means of advertisements in local newspapers, the Region’s website and mailings to affected property owners and others who requested notice, municipalities and agencies. Upon Regional Council approval, the MESP, the Master Drainage Plan, the Freeport Creek and Tributary to the Grand Sub-Watershed Study and other supporting documentation will be made available for a 30 day public review period.

Part II Orders ("bump up" requests) can be submitted for individual projects (Schedule B projects only). If no Part II Orders are received, the MESP is complete and the Ministry of Environment will file the Notice of Completion. If a Part II Order is received, the proponent will be responsible for trying to resolve the issue. It ultimately lies with the Minister of Environment to make a ruling. There are no Part II orders allowed for Schedule A, A+ and C projects. Once the MESP is complete, all Schedule A and A+ projects can immediately proceed to detailed design and implementation subject to funding. Provided there are no Part II orders, the Schedule B projects can proceed without any further EA work (with the exception of the Pumping Stations and Regional forcemain).

Following completion of the MESP, several important next steps must follow to implement the Preferred Option, including the completion of EA requirements for specific projects by the applicable municipality and the City of Cambridge updating their Official Plan, Zoning By-law and Development Charges By-law. The Regional EA for the Region’s pumping station is currently underway and is anticipated to be complete by early 2015. It is expected the pumping station will be operational by 2017.

As most of the remaining implementation falls under the jurisdiction of the City of Cambridge, Regional Staff recommend Regional Council formally request the City of Cambridge to prioritize these next steps and budget for them accordingly.

The analyses done to date also provide the transportation and servicing requirements for other future phases of the East Side Lands. It is anticipated another MESP could be completed for lands beyond the Stage 1 lands.
Area Municipal Consultation/Coordination

This project is being co-managed by the City of Cambridge and the Grand River Conservation Authority (GRCA). Representatives from the City of Cambridge and GRCA are also members of the Project Team and staff from the City of Kitchener and Township of Woolwich has been involved at relevant points in the project.

The Project Team, including staff from the City of Cambridge and the GRCA, unanimously supported the selection of the Preferred Option. Staff from the City of Kitchener and Township of Woolwich has advised they are supportive of the Preferred Option.

CORPORATE STRATEGIC PLAN:

The East Side Lands (Stage 1) Master Environmental Servicing Plan (MESP) supports the implementation of Region of Waterloo 2011-2014 Strategic Focus Area 2: Growth Management and Prosperity, Strategic Objective 2.2, Develop, optimize and maintain infrastructure to meet current and projected needs, Strategic Objective 2.3: Support a diverse, innovative and globally competitive economy and Action 2.3.1: Advance New East Side Employment Lands toward Development Readiness.

FINANCIAL IMPLICATIONS:

The Region’s 2013 Capital Program provides $43 million for Regional infrastructure projects within the East Side Lands study area. This includes the Regional infrastructure projects identified in the MESP (approximately $10 million) as well as additional Region infrastructure projects in the study area that were previously identified and included in the 2013 Capital Program such as improvements to Fountain Street and Maple Grove Road. Any improvements required for Speedsville Road are not in the 2013 Capital Program or the Development Charge Background Study.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Planning, Housing and Community Services and Transportation and Environmental Services staff were part of the Project Team recommending the Preferred Option. Staff from Hydrogeology and Source Water Protection, Water Services and Corporate Services (Finance and Legal) was also consulted through the process and preparation of this report.

ATTACHMENTS:

Attachment 1 – Study Area Location
Attachment 2 – ROP Prime Industrial Strategic Reserve (PISR) lands
Attachment 3 – Preferred Option
Attachment 4 - Summary of Evaluation Results
Attachment 5, 6 & 7 – List of Key Infrastructure Projects to Implement Preferred Option
Attachment 8 – “Quick Start” Lands
Attachment 9 – Creekside lands
Attachment 10 – Summary of Responses from Public Information Centres 1-3

PREPARED BY: Brenna MacKinnon, Manager, Greenfield Planning

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
Attachment 1 – Study Area Location
Attachment 2 – ROP Prime Industrial Strategic Reserve (PISR) lands
Attachment 3 – Preferred Option
# Attachment 4 – Summary of Evaluation Results (preferred option in **bold**)

<table>
<thead>
<tr>
<th>Criteria Category</th>
<th>Option 1: No Freeport Creek Crossing</th>
<th>Option 2: Access to the Creekside Lands with No Freeport Creek Crossing</th>
<th>Option 3a: Access Through the Creekside Lands with Connections to King Street and Maple Grove Road</th>
<th>Option 3b: Access Through the Creekside Lands with Connection to King Street</th>
<th>Option 3c: Access Through the Creekside Lands with Connection to Maple Grove Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development and Sustainability</td>
<td>Options 1 and 2 are least preferred for the development and sustainability criteria as: It limits transportation access for the Stage 1 Lands to Middle Block Road and Allendale Road. It is noted that all water and sanitary servicing options provide for logical extension to the Broader East Side Lands.</td>
<td>Options 1 and 2 are least preferred for the development and sustainability criteria as: It limits transportation access for the Stage 1 Lands to Middle Block Road and Allendale Road. It is noted that all water and sanitary servicing options provide for logical extension to the Broader East Side Lands.</td>
<td>Option 3a is most preferred for the development and sustainability criteria category as: It provides the most efficient transportation servicing, and It provides maximum access potential for the Stage 1 Lands with access to both King Street and Maple Grove Road. It is noted that all water and sanitary servicing options provide for logical extension to the Broader East Side Lands.</td>
<td>Options 3b and 3c are less preferred than Option 3a for the development and sustainability criteria category as: They provide very good access potential for the Stage 1 Lands, however Option 3b only provides access to King Street. It is noted that all water and sanitary servicing options provide for logical extension to the Broader East Side Lands.</td>
<td>Options 3b and 3c are less preferred than Option 3a for the development and sustainability criteria category as: They provide very good access potential for the Stage 1 Lands, however Option 3c only provides access to Maple Grove Road. It is noted that all water and sanitary servicing options provide for logical extension to the Broader East Side Lands.</td>
</tr>
<tr>
<td>Land Use</td>
<td>Option 1 is least preferred for the land use criteria category as: It does not provide servicing for the Creekside lands, and It relies on private sector investment for infrastructure. The net developable area for this option is</td>
<td>Option 2 is considered preferred when compared to Option 1 for the land use criteria category as: It provides servicing for the Creekside lands. However it is less preferred than Options 3a, 3b and 3c as: Access from the Stage 1 Lands to the south would</td>
<td>Options 3a, 3b and 3c are preferred for the land use criteria category as: They provide servicing for the Creekside lands, and They increase development potential by providing a</td>
<td>Options 3a, 3b and 3c are preferred for the land use criteria category as: They provide servicing for the Creekside lands, and They increase development potential by</td>
<td>Options 3a, 3b and 3c are preferred for the land use criteria category as: They provide servicing for the Creekside lands, and They increase development potential by</td>
</tr>
</tbody>
</table>

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### Criteria Category

<table>
<thead>
<tr>
<th>Option 1: No Freeport Creek Crossing</th>
<th>Option 2: Access to the Creekside Lands with No Freeport Creek Crossing</th>
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<th>Option 3c: Access Through the Creekside Lands with Connection to Maple Grove Road</th>
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<tr>
<td>also least preferred. Option 1 provides approximately 311 hectares of developable area in the PISR lands, however the Creekside lands have not been included in the net developable area for this option it does not provide any servicing for the Creekside lands. It is noted that all options provide full servicing of the Stage 1 Lands.</td>
<td>need to be constructed through private sector investment if deemed necessary and this could impact development timing and availability of land. The net developable area for Options 2, 3a, 3b and 3c are all similar. Option 2 provides approximately 311 hectares of developable area in the PISR lands and 35 hectares for the Creekside lands. It is noted that all options provide full servicing of the Stage 1 Lands.</td>
<td>connection for the Stage 1 Lands to the south and to the Creekside lands. The net developable area for Options 2, 3a, 3b and 3c are all similar. Option 3a provides approximately 308 hectares of developable area in the PISR lands and 34 hectares for the Creekside lands. It is noted that all options provide full servicing of the Stage 1 Lands.</td>
<td>providing a connection for the Stage 1 Lands to the south and to the Creekside lands. The net developable area for Options 2, 3a, 3b and 3c are all similar. Option 3b provides approximately 308 hectares of developable area in the PISR lands and 35 hectares for the Creekside lands. It is noted that all options provide full servicing of the Stage 1 Lands.</td>
<td>Stage 1 Lands to the south and to the Creekside lands. The net developable area for Options 2, 3a, 3b and 3c are all similar. Option 3c provides approximately 308 hectares of developable area in the PISR lands and 36 hectares for the Creekside lands. It is noted that all options provide full servicing of the Stage 1 Lands.</td>
</tr>
</tbody>
</table>

