Regional Municipality of Waterloo
Planning and Works

Agenda

Tuesday, June 18, 2019
9:00 a.m.
Council Chamber
150 Frederick Street, Kitchener

1. Declarations of Pecuniary Interest under The “Municipal Conflict Of Interest Act”

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.

2. Request to Remove Items from Consent Agenda

3. Motion to Approve Items or Receive for Information

3.1 Ottawa Street Improvements, Fischer-Hallman Road to Alpine Road, City of Kitchener – Public Consultation Centre #1 Information Package (Information)

Page 7

3.2 Region of Waterloo International Airport, Implementation of the Airport Master Plan - Public Consultation Centre #1 Information Package (Information)

Page 28

Should you require an alternative format please contact the Regional Clerk at Tel.: 519-575-4400, TTY: 519-575-4605, or regionalclerk@regionofwaterloo.ca
3.3 **PDL-AIR-19-06**, Airport Master Plan Public Consultation Centre No. 1
(Information)

3.4 **TES-TRP-19-10**, Highway 401 Improvements from 1.0 km West of the Homer Watson Boulevard Interchange to 1.5 km East of the King Street Interchange
(Information)


**Recommendation:**

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with D.M. Wills Associates Limited to provide engineering consulting services for environmental assessment, preliminary design, detailed design, construction administration and construction inspection services for the rehabilitation of three (3) bridges in Wellesley and Wilmot Townships at an upset limit fee of $195,110 plus applicable taxes for the environmental assessment, preliminary design and detailed design, with construction administration and inspection services to be paid on a time basis as described in report TES-DCS-19-10, dated June 18, 2019.

3.6 **TES-DCS-19-11**, C2019-02 Consultant Engineering Services for Detailed Design and Services during Construction for the Laurel Water Treatment Plant, City of Waterloo

**Recommendation:**

That the Regional Municipality of Waterloo enter into an Agreement for Professional Consulting Services with CH2M Hill Canada Limited, for the detailed design and services during construction for the new Laurel Water Treatment Plant located at 350 Conservation Drive, City of Waterloo, in the amount of $967,320 plus all applicable taxes. [TES-DCS-19-11]

3.7 **TES-DCS-19-12**, Amendment to the Consulting Services Agreement for the Hespeler Wastewater Treatment Plant Upgrades
Recommendation:

That the Regional Municipality of Waterloo approve an amendment to the existing Consulting Services Agreement with Stantec Consulting Ltd. to add design, contract administration and site inspection services required for the Membrane Aerated Biofilm Upgrades at the Hespeler Wastewater Treatment Plant for an upset fee increase of $590,000 plus applicable taxes, to be funded from the existing project capital budget in the 2019 Ten Year Wastewater Capital Program. [TES-DCS-19-12]

Regular Agenda Resumes

4. Reports – Transportation and Environmental Services


Page 88

4.2 TES-19-01/COR-19-05, Update to Corporate Asset Management Policy

Page 98

Recommendation:

That the Regional Municipality of Waterloo approve the Corporate Asset Management Policy, as set out in Appendix A to report TES-19-01/COR-19-05 dated June 18, 2019.

4.3 TES-TRS-19-16, MobilityPLUS Low Floor Bus Report

Page 108

Recommendation:

That the Regional Municipality of Waterloo approves the use of low floor “ramp style” buses for the MobilityPLUS service as set out in report number TES-TRS-19-16 dated June 18, 2019.

4.4 TES-TRP-19-09, 2019 Cambridge to Toronto (Union Station) GO Train Feasibility Study – Phase 1 Update (Information)

Page 113


Page 140

Recommendation:
That the Regional Municipality of Waterloo accept the proposal of JTC Group Limited for Aerobic Biosolids Management Contract for a three (3) years and four (4) months term at unit rates of $4.97/m³ and $7.97 /m³ (excluding all applicable taxes) for biosolids haulage and biosolids land application, respectively, as detailed in Report TES-WAS-19-13 dated June 18, 2019.

4.6 TES-WMS-19-04, Blue Box Program Update (Information)  
Page 146

4.7 TES-WMS-19-05, Single Use Plastics Strategy  
Page 154

Recommendation:

That the Regional Municipality of Waterloo request that the Federal and Provincial governments continue to take steps to regulate and limit the production and use of single use plastics and that Report TES-WMS-19-05 be submitted to Environment and Climate Change Canada and the Ministry of Environment, Conservation and Parks. [TES-WMS-19-05]

5. Reports - Planning, Development and Legislative Services

5.1 PDL-CPL-19-25, Regional Official Plan Review  
Page 157

Recommendation:

1. That the Regional Municipality of Waterloo establish a Steering Committee as described in Report PDL-CPL-19-25, and appoint three Regional Councillors to the Steering Committee; and,

2. That the Regional Municipality of Waterloo authorize the holding of a special meeting of Council related to the Regional Official Plan Review in accordance with the requirements of the Planning Act on September 18, 2019 to identify any revisions of the Regional Official Plan, as outlined in Report PDL-CPL-19-25.

5.2 PDL-CPL-19-26, Kissing Bridge Trail Lease and Disposition Process and the 2018 Annual Report of the Kissing Bridge Trailway Advisory Committee  
Page 166

Recommendation:

That the Region of Waterloo request that the Province of Ontario:

a) pause the disposition process for Guelph to Goderich Trail lands
(including Kissing Bridge Trail lands), and ensure that the corridor remains in public or not-for-profit ownership for public use; and
b) consider a longer lease term when the Region of Waterloo renegotiates the renewal of the Kissing Bridge Trail lease, to provide for greater certainty and to facilitate long-term planning and investment for infrastructure improvements along the Kissing Bridge Trail; and,

That Regional Council accept the Twenty-first Annual Report of the Kissing Bridge Trailway Advisory Board for information. [PDL-CPL-19-26]

5.3 PDL-CPL-19-27, Proposed Addition to the 2019 Transit Supportive Strategy Implementation Plan for Cambridge – Transportation Demand Management Coordinator Position

Recommendation:

That the Regional Municipality of Waterloo approve funding a Transportation Demand Management Coordinator for the City of Cambridge as part of the 2019 Transit Supportive Strategy Implementation Plan as described in Report PDL-CPL-19-27.

6. Information/Correspondence

6.1 Council Enquiries and Request for Information Tracking List

7. Other Business

8. Next Meeting – August 13, 2019

9. Adjourn
List of Upcoming Public Events

Cedar Creek Scoped Subwatershed Study - Public Consultation Centre

- **Wednesday, June 19, 2019** – 5:30-7:30 p.m., Ayr Fire Hall, 501 Scott Street, Ayr

Region of Waterloo International Airport, Implementation of the Airport Master Plan – Public Consultation Centre #1

- **Thursday, June 20, 2019** – 4:00 – 8:00 p.m., Breslau Mennonite Church, 226 Woolwich Street, Breslau

Ottawa Street Improvements, Fischer-Hallman Road to Alpine Road, City of Kitchener – Public Consultation Centre No. 1

- **Wednesday, June 26, 2019** – 4:30 – 7:00 p.m., Grand River Transit (Chandler Room), 250 Strasburg Road, Kitchener
Information Package

Ottawa Street Improvements,
Fischer-Hallman Road to Alpine Road,
City of Kitchener

Public Consultation Centre No. 1
Wednesday, June 26, 2019, 4:30 p.m. to 7:00 p.m.
Grand River Transit (Chandler Room)
250 Strasburg Road, Kitchener

What: Reconstruction of Ottawa Street, City of Kitchener

Where: From Fischer-Hallman Road to Alpine Road

Why: To Replace the Pavement Structure, Provide Improved Pedestrian and Cycling Facilities, and Improve Operations at Various Intersections.

When: Construction in 2020 and 2021

Who: Region of Waterloo Project Manager
John Stephenson, P.Eng.
Phone: (519) 575-4096
jstephenson@regionofwaterloo.ca

We Want Your Input!

There is a Comment Sheet at the back of this package. Please fill it out and share your comments with us.
1. **Why is the Region of Waterloo undertaking this Project?**

   The Region of Waterloo is currently undertaking detailed design of proposed improvements to Ottawa Street from Fischer-Hallman Road to Alpine Road in the City of Kitchener. Please refer to the [Key Plan](/key-plan) showing the project area.

   Ottawa Street provides an important east-west transportation link across Kitchener, extending from Trussler Road to Lackner Boulevard.

   The proposed improvements are intended to address the following issues:

   - The existing asphalt pavement is approaching the end of its service life;
   - There are no designated cycling facilities between Williamsburg Road and Strasburg Road;
   - There are currently no pedestrian and/or cyclist crossings of Ottawa Street, other than at signalized intersections;
   - The recent introduction of Grand River Transit (GRT)’s 205 iXpress route and strong activity at bus stops necessitates upgrades to stop areas and measures to improve service quality;
   - The intersections at Williamsburg Road, Howe Drive, Mowat Boulevard, Howland Drive and Elmsdale Drive do not satisfactorily accommodate the left turn demands from Ottawa Street to those adjoining roads;
   - The intersection of Ottawa Street and Westmount Road experiences severe congestion during peak traffic periods for several through and turn movements;
   - The existing corrugated steel pipe culvert carrying Borden Creek under Ottawa Street is nearing the end of its usable life.

   Please refer to the [Display Boards](/display-boards) for a drawing showing the above-noted project issues and challenges.

2. **Who is directing the planning of the improvements?**

   This Project is being directed by a Project Team consisting of Region of Waterloo staff, City of Kitchener staff and City of Kitchener Councillor Paul Singh. The Region has retained the consulting engineering firm MTE to assist with the planning, engineering design and contract administration of this project.
3. How is this project being planned?

Under Ontario’s Environmental Assessment Act, routine infrastructure projects are planned in accordance with the Municipal Class Environmental Assessment (Class EA) Process. Projects are planned in accordance with a “category” or “schedule” depending on the complexity and potential severity of the environmental impacts associated with the project, ranging from Schedule “A” and Schedule “A+” projects (minimal environmental impacts) to Schedule “C” projects (potential for more significant environmental impacts). Please Refer to Appendix A for more information about the Class EA process.

The improvements to Ottawa Street from Fischer-Hallman Road to Alpine Road are being undertaken as a Schedule “A+” project. Schedule “A+” projects are defined as routine projects that are considered straight-forward with minor or short-term environmental impacts. Such projects are designated as “pre-approved” under the Class EA and may proceed directly to implementation; however, the proponent is required to advise area residents and stakeholders of the project in advance of construction.

4. What is the purpose of this Public Consultation Centre?

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

- Review the improvements that have been developed by the Project Team for Ottawa Street from Fischer-Hallman Road to Alpine Road;
- Ask questions of staff from the Region of Waterloo and City of Kitchener; and
- Provide comments and input regarding the proposed improvements being considered.

Please note that additional information about this project, including electronic versions of the display boards at this Public Consultation Centre, are available on-line at:


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 planning and design for this project.
5. **What improvements are being considered?**

**Existing Ottawa Street Configuration**

This section of Ottawa Street currently includes:

- Four (4) lanes of through traffic;
- Urban cross section with curb and gutter;
- Sidewalks on both sides of the road;
- Cycling lanes on both sides of the road, from Fischer-Hallman Road to Williamsburg Road;
- A Multi Use Trail (MUT) on both sides of the road from Strasburg Road to Alpine Road;
- Signalized intersections at Westmount Road, Howland Drive, Strasburg Road and the Laurentian Centre Mall;
- A three-lane roundabout at Alpine Road;
- A one-way stop-sign controlled intersection at Nine Pines Road, Valleyview Road, Williamsburg Road, Howe Drive, Pinedale Drive, Mowat Boulevard and Elmsdale Drive;
- GRT Route 3 Ottawa South between Williamsburg Road and Alpine Road, Route 22 Laurentian West between Strasburg Road and Alpine Road, and the 205 iXpress from Fischer-Hallman Road to Alpine Road.

**Proposed Improvements to Ottawa Street**

In order to address project objectives and issues identified in **Section 1**, the Project Team has developed a Preferred Design Concept including the following key elements:

- Reconstruction of the existing roadway base and asphalt pavement on Ottawa Street from Fischer-Hallman Road to Alpine Road;
- Construction of new left-turn lanes from Ottawa Street to Williamsburg Road, Howe Drive, Pinedale Drive, Mowat Drive, Howland Drive and Elmsdale Drive;
- Reconstruction of intersection of Ottawa Street and Westmount Road as a new two-lane roundabout;
- Removal of the sidewalks on both sides of Ottawa Street and removal of the short section of cycling lanes from Williamsburg Road to Fischer-Hallman Road, in favour of construction of a new 3.0 metre wide asphalt boulevard multi-use trail on both sides of Ottawa Street from Fischer-Hallman Road to Strasburg Road;
Construction of new pedestrian refuge islands on Ottawa Street at Howe Drive, Pinedale Drive, the pathway to Chandler Drive, Mowat Boulevard, Howland Drive and Elmsdale Drive;

Construction of new bus stops, to accommodate improved passenger amenities such as shelters, benches, and real-time information displays. Stops would be relocated as necessary to reduce crossing distances, transfer distances, and integrate with new active transportation infrastructure;

Replacement of the aging corrugated steel pipe culvert carrying Borden Creek under Ottawa Street with a new open bottom concrete culvert.

Please refer to the Display Boards for drawings showing the above-noted improvements.

6. Are active transportation upgrades being considered?

Yes; active transportation upgrades are being considered in accordance with the following Regional master plans and guidelines.

The Regional Official Plan (ROP) gives direction to balance the design of reconstructed roads to meet the needs of all modes of transportation including walking, cycling, motorized vehicles and transit.

The 2018 Regional Transportation Master Plan Update through its vision of sustainable development, seeks to optimize the transportation system, encourage increased transit use and provide enhanced opportunities for cycling and walking.

The Context Sensitive Region Transportation Corridor Design Guidelines (CDG) is a planning policy document that guides the design of Regional Roads. The CDG identifies design parameters for necessary features within road allowances such as vehicular lanes, cycling lanes, sidewalks and boulevards. According to the CDG, Ottawa Street is classified as a Neighborhood Connector: Avenue. Avenues are intended to support active transportation including walking, cycling and transit and provide a high level of design and comfort for pedestrians and cyclists.

The GRT Business Plan (2017-21) maps out how the Region will improve our transit system to meet ridership targets laid out in the RTMP, and build a better, faster transit network centred on ION light rail. Ottawa Street serves as a key east-west link to the ION system with a connection at the Mill Street station. One of the key initiatives of the plan that the Ottawa Street project supports is to provide more comfortable rides, stops and stations.
7. **Did the Project Team consider improvements to the existing signalized intersection of Ottawa Street and Westmount Road? Why was a roundabout selected instead?**

The existing signalized intersection is a significant traffic bottleneck with severe levels of congestion and queues at various times of day.

The Project Team considered several signalized intersection improvement concepts, ranging from minor geometric improvements to major expansions. A traffic analysis of various alternatives indicated that even with a major expansion of the intersection, the underlying system bottlenecks would prevent any meaningful improvement in the performance of the intersection. Additionally, pedestrian crossing distances and transfer distances for GRT users would increase substantially.

In contrast, a detailed traffic analysis indicated that the intersection performance could be increased substantially through implementation of a two-lane roundabout.

Please refer to the Display Boards for details of some of the intersection configurations considered and the advantages and disadvantages of each.

8. **Did the Project Team consider retaining the sidewalks and extending the cycling lanes from Williamsburg Road to Alpine Road, to create a bike lane / sidewalk system throughout the Project Zone? Why did the Project Team decide to implement multi-use trails throughout the Project Zone?**

The Project Team considered the following points in its decision to recommend multi-use trails throughout the project zone:

- Addition of cycling lanes to Ottawa Street would require significant additional reconstruction of curb and gutter, resulting in significant and costly reconstruction of catchbasins, manholes and underground storm services. In some locations, this would also lead to a cascading need to relocate other utilities to accommodate the underground storm services;
- The recently constructed roundabout at Ottawa Street and Alpine Road incorporates multi-use trails at the roundabouts and also on the south side of Ottawa Street as far west as Strasburg Road; and
- The multi-use trails have the broadest appeal to a wide range of users including commuters, families and less confident cyclists.
9. **Who will be responsible for winter maintenance of the new multi-use trails?**

The City of Kitchener will be responsible for clearing snow from the new multi-use trails.

10. **Will the posted speed limit be changed?**

The current posted speed limit on Ottawa Street is 50 km/h from Fischer-Hallman Road to Howe Drive and 60 km/h from Howe Drive to Alpine Drive. The current posted speed is not expected to change under this project.

11. **How will driveways, trees, boulevards and private lawns be affected?**

**Driveways** - Minor re-grading of existing residential driveways may be necessary in order to blend smoothly with the planned roadworks. All driveways will be reinstated to pre-construction or better condition at no cost to the property owner.

**Trees** - It is expected that approximately ten (10) existing medium sized trees between Fischer-Hallman Road and Alpine Road will have to be removed during construction to accommodate the proposed improvements. The Display Boards at this Public Consultation Centre indicate the existing trees that would be affected by this project.

It is the Region’s practice, where space permits, to plant two replacement trees for each tree removed as a result of any road projects. The Project Team proposes replacing any removed trees with large diameter replacement salt tolerant trees (i.e. 75 mm to 80 mm caliper).

In addition to replacing any trees removed on a 2-for-1 basis, new boulevard landscaping, including additional salt-tolerant trees, will be included as part of the project where feasible.

The Project Team has retained a tree expert (arborist) to assess the condition of existing trees and other vegetation within the road corridor. The arborist’s work includes the development of any required tree preservation or protection strategies to be implemented during construction.

Please note that boulevard trees and landscaping are typically planted as part of a separate landscape contract in the year following the road construction.
12. **Does the Region of Waterloo need to acquire public or private property for this Project?**

The intent of the design process is to minimize the need to acquire property; however, in order to construct the proposed multi-use trails and intersection improvements, the Region will need to acquire small parcels of property from seven (7) abutting property owners. Additionally, the Region will be required to acquire seven (7) temporary easements in order to facilitate construction activities.

A map showing the locations where the Region will need to acquire property and easements is provided in the **Display Boards** at this Public Consultation Centre.

As the project proceeds, the Region’s Real Estate staff will contact affected property owners to discuss the necessary property acquisitions. It is the Region’s standard practice to negotiate agreements of purchase and sale with the affected property owner, 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 may acquire the needed lands through Expropriation. For further information, please see the Property Process Information Sheet in **Appendix B**.

13. **How is the natural environment being considered?**

The existing roadway corridor is fully urbanized. Accordingly, the planned project works are not expected to have any impacts on the natural environment.

Replacement of the aging corrugated steel pipe culvert carrying Borden Creek under Ottawa Street may provide an opportunity to improve the aquatic habitat along this section of the creek, by replacing the pipe with an open-bottom culvert that is more compatible with aquatic species.

During construction, monitoring measures will be implemented to minimize short-term impacts to Borden Creek.
14. **Are noise barriers being considered for this Project?**

The Region has a Noise Policy that is used to determine when noise barriers such as noise walls or berms would be recommended as part of an upcoming project.