### Socio-Economic and Cultural Environment

Option 1 is least preferred for the socio-economic and cultural environment criteria category as: It increases the potential for disruption to existing businesses on Middle Block Road and Allendale Road due to a potential increase in traffic on these roads. Options 2, 3a and 3c are more preferred than Option 1 for the socio-economic and cultural environment criteria category as: They reduce the potential disruption impact to existing residents and businesses on Middle Block Road and Allendale Road, Options 2, 3a and 3c are more preferred than Option 1 for the socio-economic and cultural environment criteria category as: They reduce the potential disruption impact to existing residents and businesses on Middle Block Road and Allendale Road. Option 3b is preferred for the socio-economic and cultural environment criteria category as: It reduces potential disruption impacts to existing residents and businesses on Middle Block Road and Allendale Road, It provides Options 2, 3a and 3c are more preferred than Option 1 for the socio-economic and cultural environment criteria category as: They reduce the potential disruption impact to existing residents and businesses on Middle Block Road and
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<td>It does not allow closure of Riverbank Drive at CPR crossing and thus does not limit traffic impacts to residents on Riverbank Drive, and It does not promote human health improvements resulting from increased mode choice. It does, however, have the advantage of not impacting the Region's Operations Centre but this advantage is outweighed by the disadvantages noted. It is noted that there are no listed built heritage or archaeological features identified within the Stage 1 lands. Riverbank Drive has been identified as a scenic road in the Cambridge Heritage Master Plan. Impacts to cultural heritage and archaeology are similar for each option.</td>
<td>They provide alternative mode choice opportunities which can positively impact human health, and They provide for an option to cul-de-sac Riverbank Drive at the rail tracks to limit traffic impacts. However they are less preferred than Option 3b as: They impact the Region’s Operation Centre, an important existing business in the area. It is noted that there are no listed built heritage or archaeological features identified within the Stage 1 lands. Riverbank Drive has been identified as a scenic road in the Cambridge Heritage Master Plan. Impacts to cultural heritage and archaeology are similar for each option.</td>
<td>Allendale Road, They provide alternative mode choice opportunities which can positively impact human health, and They provide for an option to cul-de-sac Riverbank Drive at the rail tracks to limit traffic impacts. However they are less preferred than Option 3b as: They impact the Region’s Operation Centre, an important existing business in the area. It is noted that there are no listed built heritage or archaeological features identified within the Stage 1 lands. Riverbank Drive has been identified as a scenic road in the Cambridge Heritage Master Plan. Impacts to cultural heritage and archaeology are similar for each option.</td>
<td>alternative mode choice opportunities which can positively impact human health, It provides for an option to cul-de-sac Riverbank Drive at the rail tracks to limit traffic impacts, and It results in no impacts to Region’s Operations Centre. It is noted that there are no listed built heritage or archaeological features identified within the Stage 1 lands. Riverbank Drive has been identified as a scenic road in the Cambridge Heritage Master Plan. Impacts to cultural heritage and archaeology are similar for each option.</td>
<td>Allendale Road, They provide alternative mode choice opportunities which can positively impact human health, and They provide for an option to cul-de-sac Riverbank Drive at the rail tracks to limit traffic impacts. However, they are less preferred than Option 3b as: They impact the Region’s Operation Centre, an important existing business in the area. It is noted that there are no listed built heritage or archaeological features identified within the Stage 1 lands. Riverbank Drive has been identified as a scenic road in the Cambridge Heritage Master Plan. Impacts to cultural heritage and archaeology are similar for each option.</td>
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<tr>
<td>Transportation</td>
<td>Option 1 is least preferred for the transportation criteria category as: It provides the least amount of internal roads and relies on the existing road network, It does not provide transportation servicing for the Creekside lands, It relies on the private sector to provide additional access, and It does not provide for community connectivity in the form of continuous capacity for transit and other non-motorized travel.</td>
<td>Option 2 is more preferred than Option 1 for the transportation criteria category as: It provides good east-west network connections for automotive, transit and other non-motorized travel options for the Creekside lands, and It provides two municipal transportation access points and full servicing to the Creekside lands. However it is less preferred than Option 3a, 3b and 3c as: It does not provide community connectivity from the Stage 1 Lands south to the Creekside lands and this may require private investment.</td>
<td>Option 3a is preferred for the transportation criteria category as: It provides maximum internal network connectivity for automotive, transit and other non-motorized travel options for the Stage 1 Lands, It provides three municipal transportation access points and full servicing to the Creekside lands, and It provides multiple access options from the Stage 1 Lands to the south.</td>
<td>Options 3b and 3c are more preferred than Option 1 and Option 2 for the transportation criteria category as: They provide very good network connectivity for automotive, transit and other non-motorized travel options, and They provide two municipal transportation access points and full servicing to the Creekside lands. However they are less preferred than Option 3a as: They provide one access from the Stage 1 Lands to the south.</td>
<td>Options 3b and 3c are more preferred than Option 1 and Option 2 for the transportation criteria category as: They provide very good network connectivity for automotive, transit and other non-motorized travel options, and They provide two municipal transportation access points and full servicing to the Creekside lands. However they are less preferred than Option 3a as: They provide one access from the Stage 1 Lands to the south.</td>
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<td>similar for each option.</td>
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<tr>
<td>Natural Environment</td>
<td>Option 1 is preferred for the natural environment criteria category as: It has the least impact to the natural environment, It has no impacts to the Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility, It has no impact to the Provincially Significant Wetland adjacent to the Region’s Operations Centre and Freeport Creek, and It has no crossing of Freeport Creek and no associated impacts. However, the north-south road between Allendale Road and Middle Block Road in all options will severely impact the wildlife corridor/linkage between the Hespeler West PSW Complex (Hespeler West Wetland) and the Tributary to the Grand (Allendale Creek) Natural Features and the Grand River Valley.</td>
<td>Option 2 is less preferred than Option 1 for the natural environment criteria category as: The east-west road will severely impact the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility, and Impacts to the Provincially Significant Wetland adjacent to the Region’s Operations Centre. However it is more preferred than Option 3a and 3c as: It has no crossing of Freeport Creek and no associated impacts. The north-south road between Allendale Road and Middle Block Road in all options will severely impact the wildlife corridor/linkage between the Hespeler West PSW Complex (Hespeler West Wetland) and the Tributary to the Grand (Allendale Creek) Natural Features and the Grand River Valley.</td>
<td>Option 3a and 3c are least preferred for the natural environment criteria category as: The east-west road will severely impact the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility, The east-west road will impact the Provincially Significant Wetland adjacent to the Region’s Operations Centre, and There are anticipated natural environmental impacts associated with the loss of wetland area at the proposed new crossing of Freeport Creek. However it is more preferred than Option 3a and 3c as: It has no impact to the Provincially Significant Wetland adjacent to the Region’s Operations Centre, and It has no impact on the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility.</td>
<td>Option 3b is less preferred than Option 1 for the natural environment criteria category as: The east-west road will severely impact the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility, The east-west road will impact the Provincially Significant Wetland adjacent to the Region’s Operations Centre, and There are anticipated natural environmental impacts associated with the loss of wetland area at the proposed new crossing of Freeport Creek. However it is more preferred than Option 3a and 3c as: It has no impact to the Provincially Significant Wetland adjacent to the Region’s Operations Centre, and It has no impact on the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility.</td>
<td>Option 3a and 3c are the least preferred for the natural environment criteria category as: The east-west road will severely impact the linear Region of Waterloo Core Environmental Feature south of the Regional Stormwater Management facility, The east-west road will impact the Provincially Significant Wetland adjacent to the Region’s Operations Centre, and There are anticipated natural environmental impacts associated with the loss of wetland area at the proposed new crossing of Freeport Creek. The north-south road between Allendale Road and Middle Block Road in all options will severely impact the wildlife corridor/linkage between the Hespeler West PSW Complex (Hespeler West Wetland) and the Tributary to the Grand (Allendale Creek) Natural Features and the Grand River Valley.</td>
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<td>Option 3c: Access Through the Creekside Lands with Connection to Maple Grove Road</td>
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</tr>
<tr>
<td>Cost** The numbers provided are for comparison purposes only. The capital costs provided are for the total cost of all identified infrastructure.</td>
<td>Option 1 is preferred for the cost criteria category as it is the lowest cost option. It has an approximate capital cost of $50 million directly related to this option. Operation and maintenance costs for all options are similar.</td>
<td>Options 2 and 3a, 3b and 3c have similar costs and are all less preferred for the cost criteria category. Option 2 has an approximate capital cost of $65 million directly related to this option. Operation and maintenance costs for all options are similar.</td>
<td>Options 2 and 3a, 3b and 3c have similar costs and are all less preferred for the cost criteria category. Option 3a has an approximate capital cost of $72 million directly related to this option. Operation and maintenance costs for all options are similar.</td>
<td>Options 2 and 3a, 3b and 3c have similar costs and are all less preferred for the cost criteria category. Option 3b has an approximate capital cost of $69 million directly related to this option. Operation and maintenance costs for all options are similar.</td>
<td>Options 2 and 3a, 3b and 3c have similar costs and are all less preferred for the cost criteria category. Option 3c has an approximate capital cost of $65 million directly related to this option. Operation and maintenance costs for all options are similar.</td>
</tr>
</tbody>
</table>
Attachment 5 – List of Infrastructure Projects to Implement Preferred Option 3b – Transportation Infrastructure

Preferred Option Infrastructure Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Description</th>
<th>From</th>
<th>To</th>
<th>Ownership</th>
<th>MEA Class Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Block Road</td>
<td>Upgrade and widen to 4 lanes</td>
<td>N-S Collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>Schedule B</td>
</tr>
<tr>
<td>N-S Collector</td>
<td>New 4 lane and Freeport Creek crossing structure</td>
<td>Middle Block Road</td>
<td>South of Freeport Creek</td>
<td>City of Cambridge</td>
<td>Schedule C</td>
</tr>
<tr>
<td>E-W Collector</td>
<td>New 4 lane and potential CPR crossing structure</td>
<td>King Street</td>
<td>N-S Collector</td>
<td>City of Cambridge</td>
<td>Schedule B</td>
</tr>
<tr>
<td>Middle Block Road</td>
<td>Upgrade 2 lanes</td>
<td>Fountain Street</td>
<td>Speedsville Road</td>
<td>City of Cambridge</td>
<td>Schedule B</td>
</tr>
<tr>
<td>Allendale Road</td>
<td>Upgrade 2 lanes and potentially widen to 4 lanes</td>
<td>N-S Collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>Schedule B</td>
</tr>
<tr>
<td>Speedsville Road</td>
<td>Upgrade 2 lanes</td>
<td>Middle Block Road</td>
<td>Maple Grove Road</td>
<td>City of Cambridge</td>
<td>Schedule B</td>
</tr>
<tr>
<td>Speedsville Road</td>
<td>Upgrade and widen to 4 lanes</td>
<td>Maple Grove Road</td>
<td>Eagle Street</td>
<td>TBD</td>
<td>Schedule B</td>
</tr>
</tbody>
</table>

Municipal Class EA Schedules:

**Schedule A**: Pre-approved projects.

**Schedule A+**: Pre-approved but require public notice before implementation.

**Schedule B**: Environmental screening process required.

**Schedule C**: Full planning and documentation process required and an Environmental Study Report must be prepared (beyond this project).

The EA requirements for all Schedule A, A+ and B projects have been satisfied through this project.
### Attachment 6 - List of Infrastructure Projects to Implement Preferred Option – Water Infrastructure

<table>
<thead>
<tr>
<th>Project Description</th>
<th>From</th>
<th>To</th>
<th>Servicing by:</th>
<th>Size (mm)</th>
<th>MEA Class Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watermain along Middle Block Road*</td>
<td>New N-S Collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain along Allendale Road*</td>
<td>New N-S Collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain along Middle Block Road</td>
<td>Fountain Street</td>
<td>Speedsville Road</td>
<td>City of Cambridge</td>
<td>400 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain along Speedsville Road</td>
<td>Middle Block Road</td>
<td>Maple Grove Road</td>
<td>City of Cambridge</td>
<td>400 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain along Fountain Street*</td>
<td>Banat Road</td>
<td>Middle Block Road</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain along Fountain Street</td>
<td>Kossuth Road</td>
<td>Maple Grove Road</td>
<td>Region of Waterloo</td>
<td>450 mm</td>
<td>Schedule A</td>
</tr>
<tr>
<td>Watermain (loop for N-S collector and E-W collector through Creekside lands)</td>
<td>N-S Collector</td>
<td>Existing Regional Watermain</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A</td>
</tr>
</tbody>
</table>

"Quick Start" projects have been identified with an asterisk (*)
## List of Infrastructure Projects to Implement Preferred Option 3b – Wastewater Infrastructure

<table>
<thead>
<tr>
<th>Project Description</th>
<th>From</th>
<th>To</th>
<th>Servicing by:</th>
<th>Size (mm)</th>
<th>MEA Class Schedule</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitary sewer Middle Block Road*</td>
<td>N-S collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A+</td>
<td>Includes short section of sewer east of Fountain Street</td>
</tr>
<tr>
<td>Sanitary Sewer Fountain Street*</td>
<td>Middle Block Road</td>
<td>Maple Grove Road</td>
<td>City of Cambridge</td>
<td>450 mm</td>
<td>Schedule A+</td>
<td></td>
</tr>
<tr>
<td>Sanitary sewer Allendale Road*</td>
<td>N-S collector</td>
<td>Fountain Street</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A+</td>
<td></td>
</tr>
<tr>
<td>Sanitary sewer Speedsville Road</td>
<td>Middle Block Road</td>
<td>Maple Grove Road</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A+</td>
<td></td>
</tr>
<tr>
<td>Sanitary sewer Speedsville Road</td>
<td>Maple Grove Road</td>
<td>New SPS#1</td>
<td>City of Cambridge</td>
<td>525 mm</td>
<td>Schedule A+</td>
<td></td>
</tr>
<tr>
<td>Royal Oak sanitary sewer to divert Boxwood Pumping Station to new SPS #1</td>
<td>Boxwood Pumping Station</td>
<td>New SPS #1</td>
<td>City of Cambridge</td>
<td>300 mm</td>
<td>Schedule A+</td>
<td></td>
</tr>
<tr>
<td>Proposed new SPS#1 (East Side Stage 1 lands, Hunt Club, Boxwood)</td>
<td>-</td>
<td>-</td>
<td>City of Cambridge</td>
<td></td>
<td>Schedule B</td>
<td>New facility requires acquisition of land and separate EA process</td>
</tr>
<tr>
<td>Forcemain to direct sewage to Preston WWTP</td>
<td>New SPS#1</td>
<td>Existing forcemain on Cherry Blossom Road</td>
<td>TBD</td>
<td>300 mm</td>
<td>Schedule A+</td>
<td>Being looked at as part of a separate process. Ultimate plan is for direction of forcemain to be reversed to convey flows from SPS#1 to SPS#2</td>
</tr>
<tr>
<td>Trunk sewer along Fountain Street</td>
<td>South of Kossuth Road</td>
<td>Middle Block Road</td>
<td>City of Cambridge</td>
<td>900 mm</td>
<td>Schedule A</td>
<td>Oversized for Broader East Side Lands</td>
</tr>
<tr>
<td>Trunk sewer along Middle Block Road</td>
<td>Fountain Street</td>
<td>N-S Collector</td>
<td>City of Cambridge</td>
<td>900 mm</td>
<td>Schedule A</td>
<td>Oversized for Broader East Side Lands</td>
</tr>
<tr>
<td>Trunk sewer along N-S</td>
<td>Middle Block Road</td>
<td>Allendale Road</td>
<td>City of Cambridge</td>
<td>900 mm</td>
<td>Schedule A</td>
<td>Oversized for Broader East Side Lands</td>
</tr>
<tr>
<td>Collector</td>
<td>Trunk sewer to SPS#2</td>
<td>SPS#2</td>
<td>City of Cambridge</td>
<td>1050 mm</td>
<td>Schedule</td>
<td>Oversized for Broader East Side Lands</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------</td>
<td>-------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Proposed New Regional SPS#2</td>
<td></td>
<td></td>
<td>Region of Waterloo</td>
<td></td>
<td>Schedule B</td>
<td>EA underway</td>
</tr>
<tr>
<td>Ultimate forcemain extension to service the Broader East Side Lands</td>
<td>SPS32</td>
<td>Kitchener WWTP</td>
<td>Region of Waterloo</td>
<td></td>
<td>Schedule B</td>
<td>Separate process underway.</td>
</tr>
</tbody>
</table>

“Quick Start” projects have been identified with an asterisk (*)
Attachment 8 – “Quick Start” Lands

Further study required to determine limit of gravity sewer

Approximate Limit to Gravity Wastewater Flow

Floodplain Limits Not Shown
Attachment 9 – Map of Creekside Lands
### East Side (Stage 1) Master Environmental Servicing Plan and Community Plan – PIC #1

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Concern regarding land use changes in the area.</td>
<td><strong>Land Use Changes</strong> – Existing land uses will be able to remain and there will be appropriate setbacks and buffers established to integrate the new employment uses with sensitive land uses.</td>
</tr>
<tr>
<td>2. Traffic concerns at Riverbank Drive and Allendale Road.</td>
<td><strong>Traffic</strong> – Potential traffic impacts for existing residents is a key indicator of the “Potential Impacts on Existing Area Businesses and Residents” criterion, and this will be evaluated for each option. The options vary in their ability to reduce traffic on the existing road network, and some options include the ability to cul-de-sac Riverbank Drive at the rail track, which could have a positive impact on local traffic.</td>
</tr>
<tr>
<td>3. Concerns with level of detail available at Public Information Centre (PIC) #1.</td>
<td><strong>Consultation</strong> – PIC #1 was an introductory meeting for the purpose of providing background information, explaining the process and providing an opportunity for community input.</td>
</tr>
</tbody>
</table>
| 4. Concern from resident on Riverbank Drive about as to traffic, drainage, loss of frontage and adjacent land uses. | **Traffic** - Potential traffic impacts for existing residents is a key indicator of the “Potential Impacts on Existing Area Businesses and Residents” criterion, and this will be evaluated for each option. The options vary in their ability to reduce traffic on the existing road network, and some options include the ability to cul-de-sac Riverbank Drive at the rail track, which could have a positive impact on local traffic.  
**Drainage** – As part of the Master Environmental Servicing Plan and Community Plan, a Subwatershed Study and Master Drainage Plan is being completed for the Freeport Creek and Tributary to the Grand subwatersheds. These studies will provide recommendations for how drainage should be managed.  
**Loss of Frontage** – Widening of Riverbank Drive is not anticipated.  
**Land Use** – The Study area for the Master Environmental Servicing Plan and Community Plan is the Stage 1 lands which are approximately 855 gross hectares. Of those lands, approximately 477 gross hectares have been designated in the Regional Official Plan as Prime Industrial/Strategic Reserve to accommodate future serviced large lot industrial development. Specific uses would be determined as part of future City planning processes. |
| 5. Interested in information on impacts to wells, water levels, water quantities and hydrological flow. | **Impacts to Wells, Water Levels, Water Quantities and Hydrological Flow** - The Subwatershed Study and Master Drainage Plan will consider impacts to wells, water levels, water quality and hydrological flow. The evaluation of options will also consider a number of natural environmental criteria including potential impacts to surface water and aquatic environment, groundwater resources and wetlands. Future development applications will also consider these potential impacts. |
| 6. Concern with level of consultation with residents to date. Concern about whether the heritage value of landscape | **Consultation** – A comprehensive consultation program has been designed for the Master Environmental Servicing Plan and Community Plan project to provide opportunities for... |
### Comment

identified in the Cambridge Heritage Master Plan has been considered. Concerns with land use and need for large lot industrial. Concerns with property values, traffic and potential expropriation.

#### Response

Landowners in the study area and any other interested parties to participate in the public consultation process. People who are not landowners can contact designated staff to have their name included on a mailing list for this project. Notices will be provided in local newspapers prior to all Public Information Centres. Project information is posted on the Region’s website at [www.regionofwaterloo.ca/easts](http://www.regionofwaterloo.ca/eastside).

Cultural Heritage – The City of Cambridge Heritage Master Plan identifies Riverbank Drive as a scenic heritage road. Impact on built heritage and archaeology is a criterion for the evaluation of options.

Land Use - The Study area for the Master Environmental Servicing Plan and Community Plan is the Stage 1 lands which are approximately 855 gross hectares. Of those lands, approximately 477 gross hectares have been designated in the Regional Official Plan as Prime Industrial/Strategic Reserve to accommodate future serviced large lot industrial development.

Land Need – The need for large lot employment lands was first identified as background work to the Regional Growth Management Strategy (2003) and reconfirmed in the Regional 2006 Business Park and Vacant Land Inventory. The need is still relevant today.

7. Concerns with traffic. Concerned that existing residents will be required to connect to municipal servicing and associated cost.

Traffic – Traffic for existing residents is a key indicator of the “Potential Impacts on Existing Area Businesses and Residents” criterion, and this will be documented in the advantages and disadvantages of each option. The options vary in their ability to reduce traffic on the existing road network.

Residential Servicing – Existing land uses will be able to remain and there will be appropriate setbacks and buffers established to integrate the new employment uses. The servicing of existing homes on Riverbank Drive is not a primary objective of the study. To date the objective of minimizing impacts to these residences has been a key issue.

We are also commencing a Sanitary Sewer Master Plan Study for the entire city. Part of this study is to review the needs and by-laws addressing existing homes and septic tanks. Currently, if services are available, residences must connect.

Based on the outcome of the public processes for both of these studies there may be requirements to connect. However, at this time, the MESP is considering options that likely won’t impose this immediate requirement. Once trunk sanitary sewers are in the industrial area, the City would be better positioned to provide services to the residential area in the future as needed or requested. Ultimately, at some point in the future it is expected that services will be provided. Based on current objectives of the studies this is not expected in the 10 year future, and may be many years beyond that.

8. Questions around the components of the study and whether type of industrial land use, transportation road access, evaluation of stormwater and drainage and impacts to surrounding land uses will be considered.

Components of the MESP – The MESP will be developed to identify how to effectively and efficiently service the Prime Industrial/Strategic Reserve lands in an environmentally sustainable manner. The MESP process includes the development of a Transportation Master Plan, Water/Wastewater Master Plan and Subwatershed Plan and Master Drainage Plan.

Land Use – These lands are designated for employment uses in the Regional Official Plan to
### East Side (Stage 1) Master Environmental Servicing Plan and Community Plan – PIC #1

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>accommodate future serviced large lot industrial development. The City of Cambridge Official Plan provides further direction on land use types and will need to be updated following the completion of this Master Environmental Servicing Plan.</td>
<td></td>
</tr>
<tr>
<td><strong>Community Plan</strong> – The Community Plan will synthesize the findings of the subwatershed, traffic and transportation and servicing studies to provide a comprehensive plan for the use of land in the Stage 1 study area. It will be completed in sufficient detail to guide and direct the preparation of development applications for the community.</td>
<td></td>
</tr>
<tr>
<td><strong>Impacts to Existing Land Use</strong> - Impacts to existing land use is a key consideration in the evaluation of options as part of the “Potential impacts on existing area businesses and residents” criteria. Alternatives that limit the potential negative impacts on existing area businesses and residential areas are preferred and alternatives that promote positive impacts are preferred. The Community Plan will provide recommendations for land use compatibility.</td>
<td></td>
</tr>
</tbody>
</table>
Public Information Centre #2: Summary of Key Issues and Responses

The following is a summary of key issues based on the June 26, 2012 Public Information Centre held at the École secondaire Père-René-de-Galinée (450 Maple Grove Road, Cambridge ON). A number of comments and questions from this meeting were received from members of the community. The Project Team’s responses to all written comments received and questions posed at the PIC are provided in the following table.