The Region’s Noise Policy is made up of three Parts:

- **Part A:** New Developments Impacted By Noise from Roads & Railways
- **Part B:** Existing Development Impacted By Proposed Region Road Widenings
- **Part C:** Existing Development Impacted By Noise from Existing Region Roads

For the proposed Ottawa Street improvements, Part C of the Noise Policy applies, as there are no new developments and no proposed road widenings. Under Part C of the Noise Policy, the Region will consider building and cost-sharing a noise barrier if all of the following apply:

- Resident requests a noise barrier; and
- Existing average noise levels are calculated to exceed 60dBA; and
- Two thirds (2/3) of affected property owners are in agreement to build noise barrier (based on rear yard property length) in accordance with Local Improvement Act; and
- All property owners pay 50% of cost of noise barrier based on length of wall installed at their property with payments charged over a period of ten (10) years (in accordance with Local Improvement Act).

Residents may also decide to take other measures such as installing a privacy fence, air conditioning or window improvements at their own expense.

15. **When will construction occur? How will traffic be maintained?**

**Construction Timing**

Construction of the Ottawa Street improvements is currently scheduled to be undertaken in 2020 and 2021 in the Region’s approved 2019 Transportation Capital Program. Final surface course asphalt and landscaping work will be scheduled for either 2021 or 2022.

The timing of this project is subject to receipt of all technical and financial approvals, acquisition of required property and final approval of Regional Council.
Detours and Road Access

Full two-way traffic will be maintained at most times during construction; however, lane restrictions will be necessary. Full closures may be required in some locations to complete portions of the work.

Reconstruction of the intersection of Ottawa Street and Westmount Road as a modern two-lane roundabout may require more extensive lane restrictions and closures. Staging and required traffic restrictions will be examined more closely during detailed design. Where appropriate, detour routes will be provided. More detailed information will be made available prior to construction.

Emergency Services, Grand River Transit, School Bus Services

The City of Kitchener Fire Department, Waterloo Regional Police and Ambulance Services, Grand River Transit and area School Board bus services have all been contacted through the project planning process. All of these services have indicated that they are developing plans to re-route vehicles if necessary during construction.

Pedestrian and Cyclist Access

During construction, pedestrian and cycling traffic on Ottawa Street will be maintained at most times; however, it is noted that it may be necessary to temporarily restrict pedestrian and cyclist traffic for short durations. Detours will be provided in such circumstances.

Driveway Access

Access to driveways on Ottawa Street will be maintained to the greatest extent possible during construction. The Contractor will be required to temporarily block access to and from driveways for short-term periods when completing certain construction operations directly in front of the driveway. Where a disruption to a driveway is expected, the Contractor will be required to hand-deliver a notice at least 48 hours in advance advising the property owner of the time and duration of the driveway disruption.

Area residents will receive further communication from the Region well in advance of construction providing detailed information regarding traffic detours, Grand River Transit service, Emergency vehicle access and other relevant information pertaining to the construction.
Garbage and Recyclables Collection

For residential properties on Ottawa Street, garbage, green bins, yard waste and blue boxes will continue to be picked up curbside as usual. When work is occurring in front of your property and waste collection vehicles do not have access to your driveway on garbage collection day, the Contractor will deliver your garbage and recyclables to an adjacent side street for collection and return the empty containers afterwards. We will 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 phase of construction to provide access for private garbage collection.

16. **What is the estimated cost of this Project? How will it be funded?**

The total cost of the project is estimated at approximately $6,500,000.

The road works, multi-use trails, structural works and servicing works will be funded from the Region’s Roads Rehabilitation Reserve Fund and the Development Charge Reserve Fund.

17. **What are the next steps for this Project?**

Prior to finalizing the detailed engineering design, the Region is interested in receiving public feedback on the proposed improvements. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments.

The Project Team will review the public comments received from the Public Consultation Centre and use them as input for refinement of the proposed improvements. It is planned to present the proposed improvements to Region of Waterloo Planning and Works Committee and Council in Fall 2019 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 the Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.
18. **How can I view Project information following this Public Consultation Centre? How can I receive further notification regarding this Project?**

All of the PCC display materials and other relevant project information, notifications of upcoming meetings and contact information are 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


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

19. **How Can I Provide My Comments?**

In order to assist the Project Team 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 comment box provided at the registration table. Alternatively you can mail, fax or e-mail your comments using the attached comment sheet to the Project Team member listed below, no later than July 19, 2019.

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

John Stephenson, P.Eng.  
Senior Project Manager  
Region of Waterloo  
150 Frederick Street, 6th Floor  
Kitchener, ON N2G 4J3  
Telephone: 519-575-4096  
Email: jstephenson@regionofwaterloo.ca

Ms. Dot Roga, C.E.T.  
Project Manager  
MTE  
520 Bingemans Centre Drive  
Kitchener, ON N2B 3X9  
Telephone: 519-743-6500 x1269  
Email: droga@mte85.com
APPENDIX A

Class EA Process

Municipal Class Environmental Assessment

Ontario Environmental Assessment Act

The purpose of the Ontario Environmental Assessment Act (EA Act) is to provide for “the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario”. Environment is applied broadly and includes the natural, social, cultural, built and economic components.

The key principles of successful environmental assessment planning include:

- Consultation with stakeholders and affected members of the public;
- Consideration of a reasonable range of alternatives;
- Assessment of the environmental impacts for each alternative;
- Systematic evaluation of alternatives; and
- Clear documentation of the process followed.

Municipal Class Environmental Assessment (EA)

The Municipal Class Environmental Assessment (EA) is a planning process approved under the Environmental Assessment Act that is used by municipalities to plan infrastructure enhancement projects while satisfying the requirements of the Environmental Assessment Act. Under the Class EA process, projects are planned in one of three ways depending on their scope, complexity, and potential for adverse environmental impacts.
## Municipal Class EA Schedules

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule “A”</td>
<td>Routine projects that are considered straight-forward and minimally impactful, such as maintenance, operations and emergency activities. Such projects are designated as “pre-approved” under the Class EA and may proceed directly to implementation.</td>
</tr>
<tr>
<td>Schedule “A+”</td>
<td>Routine projects that are considered straight-forward with minor or short-term impacts. Such projects are designated as “pre-approved” under the Class EA and may proceed directly to implementation; however, the proponent is required to advise area residents and stakeholders of the pending commencement of the project.</td>
</tr>
<tr>
<td>Schedule “B”</td>
<td>Projects with the potential for some adverse environmental effects. Such projects must undergo a program of public, stakeholder and agency consultation and a detailed Project File documenting the planning process must be placed on the public record. Subsequently, the project is considered to be “approved” under the Class EA.</td>
</tr>
<tr>
<td>Schedule “C”</td>
<td>Larger and more complex projects with the potential for significant environmental effects. Such projects must undergo a program of public, stakeholder and agency consultation, including 3 points of formal public contact. A detailed Environmental Study Report (ESR) must be completed and placed on the public record. Subsequently, the project is considered to be “approved” under the Class EA.</td>
</tr>
</tbody>
</table>
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.
Appendix B-2

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

**Steps Toward Offer of Settlement or Agreement of Purchase and Sale**

The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;

2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;

3) reasonable costs of the owner will be included in any compensation settlement;

4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and

5) an Agreement will be finalized with any additional discussion, valuations, etc. as may be required.

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

**Expropriation**

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

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

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.

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.
Comment Sheet

Regional Municipality of Waterloo
Ottawa Street Improvements
Public Consultation Centre

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 July 19, 2019 to:

John Stephenson, P.Eng., Senior Project Manager, Region of Waterloo
150 Frederick Street, 6th Floor, Kitchener, ON   N2G 4J3
(T) 519-575-4757  (F) 519-575-4430  (E) jstephenson@regionofwaterloo.ca

Comments regarding this project:
(Please feel free to attach a separate sheet if you require more space for your comments)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postal Code:</th>
<th>Phone:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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.
**Region of Waterloo International Airport**

**Implementation of the Airport Master Plan Public Consultation Centre #1 Information Package**

<table>
<thead>
<tr>
<th>What</th>
<th>Runway Extensions Assessment and Federal Airport Zoning Regulation Update.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where</td>
<td>Region of Waterloo International Airport.</td>
</tr>
<tr>
<td>Why</td>
<td>To ensure aircraft safety, improve usability of the airfield, and protect for future growth.</td>
</tr>
<tr>
<td>When</td>
<td>Late 2019 to obtain runway extensions assessment approval (2021 to start construction for Runway 14-32 extensions). Early 2020 to complete public consultation for the Airport Zoning Regulation update.</td>
</tr>
</tbody>
</table>
| Who       | Region of Waterloo Project Manager  
Jordan Vander Veen, P. Eng.  
Region of Waterloo International Airport  
Phone: (519) 648-2256 Ext. 8514  
Email: jvanderveen@regionofwaterloo.ca |

**Public Consultation Centre #1**

Thursday, June 20, 2019 from 4 to 8 p.m.  
Breslau Mennonite Church  
226 Woolwich Street, Breslau, Ontario

There is a comment sheet at the back of this package. Please fill it out and share your comments with us.
1. **Why is the Region considering these projects?**

Stage 1 of the 2017 Airport Master Plan identified the need to extend the existing runways and protect for the future configuration of the airfield. To plan for this growth, we are completing a Runway Extensions Assessment for both Runway 14-32 and 08-26, and updating the current Airport Zoning Regulations (AZR).

2. **Who is directing these projects?**

The Project Team and Steering Committee are directing these projects. The Project Team consists of staff from:

- The Region of Waterloo - Airport, Community Planning, Design and Construction, Transportation, Water Services, Facilities and Fleet Management Departments;
- Township of Woolwich; and,
- Grand River Conservation Authority.

The Steering Committee consists of staff from the Region of Waterloo along with:

- Region of Waterloo Chair Karen Redman;
- Region of Waterloo (Kitchener) Councillor Tom Galloway;
- Region of Waterloo (Kitchener) Councillor Michael Harris;
- Region of Waterloo (Cambridge) Councillor Helen Jowett;
- Region of Waterloo (Woolwich) Councillor Sandy Shantz; and,
- Region of Waterloo (Kitchener) Councillor Berry Vrbanovic.

Avia NG will lead the consulting team.

3. **What is the purpose of this Public Consultation Centre?**

The Region of Waterloo believes in open and transparent public consultation. This is the first Public Consultation Centre (PCC) for the Runway Extensions Assessment and AZR Update Projects. The purpose is to inform, answer questions and collect feedback about:

- The needs and opportunities for the runway extensions;
- The project environment (natural, social, cultural/heritage);
- Discuss potential mitigation measures to limit environmental impacts;
- The proposed changes to the Airport Zoning Regulations; and,
- Future public input opportunities planned.

Regional staff and consultants are here to answer your questions. Your comments are a valuable. Please use one of the following options to provide feedback:

- Fill out the attached Comment Sheet and leave it in the box at the registration table.
- Email your feedback to AirportMasterPlan@regionofwaterloo.ca
- Visit www.waterlooairport.ca/masterplan

The Project Team will consider all feedback in conjunction with all relevant information.
This section is about the Runway Extensions Assessment Project.

4. What does the runway extensions design include?

The runway extension design generally includes the following:

- Extend Runway 14 by 555 metres (1,820 feet) (northwest towards Breslau);
- Extend Runway 32 by 329 metres (1,080 feet) (southeast towards Cambridge);
- Extend Runway 26 by 529 metres (1,737 feet) (west towards Guelph);
- Construct taxiways parallel to the runway extensions;
- Construct access roads around the runway extensions;
- Move Runway 26 approach lighting;
- Install new approach lighting for Runway 14;
- Move or upgrade other visual aids;
- Move or tunnel Shantz Station Road; and,
- Upgrade how aircraft maneuver around airport.

Please refer to Appendix A, B, C and D for drawings of the proposed runway extensions.

5. Why extend the runways?

Currently, Runway 14-32 can accommodate light general aviation aircraft and flight training activity. Runway 08-26 can accommodate larger narrow-body aircraft (i.e. Boeing 737 aircraft with one aisle). Wide-body aircraft (i.e. Boeing 767 aircraft with two aisles) cannot use the airport at this time, and there is no secondary option for narrow-body aircraft. This restricts larger aircraft from operating in poor weather conditions, such as rain, ice or high winds.

Extending Runway 14-32 to a length of 2,134 metres (7,000 feet) will improve the safety and reliability of the airport. When Runway 08-26 has strong cross-winds combined with wet or icy conditions, larger narrow-body aircraft would be able to land on Runway 14-32. Additionally, scheduled air service could use Runway 14-32 when Runway 08-26 is closed for repairs.

Extending Runway 08-26 to a length of 2,663 metres (8,737 feet) will reduce the restrictions on larger aircraft operating in poor weather. It will also allow wide-body aircraft to use the airport, which need the extended length.

In general, extending the runways will:

- Enhance safety and reliability for aircraft;
- Improve the customer experience;
- Attract newer, larger aircraft and more airlines; and,
- Improve overall use and flexibility for airlines.

6. What is the process for the Runway Extensions Assessment Project?

Runway extensions less than 1,500 metres (4,921 feet) are not subject to the Canadian Environmental Assessment Act (CEAA). However, the Region has chosen to complete a screening level environmental assessment process, which will generally follow the CEAA process. This process allows the Region to:

- Share information;
- Consult with the public;
• Exercise due diligence; and,
• Ensure compliance with environmental legislation.

The Runway Extensions Assessment Project is in an early stage of development. The goal of this PCC is to inform the public about the project and to collect input early in the process. This allows time for the refinement of the design and any environmental impact mitigation strategies.

7. **What are the potential impacts of implementing these runway extensions?**

Extending the runways may have the following potential impacts:

- Update Airport Zoning Regulations;
- Removal of trees and other potential obstacles;
- Buy property for runway extensions;
- Natural environment;
- Archaeological resources;
- Heritage resources;
- Contaminated soil/groundwater; and,
- Noise.

The Region has begun the process of updating the current Airport Zoning Regulations. This process will include an assessment of obstacles that interfere with the AZRs. See page 7 for an explanation on AZRs.

8. **Is any private property required for this project?**

One goal of the planning process is to limit the impact to adjacent properties and the need to buy land. The Region owns the land required for all runway extensions and parallel taxiways. However, additional adjacent land may help limit the impact to airport operations.

9. **Natural environment considerations**

The Runway 14-32 extensions will impact the east branch of the Randall Drain, some wetlands, and potential wildlife, fish and species at risk habitat. The Runway 26 extension will impact the east branch of the Randall Drain and some species at risk habitat. Please see Appendix E for a drawing of the significant wildlife and fish habitat areas.

To determine the best mitigation measures, more investigation and consultation with approval agencies is required. Mitigation measures and compensation will be considered, including:

- Scheduling construction work to avoid critical breeding or migration periods;
- Erosion and sediment control;
- Re-vegetation/compensation; and,
- Fencing.

10. **Archaeological resource considerations**

Consultants have completed a Stage 1 archaeological investigation. This is a desktop study of known and potential areas of archaeological interest. Several additional areas are recommended for a Stage 2 field investigation. This will consist of a walking survey and/or hand test pits to determine if any buried archaeological resources exist.
11. Heritage resource considerations
Consultants have completed a Built Heritage and Cultural Heritage Landscape Assessment. Please see Appendix F for a drawing of their findings. No heritage resources are directly impacted. The airport may fence or screen the runways from potential heritage resources.

12. Contaminated soil or groundwater considerations
The Consultant has completed a desktop investigation of past land use. Due to old fuel tanks, possible spills, etc. contaminated soil may exist. Please see Appendix G for a drawing of their findings. The study recommends a geotechnical investigation to assess the soil and groundwater conditions. This will determine if excess soil requires proper disposal off site, or groundwater requires pumping and treatment.

13. Will the runway extensions increase noise?
The 2017 Airport Master Plan developed Noise Exposure Forecasts (NEF) for the year 2035. This forecast included the future Runway 14, 26 and 32 extensions. Please see Appendix H for a comparison between the current 2000 NEF and the future 2035 NEF.

The comparison shows that noise will be similar, with increases in some areas and decreases in others. In general, noise in Kitchener and Breslau is not expected to increase beyond the current 2000 NEF.

The impact of NEF contours can generally be summarized as follows:
- 25 NEF – impacts to areas sensitive to noise, some annoyance to residential areas;
- 30 NEF – impacts to residential areas, some speech interference; and,
- 35 NEF – impacts to most land uses.

Residential development is not permitted within the 30 NEF contour of the current 2000 NEF.

14. Shantz Station Road considerations
Construction of the Runway 26 extension will affect Shantz Station Road. The road will impede the extension, as it would be within the Runway End Safety Area and would not meet Transportation Canada standards.

A Regional road network study is investigating workable options for Shantz Station Road. Two potential solutions for Shantz Station Road are:
- Tunnel Shantz Station Road under the Runway End Safety Area; or,
- Realign Shantz Station Road around the Runway End Safety Area and airport access roads.

Both of these create significant impacts to adjacent landowners and the surrounding environment. This project will need a dedicated environmental assessment with extensive public consultation.

Implementation of the Runway 26 extension is not expected in the near future, estimated to start 2025 or later. Construction will not start until the Airport reaches 500,000 annual passengers in accordance with the Stage 3 trigger of the Airport Master Plan.
15. What is the estimated cost of this project?
The Region has budgeted:

- $23,000,000 to construct the Runway 14-32 extension; and,
- $11,500,000 to construct the Runway 08-26 extension, excluding Shantz Station Road.

16. What are the next steps?
The Region will hold a second PCC this fall. The Project Team will review the comments and use them as input to complete the Runway Extensions Assessment Project. The Project Team will present a recommendation to Regional Council by the end of 2019.

Pending approval by Regional Council:

- Detailed design of the Runway 14-32 extensions would take place in spring 2020.
- Construction of the Runway 14-32 extensions would begin when airport reaches Stage 2 trigger (250,000 annual passengers per the Airport Master Plan, anticipated 2021).
- Detailed design of the Runway 26 extension would begin when airport reaches Stage 2 trigger (250,000 annual passengers per the Airport Master Plan, anticipated 2021).
- Construction of the Runway 26 extension would begin when airport reaches Stage 3 trigger (500,000 annual passengers per the Airport Master Plan, anticipated 2025).

This section is about the Federal Airport Zoning Regulation (AZR) Update.

17. What are AZRs?
AZRs ensure that development near an airport is compatible with the safe operation of aircraft. These regulations:

- Limit the height of objects (i.e. buildings, trees etc.);
- Encourage land uses that do not attract birds; and,
- Encourage land uses that do not interfere with communication or navigational aids used by aircraft.

Please see Appendix I for a drawing of the proposed Airport Zoning Regulations.

18. Is the airport currently protected by AZRs?
Yes – the current AZRs have been in effect since March 19, 2009. To view the current AZR visit: https://laws-lois.justice.gc.ca/eng/regulations/SOR-2006-78/FullText.html.

19. Why is the Region updating the AZRs?
The current AZR protects the airport now, but it does not address the future airport configuration the 2017 Master Plan identified.

Updating the AZR will protect for:

- New runway extensions;
- Future instrument approach procedures (airspace protection); and,
- Long-term plan for a third runway.

The AZR update is a responsible way to protect the airport and meet the needs of future generations.
20. Who updates AZR?
Transport Canada (TC) has the authority to make or update Airport Zoning Regulations. Section 5.4 of the Aeronautics Act outlines the AZR legislation. The Region has made a formal request to TC to update the AZRs. TC will start and control the update process.

21. AZR considerations
The following table summarizes the major differences between the current and proposed AZRs:

<table>
<thead>
<tr>
<th>AZR Characteristic</th>
<th>Current AZR</th>
<th>Proposed AZR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runway 14-32 Length</td>
<td>1,250 metres (4,100 feet)</td>
<td>2,134 metres (7,000 feet)</td>
</tr>
<tr>
<td>Runway 08-26 Length</td>
<td>2,134 metres (7,000 feet)</td>
<td>3,048 metres (10,000 feet)</td>
</tr>
<tr>
<td>Runway 14-32 Approach</td>
<td>5,000 metres (16,404 feet) at 2.0% slope (50:1)</td>
<td>15,000 metres (49,203 feet) at 1.6% slope (62.5:1)</td>
</tr>
<tr>
<td>Runway 08-26 Approach</td>
<td>15,000 metres (49,203 feet) at 2.0% slope (50:1)</td>
<td>Not included</td>
</tr>
<tr>
<td>Third Runway</td>
<td>Not included</td>
<td>3,048 metres (10,000 feet) length, parallel to Runway 14-32</td>
</tr>
<tr>
<td>Outer Surface</td>
<td>Not adjacent to approaches</td>
<td>Extends along approaches up to 5,000 metres (16,404 feet) length</td>
</tr>
</tbody>
</table>

The AZR update will protect for future expansion and instrument approaches.

22. Why protect for a third runway?
The proposed AZR protects for a potential future third runway as recommended in the 2017 Airport Master Plan. The third runway is located 1,525 metres (5,003 feet) east and parallel to Runway 14-32. A third runway would allow for more capacity and increased safety at the airport, by reducing the mixed operation of commercial and general aviation traffic.

Note that including a third runway in the proposed AZRs only protects the airspace for the third runway. This does not constitute approval to build a new runway. The proposed AZRs allow a third runway to remain a viable option in the long-term future. Construction approval would require extensive public consultation and environmental studies through a separate process.

23. What are the impacts to existing objects?
There are some existing objects that would violate the proposed Airport Zoning Regulations now. The Region will identify and assess these objects as part of the AZR process. In some cases the Region may consider grandfathering an object into the regulations. For this to happen, the object must not impact aircraft safety or the instrument approaches. If the object will have an impact on aircraft safety, the Region will work with the landowner to remove it.

24. What are the impacts to future development?
The AZR will impact future development in the Region. These impacts are not expected to be widespread, but concentrated closer to the airport. Consultation with local planners and
individual landowners on these potential impacts has begun. This consultation will continue throughout the AZR process.

Visit the "Property Locator" station to determine the allowable development height on your property. This tool will be available online at www.waterlooairport.ca/masterplan.

25. What is a bird hazard zone?
Birds can create a significant hazard to aircraft and aviation safety. The current AZR includes a bird hazard zone across the outer surface, which is about 4 kilometres around the airport. This ensures that land uses close to the airport do not attract birds. The area of the proposed bird hazard zone will also remain within the outer surface in the new AZR.

26. What is the process to update the AZRs?
Transport Canada (TC) dictates the process to update AZRs. Below is a summary of the process and current status:

- Region notifies TC of intent to update AZRs – COMPLETE;
- Region submits proposed AZR plan to TC – IN PROGRESS;
- TC reviews and provides preliminary feedback on the proposed AZRs;
- Public consultation to inform public about proposed AZR plan;
- Region reviews and compiles feedback from public consultation; and,
- Revised AZR submitted to TC, incorporating public feedback.
- Deposit of AZR in local Land Title office.

This PCC is for information only. It is not considered part of TC's official public consultation process.

The Region plans to complete the official AZR public consultation process by early 2020. It may take up to three years to complete the full update process. This includes drafting the regulation, translations, consultations, legal drafting and other internal processes.

27. Will there be more opportunities to take part in this process?
Yes, this is the first of multiple Public Consultation Centres (PCC) for the AZR Update Project. The goal is to introduce the proposed AZRs and provide general overview. Transport Canada will manage future consultations. These will include briefings with land use authorities and general public consultations.

28. How will I receive more information about these projects?
Register at this Public Consultation Centre and select "Yes" to receive updates. Once registered, you will receive updates and invitations to future meetings.

29. How can I provide my comments?
Please complete the attached Comment Sheet and leave it in the box at the registration table. Or email your comments to airportmasterplan@regionofwaterloo.ca.

30. How can I view project information after the PCC?
Visit www.waterlooairport.ca/masterplan to view all project information, PCC materials.
Runway Extensions Assessment Project Comment Sheet

Region of Waterloo International Airport
Implementation of the Airport Master Plan
Public Consultation Centre #1 – Thursday, June 20, 2019

Please complete and hand in this sheet so that your comments can be considered for this project. If you cannot complete your comments today, please take this home and email your comments to airportmasterplan@regionofwaterloo.ca

Comments regarding the Runway Extensions Assessment project:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Name: ____________________________
Address: __________________________
Postal Code: ______________________
Phone: ____________________________
Email: ____________________________

COLLECTION NOTICE: All comments and information received from individuals, stakeholder groups and agencies regarding this project 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 of this information should be directed to the General Manager, Chris Wood at the Region of Waterloo International Airport at 519-648-2256 ext. 8502.
Airport Zoning Regulation Update Comment Sheet

Region of Waterloo International Airport
Implementation of the Airport Master Plan
Public Consultation Centre #1 – Thursday, June 20, 2019

Please complete and hand in this sheet so that your comments can be considered for this project. If you cannot complete your comments today, please take this home and email your comments to airportmasterplan@regionofwaterloo.ca

Comments regarding the Airport Zoning Regulation Update project:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Name: ____________________________________________
Address: __________________________________________
Postal Code: ________________________________________
Phone: ____________________________________________
Email: ____________________________________________

COLLECTION NOTICE: All comments and information received from individuals, stakeholder groups and agencies regarding this project 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 of this information should be directed to the General Manager, Chris Wood at the Region of Waterloo International Airport at 519-648-2256 ext. 8502.
Appendix B – Runway 14 Extension

- Airport property boundary
- New access road
- Runway end safety area
- Parallel taxiway extension
- 1,820ft Runway 14 Extension to 7,000ft
- Runway 14-32 (4,100ft)
- Taxiway Charlie
- Aeron VII
- Lonsdale Road
- Memo Street
- Fountain Street
- Oak St.
- 3020330 13/20
Appendix C – Runway 26 Extension
Appendix D – Runway 32 Extension
Appendix E – Significant Wildlife and Fish Habitat Areas
Appendix G – Existing Airport Site Layout and Features
Appendix H – Composite Noise Contour Plan
Appendix I – Federal Airport Zoning Regulations Update
Report:  PDL-AIR-19-06

Region of Waterloo
Planning, Development and Legislative Services
Region of Waterloo International Airport

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019  File Code: T18-80(A)

Subject: Airport Master Plan Public Consultation Centre No. 1

Recommendation:

For information only.

Summary:

This report provides information on the first Public Consultation Centre for the Implementation of the Airport Master Plan.

Report:

In April 2017, Regional Council approved the Region of Waterloo International Airport Master Plan (Report PDL-AIR-17-02). The Master Plan outlined a systematic development process that would be initiated in response to increased demand for air service. This process is broken down into 5 distinct stages as illustrated in the following figure.
Construction for airport infrastructure would not occur until needed, however the planning and design for this infrastructure occurs in advance of the need. This approach manages risk for the Region, while positioning the airport to move quickly to support expanded air service if the opportunity presents itself.

Upon approval of the Master Plan, Regional Council directed staff to initiate Stage 1 of the plan. This stage focusses on the completion of design and planning studies that would prepare the Airport, the Region and funding partners to expand infrastructure. The construction of this infrastructure would not occur until Stage 2, once the infrastructure is needed. The second stage of the Master Plan will only be initiated once the airport exceeds about 250,000 passengers annually.

Stage 1 includes completing a Runway Extensions Assessment and updating the Airport Zoning Regulations. A Public Consultation Centre (PCC) will be held for these projects on June 20 at the Breslau Mennonite Church, located at 226 Woolwich Street in Breslau, Ontario. The purpose of this PCC is to inform, answer questions and collect feedback about these projects. Additional PCCs will be held later this year.

An information package for this PCC has been attached to this report.

**Corporate Strategic Plan:**

This initiative directly supports Strategic Objective 1.1.3 in the Corporate Strategic Plan – “Develop a Master Plan and associated Business Plan that guides the growth and development of the Region of Waterloo International Airport to provide a full-service, customer friendly facility which supports commercial, corporate and general aviation.”

**Financial Implications:**

Funds for implementation of the Master Plan are allocated in the Airport Capital Budget.
Other Department Consultations/Concurrence:

The Master Plan project team includes staff from Airport, Community Planning, Design and Construction, Transportation, Water Services, Facilities and Fleet Management.

Attachments: Information Package for Airport Master Plan Implementation Public Consultation Centre No. 1

Prepared By: Jordan Vander Veen, Senior Project Manager, Planning, Development and Legislative Services

Approved By: Rod Regier, Commissioner, Planning, Development and Legislative Services
Report: TES-TRP-19-10

Region of Waterloo
Transportation and Environmental Services Department
Transportation Division

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019

File Code: D09-30/401

Subject: Highway 401 Improvements from 1.0 km West of the Homer Watson Boulevard Interchange to 1.5 km East of the King Street Interchange

Recommendation

For information.

Summary

As recommended in a Transportation Environmental Study Report in 2009 and further confirmed as feasible in a recent update review, the Ministry of Transportation, Ontario (MTO) has advanced into the detailed design stage for Highway 401 improvements within the Region of Waterloo (the Region). Improvements which are being advanced at this time include replacement of the Highway 401 Grand River bridges, rehabilitation of the King Street Overpass bridge, and reconstruction of the Highway 401 right-of-way in advance of future permanent widening. The proposed permanent designs will not result in any physical changes or travel demand pattern changes to the Region’s transportation network.

Construction of the Highway 401 Improvements are projected to occur between 2020 and 2023, subject to provincial funding and approvals. Over the course of the construction staging, there will be intermittent closures to ramps at the Highway 401 / King Street Interchange, varying in duration between 3 and 12 months. The closures will result in some traffic diversion on the Regional road network, and the Region’s transportation staff continue to work with MTO to minimize the impact of the diversions.

This proposed work will impact the Region’s plans for reconstructing King Street immediately north of Highway 401. The reconstruction project is being conducted for
state-of-good repair and to prepare for the ION Stage 2 LRT build-out. Since the Region will be conducting the reconstruction of the section of King Street between Highway 401 and Sportsworld Drive in 2020, coordination with the MTO work will be required to ensure sound traffic control measures are in place.

This project does not entail any works related to the future planned west flyover ramps at the Highway 401 and Highway 8 Interchange; however, the improvements will not inhibit the future implementation of the flyover ramps and the designs have been developed to protect for the future addition of the ramps. Regional Transportation staff continue to assert that the construction of the west flyover ramps at the Highway 8 / Highway 401 interchange need to be raised in priority and added to MTO’s 5-year transportation capital plan.

Report

1.0 Background

In September 2009, the Ministry of Transportation, Ontario (MTO), in consultation with Stantec, prepared a Transportation Environmental Study Report (TESR) for the Highway 8 and Highway 401 Interchange Improvements. The purpose of the 2009 TESR was to identify the ultimate provincial transportation needs for Highway 401 and Highway 8 within the defined study area in the Region of Waterloo (the Region). One of the key outcomes of the 2009 TESR was an approved plan for future infrastructure improvements, including the following seven (7) highway improvements which are currently being advanced by MTO:

1. Replacement of the Highway 401 Grand River Bridges (eastbound and westbound) to accommodate the ultimate Highway 401 widening;
2. Localized widening of Highway 401 to support the Grand River Bridge construction traffic staging;
3. Rehabilitation of the King Street Overpass at Highway 401;
4. Reconfiguration of the King Street interchange and some of the ramps;
5. Pavement reconstruction with median barrier replacement;
6. Storm sewer reconstruction; and
7. Extending the high mast street lighting from Highway 8 westerly to the Homer Watson Boulevard Interchange.

Other recommendations from the 2009 TESR, such as the proposed west ramps at the Highway 401 and Highway 8 interchange are not included in the current project and are subject to future programming once provincial funding and priorities are in place.

The study area, defined as 1.0 km west of the Homer Watson Boulevard interchange to 1.5 km east of the King Street interchange, is shown in Appendix A. The 2009 TESR
was completed in accordance with the requirements of a Preliminary Design, Detailed Design and Class Environmental (Class EA) Study for provincial “Group B” projects.

At all stages of this project to date involving public, stakeholder and agency/municipality consultation, MTO has consulted with Region staff for input.

2.0 Preliminary Design Stage

In 2016, MTO retained WSP to advance the recommended plan into the preliminary and detailed design stages. A Notice of Study Commencement was circulated to the general public in November 2016.

Given that no construction had commenced since the recommendations were approved in the 2009 TESR, the first stage of the 2016 WSP work was to conduct a “five-year” review to determine if any significant changes to the approved EA plan are required. The outcome of this “five-year” review confirmed that no significant changes to the approved EA plan are required and that the 7 aforementioned recommendations identified in the 2009 study are feasible to carry into the preliminary and detailed design stage.

The designs under development in the current MTO/WSP project are labelled as the “Interim Design” since they only include a portion of the recommended plan from the 2009 TESR. The remaining recommendations (i.e. the west ramps for the Highway 401 and Highway 8 interchange) will be incorporated in the “Ultimate Design” in a separate future project.

WSP completed the preliminary design and prepared a Preliminary Design Report (PDR) in August 2018 to summarize the considerations and findings of the preliminary design process. The 2018 PDR has not been published for public viewing and there was no public or agency/municipality consultation during the development of the PDR; however, the Region has been provided with the appended Traffic Engineering Study which provides insight into the anticipated traffic impacts on the Region’s road network during the construction staging.

3.0 Detailed Design Stage (June 5, 2019 Public Information Centre)

Having commenced the detailed design process in August 2018, MTO and WSP conducted a Public Information Centre (PIC) on Wednesday June 5, 2019 to present the following information to adjacent property/business owners, members of the public, municipalities and other stakeholders:

- Study process;
- Proposed detailed design plans (including property impacts, environmental
impacts, etc.); and
• Construction staging plans.

The June 5 PIC was a requirement of the provincially mandated Class EA process to ensure that the input of all stakeholders is collected and incorporated into the development of the detailed design plans. Project process, communications, and relevant background materials are also published for reference on a public project website (www.Hwy401GrandRiverBridges.ca).

4.0 Regional Considerations

Of the materials presented at the June 5 PIC, the Region will be most impacted by the details of the Interim Design Plan and the proposed construction staging.

4.1 Detailed Design Plan

An overview of the Interim Detailed Design Plan was presented at the June 5 PIC and is shown in Appendix B. Some of the notable detailed design considerations of particular interest to the Region include:

• The ramp reconfiguration at the King Street interchange is minor in nature and will not have any tangible impact on the Regional Road network;
• The King Street overpass will be rehabilitated such that there are no significant changes to the existing bridge structure with the exception of a 0.5 m widening on both the north and south sides of the bridge;
• The replacement of the Grand River Bridges will include widened structures that protect for planned future Highway 401 widening through the Region, and for the future addition of the North-to-West Highway 401 Flyover On-Ramp from Highway 8 (and the associated acceleration lane);
• A separate structure will have to be designed and built across the Grand River in the “Ultimate Design” scenario in a future separate project to facilitate the West-to-North Highway 8 Flyover On-Ramp from Highway 401; and
• Pavement reconstruction, storm sewer reconstruction, and high mast lighting installation along Highway 401 will be designed and implemented per MTO standards.

4.2 Proposed Construction Staging

An overview of the preliminary Interim Construction Staging Plans was presented at the June 5, 2019 PIC and is shown in Appendix C. Some of the construction staging considerations of particular interest to the Region are provided below. Note that the construction staging is still to be finalized as the detailed design advances into the final stages.
• The estimated timeline for construction for this project is approximately 44 months, beginning in Spring 2020 and running until the end of 2023;

• During Construction Stage 1, the King Street South-to-West On-Ramp to Highway 401 will be fully closed for up to 12 months (beginning in approximately July 2020) to facilitate work on the north side of the King Street overpass bridge. The projected 2021 a.m. and p.m. peak hour on-ramp volumes affected by this closure, as predicted by MTO, are 135 and 158, respectively. These trips are anticipated to divert along Fountain Street to the Highway 401 Westbound On-Ramp at Homer Watson Boulevard;

• During Construction Stage 2, the Highway 401 West-to-North Off-Ramp to King Street will be fully closed for approximately 6 months (starting in approximately July 2021) to facilitate work on the south side of the King Street overpass bridge. To accommodate this closure, the West-to-South off-ramp will be temporarily modified to provide access to King Street northbound via a temporary traffic signal at the ramp terminal and thus no diversion to an alternate interchange is anticipated. The revised temporary configuration will not produce significant traffic capacity issues for motorists heading northbound on King Street from Highway 401 West, but will introduce some amount of delay at the temporary traffic signal (anticipated level-of-service C during the a.m. and p.m. peak periods per MTO’s traffic assessment);

• During Construction Stage 3A, the Highway 401 East On-Ramp (from both northbound and southbound on King Street) will be closed for approximately 3 months. For the southbound-to-eastbound traffic (approximately 267 and 232 vehicles during the a.m. and p.m. peak hours, respectively, per MTO’s 2021 projections), the diverted motorists are anticipated to use the Highway 8 southbound on-ramp at Sportsworld Drive to ultimately access Highway 401 eastbound. For the northbound-to-eastbound traffic (approximately 67 and 89 vehicles during the a.m. and p.m. peak hours, respectively, per MTO’s 2021 projections), it is anticipated that motorists will either use the Sportsworld Drive access to Highway 8 southbound, or divert to the Hespeler Road or Homer Watson Boulevard interchanges;

• Additionally, during Construction Stage 3A, the Highway 401 West-to-North Off-Ramp to King Street will be fully closed for approximately 3 months. As in Stage 2, the West-to-South off-ramp will be temporarily modified to provide access to King Street northbound via a temporary traffic signal at the ramp terminal and thus no diversion to an alternate interchange is anticipated. The combined anticipated duration of Construction Stage 3A is approximately 6 months and is anticipated to begin in summer 2022;
• During Construction Stage 3B, the King Street South-to-West On-Ramp to Highway 401 will be fully closed for approximately 3 months. The anticipated diversion pattern for this ramp closure will be identical to the anticipated diversion pattern in Stage 1. Additionally, the two ramps closed during Stage 3A will remain closed for 3 months during the Stage 3B works and the diversion patterns from earlier construction stages are anticipated to remain into Stage 3B. In total, the duration of Stage 3B is anticipated to last 6 months; and

• Only night or off-peak closures will be required along King Street to facilitate works to the underside of the King Street Overpass bridge, and at least one lane of traffic will be maintained in each direction at all times.

The Region will be conducting a detailed review of the anticipated diversions provided by MTO and will continue to work with MTO on the construction staging plans to minimize the impacts on the Regional Road network as much as possible.

4.3 Impact on Planned Region of Waterloo Reconstruction of King Street

The Region has identified the need for reconstruction of King Street in the Sportsworld Drive area, immediately north of the MTO construction site. This need was identified due to the poor existing pavement condition of King Street in the area. In response, the reconstruction of this section of roadway is included in the Region’s 2019 Transportation Capital Program (Project No. 5487, No. 5932 and No. 7361) with detailed design underway in 2019 and a planned construction start in 2020.