| East Side (Stage 1) Master Environmental Servicing Plan and Community Plan – PIC #2 |
|---|---|
| **Comment** | **Response** |
| **PUBLIC INFORMATION CENTRE (PIC) AND PRESENTATION FORMAT** | |
| Landowner meeting prior to PIC was successful | Noted, thank you. Based on this feedback the Project Team will hold a landowner meeting prior to PIC #3 as well in order to provide similar opportunity for landowners. |
| Very informative presentation that was polite to all concerns | The Project Team appreciates this feedback. |
| **LAND USE DESIGNATION** | |
| Concern with land use and believes prime agricultural use should be maintained and not developed | Through the Regional Official Plan, the principle of land use has been established for the Prime Industrial Strategic Reserve lands. The study area for the Master Environmental Servicing Plan and Community Plan is the Stage 1 lands which consist of approximately 855 gross hectares (2,112 gross acres). Of those lands, approximately 477 gross hectares (1,178 gross acres) are designated in the Regional Official Plan as Prime Industrial/Strategic Reserve to accommodate future serviced large lot industrial development. |
| Clarification of the land included in the PISR designation | The study area for the Master Environmental Servicing Plan and Community Plan is the Stage 1 lands which consist of approximately 855 gross hectares (2,112 gross acres). Of this, approximately 477 gross hectares (1,178 gross acres) are designated in the Regional Official Plan as Prime Industrial/Strategic Reserve (PISR) to accommodate future serviced large lot industrial development.  
The Regional Official Plan has delineated the extent of land to be included in the PISR designation and should be referenced for clarifications. The PISR lands are also identified on the “East Side Lands - Project Location” PIC panel. |
| Concern with the need for large lot industrial land due to current industry trends | The need for large lot employment lands was first identified as background work to the Regional Growth Management Strategy (2003) and reconfirmed in the Regional 2006 Business Park and Vacant Land Inventory Study and subsequent updates. The Region of Waterloo must ensure there is a supply of strategically located, large lot employment lands to meet the needs of future industrial growth. |
| Suggestion to incent existing vacant industrial lots in Cambridge versus servicing more land | The City of Cambridge supports the development of vacant industrial lands within the City. In addition to these efforts, the need for additional large lot employment land was identified as background work to the Regional Growth Management Strategy (2003) and reconfirmed in the Regional 2006 Business Park and Vacant Land Inventory Study and subsequent updates. There is a long term plan to ensure the Region of Waterloo has large strategically located employment lands. |
## East Side (Stage 1) Master Environmental Servicing Plan and Community Plan – PIC #2

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>lands to accommodate future growth. The purpose of the MESP and Community Plan is to provide a framework for the creation of such new lots and does not preclude future programs that can be implemented to promote other Cambridge industrial lands.</td>
<td></td>
</tr>
<tr>
<td>Question as to the size of the lots and consideration for need for smaller lots</td>
<td>Based on the Region’s Business Park and Vacant Land Inventory there is an identified land need of 300 net hectares (741 net acres) for large lot employment purposes. While the intent of the Regional Official Plan policy is to maximize larger parcels, there is recognition that some lots may be less than 8 hectares (approximately 20 acres) where compromised by environmental features, property configurations, provision of new roads or existing development.</td>
</tr>
<tr>
<td>Question as to how the development would occur since the land is privately owned</td>
<td>For PISR land that is privately owned, it would be up to the current and future land owners to develop the land. The Region and the City will support the development of the PISR lands by putting in place the planning framework and developing a plan for the municipal services required.</td>
</tr>
</tbody>
</table>

### NATURAL ENVIRONMENT

Concerns around some lands identified on the Development Constraints Map.

A key component of the MESP project is the undertaking of a Subwatershed Study and Master Drainage Plan for the Stage 1 lands. This task involves the mapping, evaluation, and characterization of the network of natural environmental features and their ecological functions. This is essential in order to assess the environmental impacts of the servicing options for the Stage 1 lands. A fundamental principle of the infrastructure options is that options should avoid impacts on the network of natural features, and where unavoidable, impacts should be minimized and mitigated. The Potential Development Areas map presented at PIC #2 was in draft form and all features are still under review and subject to change as the Subwatershed Study and Master Drainage Plan are still being developed. PIC #3 will present the final draft Potential Development Areas map for this project.

Concerns around and support for the priority given to the preservation of natural features as well as specific concerns for the significance of crossing Freeport Creek.

The Provincial Policy Statement gives strong direction for the protection of significant natural environmental features and the linkages among them. Policies in municipal Official Plans and planning decisions must be consistent with these directions.

This project must be consistent with Provincial policy as well as satisfying the requirements of the Municipal Class Environmental Assessment (EA) process, as outlined by the Municipal Engineers Association. The review of options against natural environmental criteria is a key component to the evaluation of options and decision making process, as outlined by the Municipal Class EA document. The evaluation of servicing options for the Stage 1 lands considered the evaluation results under six criteria groups: development and sustainability; cost; land use; socio-economic and cultural environment; natural environment; and transportation network.

Clarification of hatched area and process to delineate these on the Potential Development Areas Map

The area delineated with a hatched line on the Potential Development Areas map is regulated by the GRCA pursuant to Ontario Regulation 150/06. This area is currently under review and PIC #3 will present a revised Regulation limit and Potential Development Areas Map. Analysis to determine opportunities for development within the GRCA regulated areas would be conducted on a site specific basis at the development approvals stage in accordance with GRCA policies. Applicable Provincial and Municipal policies would also need to be considered. More information on the GRCA Regulation and Policies can be obtained at [www.grandriver.ca](http://www.grandriver.ca) in the Planning and Regulations Section.
## Flooding and drainage

**Issues:** Flooding and drainage issues from Regional Stormwater Management pond

**Response:** The City of Cambridge has recently completed maintenance work on the central Stormwater Management Pond. Further discussion with the City of Cambridge Transportation and Public Works Department is encouraged.

**Tile under driveway of 4455 Fountain Street N**

**Response:** This is an existing localized drainage issue. For drainage issues on Fountain Street, the Region’s maintenance department should be consulted.

**Concern with floodline delineation**

**Response:** Floodplain mapping is currently being completed and will be presented at PIC #3.

### INFRASTRUCTURE

**Timely servicing of the Creekside Lands and alternative to service through SPS-2 if the Regional Pump Station takes too long to develop**

**Response:** The purpose of the MESP is primarily to service the PISR lands and to consider the ability for other lands to be serviced. The Creekside lands (see PIC panel for location) are considered to be other lands that would benefit from the servicing for the PISR lands, and have been considered in the evaluation of each option. As evident in the evaluation, the benefits of servicing the Creekside lands include increasing total serviceable land and efficiency of servicing. Staging of the Creekside lands will be considered during development of a detailed staging plan for the preferred option.

**Concern with long timeline for infrastructure development, staging of infrastructure (what lands will be first) and need for additional requirements prior to development**

**Response:** The purpose of the MESP is primarily to service the PISR lands and to consider the ability for other lands to be serviced. One of the fundamental principles of the infrastructure options was that options should provide optimal flexibility for the staging of the lands to allow some lands to be developed before others. Staging will take into consideration costs and timing to provide services with the ultimate servicing strategy servicing the entire PISR lands. The staging plan will be developed for the preferred option and presented at PIC #3. There is a strong interest to provide a servicing solution that allows some lands to develop before major infrastructure construction is needed. This was presented at PIC #2 and will be refined for PIC #3. Methods to expedite the development approvals process are being considered as part of the implementation plan for the Stage 1 lands. As this is a large area of land with significant servicing requirements, a number of activities will need to be implemented after the MESP and Community Plan before development. The implementation plan will outline these activities and a suggested approach.

**No requirement for grade separation at CPR tracks**

**Response:** CPR is a stakeholder and discussions with CPR will be needed as the project proceeds. The study team is considering options with and without a grade separation.

**Inclusion of future LRT plans in MESP documents**

**Response:** The Region of Waterloo Rapid Transit project is an important transit project in the Region. The MESP will consider the future Rapid Transit plans along with all other transportation and transit plans as part of the background information and review of options.

**Support for traffic lights at Middle Block Road and Fountain Street**

**Response:** The transportation component of the MESP considers the need for new roads as well as existing road improvements in order to improve traffic and the efficient movement of people and goods within the Stage 1 lands. In the future, detailed turning movement forecasts and traffic control will be decided. At this time, there is nothing to preclude the installation of signals at Middle Block Road and Fountain Street when, or if, they become warranted according to Regional policy.

**Consider rail spurs to provide goods movement option**

**Response:** For sites adjacent to the existing rail line, planning for rail spurs would be conducted at the site plan stage.

**Concern around location of pump stations**

**Response:** The general location of the Regional Pump Station was identified in the Region of Waterloo Wastewater Master Plan. The specific location for the pump station and forcemain will not be...
### Comment | Response
---|---
Clarification is needed on which side of the road the sewer will be on and where sewage is pumped to in short and long term basis | Sewers will be located within the road right-of-way and location will be decided on a case-by-case basis. The sewage from the East Side Stage 1 lands will be collected and treated at either the Kitchener or Preston Wastewater Treatment Plants.
Question as to whether there may be a new Highway 401 interchange due to large amounts of truck traffic | Highway 401 is under Provincial jurisdiction. The province has completed a review of the interchanges and because of the inability to meet highway design criteria have decided to not pursue any new accesses or interchanges in this area at this time.
Question as to whether the residents on Riverbank Drive might be able to connect to the proposed sewer if it went behind their property | The MESP considers the location of trunk sewers, and has shown a trunk sewer alignment option behind the Riverbank Drive residential properties on some of the options. This sewer is a trunk sewer, and typically residents would not connect to a trunk sewer. The City of Cambridge would evaluate this on a case by case basis and consider this as an option if this was deemed to be desirable. The scope of this MESP has not considered servicing the residential properties on Riverbank Drive.
Question as to the timing for the Broader East Side Lands | Based on the approved (but currently under appeal) Regional Official Plan, the Broader East Side Lands are considered to be beyond the 2031 planning time horizon. There has not been a specific time horizon established as land use planning is typically done on a 20 year time horizon. The Region will consider land needs as part of their five year review of the Regional Official Plan.
Question as to whether access to the Creekside lands was ever considered from Riverbank Drive | The project team has not specifically considered an access for the Creekside lands from Riverbank Drive. It is a fundamental principle of the infrastructure options that Riverbank Drive is a local road and it is not desirable to increase the volume of traffic utilizing this road, therefore no major servicing was considered on Riverbank Drive, only minor local improvements. The value of Riverbank Drive as a scenic heritage road was identified in the Cambridge Heritage Master Plan and has been recognized throughout this project.
Question as to the status of the Creekside lands development | An Official Plan Amendment has been submitted for the Creekside (Stage 1) lands and is in the review process.
Question as to the timing of zoning | The Community Plan will consider the general land uses of the Stage 1 lands. After the completion of the MESP and Community Plan, the City of Cambridge will need to amend its Official Plan and Zoning By-law for this area.
Question as to whether the City or Region would need a municipal-owned right-of-way for any services | The City of Cambridge would have a city-owned easement for maintenance purposes where needed.
Question as to whether the servicing from the Toyota plant will assist the servicing for the Stage 1 Lands | The sanitary and water investments from the Toyota plant will assist in allowing the servicing of the Stage 1 lands to move forward.
Question as to the cost implications of each option | The cost implications will be included for each option on the PIC #3 panels and included in the MESP document.

### SPECIFIC IMPACTS ON PRIVATE RESIDENTS AND INDUSTRY

Clarification of the plans for expropriation of private lands | Where a development application is submitted for a property abutting a public road and widening may be needed now or in the future, in part to accommodate the increased traffic generated from the development application, the City may require a road widening as a condition of approval for...
### Comment

the development, subject to the maximum Right-of-Way limits established in the Official Plan.

In a proposed plan of subdivision, the local road would be constructed by the developer and then eventually transferred to the City of Cambridge as part of the development approvals process.

If a new road was proposed through an undeveloped area, the market value of the land would be established through a property appraisal and then negotiating the purchase of the land from the property owner. In the event an agreement on price cannot be reached and there is an established need for the property the provisions of the Expropriations Act are followed. The same process is followed where there is an established need to widen a public road and there is no development application made for a property abutting the road.

---

Some support and some concern with the option to cul-de-sac Riverbank Drive

One of the fundamental principles of the infrastructure options was that Riverbank Drive is a local road and it is not desirable to increase the volume of traffic utilizing this road, therefore no major servicing will be considered on Riverbank Drive, only minor local improvements. The value of Riverbank Drive as a scenic road was identified in the Cambridge Heritage Master Plan and has been recognized throughout this project. A number of the evaluation criteria consider the potential for impact to both the cultural value of and the residents along Riverbank Drive. As part of this MESP, there will be no decisions made with respect to a cul-de-sac of Riverbank Drive. The option to be able to cul-de-sac Riverbank Drive due to providing an alternative transportation access to King Street provides potential to mitigate traffic concerns on Riverbank Drive. Even without developing a cul-de-sac on Riverbank Drive, alternative access to King Street will assist in mitigating traffic concerns on Riverbank Drive. The decision to cul-de-sac Riverbank would involve a future public process undertaken by the City of Cambridge.

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Effect of industry on existing residents

Impacts to existing land uses are a key consideration in the evaluation of options as part of the “Potential impacts on existing area businesses and residents” criterion. Within that criterion, alternatives that limit the potential negative impacts on existing area businesses and residential areas are preferred and alternatives that promote positive impacts are preferred. The Community Plan will provide recommendations for land use compatibility.

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Impact on private residential wells

A hydrogeological review is a component of the Subwatershed Study and Master Drainage Plan. Site specific development applications will also consider the localized impacts on wells.

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Impacts to property values

Impacts to existing land uses is a key consideration in the evaluation of options as part of the "Potential impacts to existing residents" and "Potential impacts to area businesses" criteria. Within that criterion, alternatives that limit the potential negative impacts on existing area businesses and residential areas are preferred and alternatives that promote positive impacts are preferred. The Community Plan will provide recommendations for land use compatibility.

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Ensure inclusion of Hunt Club and Arriscraft lands within the MESP and area specific development charge

The purpose of the MESP is to primarily service the PISR lands and optimize the ability for other lands to be serviced. The plans for the Hunt Club and Arriscraft lands have been considered as part of the infrastructure analysis.

### FEEDBACK ON SPECIFIC OPTIONS RECEIVED FROM PUBLIC

**Option 1:** No access to Creekside lands, impacts to residents on Riverbank due to location of sewers, doesn’t resolve traffic issues, not efficient transportation network, less damaging and most advantageous

Varying perspectives were provided on each of the options. This feedback has been considered as part of the evaluation process, and the evaluation results have been revised where appropriate. The preferred option will be presented at PIC #3 for public review and comment.
<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 2:</strong> impacts to residents on Riverbank due to location of sewers, not efficient transportation network, less damaging and most advantageous</td>
<td></td>
</tr>
<tr>
<td><strong>Option 3a:</strong> preferred transportation and servicing network, provides maximum access, sewers can be located in road ROWs, alternative for traffic and Riverbank. Not concerned about crossing Freeport Creek. Development and new investment can occur in short-term, phasing makes sense, efficient use of existing infrastructure, greater efficiency for access and servicing</td>
<td></td>
</tr>
<tr>
<td><strong>Option 3b:</strong> less efficient transportation route than 3a</td>
<td></td>
</tr>
<tr>
<td><strong>Option 3c:</strong> does not resolve traffic issues on Riverbank Drive, less efficient transportation route than 3a</td>
<td></td>
</tr>
</tbody>
</table>
Public Information Centre #3: Summary of Key Issues and Responses

The following is a summary of key issues based on the January 31, 2013 Public Information Centre held at the École secondaire Père-René-de-Galinée (450 Maple Grove Road, Cambridge ON). A number of comments and questions from this meeting were received from members of the community. The Project Team’s responses to all written comments received and questions posed at the PIC are provided in the following table.

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUBLIC INFORMATION CENTRE</strong></td>
<td>PIC #3 presented a summary of the evaluation results and identified the preliminary preferred option. All materials from PIC #3 have been provided on the project website: <a href="http://www.regionofwaterloo.ca/en/aboutTheEnvironment/eastsidearea.asp">http://www.regionofwaterloo.ca/en/aboutTheEnvironment/eastsidearea.asp</a>. The MESP documentation will provide detailed information on process, selection and the preferred option. The MESP documents will be provided for public review and comment.</td>
</tr>
<tr>
<td>Lack of detailed information provided at PIC #3</td>
<td>The Community Concept Plan has identified transition areas to provide buffers, setbacks and appropriate landscaping to mitigate impacts to existing residents. The City of Cambridge Official Plan Amendment and Zoning By-law Amendment will include policies and standards to deal with separation distances, screening and buffering requirements between sensitive uses and new employment uses for these transition areas and the rest of the Stage 1 Lands.</td>
</tr>
<tr>
<td>Land use designation</td>
<td>The Regional Official Plan outlines “unless otherwise compromised by design limitations associated with environmental features, property configurations, the provision of new local roads or existing development, the lands will be developed as parcels greater than eight hectares in size.” This policy has been used as a guide in the development of the preferred servicing and community plan concept.</td>
</tr>
<tr>
<td>Limit noise producing businesses in area near homes</td>
<td>It is not possible to predict the future values of property in the study area as there are many factors both locally and over a broader area that affect the price of land. However, there will be significant servicing improvements and increased transportation access which could have a positive impact on property value.</td>
</tr>
<tr>
<td>Private land should be fenced off from new development to not allow access</td>
<td></td>
</tr>
<tr>
<td>There is an absence of analysis of the impacts of the development constraints on the original land use planning objectives for the PISR designation (parcels greater than 8 hectares with half being parcels 20-40 hectares in size)</td>
<td></td>
</tr>
<tr>
<td>Concern about property values due to proposed industrial land use next to existing residential areas and how the City compensation for loss of property values</td>
<td></td>
</tr>
<tr>
<td>Land between Banat Road and Hammer's bush should be half acre estate lots</td>
<td>The Regional Official Plan has established the land use as Prime Industrial Strategic Reserve.</td>
</tr>
<tr>
<td>Existing noise issues due to existing industrial facilities</td>
<td>This is a site specific issue relating to existing businesses within and outside of the study area. The City of Cambridge should be contacted directly for any concerns relating to existing land uses.</td>
</tr>
</tbody>
</table>
## NATURAL ENVIRONMENT

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green roofing requirement for industrial areas</td>
<td>The guiding principles of the Community Plan include developing in a way that protects key environmental resources, promotes a high standard of urban design and promotes energy efficient and environmentally sensitive development. Specific site level design features will be established during the City of Cambridge Official Plan Amendment and Zoning By-law Amendment processes.</td>
</tr>
<tr>
<td>Buffer areas to be naturalized with trees, grasslands, etc</td>
<td>Transition areas have been identified in the Community Plan Concept and are areas where buffers, setbacks and landscaping would be required. Site level design features will be considered during the City of Cambridge Official Plan Amendment and Zoning By-law Amendment processes. Those site level design features would be implemented at the individual plan of subdivision or site plan stage.</td>
</tr>
<tr>
<td>Ensure no well contamination to home wells</td>
<td>A hydrogeological review is a component of the Subwatershed Study and Master Drainage Plan. Potential impacts to groundwater supplies are being assessed and recommendations for protecting these supplies will be identified. Site specific development applications will also consider the localized impacts on wells.</td>
</tr>
<tr>
<td>Build community areas and parks, walking trails, etc</td>
<td>Provision for community areas, parks and walking trails will be confirmed during the City of Cambridge Official Plan Amendment and Zoning By-law Amendment processes.</td>
</tr>
<tr>
<td>Water retention ponds/wetlands closer to buffer areas</td>
<td>The Subwatershed Study and Master Drainage Plan identify the approximate area and location of storm management facilities. The decision on the precise location and number of these facilities will occur as part of future development applications.</td>
</tr>
<tr>
<td>An assessment of the potential impacts of development on the source water resources of the Region should be provided, as should any potential constraints on employment uses that will result from source water protection requirements</td>
<td>The Subwatershed Study and Master Drainage Plan consider the impacts of the development on the source water resources and recommend measures to protect these resources.</td>
</tr>
<tr>
<td>Issues relating to the floodline and culvert at Middle Block Road and Fountain Street</td>
<td>These comments are being reviewed by the GRCA and City of Cambridge and will be responded to separately.</td>
</tr>
</tbody>
</table>

## INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike lanes should be built on new roadways</td>
<td>The MESP identifies a typical cross section for the proposed roads including bike lanes along the new roads. Finalization of the new road cross section will be confirmed through detailed design and during the Draft Plan and Site Plan processes.</td>
</tr>
<tr>
<td>Riverbank Road cul-de-sac is not needed as new bridge at Fairway Road has reduced traffic significantly</td>
<td>As part of this MESP, there will be no decisions made with respect to a cul-de-sac of Riverbank Drive. The option to be able to cul-de-sac Riverbank Drive was an evaluation criterion in the review of the options. The decision to cul-de-sac Riverbank Drive, if deemed valid for consideration, would require future public process undertaken by the City of Cambridge.</td>
</tr>
<tr>
<td>Need detailed costs for options</td>
<td>The MESP will outline the comparable costs for each servicing option.</td>
</tr>
<tr>
<td>Comment</td>
<td>Response</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Servicing strategy appears to be different from that contemplated by the RGMS</td>
<td>Comment noted. Further detail on the servicing strategy will be provided as part of the MESP document.</td>
</tr>
<tr>
<td>Missing assessment of the implications of the proposed servicing scheme on treatment plant capacity and the impacts on the servicing of other lands within the Region</td>
<td>Based upon the City’s identification of the remaining treatment plant capacity, it is anticipated that there will be enough capacity in the Preston treatment plant to accommodate the forecasted growth of the Stage 1 Lands to 2031. As an alternative, there is sufficient servicing capacity in the Kitchener treatment plant to service the Stage 1 Lands. Please refer to the Region of Waterloo 2012 Water and Wastewater Monitoring Report which provides details on the wastewater treatment plant capacity.</td>
</tr>
<tr>
<td>Need to identify the area to be ultimately serviced by the proposed Regional pump station</td>
<td>The MESP will provide a description of the area being serviced by the proposed Regional pump station.</td>
</tr>
<tr>
<td>Creekside lands should be included within the &quot;Quick Start&quot; lands</td>
<td>Comment noted. The Creekside lands are included within the City of Cambridge urban area and can proceed at the same time as the “Quick Start” lands if all of the required planning approvals for the Creekside proposal are in place.</td>
</tr>
</tbody>
</table>