The first phase of the Region’s King Street reconstruction will include the section from Sportsworld Drive to Highway 401 in 2020. This section is currently in poor structural condition and thus the reconstruction work cannot be postponed any further. Accordingly, coordination of traffic control with the work being done in 2020 by MTO will be required to accommodate the Region’s work being done at the same time.

The reconstruction of King Street will involve changes to the roadway cross-section to include protection for the future ION Stage 2 LRT alignment and for the addition of active transportation facilities in the area.

4.4 Impact on Future LRT Corridor (King Street)

As part of the approved route for the Stage 2 ION, the LRT will travel along King Street and under the Highway 401 overpass. Since the bridge superstructure will not be changing as part of this project (i.e. MTO will only be rehabilitating the existing bridge), the work will not impact future LRT planning. Stage 2 ION, including LRT tracks and vehicular lanes, is currently being designed (preliminary design) to fit through the existing bridge structure. With the design completed to date for Stage 2 ION, it has
been determined that the bridge structure does not need to be changed in order to accommodate the LRT tracks and overhead systems.

The timing of MTO’s Highway 401 improvements work should not impact the Region’s ability to pursue ION Stage 2 since the LRT implementation is not imminent and the planned reconstruction of King Street will still be completed in advance of the LRT implementation.

4.5 Highway 8 / Highway 401 West Flyover Ramps

The 2009 TESR also confirmed the need for west flyover ramps at the Highway 8 / Highway 401 interchange and, accordingly, the recommendation to implement these ramps was included in the final approved plan. The Region has been strongly in favour of implementing these ramps so that Highway 401 traffic to and from the west of Highway 8 can be removed from King Street near Sportsworld Drive (a Regional road). However, the current project does not include any works for the west flyover ramps.

While the flyover ramps are not specifically being addressed in the current project, the detailed design for the current improvements will not inhibit the future implementation of the flyover ramps. Further, where necessary, the current improvements have been designed in a manner which facilitates the future flyover ramps. For example, the north Grand River Bridge (for westbound traffic) is designed and will be built to a width which will accommodate the length required for the westbound flyover ramp acceleration lane (in addition to the general Highway 401 widening planned for the area).

Regional Transportation staff continue to assert that the construction of the west flyover ramps at the Highway 8 / Highway 401 interchange need to be raised in priority and added to MTO’s 5-year transportation capital plan.

5.0 Next Steps

The next steps for this study are for MTO to finalize the detailed designs, prepare a Design and Construction Report (DCR), file the DCR for a 30-day public review period, and proceed into the construction tendering process. MTO is planning to have a draft DCR circulated for public review in the fall of 2019 with an approved DCR to follow shortly thereafter.

For the Region, the next step is to provide feedback on the design plan and construction staging plans presented at the June 5, 2019 PIC so that the MTO/WSP project team incorporates the comments provided by the Region’s Transportation staff into the final design and construction staging plans.

Subject to funding and approvals, MTO anticipates construction of the infrastructure improvements to begin in the Spring of 2020.
Corporate Strategic Plan

The proposed MTO improvements to Highway 401 from 1.0 km west of the Homer Watson Boulevard Interchange to 1.5 km east of the King Street Interchange within the Regional Municipality of Waterloo would effectively address two key regional Strategic Objectives:

I. Objective 1.2 (Thriving Economy) – Plan for and provide the infrastructure and services necessary to create the foundation for economic success; and

II. Objective 2.4 (Sustainable Transportation) – Optimize road capacity to safety manage traffic and congestion.

Financial Implications

Since the various improvements included in this project are proposed for Ministry infrastructure only, and through further confirmation via discussions with MTO staff during this project, the proposed work does not have any anticipated direct financial implications to the Region.

Other Department Consultations/Concurrence:

Nil.

Attachments

Appendix A – Project Study Area
Appendix B – Proposed Interim Detailed Design Plan from June 5, 2019 PIC
Appendix C – Proposed Construction Staging Plans from June 5, 2019 PIC

Prepared By: Darryl Spencer, Acting Manager, Transportation Planning

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Project Study Area

CITY OF KITCHENER

Homer Watson Blvd

Grand River Eastbound and Westbound Bridges

To Woodstock / London

New Dundee Rd

STUDY AREA

King St E

8

C.P. Rail

Fountain St N

REGION OF WATERLOO

CITY OF CAMBRIDGE

C.P. Rail

Grand River Overpass

Fountain St S

401

17

8

12

SPEEDSVILLE RD

NOT TO SCALE
Proposed Interim Detailed Design Plan from June 5, 2019 PIC
Proposed Interim Detailed Design Plan from June 5, 2019 PIC

NEW GRAND RIVER BRIDGES

ELEVATION

SECTION
Proposed Interim Detailed Design Plan from June 5, 2019 PIC

KING STREET OVERPASS

ELEVATION

SECTION
Proposed Construction Staging Plans from June 5, 2019 PIC

CONSTRUCTION STAGING - STAGE 1
Proposed Construction Staging Plans from June 5, 2019 PIC
Proposed Construction Staging Plans from June 5, 2019 PIC
Proposed Construction Staging Plans from June 5, 2019 PIC
Region of Waterloo
Transportation and Environmental Services
Design and Construction

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019

File Code: T02-30 / 5893, 5901, 5508


Recommendation:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with D.M. Wills Associates Limited to provide engineering consulting services for environmental assessment, preliminary design, detailed design, construction administration and construction inspection services for the rehabilitation of three (3) bridges in Wellesley and Wilmot Townships at an upset limit fee of $195,110 plus applicable taxes for the environmental assessment, preliminary design and detailed design, with construction administration and inspection services to be paid on a time basis as described in report TES-DCS-19-10, dated June 18, 2019.

Summary:

The Regional Municipality of Waterloo intends to rehabilitate a total of three (3) bridges in Wellesley and Wilmot Townships in 2020. The proposed project involves the rehabilitation of two (2) bridges on Manser Road in the Township of Wellesley with scope for these two bridges including concrete patching, concrete overlay, waterproofing and paving of bridge decks, repair of exterior soffits and barrels, replacement of railing systems, repairs to retaining walls and abutments, replacement of guiderails and end treatments. The project also involves the rehabilitation of one (1) bridge on Erb’s Road in the Township of Wilmot with scope including patching, waterproofing and paving the bridge deck, semi-integral abutment conversion, bearing replacement, girder end repairs, ballast wall repairs, replacement of parapet walls and
railings, sidewalk rehabilitation, replacement of guiderails and end treatments and drainage improvements. In addition, opportunities will also be investigated to modify each structure to enhance the sidewalks and/or cycling facilities across each bridge.

It is expected that all bridges will remain open to two-way traffic by staging the construction and utilizing temporary signals to alternate traffic flow. Please refer to Appendix A for a key plan of the bridge locations.

An engineering consulting firm is required to complete the environmental assessment, preliminary design, detailed design, construction administration and construction inspection services for the project. A consultant selection process was conducted in accordance with the Region’s Purchasing By-law. The Consultant Evaluation Team recommends that D.M. Wills Associates Limited be retained to undertake this assignment at an upset limit fee of $195,110 plus applicable taxes for the environmental assessment, preliminary design and detailed design with construction administration and inspection services to be paid on a time basis.

1. Background

The Region of Waterloo wishes to proceed in 2020 with the rehabilitation of the Manser Road Bridges (#0505 & #0506) at Boomer Creek in the Township of Wellesley and also the Erb’s Road Bridge (#0903) at the Nith River in the Township of Wilmot. Please refer to the key plans in Appendix A showing the locations of these bridges.

1.1. Rehabilitation Requirements

For each of these three bridges, recent preliminary condition assessments indicate that the main concrete components of the bridge superstructure, including the deck and barriers, require rehabilitation or replacement. Additionally, the expansion joints require removal and conversion to semi-integral abutments and the deck requires new waterproofing and re-paving.

The sections of Manser Road and Erb’s Road on which these bridges are located are identified in the Region’s Active Transportation Master Plan as on-road cycling routes. Accordingly, options for enhanced cycling facilities on each bridge will be developed and evaluated during the preliminary design phase.

Based on the expected scope of the rehabilitation, it will be necessary to reduce each bridge to one lane during construction with the traffic alternating in each direction by utilizing temporary traffic signals. Options to minimize the duration of the rehabilitation work will be evaluated during the planning and preliminary design stage.

It is anticipated that each bridge will not require any changes which will alter the basic structural system, overall configuration or appearance, and therefore the project can proceed in accordance with the Schedule “A+” requirements of the Municipal Class Environmental Assessment (Class EA).
1.2. Need for Consultant Assignment

Regional staff does not have the structural expertise to undertake these types of structural engineering projects. For this reason, staff recommends that an external consultant be hired to complete this project now in order to provide sufficient time to consider the various alternatives for rehabilitation, complete preliminary design, obtain the necessary approvals, coordinate any utility relocations and complete the detailed design in advance of the scheduled 2020 construction.

2. Consultant Selection

An invitation to submit proposals to provide engineering consulting services was advertised in the Daily Commercial News, the Record, and on both the Region and Ontario Public Buyers Association websites, on April 2, 2019. Ten (10) Proposals were submitted. The proposals were evaluated by the Consultant Evaluation Team which consisted of the following staff:

- Ken Brisbois, Project Manager, Transportation Rehabilitation;
- Larry Van Wyck, Project Manager, Transportation Rehabilitation;
- Gary MacDonald, Head, Transportation Rehabilitation;
- Aaron Dooling, Buyer, Treasury Services.

Based on the proposals, the Consultant Evaluation Team short-listed the following two (2) firms:

- GHD Limited
- D.M. Wills Associates Limited

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

Quality Factors

- Project Approach and Understanding (30%)
- Experience of the Project Manager (20%)
- Experience on Similar Projects (20%)
- Experience of the Project Support Staff (15%)

Price Factor

- Upset Limit Fee (15%)

Although many of the consultant submissions indicated a capability to complete the assignment, the proposals from the two short-listed consultants were significantly
superior in their demonstrated understanding and approach for the project, and included more experienced staff that would be dedicated to the construction phase of the project.

The proposals submitted by the two short-listed firms both demonstrated a comprehensive understanding of the components of the assignment, capable staff, and ample experience on similar projects. Based on the review of the proposals, and in consideration of the combination of quality and price factors described above, D.M. Wills Associates Limited achieved the highest overall score with the highest quality score and the lowest fee of the short-listed firms. Therefore, the Consultant Evaluation Team recommends that D.M. Wills Associates Limited be retained to undertake the environmental assessment, preliminary design, detailed design, construction administration and construction inspection services for this assignment.

3. Scope of Work

For this engineering assignment the consultant will, for all three (3) bridges: undertake a complete review of required infrastructure for existing and future conditions; conduct/coordinate structural condition assessments and pre-design testing; develop and assess rehabilitation/replacement alternatives; complete the preliminary and detailed design for the rehabilitations/replacements; assess the advantages and disadvantages of different construction staging alternatives; make presentations to the Region; prepare contract drawings, specifications and tender documents; review the need for all necessary agency approvals/permits; assist during the tendering period; provide contract administration and site inspection services during construction; prepare as-built drawings; and provide post-construction services during the warranty period. A breakdown of the successful consultant’s upset fee is included in Appendix B attached to this report.

4. Schedule

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

<table>
<thead>
<tr>
<th>Project Initiation</th>
<th>June 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-design testing/condition assessments</td>
<td>Summer 2019</td>
</tr>
<tr>
<td>Review of Preliminary Alternatives and Economic Analysis</td>
<td>Summer 2019</td>
</tr>
<tr>
<td>Draft Preliminary Reports</td>
<td>Summer 2019</td>
</tr>
<tr>
<td>Final Preliminary Design Reports</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Selection of Preferred Rehabilitation Alternative</td>
<td>Fall 2019</td>
</tr>
</tbody>
</table>
Completion of Detail\ned Design and Tender Documents | Winter 2019  
---|---  
Obtain all Permits and Approvals | Winter 2019  
Tendering (#0505 & #0506) - Manser Road Bridges | Spring 2020  
Tendering (#0903) – Erb’s Road Bridge | Spring 2020  
Construction in two separate contracts | Spring to Fall 2020

5. Consultant’s Fee Estimate

The short-listed consultants provided an upset fee for professional services for the preliminary and detailed design phases, and also an estimate of contract administration and construction inspection fees. On road and bridge projects, the time required for contract administration and construction inspection can vary significantly depending on weather conditions, unforeseen developments during construction, contractor performance, and other unknown variables. Because an upset fee does not lend itself well to these types of services, it has been the Region’s practice on road and bridge projects to pay for contract administration and construction inspection services on a time basis. It is recommended that this same practice be followed for this project. For budgetary purposes, staff has estimated the cost of contract administration and construction inspection services to be $359,160 (plus applicable taxes) which is based on the preliminary estimate of fees submitted by D.M. Wills Associates Limited and a review of costs on similar projects.

The upset limit for D.M. Wills Associates Limited to undertake the preliminary and detailed design phases of this project is $195,110 (plus applicable taxes) for consultant fees and disbursements. Based on an estimated total project cost of $2.3 million, the consultant’s upset fee limit for the preliminary and detailed design phases of $195,110 plus applicable taxes represents approximately 8.5% of the estimated total cost for this project, which is considered in the normal fee range for an assignment of this type. A breakdown of the proposed upset limit fee is shown in Appendix B.

Corporate Strategic Plan:

Rehabilitation of all three (3) bridges would satisfy the 2015-2018 Corporate Strategic Plan objective to optimize road capacity to safely manage traffic and congestion under Strategic Focus Area 2: Sustainable Transportation.

In addition, the Region’s consultant selection process meets the 2015-2018 Corporate Strategic Plan objective to ensure Regional programs and services are efficient, effective, and provide value for money under Strategic Focus Area 5: Responsive and
Engaging Government Services.

Financial Implications:
The approved 2019-2028 Transportation Capital Program includes combined total budget of $2,360,000 for 2019-2021 for the completion of the environmental assessment, preliminary design, detailed design, tendering and rehabilitation of the Manser Road Bridges (#0505 & #0506) at Boomer Creek in the Township of Wellesley (Projects #05893 and #05901) and also the Erb’s Road Bridge (#0903) at Nith River in the Township of Wilmot (Project #05508). The projects are funded from the Roads Rehabilitation Reserve.

Other Department Consultations/Concurrence:
Corporate Services (Purchasing) staff were consulted in the procurement of this consulting assignment.

Attachments:
Appendix A – Key Plans
Appendix B – Breakdown of D.M Wills Associates Limited Upset Limit Fee

Prepared By: Ken Brisbois, Project Manager, Design & Construction
Approved By: Thomas Schmidt, Commissioner, Transportation & Environmental Services
Appendix A

5893 - Manser Road Bridge – South (#0505) at Boomer Creek, Township of Wellesley

REHABILITATION OF MANSER ROAD BRIDGE
REGIONAL ROAD No. 5 (MANSER ROAD) AT BOOMER CREEK
TOWNSHIP OF WELLESLEY
5901 – Manser Road Bridge - North (#0506) at Boomer Creek, Township of Wellesley

REHABILITATION OF MANSER ROAD BRIDGE
REGIONAL ROAD No. 5 (MANSER ROAD) AT BOOMER CREEK
TOWNSHIP OF WELLESLEY

E:\CCCC\DES-5500\C005501\5901-MANSER_KEY PLAN.DWG
5508 – Erb’s Road Bridge (#0903) at Nith River, Township of Wilmot
## Appendix B

### Breakdown

D.M. Wills Associates Limited
Fee Estimate
C2019-04 Consultant Selection
Environmental Assessment, Preliminary Design, Detailed Design, Construction Administration and Construction Inspection Services for the Rehabilitation of Three (3) Bridges, Wellesley and Wilmot Townships

Upset Limit Fee for Preliminary and Detailed Design, Tendering and Construction Phase based on the Project Detailed Terms of Reference

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee (CAD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary and Detailed Design, Approvals and Tendering</td>
<td>195,110.00</td>
</tr>
<tr>
<td>Estimated Contract Administration &amp; Inspection (time basis)</td>
<td>359,160.00</td>
</tr>
<tr>
<td><strong>Total Estimated Fee (excluding HST)</strong></td>
<td><strong>554,270.00</strong></td>
</tr>
</tbody>
</table>
Region of Waterloo  
Transportation and Environmental Services  
Design and Construction

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019    File Code: 04015-B

Subject: C2019-02 Consultant Engineering Services for Detailed Design and Services during Construction for the Laurel Water Treatment Plant, City of Waterloo

Recommendation:
That the Regional Municipality of Waterloo enter into an Agreement for Professional Consulting Services with CH2M Hill Canada Limited, for the detailed design and services during construction for the new Laurel Water Treatment Plant located at 350 Conservation Drive, City of Waterloo, in the amount of $967,320 plus all applicable taxes. [TES-DCS-19-11]

Summary:
As part of the Region’s Long Term Water Strategy (LTWS) and Water Supply Master Plan (WSMP), it was identified that additional groundwater sources were required to meet future demands and provide security of water supply. An Environmental Assessment (EA) for the Waterloo North Water Supply System was completed in 2011 and updated in 2017, which identified the implementation of new Laurel Well W25. As part of the EA water quality testing was completed and identified that a new water treatment plant is required to treat the water from Laurel Well W25. In 2018, a preliminary design was completed for the Laurel Water Treatment Plant that includes iron and manganese removal and expansion capabilities for sulphate removal.

A consulting engineer is required to complete the detailed design and services during construction of the Laurel Water Treatment Plant. A consultant selection process was followed in accordance with the Region’s Purchasing By-Law 16-032 for the procurement of goods and services and included price as a factor. When considering Quality, Equity and Price Factors, the submission from CH2M Hill Canada Limited...
(CH2M) of Kitchener, Ontario, scored the highest. The consultant evaluation team therefore recommends that CH2M be retained to undertake this assignment for a total upset fee of $967,320 plus applicable taxes.

Subject to Council approval of this assignment, it is anticipated that detailed design will commence in July 2019 with construction planned for 2020 and 2021.

Report:

Background

The Long Term Water Strategy (LTWS) was adopted by the Region in 2000, and updated in 2007, to ensure sufficient water supply is available for the Region to 2041. The LTWS identified that new groundwater sources were required in order to meet future demands. In 2014, the Integrated Urban Supply Optimization and Expansion (IUS Project) was initiated by the Region in order to identify potential locations for new groundwater sources. The Waterloo North area was identified through this project as an area with potential to develop new supplies or increase capacity from existing sources. One of the studies from the IUS project identified three specific locations within Waterloo North to further investigate as new potential sources or existing sources where capacity could potentially be increased. These included the Erbsville area, well W5A and the area near the Laurel standpipe.

In 2008, the Region initiated the Waterloo North Water Supply Class Environmental Assessment (EA) to determine the preferred approach for a new water supply within the Waterloo North Study area. The EA included a hydrogeological investigation of the three potential sources, including long term pumping tests. The EA evaluated three potential sources and recommended that the Laurel well (W25) and well W5A were the preferred combined source for the area. Based on the long term pumping test, the Laurel well (W25) and well W5A could operate at sustainable flowrates of 60 L/s and 42 L/s, respectively or operate at a combined flowrate of 80 L/s. Water quality testing performed as part of the EA indicated that both wells had levels of iron and manganese above the Ontario Drinking Water Standards (ODWS). Well W5A also had levels of sulphate above the ODWS. The recommended treatment approach was a centralized water treatment facility located at the site of the Laurel well (W25), and the existing Laurel standpipe located at 350 Conservation Drive, Waterloo. The Waterloo North EA was completed and filed in 2011.