**COMMUNITY PLAN**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not confirm or otherwise deal with land use or land use policies related to implementation</td>
<td>The Community Plan serves as the link between the policy directions in the Regional and City Official Plans, the Master Environmental Servicing Plan for the Stage 1 Lands and the subsequent planning, environmental and development approvals required for the lands to be made available for development. The City of Cambridge will need to conduct an Official Plan Amendment and Zoning By-law Amendment to confirm the land use policies and zoning standards relating to the Stage 1 Lands.</td>
</tr>
<tr>
<td>Decisions regarding the Region's urban boundary should be made prior to decisions regarding a detailed community plan and servicing</td>
<td>Servicing studies and subwatershed studies for large land areas assist in informing the viability of future development as well as help to determine appropriate staging options.</td>
</tr>
<tr>
<td>The extent of the actual constrained areas is unclear. The draft Community Plan appears to identify development within the areas regulated by GRCA and it is not clear whether areas identified as &quot;environmental constraints&quot; includes all required buffers</td>
<td>The environmental constraints shown include floodplains, Core Environmental Features and Supporting Environmental Features with their recommended buffers and linkages, as well as environmental constraints that are subject to a scoped Environmental Impact Statement (as identified on the PIC #3 panels). These environmental constraints are considered non-developable. For the purposes of the MESP, the lands outside of the identified environmental constraints, but within the GRCA Regulation Limit, were considered developable. Please note that a permit from the GRCA is required prior to undertaking any development, as defined in the Conservation Authorities Act, within the regulated areas.</td>
</tr>
<tr>
<td>Not clear if transition areas have been mapped based on the Province's Land Use Compatibility Guideline</td>
<td>The Community Plan serves as the link between the policy directions in the Regional and City Official Plans, the Master Environmental Servicing Plan for the Stage 1 Lands and the subsequent planning, environmental and development approvals required for the lands to be made available for development. Land use compatibility has been recognized as an important consideration for the Stage 1 Lands. The Community Plan identifies that transition areas, setbacks, buffers, provision for outdoor storage, fencing, design standards and landscaping will be given consideration during implementation to ensure land use compatibility. The City of Cambridge will need to conduct an Official Plan Amendment and Zoning By-law Amendment to confirm the land use policies relating to the transition areas and the Province’s Land Use Compatibility Guidelines.</td>
</tr>
</tbody>
</table>
**East Side (Stage 1) Master Environmental Servicing Plan and Community Plan – PIC #3**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEEDBACK ON PREFERRED OPTION</strong></td>
<td></td>
</tr>
<tr>
<td>In support of option 3A, Intermarket is willing to modify their plans to pay for the road connection to Maple Grove Road, alter the alignment to have no impact on the wetland adjacent to the Regional Operations yard and have minimal impacts on the Regional Operations yard facilities.</td>
<td>Comment noted. The connection to Maple Grove Road is not anticipated to be required for the East Side Lands development. Separate communications with the Region of Waterloo, City of Cambridge and the GRCA will be required to consider this road to satisfy specific development needs.</td>
</tr>
<tr>
<td>Proposed &quot;Quick Start&quot; servicing plan will help unlock future development opportunities in the short-term in an area that is contiguous to existing employment uses and well connected by the existing road network</td>
<td>Comment noted.</td>
</tr>
<tr>
<td>Costs for infrastructure related to East Side Lands, including the &quot;quick Start&quot; will be recovered through Development Charges</td>
<td>Comment noted.</td>
</tr>
<tr>
<td>The proposed servicing along Speedsville Road north of Maple Grove Road will unlock future development potential for the east side of the Provincial land</td>
<td>Comment noted.</td>
</tr>
<tr>
<td>Support the confirmation that that the Preston Wastewater Treatment Plan will have sufficient capacity to accommodate new development activity within the Stage 1 East Side Lands</td>
<td>Comment noted.</td>
</tr>
</tbody>
</table>
REPORT: P-13-088

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

DATE: September 10, 2013

FILE CODE: D10-70

SUBJECT: PROPOSED REVISIONS TO THE REGIONAL TRANSPORTATION IMPACT STUDY GUIDELINES

RECOMMENDATION:

That the Regional Municipality of Waterloo approve the proposed revisions to the Regional Transportation Impact Study Guidelines in accordance with the Regional Implementation Guidelines policies in the Regional Official Plan and the Regional Official Policies Plan as outlined in Report P-13-088, dated September 10, 2013:

a) Require the submission of a completed Transportation Demand Management Checklist, as described in Attachment A of this report, for proposed new non-residential and mixed-use developments likely to generate 100 or more new peak direction auto trips or where there are localized safety or roadway/intersection capacity deficiencies within the Urban Growth Centres, Major Transit Station Areas and Reurbanization Corridors of Cambridge, Kitchener and Waterloo;

b) Encourage the Cities of Cambridge, Kitchener and Waterloo to use a new voluntary Parking Management Worksheet, as set out in Attachment B, to calculate potential parking reductions, as appropriate, in conjunction with the Transportation Demand Management Checklist;

c) Include new language in Section 6 (Travel Demand) of the Guidelines to reflect the new Transportation Demand Management Checklist and Parking Management Worksheet, and to explain how they are applied by the Region and Area Municipalities; and

d) Include the Transportation Demand Management Checklist and Parking Management Worksheet in ‘The Big Shift Toolbox’ for developers and others interested in Transit Oriented Development in Waterloo Region.

SUMMARY:

On April 9, 2013, the Planning and Works Committee hosted a Public Meeting to receive comments on proposed revisions to the Region’s current Transportation Impact Study (TIS) Guidelines (Report No. P-13-031). The TIS Guidelines are a Regional Implementation Guideline in accordance with policy 5.A.2 of the Regional Official Plan (ROP) and 12.2.2.2 of the Regional Official Plan (ROPP). Consistent with ROP policy 10.B.10 and ROPP policy 12.2.2.3 relating to Regional Implementation Guidelines, the proposed revisions to the TIS Guidelines do not introduce any new policies that could be the basis for refusing development applications under the Planning Act. Rather, the revisions further detail the manner in which ROP policies 3.C.3, 3.C.4 and 5.A.25 regarding Transportation Demand Management and alternative forms of transportation, could be implemented.

The proposed revisions would incorporate a new Transportation Demand Management Checklist (TDM Checklist) which evaluates proposed developments on how TDM-supportive they are. The revisions would also include a supplementary Parking Management Worksheet that can be used to calculate potential reductions to zoning by-law parking requirements, subject to approval by the relevant Area Municipality, for proposed new non-residential developments within the Urban Growth Centres, Major...
Transit Station Areas and Reurbanization Corridors of the Cities of Cambridge, Kitchener and Waterloo.

These changes are intended to support the further integration of Transportation Demand Management (TDM) into the existing development review process. Incorporating TDM into the development review process supports transit oriented development and the provision of transportation choice in Waterloo Region consistent with the Regional Official Plan, the Regional Transportation Master Plan, and the Community Building Strategy.

The proposed TDM Checklist and supplementary Parking Management Worksheet are based on North American best practices and were tested using 18 examples in different urban contexts in Waterloo Region. To reflect the feedback received during the consultation process, the TDM Checklist now includes specific references to the Built Environment Standards for the Accessibility for Ontarians with Disabilities Act, applicable LEED requirements for interested developers, and an additional reference to car sharing.

Regional staff considered different options for implementing the TDM Checklist and Parking Management Worksheet in the development review process. It is proposed that the new requirements only apply to new commercial, office, retail, institutional and mixed-use developments that are likely to generate 100 or more new peak direction auto trips or where there are localized safety or roadway/intersection capacity deficiencies in the Urban Growth Centres, Major Transit Station Areas and Reurbanization Corridors of Cambridge, Kitchener and Waterloo. In addition, they would only apply to Official Plan Amendments and Zoning By-law Amendments, and to Site Plan applications within these areas where the site is adjacent to a Regional Road.

Funding for this initiative was provided by the Region of Waterloo, the Cities of Cambridge, Kitchener and Waterloo, and Transport Canada’s ecoMOBILITY program. Staff from all three Cities have reviewed this report and support the proposed revisions to include the TDM Checklist in the Region’s TIS Guidelines.

**REPORT:**

Transportation Demand Management (TDM) is one of the tools the Region is using to create a vibrant and sustainable community. Using policies and programs to make active and sustainable transportation more convenient, a TDM approach to transportation can deliver long-term environmental sustainability, improve public health, create stronger communities, and build more prosperous and livable cities. The new Regional Official Plan, Regional Transportation Master Plan and Community Building Strategy support TDM as a growth management strategy that supports higher transit ridership and more sustainable travel patterns. In Waterloo Region, TDM has typically focused on travel incentives and new infrastructure to encourage people to travel by foot, bike, carpool, or bus.

In 2010, the Region partnered with the Cities of Cambridge, Kitchener and Waterloo to consider innovative strategies that incorporate TDM-supportive elements into the development review process. Over the following two years, a project team consisting of planners and transportation engineers from the Region and the three Cities worked with BA Group to develop a customized strategy for Waterloo Region. One of the key recommendations of this strategy was to revise the Region’s current Transportation Impact Study (TIS) Guidelines to include:

i) A new Transportation Demand Management Checklist (TDM Checklist), as set out in Attachment A of this report;

ii) A new supplementary Parking Management Worksheet, as set out in Attachment B, that may be used to calculate lower trip generation rates if the appropriate Area Municipal planning authority determines that the Worksheet applies to a specific application; and
iii) New language in Section 6 (Travel Demand) of the Guidelines to reflect the new TDM Checklist and Parking Management Worksheet, and to explain how they will be applied by the Region and Area Municipalities.

Proposed Revisions to the TIS Guidelines

Regional Council adopted its existing TIS Guidelines on November 26, 2008. The TIS Guidelines are an important tool in the development review process because they help developers and public agencies identify the impacts of proposed developments on the existing street network and recommend appropriate mitigation measures. In the past, the Region’s TIS Guidelines typically focused on road improvements, such as road widenings, turn lanes and traffic signals. By incorporating additional TDM elements such as the TDM Checklist and Parking Management Worksheet, the proposed revisions will help enhance the effectiveness of the TIS Guidelines by encouraging developments located near transit to include mixed uses at higher densities, cycling and walking amenities and lower overall parking rates.

In general, a TIS is requested by the Region whenever a proposed development will generate 100 or more new peak direction auto trips to or from the site during the morning or afternoon peak hour. The NCR Lands, located near the Northfield ION Station, are a recent example of a mixed use development requiring a TIS. In some cases, a TIS may be requested due to localized safety or roadway/intersection capacity deficiencies. Under the proposed changes, any new non-residential developments in the Urban Growth Centres, Major Transit Station Areas and Reurbanization Corridors of Cambridge, Kitchener, and Waterloo that are asked to submit a TIS would now be required to submit a completed TDM Checklist satisfactory to the Region and the Area Municipal planning authority. The new requirements would only apply to Official Plan Amendments and Zoning By-law Amendments, and to Site Plan applications within these areas where the site is adjacent to a Regional Road.