The Region initiated a Water Supply Master Plan (WSMP) as an update to the LTWS in 2011. The WSMP was completed and filed at the end of 2014. One of the main findings from the WSMP was the change to the future water demand projections. The decline of the future water demands are attributed to water conservation and efficiency efforts, intensification and economic factors.

The WSMP also identified the need for additional sources of groundwater supplies in
order to secure long term water supply to the IUS. The Waterloo North water supply was identified as one of these sources.

In 2015, Stantec Consulting was retained to prepare an addendum to the Class Environmental Assessment (EA), completed by the Region in 2011, to address updated recommendations for phasing of the supply wells, as well as to integrate Drinking Water Source Protection Planning based on recent amendments to the Municipal Class Environmental Assessment (MCEA) process and to prepare a preliminary design for the proposed Waterloo North Water Supply System. The EA addendum was completed in August 2017 and a preliminary design was completed in July 2018.

**Consultant Selection**

A consulting engineer is required to complete the detailed design and services during construction of the Laurel Water Treatment Plant. The Region of Waterloo placed advertisements on its website, in the Waterloo Region Record, and in the Daily Commercial News inviting submissions from consultants to provide services for detailed design and services during construction for the new Laurel Water Treatment Plant.

The consultant selection process was carried out in accordance with the Region of Waterloo’s Purchasing By law 16-032 for the procurement of goods and services, and included price as a factor. The evaluation criteria were subdivided into Quality, Equity, and Price factors as follows:

**Quality factors**

- Project Approach/Understanding/Work Plan: 30%
- Qualifications and Experience of the Project Manager: 20%
- Qualifications and Experience of the Project Support Staff: 15%
- Experiences of the Consultant on Similar Projects: 20%

**Price Factor**

- Upset Price: 15%

Eight (8) proponents submitted a Letter of Interest. The Region’s selection team, consisting of: Pam Law, Senior Project Engineer (Water Services); Chad Schwartzentruber, Senior Project Manager Environmental Engineering (Design and Construction); Chad Melitzer, Project Manager Environmental Engineering (Design and Construction) and Aaron Dooling (Procurement), reviewed the eight submissions for quality factors. The following three consultants were short-listed and invited to submit a detailed work plan and upset fee:

- AECOM Canada Ltd.
- CH2M Hill Canada Ltd.
- R.V. Anderson Associates Ltd.
The upset fee envelopes of the three short-listed proponents were opened in the presence of Aaron Dooling (Procurement and Supply Services).

When considering all Quality and Price Factors, the submission from CH2M Hill Canada Ltd. scored the highest overall score. CH2M Hill Canada Ltd. received the highest technical score due to superior understanding of the project and significant experience on similar projects, and its price was the lowest. Staff recommends that CH2M Hill Canada Ltd. be awarded this assignment for an upset fee of $967,320 plus all applicable taxes.

**Scope of Work**

For this assignment, the Consultant will provide professional consulting services during the detailed design, tender, construction, and post-construction phases of the capital project. The consultant will prepare issued-for-tender, issued-for-construction, and record versions of the Contract Drawings and Contract Specifications for the general construction contract. The Consultant will also provide services related to construction cost estimates and cash flow projections, approvals and permits, third party geotechnical investigation, third party materials testing and quality control, health and safety reviews, site inspection, contract administration, equipment acceptance tests, commissioning of new works, a custom operation and maintenance manual, custom training sessions and administration of equipment warranties.

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

**Schedule:**

Subject to Council approval of this assignment, it is anticipated that detailed design will commence in July 2019 with construction planned for 2020 and 2021.

**Corporate Strategic Plan:**

Award of this contract meets the 2015-2018 Corporate Strategic Plan Objective to “plan for and provide the infrastructure and services necessary to create the foundation for economic success” under Focus Area 1 “Thriving Economy” and “protect the quality and quantity of our water resources” under Focus Area 3 “Environment and Sustainable Growth”

**Financial Implications:**

The Region’s approved 2019-2028 Water Capital Program includes a budget of $6,723,000 from 2019 to 2028 for Laurel Water Treatment Plant (project # 04015) to be funded from the Development Charge Reserve Fund (48%; $3,223,000) and growth related debentures (52%;$3,500,000). Debt servicing costs to be reflected in future Water operating budgets are estimated to be $251,867 annually over a period of 20 years on an estimated cost of borrowing of 3.75%.

The consultant’s upset fee of $967,320 is within the budget allowance for engineering.
work and represents approximately 14.5% of the total project budget. The upset fee is considered competitive for a capital project with this magnitude, complexity and specific project requirements.

Other Department Consultations/Concurrence: Nil

Attachments:
Appendix A – Breakdown of Consultant’s Upset Fee

Prepared By: Chad Melitzer, Project Manager, Design and Construction

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
## Appendix A

### Laurel Water Treatment Plant

#### Breakdown of Consultant’s Upset Fee

<table>
<thead>
<tr>
<th>TASK</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Detailed Design Phase</strong></td>
<td></td>
</tr>
<tr>
<td>Project Management / Quality Control</td>
<td>$29,470</td>
</tr>
<tr>
<td>Background Review</td>
<td>$13,720</td>
</tr>
<tr>
<td>Pre-Qualification / Purchase of Equipment / Pilot Testing</td>
<td>$77,770</td>
</tr>
<tr>
<td>Permits, Approvals and Investigative Services</td>
<td>$15,200</td>
</tr>
<tr>
<td>Engineering and Design</td>
<td>$307,450</td>
</tr>
<tr>
<td><strong>Tender Phase</strong></td>
<td></td>
</tr>
<tr>
<td>Tender</td>
<td>$10,140</td>
</tr>
<tr>
<td><strong>Construction Phase</strong></td>
<td></td>
</tr>
<tr>
<td>Project Management / Contract Administration</td>
<td>$70,000</td>
</tr>
<tr>
<td>Construction Technical Support</td>
<td>$68,330</td>
</tr>
<tr>
<td>Construction Inspection Services</td>
<td>$275,000</td>
</tr>
<tr>
<td>Commissioning, Operation Manuals and Training</td>
<td>$15,000</td>
</tr>
<tr>
<td>Post Construction Phase</td>
<td>$85,240</td>
</tr>
<tr>
<td><strong>Total Upset Fee (plus applicable taxes)</strong></td>
<td><strong>$967,320</strong></td>
</tr>
</tbody>
</table>
Region of Waterloo

Transportation and Environmental Services

Water Services

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019       File Code: C06-60(A); E13-20/8242

Subject: Amendment to the Consulting Services Agreement for the Hespeler Wastewater Treatment Plant Upgrades

Recommendation:

That the Regional Municipality of Waterloo approve an amendment to the existing Consulting Services Agreement with Stantec Consulting Ltd. to add design, contract administration and site inspection services required for the Membrane Aerated Biofilm Upgrades at the Hespeler Wastewater Treatment Plant for an upset fee increase of $590,000 plus applicable taxes, to be funded from the existing project capital budget in the 2019 Ten Year Wastewater Capital Program. [TES-DSC-19-12]

Summary:

Headworks upgrades are currently underway at the Hespeler Wastewater Treatment Plant (WWTP) and are scheduled for completion in early 2021. A Membrane Aerated Biofilm (MABR) upgrade was planned following the current project at the Hespeler WTP within the Region’s Ten Year 2019-2028 Wastewater Capital Program and was originally scheduled to start in 2021 and be completed in 2023.

In April 2019, staff was directed to submit an application for a low interest loan and grant to the Federation of Canadian Municipalities (FCM) for Green Municipal Funding (GMF) for MABR upgrades at the Hespeler WWTP. If the Region is successful in receiving the GMF funding, the Region will be required to have the MABR works completed by April 2021.

To meet the GMF funding timeline, a consultant needs to be retained now to start the design work for the MABR. If the Region is successful in receiving the GMF funding, a
consultant will also need to be retained to provide contract administration and site inspection services during construction of the MABR. Stantec can complete the design, contract administration and site inspection work for the MABR upgrades at the Hespeler WWTP more quickly, efficiently and cost-effectively than another consultant because of their ongoing work for the current upgrades at the Hespeler WWTP.

In 2017, Stantec Consulting Ltd. (Stantec) was retained by the Regional Municipality of Waterloo (Region) to provide design, contract administration and site inspection services for the current Hespeler Wastewater Treatment Plant (WWTP) Upgrade project at an upset fee of $2,149,810. In accordance with Part VII, 21(1)(g) of the Region’s Purchasing By-law, staff negotiated an upset fee of $590,000 plus applicable taxes to provide design, contract administration and site inspection services for the MABR because the extension of the existing assignment would be more cost effective and beneficial to the Region.

Staff recommends that the Region approve an amendment to the existing consulting services agreement with Stantec to add design, contract administration and site inspection services required for the Hespeler WWTP MABR Upgrade project for an upset fee increase of $590,000 plus applicable taxes.

Subject to Council approval, the MABR design work will commence immediately. The fees for contract administration and site inspection would only be incurred if the Region is successful in receiving the GMF funding and if Council approves a future contract extension to add the MABR work to current Construction Contract T2018-168 Headworks Upgrades for the Hespeler WWTP.

Report:

Background

Upgrades are currently underway at the Hespeler Wastewater Treatment Plant (WWTP). The current upgrades are being constructed under Contract T2018-168 Headworks Upgrades and are scheduled for completion in early 2021.

A Membrane Aerated Biofilm (MABR) upgrade was planned following the current project at the Hespeler WTP within the Region’s Ten Year 2019-2028 Wastewater Capital Program and was originally scheduled to start in 2021 and be completed in 2023.

The Hespeler WWTP MABR process was proven by pilot work in 2017/2018 and will provide several benefits at the plant. These benefits include:

- improved effluent water quality for nitrogen at a considerably lower project capital cost (40% lower than a comparable conventional upgrade); and
- a streamlined upgrade when the plant requires a future capacity expansion
(subject to Environmental Assessment process):
- reduced energy required and greenhouse gas emitted to treat the wastewater at the plant; and,
- climate change related resilience to plant operations for storm events and upsets.

In April 2019, staff was directed (Report TES-WAS-19-07) to submit an application for a low interest loan and grant to the Federation of Canadian Municipalities (FCM) for Green Municipal Funding (GMF) for MABR upgrades at the Hespeler WWTP. A copy of the April 2019 report is included in Attachment A.

**Schedule**

The application to the FCM for GMF funding was submitted on May 1, 2019. Successful candidates will be notified in September 2019.

If the Region is successful in receiving the GMF funding, the Region will be required to have the MABR works completed by April 2021 and complete 12 months of monitoring and evaluation of the process to qualify for the grant. To meet this timeline, design for the MABR needs to be started now. The Region will also need to pre-purchase the MABR equipment by October 2019 and negotiate an extension to Contract T2018-168 to include the MABR work by the end of 2019. If the Region is successful in receiving the GMF funding, two further reports to Council are planned as follows:

1) A pre-purchase recommendation for the MABR to be presented at a Council meeting in October or November 2019; and
2) A contract extension recommendation to add the MABR work to current Construction Contract T2018-168 Headworks Upgrades for the Hespeler WTP to be presented at a Council Meeting in November or December 2019 to complete the construction works within the required schedule.

**Consultant’s Proposal**

In 2017, Stantec Consulting Ltd. (Stantec) was retained by the Regional Municipality of Waterloo (Region) to provide design, contract administration and site inspection services for the current Hespeler WWTP Upgrade project at an upset fee of $2,149,810. This upset fee represents approximately 10% of the current $21,500,000 construction cost. As part of the original assignment for design, contract administration and site inspection services for the Hespeler WWTP Upgrade, Stantec incorporated features and provisions for future construction of the MABR process.

To meet the GMF funding timeline, a consultant needs to be retained now to start the design work for the MABR. If the Region is successful in receiving the GMF funding, a consultant will also need to be retained to provide contract administration and site inspection services during construction of the MABR. Stantec can complete the design,
contract administration and site inspection work for the MABR upgrades at the Hespeler WWTP more quickly, efficiently and cost-effectively than another consultant for the following reasons:

1) Stantec staff have the required expertise with MABR process technology, having successfully conducted two pilot tests at Region facilities;
2) Stantec has extensive knowledge of the Hepeler WWTP as Stantec designed the work for current Contract T2018-168; and
3) Stantec is currently providing contract administration and site inspection services for Contract T2018-168.

In accordance with Part VII, 21(1)(g) of the Region’s Purchasing By-law, staff negotiated an upset fee of $590,000 plus applicable taxes to provide design, contract administration and site inspection services for the MABR upgrades at the Hespeler WWTP because the extension of the existing assignment would be more cost effective and beneficial to the Region. A breakdown of Stantec’s upset fee is provided in Attachment B. The upset fee of $590,000 represents approximately 10% of the $6,200,000 construction cost for the new MABR works, which is in the lower range of engineering fees for a project of this magnitude and complexity.

In view of the above, staff recommends that the Region approve an amendment to the existing consulting services agreement with Stantec to add design, contract administration and site inspection services required for the Hespeler WWTP MABR Upgrade project for an upset fee increase of $590,000 plus applicable taxes. This would increase Stantec’s current total upset fee limit of $2,149,810 to $2,739,810 plus applicable taxes.

Subject to Council approval, the MABR design work will commence immediately. The fees for contract administration and site inspection would only be incurred if the Region is successful in receiving the GMF funding and if Council approves a future contract extension to add the MABR work to current Construction Contract T2018-168 Headworks Upgrades for the Hespeler WWTP.

Corporate Strategic Plan:

Upgrades to the Hespeler WWTP meet the 2015-2018 Corporate Strategic Plan objective to protect the quality and quantity of our water resources under Strategic Focus Area 3, Environment and Sustainable Growth.

Financial Implications:

The Region’s 2019-2028 Ten-Year Wastewater Capital Program includes a total budget of $26,509,000 for upgrades at the Hespeler WWTP (project #08242). $6,200,000 of the total budget is allocated for the Hespeler MABR to be funded from the Wastewater
Capital Reserve (75%; $4,650,000) and growth related debentures (25%; $1,550,000). An amount of $620,000 was allocated for Consulting Services. There is sufficient budget in capital project #08242 to accommodate Stantec's additional upset fee of $590,000 including applicable taxes.

As per report TES-WAS-19-07 (Attachment A) the Region of Waterloo has applied for funding from the Federation of Canadian Municipalities as part of the Green Municipal Fund. If the application is successful the project will be funded with GMF funding of $1.5 million in debentures funded from the Wastewater Development Charge Reserve Fund and a $232,500 grant with the balance of $4.48 million funded from the Wastewater Capital Reserve.

Other Department Consultations/Concurrence:

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

Attachments

Attachment A: Report TES-WAS-19-07, April 2019
Attachment B; Breakdown of Consultant’s Upset Fee

Prepared By: Leigh McDermott, Senior Project Manager
Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services

Attachment A: Report TES-WAS-19-07, April 2019

DOCS_ADMIN-#2962904-TES-WAS-19-07, Application for Green Municipal Funding for Membrane Aerated Biofilm Upgrades at the Hespeler Wastewater Treatment Plant

Attachment B: Breakdown of Consultant’s Upset Fee

| Detailed Design       | $330,000 |
| Contract Administration| $40,000  |
| Site Inspection       | $220,000 |
| Total                 | $590,000 |
Region of Waterloo
Corporate Services
Facilities and Fleet Management
Financial Services & Development Financing
Transportation and Environmental Services
Transit Services

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 18, 2019

File Code: F01-80

Subject: Investing in Canada Infrastructure Program Update

Recommendation:
For information.

Summary:
The total investment in Regional transit infrastructure under this program amounts to $467 million. Under the Public Transit stream the cost-sharing ratio for the funding envelope is 40% Federal, 33.33% Provincial and 26.67% municipal. Accordingly, the Region of Waterloo has been allocated $187 million from the Government of Canada and $155 million from the Province of Ontario over the next ten years. The Region will be required to contribute $125 million in funding for its municipal share.

Report:
From April 2, 2019 to May 28, 2019, municipalities were able to nominate their public transit projects under the Investing in Canada Infrastructure Program (ICIP). This stream will fund construction, expansion and improvement of public transit networks.
The first intake of the Public Transit stream of the 10-year infrastructure program will unlock up to $1.62 billion in joint provincial and federal funding for critical public transit outside the GTHA. In total, ICIP will unlock up to $30 billion in combined federal, provincial, and local investments in Ontario communities as part of a 10-year bilateral agreement.

As of May 28, 2019, the Region nominated 17 public transit projects, totalling $183,516,750 in combined federal, provincial, and regional funding.

**Proposed Region of Waterloo Projects**

The approved 2019 – 2028 Public Transit Capital Program includes senior government funding (40% - Federal funding; 33.33% - Provincial funding) under the ICIP for projects which staff had determined met the program eligibility criteria and were included in the project list per Report COR-FSD-19-15/TES-TRS-19-08. The regional share of these project costs is to be funded from a combination of reserves, development charges and long term borrowing.

ICIP funding included in the 2019 – 2028 approved Regional Capital Plan per Report COR-FSD-19-15/TES-TRS-19-08 were also reflected in the 2019 Development Charges Background Study which is currently underway to update the Regional Development Charges By-law.

Report COR-FSD-18-23 (December 11, 2018) recommended that Regional Council request advanced approval under ICIP for the Grand River Transit Northfield Drive Facility and Transit buses. No formal approval was received; however this project was included in the initial funding intake request under the ICIP on April 3, 2019. It should be noted that because of manufacturing / delivery schedules twelve buses had to be ordered for delivery in 2019 in advance of any formal ICIP funding approval per report COR-TRY-19-08 dated January 16, 2019. These vehicle costs will not be eligible for ICIP funding.

The following projects have been determined to be consistent with the required outcomes of the program and accordingly were submitted for funding from ICIP. ICIP has recommended that the Region include a contingency due to the uncertainty of the timing of the next Public Transit intake. Based on past experience with the Public Transit Infrastructure Fund, Regional staff have included a contingency of 25% of budgeted expenditures on the application for each project, with the exception of Northfield Drive Facility Construction.
Additional projects have been identified in order to maximize available federal and provincial funding per Report COR-FSD-19-15/TES-TRS-19-08. It is anticipated that additional projects will be identified in future years in order to maximize available federal and provincial funding. To be clear, approval of the recommendation in this report does not mean that the individual projects are approved. All projects funded under ICIP will follow the same approval process as any other capital project at the Region. Projects will be identified in the Public Transit 10 year capital program, spending and funding allocations will be approved through the annual budget process, and procurement/tendering will follow the terms of the Region’s Purchasing By-law.

**Deferral of the Northfield Drive Facility Tender:**

The construction of the GRT Northfield Drive facility was required to be complete in 2021 in order to meet the Regional transit ridership goals, as established in the RTMP, along with the supporting fleet storage requirements. The construction tender was ready to be issued in fall 2018. The tender issuance was delayed in anticipation of the Investing in...
Canada Infrastructure Program (ICIP) funding program details. The Region’s application for this project was submitted in April and staff are working closely with the Province as the application is reviewed. The Province will review the Region’s application and supporting documentation and if approved will nominate the project to the Federal government for their review. Approval timing may vary but is expected by the end of summer.

Tendering of the project is now anticipated to be in the fall/winter 2019 with construction commencing in spring 2020.

This delay will have impacts to GRT for the storage of buses and administration spaces as existing facilities will be at capacity in 2021. The deferral of the Northfield tender will potentially require that fleet additions to provide expanding services be squeezed into existing facilities, stored outdoors or stored elsewhere off-site. GRT does not have space to store or maintain additional fleet beyond 2021 and the acquisition of articulated buses will need to be deferred until the facility is available. Additional space for transit services administration employees may also need to be sought at other Regional buildings in the interim as needed.

Corporate Strategic Plan:
This report supports strategic objectives found in the Corporate Strategic Plan, and particularly Focus Area 1.2 - Plan for and provide the infrastructure and services necessary to create the foundation for economic success.

Financial Implications:

The 2019-2028 Public Transit Capital Program, as approved by Council, was prepared to include senior government funding from ICIP for the projects included in Report COR-FSD-19-15/TES-TRS-19-08. The Draft 2020-2029 Capital Program will be prepared to include senior government funding from ICIP for the projects included in Attachment “A” to this report. The regional share of these projects will be funded from a combination of reserves, development charges and long term borrowing.

Other Department Consultations/Concurrence: Nil

Attachments:
Attachment ‘A’ – List of Projects nominated for the Investing in Canada Infrastructure Program
Attachment ‘B’ – List of Projects identified for the second intake of the Investing in Canada Infrastructure Program

Prepared By: Brad Palmer, Financial Analyst - Transit

Approved By: Craig Dyer, Commissioner, Corporate Services/Chief Financial Officer

Thomas Schmidt, Commissioner, Transportation and Environmental Services
List of Projects nominated for the Investing in Canada Infrastructure Program

1. Northfield Drive Operating and Maintenance Facility Construction

**Project Description:** Bus maintenance garage to include hoist capability for articulated buses and storage for up to 200 conventional buses.

**Proposed Start Date:** Fall/Winter 2019

**Proposed Completion Date:** 2022

**Total Project Costs:** $118,818,000 including 10% contingency

2. Conventional Vehicle Additions

**Project Description:** GRT Conventional bus fleet expansion scheduled in the 2019 capital budget for 2019 to 2021.

**Project Timeframe:** Annually 2019 to 2021

**Total Project Costs:** $11,812,500 including 25% contingency

3. Conventional Vehicle Replacements

**Project Description:** Conventional bus replacements scheduled in the 2019 capital budget for 2019 to 2021.

**Project Timeframe:** Annually 2019 to 2021

**Total Project Costs:** $11,812,500 including 25% contingency

4. Pedestrian Bridge Hwy 7/8

**Project Description:** To provide access to transit services from Southmoor/Avalon via Strasburg Road.

**Proposed Start Date:** 2020

**Proposed Completion Date:** 2021

**Total Project Costs:** $9,500,000 including 25% contingency

5. Conestoga College Upgrades

**Project Description:** Passenger Facilities, transit infrastructure, and expansion vehicles to service Conestoga College.

**Proposed Timelines:** Detailed design to be completed in 2019 with construction completed by 2020.
6. Active Transportation Improvements

**Project Description:** This project relates to the design and implementation of pedestrian environment improvements (i.e. walkways, lighting improvements) at various GRT locations.

**Proposed Start Date:** 2019

**Proposed Completion Date:** 2021

**Total Project Costs:** $5,218,750 including 25% contingency

7. University of Waterloo Transit Shelter Canopy

**Project Description:** Construction of four 90m x 5m shelter canopies, with 8 heated glass shelters, and an enclosed bike shelter area with space for 40 bikes, at the University of Waterloo Bus Station.

**Proposed Start Date:** 2020

**Proposed Completion Date:** 2020

**Total Project Costs:** $3,750,000 including 25% contingency

8. Specialized Vehicle Replacements

**Project Description:** Specialized bus replacements scheduled in the 2019 capital budget for 2019 to 2021.

**Proposed Start Date:** 2019

**Proposed Completion Date:** 2021

**Total Project Costs:** $3,562,500 including 25% contingency

9. Market Trail to ION Implementation

**Project Description:** The proposed Market Trail is a shared-use cycling/pedestrian connection within the Region-owned rail corridor between Northfield ION Station and Farmers Market Road. The trail provides a direct connection from ION to a provincially-significant tourist destination (St Jacobs Market) and access points to major employment areas adjacent to the corridor. The trail has the potential to foster new ridership, create new demand outside of traditional peaks (i.e., market days), and reduce traffic/parking demand pressures facing the market area.

**Proposed Start Date:** 2020
10. On-Street Transit Infrastructure

Project Description: Adding infrastructure at bus stops, including shelters, benches and concrete areas to improve accessibility of stops as well as improvements along roads to improve pedestrian crossings to stops or aid in bus movements.

Proposed Start Date: 2019

Proposed Completion Date: 2021

Total Project Costs: $2,593,750 including 25% contingency

11. ITS for Transit

Project Description: Expanded and new technology solutions including digital displays, solar-powered real time displays, depot management, fleet maintenance system & vehicle health monitoring on buses, improved dispatching software, transit systems integration, expanded data analysis & performance monitoring software.

Proposed Start Date: 2019

Proposed Completion Date: 2021

Total Project Costs: $2,131,250 including 25% contingency

12. Transit Priority Measures

Project Description: Fulfilling one of the GRT Business Plan goals of implementing transit priority measures (TPM) by identify any physical, operation, regulatory or technological improvements that has the effect of prioritizing transit movements.

Proposed Start Date: 2019

Proposed Completion Date: 2021

Total Project Costs: $1,382,500 including 25% contingency

13. Iron Horse Trail Improvements

Project Description: The Iron Horse Trail is a shared-use pathway located within the Region’s Central Transit Corridor and connects adjacent neighbourhoods to the core areas of Kitchener and Waterloo. A series of trail access and crossing improvements have been identified by Grand River Transit as part of the GRT Business Plan assessment of active transportation connectivity to and from ION light rail stations. Lighting and widening of the central portion of the trail, as well as a major new connection
from the trail to Central Station, are being implemented. New segments of active transportation infrastructure linking the trail to/from additional light rail stations, as well as walkway, lighting, and crossing improvements to the existing trail, will be implemented.

**Proposed Start Date:** 2020

**Proposed Completion Date:** 2020

**Total Project Costs:** $1,250,000 including 25% contingency

14. Specialized Vehicle Additions

**Project Description:** GRT Specialized bus fleet expansion scheduled in the 2019 capital budget for 2019 to 2021.

**Project Timeframe:** Annually 2019 to 2021

**Total Project Costs:** $400,000 including 25% contingency
List of Projects identified for the second intake of the Investing in Canada Infrastructure Program

1. Conventional Vehicle Additions

Project Description: GRT Conventional bus fleet expansion scheduled in the 2019 capital budget for 2022 to 2028.

Project Timeframe: Annually 2022 to 2028

Total Project Costs: $29,137,500 including 25% contingency

2. Conventional Vehicle Replacements

Project Description: Conventional bus replacements scheduled in the 2019 capital budget for 2022 to 2028.

Project Timeframe: Annually 2022 to 2028

Total Project Costs: $109,925,000 including 25% contingency

3. Rolling Stock LRT Future Vehicles

Project Description: Requirements for 2023 and 2024

Project Timeframe: 2023 – 2024

Total Project Costs: $38,625,000 including 25% contingency

4. Bus Additions – Articulated

Project Description: Annual requirements 2022 – 2028 estimated at 3 per year.

Project Timeframe: Annually commencing 2022

Total Project Costs: $23,467,500 including 25% contingency

5. Specialized Vehicle Replacements

Project Description: Specialized bus replacements scheduled in the 2019 capital budget for 2022 to 2028.

Proposed Start Date: 2022

Proposed Completion Date: 2028

Total Project Costs: $8,625,000 including 25% contingency

6. On-Street Transit Infrastructure
**Project Description:** Adding infrastructure at bus stops, including shelters, benches and concrete areas to improve accessibility of stops as well as improvements along roads to improve pedestrian crossings to stops or aid in bus movements.

**Proposed Start Date:** 2022

**Proposed Completion Date:** 2028

**Total Project Costs:** $3,718,750 including 25% contingency

### 7. ITS for Transit

**Project Description:** Expanded and new technology solutions including digital displays, solar-powered real time displays, depot management, fleet maintenance system & vehicle health monitoring on buses, improved dispatching software, transit systems integration, expanded data analysis & performance monitoring software.

**Proposed Start Date:** 2022

**Proposed Completion Date:** 2028

**Total Project Costs:** $2,718,750 including 25% contingency
Region of Waterloo
Transportation and Environmental Services
Corporate Services
Facilities Management & Fleet Services

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 18, 2019   File Code: F06-80
Subject: Update to Corporate Asset Management Policy

Recommendation:

That the Regional Municipality of Waterloo approve the Corporate Asset Management Policy, as set out in Appendix A to report TES-19-01/COR-19-05 dated June 18, 2019.

Summary:
Nil.

Report:
As part of the Corporate Asset Management (AM) Strategy, the Corporate Asset Management Policy was updated (Appendix A) to bring it in line with the requirements outlined in current legislation.

The initial Policy was approved by Council in February 2016 as outlined in report TES-WAS-16-01/COR-FFM-16-01. At the time, the Policy was created with the intent to provide staff with direction and guidance for decision making in the management of airport, transportation, transit, solid waste management systems, water and wastewater treatment and distribution systems, facilities and fleet assets with a total replacement value of approximately $5.5 billion.

On December 27, 2017 the Ministry filed O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure, which Region staff outlined in report COR-FFM-18-02/TES-18-01. This regulation provides requirements and timelines for the development of Strategic Asset
Management Policies. The regulation requires that all municipalities develop a strategic asset management policy by July 1, 2019 with a formal review at least every five years. Required contents of the policy include:

- Alignment with municipal objectives (i.e. strategic plan, official plan, master plans)
- Process on how the asset management plan would assist with budget development and long-term financial strategies
- Approach to continuous improvement and best practices associated with asset management planning
- Principles to guide asset management planning
- Commitment to consider asset management planning to address risks that may be caused by climate change
- Alignment with relevant policies under the Planning Act and municipal official plans
- Determination of capitalization thresholds for inclusion of assets in the asset management plan in conjunction with the tangible capital asset policy
- Identify asset management governance structure including Council involvement
- Provide opportunities for public to provide input into asset management planning

In light of the specific requirements within the proposed AM regulation, the Municipal Finance Officers' Association of Ontario (MFOA) has developed a Strategic Asset Management Policy toolkit and templates for use by the municipal sector. This toolkit approach was funded and endorsed by the Province; therefore, staff used this toolkit to guide the Region’s approach. The toolkit identified 8 elements of an Asset Management Policy. These elements are categorized by Statements, Processes and Commitments. In addition to these elements the Province provided mandatory wording in the form of the first eleven Guiding Principles written in the Policy. All of these elements are included in the updated Policy as mandated by the Province. The definitions written in the Policy are derived from industry standard asset management guides and legislation such as the International Infrastructure Management Manual (IIMM), the Public Sector Accounting Board PS 3150, and the Ontario Municipal Asset Management Planning Regulation (O. Reg. 588/17).

**Corporate Strategic Plan:**
The implementation of best practice asset management principles, reinforced by a Corporate Asset Management Policy supports the Corporate Strategic Plan objective to plan for and provide the infrastructure and services necessary to create the foundation for economic success under Strategic Focus Area 1 – Thriving Economy. It specifically addresses strategic action 1.2.2 to continue to implement and improve an asset management plan to optimize the use and availability of existing and new infrastructure.

**Financial Implications:** Nil

**Other Department Consultations/Concurrence:**
Staff representatives from Divisions within Transportation and Environmental
Services, Corporate Services and Planning Development and Legislative Services Departments are involved in the Corporate Asset Management Program and have been consulted in the preparation of this report.

**Attachments:**
Appendix A – Regional Municipality of Waterloo Asset Management Policy

**Prepared By:** Charles Allen, Manager, Planning and Performance Management
Tim Walton, Manager, Asset Management & Strategic Initiatives

**Approved By:** Craig Dyer, Commissioner, Corporate Services/Chief Financial Officer
Thomas Schmidt, Commissioner, Transportation and Environmental Services
Policy Statement:
The Region will formalize practices and responsibilities associated with the management of tangible capital assets, communicate relevant policies and programs to internal and external stakeholders and review this Policy regularly to ensure that it continues to be appropriate for the Region’s asset management program.

Definitions:

**Tangible Capital Assets (TCAs)** – are non-financial assets having physical substance that:

a) are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets;

b) have useful economic lives extending beyond one year;

c) are used on a continuing basis; and

d) are not for resale in the ordinary course of operations.

**Asset Management** – The systematic and coordinated activities and practices of an organization to optimally and sustainably deliver on its objectives through the cost-effective lifecycle management of assets.

**Asset Management Practices** – The processes and techniques (people, data, and systems) that an organization undertakes to plan, implement, and measure effective asset management. Examples of processes include demand forecasting, developing and monitoring levels of service, operational and renewal planning, and risk management. Techniques include the use of software and other data management methods to record, maintain, and analyse information for asset investment decision-making.

**Asset Management Planning Progress Review** – Annual review required before July 1 of every year (per Ontario Regulation 588/17) that includes progress on ongoing efforts to implement the Strategic Asset Management Plan, factors affecting the ability of the Region to implement its Strategic Asset Management Plan, and a strategy to address these factors including the adoption of appropriate practices.
Strategic Asset Management Plan – Defines Senior Management’s commitment and approach to achieving this Policy. It establishes best asset management practices and identifies recommended actions to be undertaken to improve or enhance the asset management capability and achieve strategic objectives. It will summarize the characteristics, condition, and risk exposure of assets. It will outline activities for each asset type with input from all Regional functional areas with recommended financing strategies to provide a defined level of service in the most cost effective way.

Master Plan – A long range plan which integrates tangible capital asset requirements for existing and future needs as defined by levels of service.

Operating Principles:

This Corporate Asset Management (AM) Policy provides direction and guidance for decision making in the management of assets for the following service areas: airport, transportation, transit, solid waste management, water and wastewater treatment and distribution, facilities, and fleet.

1. Vision
Regional staff and stakeholders will work together to continuously improve infrastructure services with comprehensive asset management practices that ensure that the right work is done at the right time, for the right reasons and at the right price to maximize the effectiveness of investment in tangible capital assets.

2. Goals
The objectives of the Asset Management Policy are to:
• Formalize, standardize, and align the Region’s functions, practices and responsibilities associated with the management of the tangible capital assets used to support the delivery of services;
• Communicate to stakeholders the management principles, a common purpose and approach endorsed by the Region, gaining their support and trust; and
• Outline key responsibilities and review processes for asset management

3. Strategic Alignment
The corporate asset management vision requires alignment with federal and provincial legislation, and the Region’s strategic goals, policies and plans at any given time. To achieve this vision, the Region will integrate asset management planning with other municipal processes and documents, such as:

• The Strategic Plan
• Financial Plans
• Master Plans
• Business Plans
• Official Plan
• Climate Change Adaptation & Mitigation Plans
• Corporate Energy Plan

These plans each have their own review and approval cycle. The Strategic Asset Management Plan will be based on the current version of each of these.
4. Guiding Principles

In its asset management planning, the Region will strike a balance between its organizational capacity, financial and stakeholder support, local needs, risks and vulnerabilities. The following key principles will guide the Region in making its asset management decisions. Some of the principles reference services provided by external agencies but must be considered in asset management planning.

**Forward looking**: The Region shall take a long-term view while considering demographic and economic trends in the region.

**Budgeting and planning**: The Region shall take into account any applicable budgets or fiscal plans, such as fiscal plans released under the following:
- Fiscal Transparency and Accountability Act, 2004;
- Budgets adopted under Part VII of the Municipal Act, 2001; and
- Safe Drinking Water Act, 2002

**Prioritizing**: The Region shall clearly identify infrastructure priorities which will drive investment decisions.

**Economic development**: The Region shall promote economic competitiveness, productivity, job creation, and training opportunities.

**Transparency**: The Region shall be evidence-based and transparent. Additionally, subject to any prohibitions under an Act or otherwise by law on the collection, use, or disclosure of information, the Region shall:
- Collect and use current and accurate asset information that is available to all that need it,
- Make decisions with respect to infrastructure based on information that is publicly available or made available to the public, and
- Share information with implications on infrastructure and investment decisions with the Government and broader public sector entities.

**Reliability**: The Region shall ensure the continued provision of core public services, including those provided by broader public sector entities, such as health care and education.

**Environmentally conscious**: The Region shall minimize the impact of infrastructure on the environment by:
- Respecting and helping maintain ecological and biological diversity;
- Augmenting resilience to the effects of climate change; and
- Endeavouring to make use of acceptable recycled aggregates.

**Health and safety**: The Region shall ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.

**Community focused**: The Region shall promote community benefits, being the supplementary social and economic benefits arising from an
infrastructure project that are intended to improve the well-being of a community affected by the project, such as:

• Local job creation and training opportunities;
• Improvement of public space within the community;
• Promoting accessibility for persons with disabilities; and
• Providing documented and accepted levels of service through citizen and stakeholder engagement described in Section 9.

Innovation and Continuous Improvement: The Region shall continuously improve its Asset Management Practices through a comprehensive knowledge management approach. The Region shall create opportunities to make use of innovative technologies, services, and practices, particularly where doing so would utilize technology, techniques, and practices developed in Ontario.

Integration: The Region shall where relevant and appropriate, be mindful and consider the principles and content of non-binding provincial or municipal plans and strategies established under an Act or otherwise, in planning and making decisions surrounding the infrastructure that supports them.

Risk-based: The Region will monitor and address risk associated with asset failure by focusing resources, expenditures, and priorities based upon risk assessments and the corresponding cost/benefit. Lifecycle costing and risk analysis processes will be consistently applied when evaluating competing asset investment needs across asset types. This approach will facilitate prioritization and optimization of capital investment in the Region’s assets.

Value-based and affordable: The Region will choose practices, interventions and operations that minimize costs of asset ownership and service delivery, while satisfying agreed levels of service. Decisions will be based on balancing service levels, risks, and costs to ensure assets are sustainable and appropriate for use.

5. Capital Thresholds
Assets whose role in service delivery requires deliberate management by the Region, for example those that pose substantial risk to the Region, will be included in the Strategic Asset Management Plan. The service-focus intent of this Policy differentiates its requirements for identifying assets from the capitalization thresholds, which are developed for the purposes of financial reporting. For this reason, the capitalization threshold developed for financial reporting will not necessarily be the guide in selecting the assets covered by asset management planning processes.

6. Budgeting
Asset management planning will encompass sound financial analysis that will be completed by a multi-disciplinary team comprised of representative(s) from finance and the service areas, and documented in the financial strategy section of the Strategic Asset Management Plan. The financial analysis used for the
Strategic Asset Management Plan will align with existing financial plans. The alignment will stem from a multi-disciplinary team, common analytical methods followed, and common data sources used. The Region will integrate findings from the Strategic Asset Management Plan into its long-term financial planning and budgeting processes.

The following elements of the Strategic Asset Management Plan will be referenced by the service area in the preparation of their budget submission:

- Forecasted spending needs identified in the plan;
- Prioritization of spending needs;
- All potential revenues and costs (operating, maintenance, renewal, and decommissioning) associated with forthcoming tangible capital asset decisions including new assets; and
- New revenue tools and alternative funding strategies where possible.

Comprehensive financial planning strategies and processes will be applied across all asset types to ensure long-term affordability. Funding and service delivery opportunities to achieve cost savings will be explored where appropriate. The Budget Committee will review the submission prepared by each service area to approve the Region's annual budget.