The TDM Checklist is intended to be part of the standard development application review process whenever a TIS is required by the Region. Features and incentives from the TDM Checklist can be customized based on the needs of each application.

The TDM Checklist evaluates proposed developments on how TDM-supportive they are. Points are assigned based on the level of transit service available within walking distance of the site, whether cycling and pedestrian amenities are provided (e.g. showers, change and locker facilities, bike parking), and whether parking requirements and parking facilities support walking and transit use. In general, the higher the points achieved, the lower the potential impact is on the Regional road network.

The Parking Management Worksheet is a supplementary and voluntary component of the TDM Checklist. The Worksheet uses TDM incentives and transit-related factors to calculate potential reductions to zoning by-law parking requirements, subject to approval by the relevant Area Municipality. The parking reductions calculated by the Worksheet are context-dependent. For instance, a development in an Urban Growth Centre would generate a larger potential parking reduction than a similar development in a Reurbanization Corridor or a suburban location because there are more high frequency transportation services and amenities available. TDM-related parking management options are also consistent with the best practices of other municipalities and serve to reduce the costs of higher density developments. Any proposed parking number below the minimum requirement established in a Zoning By-law would necessitate the approval of the Area Municipality before it could be considered as part of a TIS. Such local municipal approval could require agreements that ensure proposed parking management strategies are implemented.

For additional details about the proposed revisions to the TIS Guidelines, please see Report No. P-13-031.
Stakeholder Consultation and Public Meeting

In March 2013, a draft of the proposed revisions to the current TIS Guidelines were circulated to the Area Municipalities and other interested parties, including posting on the Regional website. Formal comments were accepted until April 19, 2013, providing five weeks for review.

On March 26, 2013, the Region held an information and consultation session with nine planning and engineering consultants to discuss the proposed changes to the TIS Guidelines. No objections were received at the meeting, and the majority of participants expressed an interest in continuing to expand the role of TDM in the development review process. This consultation session was the last in a series of sessions, which also included a meeting with the Reurbanization Working Group on November 3, 2010 and presentations to City and Regional staff on January 14, 2011 and February 14, 2011. Information on the proposed changes was presented at each of the sessions and participants were asked to provide their comments and suggestions. Over the following two years, the TDM Checklist was tested and refined based on feedback received from the Area Municipalities.

On April 9, 2013, the Planning and Works Committee hosted a formal Public Meeting to receive comments from interested agencies and members of the public. No additional comments were received at the Public Meeting.

Based on the stakeholder feedback, Regional staff is proposing a few minor revisions to the TDM Checklist that was originally presented to Regional Council on April 9, 2013 (Report No. P-13-031). The TDM Checklist now includes specific references to the Built Environment Standards of the Accessibility for Ontarians with Disabilities Act, applicable LEED requirements for interested developers, and an additional reference to car sharing. A copy of the TDM Checklist as revised is found in Attachment A. A copy of the Parking Management Worksheet is found in Attachment B and the proposed new language in Section 6 (Travel Demand) of the TIS Guidelines is found in Attachment C.

Implementation and Next Steps

Subject to Regional Council approval, Regional staff will integrate the proposed revisions with the TIS Guidelines and begin to apply them to new development applications as required. The following promotional steps are recommended by staff to inform the development community of the new TIS requirements:

- Invite developers to discuss the TDM Checklist in pre-application reviews;
- Brand the program in a way that adds to the profile of the strategy; and
- Develop and provide promotional material to the development community.

The implementation of the Parking Management Worksheet will vary depending on the context of each Area Municipality.

Moving forward, Regional and Area Municipal staff will continue to explore ways to incorporate the TDM Checklist and Parking Management Worksheet into Area Municipal Zoning By-laws through the Parking Coordinating Committee. City of Waterloo staff has indicated their intent to focus on TDM and parking management as part of their Station Area Planning process for Major Transit Station Areas. The three Cities have also indicated that the strategy could be used to complement their urban design guidelines.

Consistent with Regional Official Plan sections 10.B.9 and 10.B.10 relating to Regional Implementation Guidelines, the proposed revisions to the TIS Guidelines do not introduce any new policies that could be the basis for refusing development applications under the Planning Act. The revisions will further detail the manner in which policies established in the Regional Official Plan are to be applied.
Area Municipal Consultation/Coordination

Parking and parking requirements are an Area Municipal responsibility. The Region of Waterloo served as the project lead for the TDM Checklist and Parking Management Worksheet, which was a coordinated effort to establish a stepwise approach toward transit-supportive parking policies. Regional staff has been collaborating with the Cities of Cambridge, Kitchener and Waterloo on the new TDM Checklist and Parking Management Worksheet since 2010.

Funding for this initiative was provided by the Region of Waterloo, the Cities of Cambridge, Kitchener and Waterloo, and Transport Canada’s ecoMOBILITY program.

A copy of this report was provided to the three Cities on August 2, 2013 and August 29, 2013. Staff from all three Cities support the proposed revisions to the Region’s TIS Guidelines.

CORPORATE STRATEGIC PLAN:

The proposed revisions to the TIS Guidelines will help to more effectively encourage compact, livable urban communities (Objective 2.1) that support greater use of active transportation and transit infrastructure (Objectives 3.1, 3.2 and 3.3). An additional outcome of implementation will be lower greenhouse gas emissions (Objective 1.2) resulting from changes in travel behaviour.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Corporate Resources (Legal) were involved with the development and testing of the proposed revisions to the TIS Guidelines.

ATTACHMENTS:

Attachment A – Proposed TDM Checklist, as revised since April 9, 2013
Attachment B – Proposed Parking Management Worksheet
Attachment C – Proposed revisions to Section 6 (Travel Demand) in the Regional Transportation Impact Study Guidelines

PREPARED BY: John Hill, Principal Planner, Strategic Policy Development

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
APPENDIX H: TDM CHECKLIST

The Transportation Demand Management (TDM) Checklist and Parking Management Worksheet are not designed for residential properties, but can be used to inform mixed-use developments.

TABLE A Site Access

<table>
<thead>
<tr>
<th>Points</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>2 Development incorporates functional building entrances that are oriented to public space or to locations where pedestrians and transit users arrive from such as a street, square, park or plaza. Yes</td>
</tr>
<tr>
<td>A2</td>
<td>1 External to site: Continuous sidewalks (consistent with AODA Accessible Built Environment Standard) are provided along both sides of all adjacent public streets. AND Internal to site: Pedestrian walkways (consistent with AODA Accessible Built Environment Standard e.g. 1.8m min width) are provided through large parking areas to link the building with the public street sidewalk system. Yes</td>
</tr>
<tr>
<td>A3</td>
<td>3 Non-residential: development provides secure bike storage for 5% of the building occupants. Consistent with LEED requirements. Yes</td>
</tr>
<tr>
<td>A4</td>
<td>4 Shower and change facilities for employees provided on-site consistent with LEED requirements. Yes</td>
</tr>
<tr>
<td>A5</td>
<td>2 Provision of active uses at-grade along street frontages (e.g. retail). Yes</td>
</tr>
</tbody>
</table>

Category Max = 10

TABLE B Public Transportation Access

<table>
<thead>
<tr>
<th>Points</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>1 Bus shelters with seating are provided at the transit stop immediately adjacent to the development in consultation with Transportation Planning at the Region of Waterloo. Yes</td>
</tr>
<tr>
<td>B2</td>
<td>1 Information regarding public transit routes, schedules and fares are provided in an accessible and visible location on site and in adjacent bus stops. Yes</td>
</tr>
<tr>
<td>B3a</td>
<td>5 Located within 800m of a Rapid Transit Station. Yes</td>
</tr>
<tr>
<td>B3b</td>
<td>3 Located within 600m of a bus service with headways of 15 min or less or is located in a designated mixed use corridor or node. Note: Points are awarded for either B3a, B3b or B3c only. Please choose whichever represents the highest order of transit. Yes</td>
</tr>
<tr>
<td>B3c</td>
<td>1 Located within 400m of a bus service with headways of 16 min to 30 min. Note: Points are awarded for either B3a, B3b or B3c only. Please choose whichever represents the highest order of transit. Yes</td>
</tr>
</tbody>
</table>

Category Max = 5

TABLE C Parking

<table>
<thead>
<tr>
<th>Points</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>24 Utilizes reduced parking supply consistent with the voluntary TDM Parking Management Worksheet (Appendix I). Contact your Area Municipal planning authority to determine whether the Worksheet is applicable to your development. Note: Points are awarded for either C1, C2, or C3 only. Please choose whichever applies with the highest value. Yes</td>
</tr>
<tr>
<td>C2</td>
<td>24 Includes allowances for shared parking in mixed-use zones. Note: Points are awarded for C1, C2, or C3 only. Please choose whichever applies after consulting with the Area Municipal planning authority. Yes</td>
</tr>
</tbody>
</table>
**C3** 15 Provides no more than the minimum number of parking spaces, as required by applicable Zoning By-Law.  
*Note: Points are awarded for either C1, C2, or C3 only. Please choose whichever applies.*

**C4** 10 Implements paid parking on part or all of the site (e.g. parking permits, paid parking zones near main entrances)

**C5** 3 Provides priority parking for carpooling/vanpooling participants equivalent to 5% of employee spaces

**C6** 5 Commercial Uses: Provide car-share spaces equivalent to 2% of building occupants

**C7** 3 Parking is not located on major street frontage or between a road right of way and the building facade.

**C8** 5 25% to 50% of parking is located underground or in a structure

**C9** 10 50% to 75% of parking is located underground or in a structure

**C10** 15 75% of parking or more is located underground or in a structure

**C11** 3 Parking spaces provided off-site on a lot within 300 metres of the lot containing such use.

**TABLE D**  
**Trip Reduction Incentives**

A formal TDM plan will identify specific initiatives that will be initiated in order to encourage reduced single occupant vehicle travel.

<table>
<thead>
<tr>
<th>Points</th>
<th>Features</th>
<th>Yes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>The building owner/occupant will make available a ride matching service for car/vanpooling</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>D2</td>
<td>The building owner/occupant will make available emergency ride home options</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>D3</td>
<td>The building owner/occupant will make available subsidized transit passes for all occupants for a period of two years</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>D4</td>
<td>The building owner/occupant agrees to charge for parking as an unbundled cost to occupants</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>D5</td>
<td>The building owner/occupant agrees to provide reduced cost parking for users of car/van pool, bicycle, moped/motorcycle spaces</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>D6</td>
<td>The building owner/occupant has prepared a TDM plan to the satisfaction of the Region of Waterloo and the Area Municipality that targets a 10% reduction in peak hour trips using forecast trip generation with status quo travel characteristics</td>
<td>10</td>
<td>N/A</td>
</tr>
<tr>
<td>D7</td>
<td>The employer has provided flexible working hours, telework or shift work arrangements.</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>D8</td>
<td>The development agrees to join Travelwise (TMA) that provides the same services outlined under items D1, D2, D6</td>
<td>14</td>
<td>N/A</td>
</tr>
<tr>
<td>D9</td>
<td>The building owner/occupant will make available car sharing services</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>D10</td>
<td>The development includes mixed uses (i.e. retail, commercial or food services, daycares, or other complementary uses) on-site or located within 400 metres.</td>
<td>2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**TABLE E**  
**Checklist Summary**

For each item, a "Yes" answer is equivalent to the points as indicated in the section. N/A sections should be explained in an attachment to this table. The score for each section is reflected as a percentage and calculated by dividing the points by the "Total Applicable".