7. Community Planning
Community planning for development and/or redevelopment, that may require new assets or existing asset enhancements, will be done in consultation with asset managers, and will give consideration to operational and financial asset impacts based on lifecycle analysis and financial sustainability principles. Parties involved in the development of the Strategic Asset Management Plan will reference the direction established in the Official Plan and Master Plans, as well as the methods, assumptions, and data used in their development. The aim of cross-referencing these plans is to ensure that development and redevelopment occur within the Region’s means through an understanding and consideration of current and future asset needs.

8. Climate Change
The Region commits to embedding climate change considerations in asset management planning, and to the development of tailored actions that make the best use of its resources to mitigate and adapt to climate change. Where practical, programs will strive to go beyond minimum legislative solutions to help ensure assets are increasingly resilient to changing social, climate, environmental and economic conditions, and to mitigate future climate impacts such as greenhouse gas emissions reduction. Bolstering resilience to climate change in the Region may involve modifying the scope of current operations, anticipating possible costs to support contingency funds, leveraging alternative funding mechanisms, integrating the emergency management perspective to planning, and revising levels of service.

9. Citizen and Stakeholder Engagement
The Region provides its citizens and stakeholders with the municipal services they need within the bounds of regulatory requirements, the built environment, and the natural environment. To achieve this goal, the Region will seek to
understand the needs of current citizens and stakeholders and consider the needs of future generations, and incorporate these perspectives into the Strategic Asset Management Plan. The Region recognizes the various citizens and stakeholders as an integral part of the asset management approach. Accordingly, the Region will:

• Provide access and opportunities for citizens and stakeholders to contribute in asset management planning through strategic planning, master planning and environmental assessment processes;
• Ensure individuals and groups are treated fairly and respectfully during any engagement process and;
• Coordinate asset management planning with other infrastructure asset owning agencies such as local municipalities and regulated utilities.

Responsibilities:

An Asset Management Governance Structure has been established to lead the development of AM tools and practices and to oversee their application across the organization. The following details the responsibilities of the key stakeholders within the Region:

Council

• Approves, by resolution, the Asset Management Policy and its updates as necessary every four years;
• Approves, by resolution, the Strategic Asset Management Plan and its updates every four years;
• Approves, by resolution, the Asset Management Planning Progress Review on or before July 1 of every year; and
• Supports ongoing efforts to continuously improve and implement the Strategic Asset Management Plan.

Corporate Leadership Team and Asset Management Steering Committee

• Provides executive level oversight regarding the strategic and change elements of Asset Management;
• Endorses the Asset Management Policy and Strategic Asset Management Plan updates every four years;
• Endorses the Asset Management Planning Progress Review before July 1 of every year;
• Maintains compliance with the Asset Management Policy and provincial asset management regulation; and
• Supports ongoing efforts to continuously improve and implement the Strategic Asset Management Plan.
• Supports citizen and stakeholder engagement
• Is committed to transparency and accountability in decision making

Department Asset Management Leads

• Chair Asset Management Working Group meetings on a rotation schedule;
• Attend the Steering Committee meetings to present information for approval and bring direction back to the Working Group;
• Ensure that Steering Committee is engaged appropriately for key decision points; and
• Ensure timely resolution of issues and escalate to the Asset Management Steering Committee as necessary.
• Is committed to all the operating principles within the Corporate Asset Management policy.

**Asset Management Working Group**

• Reports to the Department Asset Management Leads;
• Communicates with stakeholders about the asset management system to increase awareness of their role in asset management decision-making including the value of the activities they are undertaking and the asset information they are providing;
• Identifies and develops asset management knowledge, skills and training programs, aligned with corporate competency frameworks;
• Identifies and develops citizen engagement knowledge, skills and training programs, to ensure there is access and opportunity for the citizens and stakeholders to contribute to decision making;
• Is committed to a transparent and accountable decision making process;
• Reviews and updates the Asset Management Policy every four years based on input from department leads;
• Prepares the Strategic Asset Management Plan and its updates every four years based on input from service areas. Conducts the AM Planning Progress Review; and
• Creates necessary guiding strategies and supporting frameworks at the corporate level to continuously improve and adopt appropriate asset management planning and management practices.
Region of Waterloo
Transportation and Environmental Services
Transit Services

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 18, 2019       File Code: D28-60(A)

Subject: MobilityPLUS Low Floor Bus Report

Recommendation:

That the Regional Municipality of Waterloo approves the use of low floor “ramp style” buses for the MobilityPLUS service as set out in report number TES-TRS-19-16 dated June 18, 2019.

Summary: Nil

Report:

GRT’s MobilityPLUS service uses small bus-style vehicles to transport people with impaired mobility. The MobilityPLUS service has been and continues to be delivered using a “lift style” mobility bus that uses a lift to load customers that require wheel chairs and other mobility devices onto the bus. The Transit Mobility industry is moving away from this style of bus in favor of low floor “ramp style” buses. These buses allow the loading of wheel chair customers via a deployable ramp similar to those utilized on conventional buses (see appendix for pictures). The ramp will be familiar to customers and provide easier access to the vehicle for ambulatory customers with decreased mobility as the ramp is easier to navigate when boarding the vehicle as compared to the stairs used in the current lift style buses. This type of vehicle is now being used by many Transit Mobility Services throughout Canada and is also currently in active use by the contracted BusPlus vehicles operated by Voyageur on the Region’s behalf.

Comparison of Vehicles:

The following table outlines certain aspects of both the current and proposed vehicle types and includes expected benefits that will be achieved with a move to the ramp style bus:
<table>
<thead>
<tr>
<th></th>
<th>Existing Lift Style Bus</th>
<th>Proposed Ramp Style Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Cost</td>
<td>$145,000 per bus based on previous tenders adjusted for inflation &amp; additional equipment.</td>
<td>$171,250 per bus based on open tender.</td>
</tr>
<tr>
<td>Ambulatory Boarding / Alighting</td>
<td>Steps</td>
<td>Accessible ramp</td>
</tr>
<tr>
<td>Boarding Time</td>
<td>Up to 1 minute to deploy the lift and same again to stow. Additional time is needed to secure passenger before using lift.</td>
<td>11 seconds to deploy ramp</td>
</tr>
<tr>
<td>Service Efficiency</td>
<td>Daily vehicle itineraries based on longer 3 minute boarding times to deploy the lift, secure the passenger on lift and board them.</td>
<td>Reduction in boarding time will allow for less time required at each customer pick-up / drop-off, thus potentially allowing for additional trips per vehicle per day.</td>
</tr>
<tr>
<td>Fuel Consumption</td>
<td>Longer idling time required at each customer pick-up / drop-off.</td>
<td>Reduced time at each pick-up / drop-off will save fuel and reduce emissions.</td>
</tr>
</tbody>
</table>
The initial purchase cost of the low floor ramp style buses ($171,250) is higher as compared to the lift style buses ($145,000) by $26,250. It is anticipated that the low floor ramp style bus will incur lower maintenance costs over time as the ramp will be much more economical to maintain than the lift mechanism. Our maintenance records show that the cost to maintain the lift mechanism over the lifecycle of the bus is approximately $15,000 and it is anticipated maintenance on the low floor ramps will cost approximately $3,000 over the lifecycle of the bus. Other than the ramp, the new style vehicle is substantively the same as the current vehicles in terms of general operation and maintenance. Taking into account the potential savings in maintenance costs of approximately $12,000, the differential in total ownership cost between the two styles is less than $15,000. Staff believe the enhanced customer experience, improved accessibility, reduced boarding time and increased safety is worth the initial outlay for purchase.

Corporate Strategic Plan:

The use of low floor ramp style Mobility Buses meets the Corporate Strategic Plan objective to create a public transportation network that is integrated, accessible, affordable and sustainable

Financial Implications:

Subject to the approval of the recommendation by committee, as set out in a tender to be proposed to council on June 26, 2019, the Region is proposing to purchase four (4)
low floor wheelchair accessible mini buses in 2019, at a total cost of $685,000 (or $171,250 per bus). The Approved 2019-2028 Transit Services Capital Program contemplates the purchase of lift style buses at a cost of $105,000 per bus. In 2019, there is a budget of $630,000 for six (6) lift style buses.

Regional staff will draft the Proposed 2020-2029 Capital Program to include a price per bus of $175,000 going forward.

Other Department Consultations/Concurrence:

Finance staff was consulted in the preparation of this report.

Attachments:

Prepared By: Neil Malcolm, Assistant Director, Transit Services

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix – Vehicle Photos

Proposed Ramp Style MobilityPLUS Vehicle:

![Proposed Ramp Style MobilityPLUS Vehicle](image)

Current Lift Style MobilityPLUS Vehicle:

![Current Lift Style MobilityPLUS Vehicle](image)
Region of Waterloo

Transportation and Environmental Services

Transportation Division

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019

File Code: D10-40/GO

Subject: 2019 Cambridge to Toronto (Union Station) GO Train Feasibility Study – Phase 1 Update

Recommendation:

For Information.

Summary

The Regional Municipality of Waterloo, in collaboration with the City of Cambridge, Metrolinx, and MTO is leading a Study to assess the feasibility of providing GO train passenger service from the City of Cambridge to Toronto (Union Station) via Guelph along the Fergus subdivision which is currently owned by the Canadian National Railway company (CN). This Study was structured to be carried out in two phases with Phase 1 meant to carry out high-level analysis while Phase 2 is meant to carry out a more detailed analysis based on the findings from Phase 1. Elements of Metrolinx’s Business Case were adopted in both phases of this Study.

Findings from Phase 1 of this Study showed that providing GO rail service between Cambridge and Toronto (Union Station) along the Fergus subdivision via Guelph is the viable alternative compared to providing GO rail service via the Milton Line extension to Cambridge. This is primarily predicated on ridership potential and travel time savings associated with this route which could be achieved from ongoing investments made by Metrolinx to improve service on the Kitchener GO Line. As key benefits, the Cambridge GO rail service would:

- Connect Cambridge to one of the fastest growing regions in the Province;
• Enhance economic growth and investment potential within the City of Cambridge in specific, as well as the Region in general;
• Leverage investments made in local and regional transit (i.e., ION LRT Stage 2 and Kitchener GO Line corridor respectively);
• Provide opportunities for land-use intensification and transit-oriented development;
• Reduce congestion on the Highway 401; and
• Provide reliability and travel time savings.

Connecting Cambridge to the GO rail network via the Fergus subdivision has a higher degree of constructability and deliverability compared to the Milton GO Line extension given the ability to bypass the need for any negotiations with the Canadian Pacific Railway company (CP). Based on current and future travel patterns, the midline stations along the Kitchener GO Line corridor offer a higher potential to be transformed to key destination stations for future riders compared to midline stations along the Milton Line GO corridor. In terms of future ridership growth potential, this makes providing a passenger rail connection to Cambridge via the Fergus subdivision more attractive than via the Milton GO Line extension.

Some constraints identified in Phase 1 of this Study with the delivery of the service include:

• Integrating the service with the proposed ION Pinebush Station while accounting for existing developments;
• Providing for seamless interaction between freight and passenger trains at the Guelph Junction; and
• Integrating the service at the Guelph GO Station.

Metrolinx is currently undertaking an Initial Business Case (IBC) for two-way all-day service on the Kitchener GO Line which is anticipated to be completed in the near future. Upon its release, the assumptions and ridership forecast developed for Phase 1 of the Cambridge GO Train Feasibility Study will be compared with the findings from the Kitchener GO Line IBC for consistency.

Phase 2 of this Study will include a detailed review of the physical conditions of the rail tracks along the Fergus subdivision, determine the preferred vehicle technology to be used to provide service along the corridor and assess how it will operate, assess GO Station integration at the terminal or transfer stations, and provide a more detailed cost estimate. Phase 2 will commence in July 2019 and is scheduled to be completed by December 2019. With Metrolinx’s planning area being extended to include the Region, findings from this Study will be presented to the Province and Metrolinx to be considered for its Business Case upon its completion.
Report

1. Background

The Regional Municipality of Waterloo (hereinafter referred to as “the Region”), in collaboration with the City of Cambridge, Metrolinx, and Ontario’s Ministry of Transportation (MTO) is leading a Study to assess the ‘feasibility of providing GO train passenger service from the City of Cambridge to Toronto (Union Station) via Guelph along the Fergus subdivision’ (this “Study”). A previous study commissioned by the Region and the City of Cambridge in 2009 assessed the feasibility of extending GO train passenger service to the City of Cambridge (the “2009 Study”). In the 2009 Study, two rail routes assessed as potential options to connect Cambridge to the GO rail network included extending the Milton Line (currently owned and operated by CP) or connecting to the Kitchener GO Line via the Fergus Subdivision Line (currently owned and operated by CN) as shown in Appendix A. Upon detailed analysis, an extension of the Milton Line was determined as the preferred route to support a GO rail connection to Cambridge in terms of travel time and ridership.

Following findings made from the 2009 Study, a study on the Business Case and Implementation Strategy for the preferred rail corridor via the Milton GO Line was done in 2014 (the “2014 Study”) to explore opportunities to deliver the train service with lower investment, assess transit travel markets, and promote a less auto-centric approach to station access and service design. However, significant impediments along the Milton Line, primarily related to the inability to negotiate with CP for service time to operate passenger and freight rail along this section of the Milton rail corridor, prevented the recommendations of the 2009 and 2014 Studies from being carried forward. Hence, this led to Metrolinx leaving service to Cambridge out of its Regional Transportation Plan (RTP) to 2041.

Over the past several years, changes in transportation trends, coupled with an increase in development, have resulted in an increase in travel demand between the City of Cambridge and the Greater Toronto Area (GTA). With Metrolinx carrying out major investments along the Kitchener GO line coupled with failed negotiation attempts with CP to operate passenger rail service along the Milton Line, the Region’s 2018 Transportation Master Plan (TMP) recommended for a study to be carried out to reassess the feasibility of providing GO train passenger service from the City of Cambridge to Toronto (Union Station) via Guelph along the Fergus subdivision. This Study was structured to be completed in two phases as shown in Figure 1. Phase 1 (which is the focus of this report) evaluated new information which has become available since the 2009 and 2014 Studies were completed. This was based on updated data from the 2016 Census and Transportation Tomorrow Survey (TTS), recent developments (e.g., route selection for ION Stage 2, investments on the Kitchener GO line), and recent intensification activities in the City of Cambridge. This information was
used to estimate future ridership, identify potential station areas, and develop service schedules for the potential rail route. Phase 2 will include a detailed review of the physical conditions of the rail tracks and need for grade separation through the Fergus subdivision, assess the type of vehicle technology to be used and how it will operate, discuss GO Station integration at the terminal or transfer stations, and provide a more detailed cost estimate.

The outcome from Phase 1 of this Study was compared against the preferred alternative from the 2009 and 2014 Studies. This report focuses on findings from Phase 1 and discusses how they will be carried forward to Phase 2 of this Study.

**Figure 1: Study Scope**

- Information update
- Ridership forecast
- Station location analysis
- Service scenarios
- High-level cost estimate

- Review track condition
- Assess vehicle technology
- GO Station integration
- Detailed cost estimate
- Business case development

2. **Rationale for Connecting Cambridge to the GO Rail Network**

Providing GO train service to Cambridge would address a number of key issues and provide a number of opportunities to Cambridge as well as to the broader Greater Golden Horseshoe region. This service will have the potential to:

- Fill a service gap in this part of the Province and connect Cambridge to the GTA via a wider regional rail network;
- Address the continuous increase in commuter traffic between Cambridge, Guelph, and the GTA;
- Connect Cambridge to a broader employee market in areas such as science and technology needed to support economic development;
- Enhance network connectivity by leveraging provincial investments made on the Kitchener GO Line;
• Leverage investments made by the Region to connect area municipalities with ION LRT;
• Support local Transit-Oriented Development (TOD) in Cambridge and Guelph;
• Attract skilled workers from the GTA to affordable housing in Cambridge; and
• Provide a consistent and reliable travel time to the GTA and reduce auto-congestion on Highway 401.

3. Stakeholders Involvement

The Region is leading this Study in collaboration with the City of Cambridge, the City of Guelph, the Township of Guelph/Eramosa, Wellington County, MTO, and Metrolinx. Four progress meetings were held at key milestones during Phase 1 which were attended by Regional staff, as well as representatives of Metrolinx and the City of Cambridge. Additional meetings and teleconferences were held with MTO, the City of Guelph, Township of Guelph/Eramosa, and Wellington County to communicate the Study progress and findings. Additional inputs received will be considered in Phase 2 of this Study.

4. Study Findings – Phase 1

4.1 Potential Location for GO Station in Cambridge

A total of five locations were shortlisted and evaluated as potential candidate location for a GO Rail Station in Cambridge. A list of these stations is presented in Appendix B.

The Metrolinx Business Case Manual and a review of published business cases were used to develop evaluation criteria to assess the attractiveness of each of the above locations by walking/cycling, transit and auto (vehicle). Based on the high-level assessment, the Pinebush ION Station location emerged as the location with the most potential for a future GO Rail Station in Cambridge. This location ranked highest for the following reasons:

• Its close proximity to Highway 401 could attract ridership from commuters located west of Cambridge;
• Its integration with the future Stage 2 ION LRT Station would provide for high connectivity potential to various destinations;
• It provided for a relatively short travel time to Guelph based on proposed service via the Fergus Subdivision to connect to the Kitchener GO Line;
• Its close proximity to residential areas and amenities makes it accessible through active modes of transportation; and
• It provides for a high short-term potential for intensification and redevelopment based on the policy review and anticipated direction of the Hespeler Road Corridor Secondary Plan.
Although space for parking is limited at the Pinebush ION Station, structured parking could be explored as part of transit-oriented development. The need for parking will be examined further in Phase 2 of this Study. Appendix C provides an overview of the existing conditions and catchment area for the proposed Pinebush GO Station.

4.2 GO Rail Service Scenarios and Operations

The ridership expected on a future passenger GO rail service between Cambridge and Toronto (Union Station) via the Fergus subdivision will depend on the competitiveness of the GO train’s service levels relative to other modes of travel. Today, GO rail services between the Kitchener GO Station and Toronto (Union Station) are slow with an average journey time taking over two (2) hours. However, growing congestion on Highway 401 coupled with continuous investments made along the Kitchener GO Line were considered in developing realistic travel times for the proposed GO rail service between Cambridge to Toronto (Union Station) shown in Appendix D. These service scenarios were used to perform the ridership forecast for this Study. Achieving the travel times in Appendix D would require the use a low-cost operating rail technology system that could provide reasonable performance and deliver good passenger service.

Freight service currently operating along the Fergus subdivision and the Guelph Junction (where the rail via the Fergus subdivision connects to the Kitchener GO Line) were identified as constraints to the smooth operation of a GO rail service along the Fergus subdivision.

Phase 2 will review operations at the Guelph Junction with the addition of a passenger rail service between Cambridge and Guelph in concurrence with passenger rail service operated by GO rail and VIA rail between Kitchener and Guelph, and freight activity.

4.3 Ridership Forecast

The ridership forecast for this Study was developed following a similar methodology used to develop the ridership forecast in the 2009 Study and the 2014 Study. The forecast was developed to represent a spectrum between a conservative ridership scenario (“Low” forecast) and an optimistic ridership scenario (“High” forecast).