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Requirement</th>
<th>Points Scored</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian &amp; Cyclist Orientation</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Transit Access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUB-TOTAL</strong></td>
<td><strong>40</strong></td>
<td><strong>25</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>65</strong></td>
<td><strong>25</strong></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE F**  
**Scoring Summary**

<table>
<thead>
<tr>
<th>FINAL SCORE</th>
<th>RATING</th>
</tr>
</thead>
</table>

1434326
<table>
<thead>
<tr>
<th></th>
<th>TDM-SUPPORTIVE DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 - 65</td>
<td>****</td>
</tr>
<tr>
<td>40 - 49</td>
<td>***</td>
</tr>
<tr>
<td>30 - 39</td>
<td>**</td>
</tr>
<tr>
<td>24 - 29</td>
<td>*</td>
</tr>
<tr>
<td>0 - 23</td>
<td>X</td>
</tr>
</tbody>
</table>

Non-TDM-Supportive Development
APPENDIX I
PARKING MANAGEMENT WORKSHEET

Site Address: ____________________________ Site Context: ____________________________
Date: ____________________________ Worksheet No.: ____________________________

*“Urban Growth Centres” (UGC) area classification includes the downtown and RT Station Areas of Kitchener, Waterloo and Cambridge.*

*“Intensification Corridor” (IC) classification is applied to sites within 800 metres of the future CTC line*

*“Other” classification applies to all other sites*

Please highlight the cell percentages applicable to your development under the appropriate classification.
Please note that the Parking Management Worksheet and the Transportation Demand Management (TDM) Checklist are not designed for residential properties, but can be used for mixed-use developments. Local municipalities are the decision-making bodies with respect to consideration of parking reductions below Zoning By-law requirements.

**TABLE A** Pedestrian and Cyclist Orientation

In creating an environment that supports pedestrian and cycling activity, the public realm must be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s). These facilities and features should encourage walking and cycling.

<table>
<thead>
<tr>
<th>Features</th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Development incorporates functional building entrances that are oriented to public space or to locations where pedestrians and transit users arrive from such a street, square, park or plaza.</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>A2 Continuous sidewalks (1.5m min. width) are provided along both sides of all adjacent public streets and pedestrian walkways (1.5m min width) are provided through large parking areas to link the building with the public street sidewalk system</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>A3 Non-Residential: Development provides secure bike storage for 4% of the building occupants</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>A4 Shower and change facilities for employees provided on-site consistent with LEED requirements.</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>A5 Provision of active uses at-grade along street frontages.</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Category Maximum**

| 4%  | 4%  | 4%    |

**Available Parking Reduction**

**TABLE B** Public Transportation Access

The availability and proximity of convenient public transit service with direct pedestrian linkages to the building will provide viable travel options for employees, visitors and residents.

<table>
<thead>
<tr>
<th>Features</th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 Bus shelters with seating are provided at the transit stop immediately adjacent to the development, in consultation with Transportation Planning at the Region of Waterloo</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>B2 Information regarding public transit routes, schedules and fares are provided in an accessible and visible location on site and in adjacent bus stops</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>B3a Located in an UGC or within 800 m of a future Rapid Transit Station</td>
<td>24%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>B3b Located within 600m a transit route with 15 minute headways (or less) or is located in a designated mixed use corridor or node. <strong>Note: Points are awarded for either B3a, B3b or B3c only.</strong> Please choose whichever represents the highest order of transit.</td>
<td>-</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
**B3c**
Located within 400 metres of a bus service with headways of 15 min to 30 min. **Note:** Points are awarded for either B3a, B3b or B3c only. Please choose whichever represents the highest order of transit.

- 1%

**Category Maximum**

<table>
<thead>
<tr>
<th></th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Parking Reduction</td>
<td>24%</td>
<td>12%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**TABLE C**
Parking

Vehicle parking facilities can affect the character, travel mode and cost of a development. Reducing parking supply to match expected demand can have a positive influence on the selection of alternative travel modes.

<table>
<thead>
<tr>
<th>Features</th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Provides priority parking for carpooling/vanpooling participants equivalent to 5% of employee spaces</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>C2 Commercial Uses: Provide car-share spaces equivalent to 2% of building occupants</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>C3 Implements paid parking system on all or part of the site (e.g. parking permits, paid parking zones near main entrances)</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>C4 Parking is not located on major street frontage.</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>C5 25% to 50% of parking is located underground or in a structure</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>C6 50% to 75% of parking is located underground or in a structure</td>
<td>4%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>C7 75% of parking or more is located underground or in a structure</td>
<td>5%</td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Category Maximum**

<table>
<thead>
<tr>
<th></th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Parking Reduction</td>
<td>6%</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**TABLE D**
Trip Reduction Incentives

A formal TDM plan will identify specific initiatives that will be initiated in order to encourage reduced single occupant vehicle travel.

<table>
<thead>
<tr>
<th>Features</th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 The building owner/occupant will provide a ride matching service for car/vanpooling</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>D2 The building owner/occupant will provide emergency ride home options</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>D3 The building owner/occupant will provide subsidized transit passes for all occupants for a period of two years</td>
<td>10%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>D4 The building owner/occupant agrees to charge for parking as an separate cost to occupants</td>
<td>10%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>D5 The building owner/occupant agrees to provide reduced cost for users of car/van pool, bicycle, moped/motorcycle spaces</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>D6 The development agrees to join Travelwise (TMA) that provides the same services outlined under items D1 and D2</td>
<td>9%</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Category Maximum**

<table>
<thead>
<tr>
<th></th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Parking Reduction</td>
<td>23%</td>
<td>11%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**TABLE E**
Parking Reduction Summary

Please indicate the total reduction available based upon Tables A through D above.

<table>
<thead>
<tr>
<th>Category</th>
<th>Reduction Achieved</th>
<th>Maximum Achievable Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrian &amp; Cyclist Orientation</strong></td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Public Transit Access</strong></td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Parking</strong></td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Trip Reduction Incentives</strong></td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>57%</strong></td>
<td><strong>31%</strong></td>
</tr>
</tbody>
</table>

**TABLE F**
TOTAL REDUCTION ACHIEVED

<table>
<thead>
<tr>
<th></th>
<th>UGC</th>
<th>IC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
</tr>
</tbody>
</table>
Estimation of Adjustments to Transportation Demand Management Initiatives

A Transportation Demand Management (TDM) Plan should be prepared to influence how, when, where, and why trips will be made to and from the site. To reduce single occupant vehicle use, the plan should include a description of the initiatives proposed and any consequent measures required to enhance opportunities for active and sustainable transportation use and improve auto occupancy rates.

To demonstrate that the proposed development is transit-supportive, an acceptable TDM Plan for new non-residential and mixed-use developments in the Urban Growth Centres, Major Transit Station Areas and Reurbanization Corridors of Cambridge, Kitchener and Waterloo will include a completed TDM Checklist (see Appendix H). The TDM Checklist applies to all Official Plan Amendments and Zoning By-law Amendments in these areas, and to Site Plan applications within these areas where the site is adjacent to a Regional Road. Consistent with ROP policy 3.C.3, the Region may consider reductions in the level of road improvements that would otherwise be required if the development achieves 24 points or higher on the TDM Checklist and the applicant agrees to implement, and can appropriately secure, the transportation strategies identified in the TDM Checklist. Implementation and assessment of the TDM Checklist is conducted on a case by case basis in consultation with the Area Municipalities.

The supplementary Parking Management Worksheet is a voluntary component of the TDM Checklist that uses TDM strategies and transit-related factors to calculate potential parking reductions, subject to approval by the Area Municipality (see Appendix I). Parking and parking requirements are an Area Municipal responsibility and applicants interested in using the Parking Management Worksheet are expected to consult the appropriate Area Municipal planning authority to determine whether the Worksheet applies to their application. Any proposed parking number below the minimum requirement established in a Zoning By-law would necessitate the approval of the Area Municipality (which may include a minor variance or zoning by-law amendment) before the reduced rate could be used to calculate lower trip generation rates in the TIS. Such local municipal approval could be subject to conditions such as requirements for applicants to enter into agreements to ensure proposed parking management strategies are implemented. The Area Municipalities are encouraged to provide reduced parking requirements, where appropriate, for developments where the applicant agrees to incorporate TDM strategies as part of the proposed development.

The TDM Checklist rates developments on how transit-oriented and TDM-supportive they are. Points are assigned based on the level of transit service available within walking distance of the site, whether cycling and pedestrian amenities are intended (e.g. showers, change and locker facilities, bike parking), and whether parking rates and parking facilities support walking and transit use.

The TDM Checklist includes several elements to help the TIS achieve a TDM-supportive designation, such as locating the building façade adjacent to the road right-of-way, or by providing:

- Preferential carpool spaces
- Bike parking
- Car sharing spaces
- Mixed uses with retail, commercial and food services
- Structured, higher-density parking
- Reduced parking rates
- Shower and change room facilities for active commuters

The TDM Checklist encourages trip reduction incentives such as subsidized transit passes, emergency ride home services, and online carpool matching. Features and incentives can be customized based on the context of the site.

The effects of the proposed TDM Plan should be identified and evaluated. These measures may reduce trip generation, reduce the proportion of trips in the peak hour, and increase the modal share of
trips by walking, cycling, and transit, and/or increase auto occupancy. The effects should be calculated as adjustments to the basic travel demand estimates.

The report should identify steps to be taken with respect to the proposed development or redevelopment to support walking, cycling, carpooling, telecommuting, and the use of transit.

Specific consideration should be given to the proposed developments adjacent to Rapid Transit stations. The impacts of the Rapid Transit on the proposed development should be identified and evaluated.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Mar-12</td>
<td>Council</td>
<td>Staff to review the operation of the Homer Watson Boulevard/Block Line Road roundabout and report back to Council in 2013.</td>
<td>Transportation and Environmental Services</td>
<td>Sept. 2013</td>
</tr>
<tr>
<td>08-May-12</td>
<td>P&amp;W</td>
<td>Report detailing the rationale for the Injury Crash Cost calculation used by staff in reports for roadway improvements. (E-12-045 page 48 authored by Frank Kosa)</td>
<td>Transportation and Environmental Services</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>05-Jun-13</td>
<td>G. Lorentz</td>
<td>Staff to review signage on Trussler Road/Ira Needles Boulevard</td>
<td>Transportation and Environmental Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J. Haalboom</td>
<td>Staff continue to lobby the Province for changes to the <em>Highway Traffic Act</em> providing right of way to pedestrians and on an as needed basis provide an update to Council</td>
<td>Transportation and Environmental Services</td>
<td>as required</td>
</tr>
</tbody>
</table>