Daily ridership to and from Cambridge was forecasted to add between 850 (“Low”) and 1,352 (“High”) passengers to the Kitchener GO Line by 2026, growing to between 1,201 and 1,934 passengers in 2031 with the introduction of two-way, all-day GO service on the Kitchener Line. By 2041, with continued growth in population and employment, increasing congestion on the Highway 401 corridor and improvements in travel time on the passenger rail service, daily ridership was forecasted to grow to between 1,889 and 3,129 passengers.

Appendix E shows the midline stations along the Cambridge to Toronto (Union Station) corridor via Guelph. Although the majority of the trips will be destined to Toronto (Union Station).
Station), the City of Guelph was identified as another major destination that will attract more trips than any other midline station along the rail corridor between Cambridge and Toronto (Union Station). The Guelph GO Station was estimated to have a higher than typical share of trips than any other midline station origin-destination pair on the corridor due to its proximity to Cambridge as well as the transit-supportive nature of its surrounding environment. This further signifies the strategic importance of this rail corridor to connect the innovation, employment and education hub between the Region of Waterloo, City of Cambridge, City of Guelph, and the rest of the GTA.

A summary of the estimated ridership between Cambridge and other “key” midline stations is shown in Appendix F. The ridership forecast did not account for future midline stations planned along the Kitchener GO Line that could generate additional passengers such as the planned Woodbine Station or serve as transfer stations to other major destinations such as the Pearson Airport.

4.4 GO Rail Service Deliverability and Constraints

Here are some caveats that will need to be addressed prior to the deliverability of the GO rail service between Cambridge and Guelph via the Fergus subdivision:

- The ridership catchment area for the proposed Pinebush ION Station may overlap with that of the planned Breslau GO Station in Kitchener; however, it is anticipated that the form and function of the two Stations will differ, with the Breslau Station catering more to commuters requiring parking space and the Cambridge Station being more oriented towards urban/transit based commuters. The status of the Breslau GO Station is unknown at this time due to the recent shift in Metrolinx’s direction towards a market-driven approach requiring municipalities and private sector partners (“third parties”) to lead the development of new stations or redevelopment of existing stations;
- The development of the proposed Pinebush GO Station and the lands around it to support transit-oriented development would be dependent on market potential and availability of ‘third parties’ to fund the development of the station as per Metrolinx’s new station delivery model;
- Metrolinx is currently undertaking an Initial Business Case (IBC) for two-way all-day service on the Kitchener GO Line which is anticipated to be completed in the near future. Upon its release, the assumptions and ridership forecast developed for Phase 1 of this Study may need to be compared with the findings from the Kitchener GO Line IBC for consistency and alignment and refined in Phase 2 if necessary; and
- Service along the Fergus subdivision into the Guelph GO Station and the proposed Pinebush ION Station will require more detailed study to investigate how the platform will accommodate the new service given the space constraints.
at the station. A review of operations between freight and passenger trains in the Guelph Junction will also be required.

- A suitable rail technology to provide service along the Fergus subdivision other than the traditional 12 car locomotive trains used by GO will need to be determined.

5. Financial & Economic Considerations

The cost estimates for Phase 1 of this Study were based on financial and economic considerations.

5.1. Financial Considerations

5.1.1. High-level Cost Estimate

The Metrolinx Business Case Guidance along with ‘rule-of-thumb’ methodology was applied to estimate the cost for Phase 1 of this Study.

The capital cost for the track improvements required to be done on the Fergus Subdivision was estimated between $80 million and $85 million. This estimate includes the cost for reasonable investments required to upgrade the rail and track components, lights/gates, crossings, signals, bridge, rolling stock, and maintenance and storage facility. A summary of the costs is presented in Appendix G. The cost of developing the proposed Pinebush GO Station in Cambridge was also included in the capital cost estimate.

A high-level operation and maintenance cost estimate of the track, train-sets, and rail infrastructure was estimated at $10-20M per year. This estimate depends on service specification and design, and captures a spectrum of opportunities for service delivery.

5.1.2. Revenue Forecast

Passenger revenue forecasts were developed using the fare from the Kitchener GO Station as a proxy for service to/from the proposed Pinebush GO Station in Cambridge. An average fare considering distance and concession type was calculated to/from each station on the Kitchener GO Line and applied to the ridership forecast.

As shown Figure below, the service is anticipated to generate between $1.7 and $2.7 million dollars by 2026, growing to between $6.8 and $10.7 million by 2041 due to ridership growth.
5.2. Economic Considerations

The potential economic impact of providing a passenger rail service to Cambridge was estimated in terms of direct benefits to the end-user and economy as well as other indirect (external) benefits/impact to society and the wellbeing of future users. The year 2050 was used as the horizon year to estimate the economic impact of the service given it takes approximately 25 years for the economic impact of such an investment to be fully realized.

5.2.1. Transportation User-Benefits

For simplicity, the transportation user-benefits for Phase 1 of this Study were estimated based on accident reduction benefits, travel time savings, auto operating cost savings, and service reliability benefits. These estimates are summarised in Appendix G.

Based on the “Low” and “High” ridership forecast, it was estimated that providing GO rail service to connect Cambridge to the GO network could achieve travel time savings amounting to a Net Present Value (NPV) of between $32M and $36M by 2050. In addition, a reduction in vehicle kilometers travelled (VKT) could potentially result in an auto operating cost savings with an NPV between $70M to $80M and an accident reduction cost savings amount to $4M - $5M by 2050.

For Phase 1 of this Study, the reliability benefits of the proposed GO rail service
Cambridge was assumed to be equal to the benefits gained from the travel time savings.

5.2.2. Wider Economic Benefits

A new GO rail service to Cambridge would bring wider economic benefits to the City of Cambridge, the Region, and its neighbouring municipalities as a whole in the areas of economic growth and productivity, enhanced connectivity, and housing affordability as discussed below:

- **Economic Growth & Productivity:** Providing GO service to Cambridge would enhance the Waterloo-Toronto “innovation corridor”, provide residents with a reliable and efficient alternative to travel, and attract more skilled workers to the area. In addition, this connection will also enhance mobility between Cambridge and Guelph, by taking advantage of their population and employment growth to create new investment opportunities in the local economies;

- **Enhanced Connectivity:** As of date, Highway 401 remains the primary gateway between City of Cambridge and the GTA. The extension of GO service to Cambridge would enhance connectivity which could bring about the potential for development of new employment markets or expansion of existing markets in the domain of technology, education, and manufacturing; and

- **Housing Affordability Benefits:** The extension of GO rail service to Cambridge with reliable rail service and reasonable travel times could help shape the land-use within the region as a whole and improve accessibility to affordable housing for residents of Southern Ontario. Housing affordability is presented here as a qualitative measure only. A quantitative contribution to benefits was not included in Phase 1 of this Study.

A typical rail project such as the one proposed in this Study could achieve wider economic benefits of approximately 20-30% of the transport-user benefits based on industry standard. This was estimated to be between $20M and $35M as shown in Appendix G.

5.2.3. External Impacts

The external impacts of providing GO rail service to Cambridge are as follows:

- **Environment:** The short term environmental impacts of introducing a new GO service along the Fergus Subdivision would be related to construction of the track and station facility in Cambridge. These impacts would be further explored through a future Environmental Assessment process. In the longer term, the key benefits considered from an environmental standpoint include:
  - Reduction in Greenhouse Gas (GHG) Emissions;
The impact on local air quality as a result of the new service would stem from air emissions from trains during service operation. A net benefit would be expected based on the potential savings in vehicle kilometres travelled (VKT) from converted automobile users who will switch to transit; and

Noise: The Fergus subdivision runs largely through commercial areas and employment lands, with a limited number of sensitive noise receptors adjacent to the corridor north of Highway 401. Hence, provisions for noise mitigation measures will be limited other than around areas in proximity to the proposed Pinebush GO Station where there may be residential developments.

Social Wellbeing: Recent surveys completed as part of the Region’s 2018 TMP revealed that residents of Cambridge are four times more likely to commute to the GTA compared to residents in Kitchener or Waterloo. Providing a GO rail service to Cambridge will help reduce their burdens from driving and improve their wellbeing. As mentioned earlier, a GO rail service would have the potential to shape land-use by providing for more intensification which could help encourage the use of sustainable modes of travel such as walking, cycling, or public transit.

The Net Present Value (NPV) of the estimated economic benefits considering a conservative (“Low”) versus an optimistic (“High”) ridership scenario by 2050 is shown in Appendix G. The low ridership scenario could result to a NPV in economic benefits of about $159M, while the high ridership scenario could result to a NPV in economic benefits of about $194M.

6. Comparison with the Milton Line Extension Alternative

The 2009 Study reviewed the feasibility for extending GO rail passenger service to Cambridge and determined it was more feasible to connect Cambridge to the GO rail network via the Milton GO Line extension as opposed to using the rail connection via the Fergus subdivision. The 2014 follow-up Study evaluated several scenarios to achieve this connection via the Milton GO Line extension and provided more detailed estimates for capital and operating costs, as well as ridership and revenue forecasts for the 2021 and 2031 horizon years.

Table 1 below illustrates a comparison between findings from Phase 1 of this Study and the 2014 Study based on ridership potential, revenue, and capital cost estimates. The comparison was based on ridership forecast for the 2031 horizon year only given it is the only consistent horizon year between the 2014 Study and this Study update. Furthermore, the comparison does not include economic considerations as they were assumed to be about the same for the purpose of this analysis.

Findings in Table 1 show that connecting Cambridge to Toronto (Union Station) via the...
Fergus subdivision is a viable alternative in terms of ridership and annual revenue compared to the preferred alternative via the Milton extension presented in the 2014 Study. The annual revenue for Phase 1 of this Study assumed weekend service with an 85% reduction in daily ridership during the weekend, an aspect that wasn’t considered in the 2014 Study.

Providing a GO rail service between Cambridge and Toronto (Union Station) via the Fergus subdivision will not only serve trips destined to Toronto but will present an opportunity to connect passengers to other future midline stations which have the potential to develop to key destination stations serving areas such as the Pearson International Airport employment area, or other education and leisure areas.

By contrast, the potential for service improvements on the Milton Line are limited, as it offers less other midline destinations to future passengers other than Toronto (Union Station). Moreover, the ongoing challenges with negotiating for GO Rail service delivery on the Milton Line due to the ownership of the rail track by CP further enhances the viability and deliverability potential of service via the Fergus subdivision.

**Table 1: Comparison between Fergus Subdivision versus Milton Line – 2031 Horizon Year**

<table>
<thead>
<tr>
<th>Route</th>
<th>Daily Ridership</th>
<th>Annual Ridership</th>
<th>Annual Revenue</th>
<th>Capital Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Via Fergus Subdivision (2019 Study)</td>
<td>1,203</td>
<td>1,933</td>
<td>321,900</td>
<td>517,300</td>
</tr>
<tr>
<td>Phase 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Via Milton (2014 Study)</td>
<td>790</td>
<td>1,548</td>
<td>192,000</td>
<td>376,200</td>
</tr>
</tbody>
</table>

7. Next Steps

Findings from Phase 1 of this Study indicated that providing GO rail passenger service between Cambridge and Toronto (Union Station) via the Fergus Subdivision would be feasible in terms of ridership, travel time, and other factors providing a rationale for further analysis and assessment to be carried out.

Phase 2 of this Study will review in detail the physical conditions of the rail tracks along the Fergus subdivision, identify a vehicle technology to be used to provide service along
the corridor, and assess how it will operate. Furthermore, Phase 2 will evaluate how the proposed GO rail line between Cambridge and Guelph would be integrated with the Kitchener GO line and other planned rail services, assess station integration at terminal and transfer stations, and identify how various intercity travel options may impact or compete with the potential GO rail service between Cambridge and Toronto (Union Station). Finally, the financial implications of investments such as the capital and operation and maintenance costs of providing passenger rail service between Cambridge and Toronto (Union Station) via Guelph through the Fergus subdivision will be further quantified in Phase 2 of this Study. Phase 2 will commence in July 2019 and is scheduled to be completed by December 2019. With Metrolinx’s planning area being extended to include the Region, findings from this Study will be presented to the Province and Metrolinx to be considered for a Business Case upon its full completion.

Corporate Strategic Plan

Connecting Cambridge to Toronto (Union Station) with GO rail service via the Fergus subdivision is directly related to the following strategic objectives under the Thriving Economy and Sustainable Transportation Focus Areas:

- Plan for and provide the infrastructure and services necessary to create the foundation for economic success: and
- Improve inter-city rail transportation services to and from Waterloo Region.

Financial Implications

The estimated cost for Phase 1 of the GO Train feasibility study is approximately $100,000. The Province had committed to cost-sharing (50%) of the eligible study costs to a maximum of $50,000. Regional staff continues to work with MTO to establish a transfer payment agreement to recover this cost. The remaining costs were approved to be funded as part of the Cambridge Transit Supportive Strategy (CTSS) (Report PDL-CPL-18-14 / TES-TRS-18-10; March 20, 2018). Phase 2 of this Study has an approximate cost estimate of $100,000 and it will be funded entirely through the approved CTSS costs.

Other Department Consultations / Concurrence

The Region’s Planning, Development & Legislative Services Department was involved in this Study.
Attachments

Appendix A – Potential Passenger Rail Corridor Connections from Cambridge (2009 Feasibility Study)

Appendix B – Shortlisted Candidate Station Locations and External Auto Catchments

Appendix C – Existing conditions and catchment area for the Pinebush Station

Appendix D – Midline Stations

Appendix E – Ridership forecast

Appendix F – Cost Estimates

Prepared By: Tabot Eneme, Transportation Planning Engineer

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Appendix A – Potential Passenger Rail Corridor Connections from Cambridge (2009 Feasibility Study)

- Kitchener to Guelph Approx. 22.5 km
- Guelph to Georgetown Approx. 33.8 km
- Cambridge to Guelph Approx. 21 km
- Cambridge to Milton Approx. 43.5 km
- Milton to Toronto (Union Station) Approx. 48.3 km
- Georgetown to Toronto (Union Station) Approx. 46.7 km
Cambridge to Union Station Rail Connection and Surrounding GO Network
Appendix B – Shortlisted Candidate Station Locations and External Auto Catchments

![Map of Cambridge showing候选站点和外部自动接线图。]
Appendix B - Potential GO Station locations in Cambridge

<table>
<thead>
<tr>
<th>Station Location</th>
<th>Location Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preston Alternative</td>
<td>This station would be located at the proposed Stage 2 ION Station north of Eagle Street North and west of Speedsville Road</td>
</tr>
<tr>
<td>Pinebush ION Station</td>
<td>This station would be located at the proposed Stage 2 ION Station on Hespeler Road, south of Pinebush Road/Eagle Street North</td>
</tr>
<tr>
<td>Hespeler Village</td>
<td>This station would be located along the rail corridor at Guelph Avenue north of Hespeler Village downtown</td>
</tr>
<tr>
<td>Preston at Bishop</td>
<td>The station would be located along the rail corridor at Bishop Street North close to downtown Preston</td>
</tr>
<tr>
<td>Delta ION Station</td>
<td>The station would be located at the proposed ION Station north east of Hespeler Road and Dundas Street North</td>
</tr>
</tbody>
</table>
Appendix C – Existing Conditions and Catchment Area for the Pinebush Station
### Appendix D – GO Train Service Scenarios – Cambridge to Toronto (Union Station)

<table>
<thead>
<tr>
<th>Service Level</th>
<th>Base Year</th>
<th>2026</th>
<th>2031</th>
<th>2041</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peak period</td>
<td>Peak period</td>
<td>Two-way all-day</td>
<td>Two-way all-day</td>
</tr>
<tr>
<td>Travel Time (minutes)</td>
<td>129</td>
<td>106</td>
<td>99</td>
<td>88</td>
</tr>
<tr>
<td>Cambridge to Guelph</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Transfer**</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Guelph to Toronto (Union Station)</td>
<td>99</td>
<td>76</td>
<td>69</td>
<td>58</td>
</tr>
<tr>
<td># of trains in AM peak period</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Travel Time Improvement relative to</td>
<td>-</td>
<td>17%</td>
<td>23%</td>
<td>32%</td>
</tr>
<tr>
<td>the Base Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Service Improvements along the       | N/A        | Track Electrification Equipment Improvements | Further improvements to tracks, signal system, and operation above and beyond improvements made by 2026 | Wide spread adoption of Electric Multiple Units (EMU) above and beyond improvements made by 2031 |
| Kitchener GO Line corridor           |            |                                             |                                                                                           |                                                                                           |

*2016 was assumed as the Base Year to correspond with the most recent TTS data

**Includes five minute transfer and five minute transfer penalty
Appendix E – Midline Stations - Toronto Bound
### Appendix F – Ridership Forecast

Ridership Forecast - Toronto (Union Station) Bound (AM Peak and Daily)

<table>
<thead>
<tr>
<th>Final Station</th>
<th>2016 (Baseline)</th>
<th>2026</th>
<th>2031</th>
<th>2041</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM Peak</td>
<td>Daily</td>
<td>AM Peak</td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Key Mid-line Stations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guelph</td>
<td>1</td>
<td>1</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Acton; Georgetown</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brampton Stations (Mount Pleasant, Brampton, Bramalea)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Malton (to Airport)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>West Toronto (Etobicoke North, Weston, Bloor)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Toronto (Union Station)</strong></td>
<td>103</td>
<td>103</td>
<td>191</td>
<td>297</td>
</tr>
<tr>
<td><strong>Total Ridership</strong></td>
<td>107</td>
<td>107</td>
<td>216</td>
<td>344</td>
</tr>
</tbody>
</table>
## Ridership Forecast - Cambridge Bound (AM Peak and Daily)

<table>
<thead>
<tr>
<th>Final Station</th>
<th>2016 (Baseline)</th>
<th>2026</th>
<th>2031</th>
<th>2041</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM Peak</td>
<td>Daily</td>
<td>AM Peak</td>
<td>Daily</td>
</tr>
<tr>
<td>Key Mid-line Stations</td>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Guelph</td>
<td>N/A</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Acton; Georgetown</td>
<td>N/A</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Brampton Stations (Mount</td>
<td>N/A</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Pleasant, Brampton, Bramalea)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malton (to Airport)</td>
<td>N/A</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>West Toronto (Etobicoke North</td>
<td>N/A</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Weston, Bloor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toronto (Union Station)</td>
<td>N/A</td>
<td>103</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Ridership</td>
<td>N/A</td>
<td>107</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Total Ridership (Includes Reverse Commute)

<table>
<thead>
<tr>
<th>Final Station</th>
<th>2016 (Baseline)</th>
<th>2026</th>
<th>2031</th>
<th>2041</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM Peak</td>
<td>Daily</td>
<td>AM Peak</td>
<td>Daily</td>
</tr>
<tr>
<td>Key Mid-line</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Stations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guelph</td>
<td>1</td>
<td>2</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Acton;</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Georgetown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brampton</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Stations (Mount Pleasant, Brampton, Bramalea)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malton (to Airport)</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>West Toronto (Etobicoke North, Weston, Bloor)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Toronto (Union Station)</td>
<td>103</td>
<td>206</td>
<td>191</td>
<td>297</td>
</tr>
<tr>
<td>Total Ridership</td>
<td>107</td>
<td>214</td>
<td>216</td>
<td>344</td>
</tr>
</tbody>
</table>
Appendix G – Cost Estimates

Capital Costs Breakdown Summary Table

<table>
<thead>
<tr>
<th>Rail and Track Component</th>
<th>Cost/Unit</th>
<th>Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Mainline (km)</td>
<td>$1,000,000</td>
<td>18</td>
<td>$18,000,000</td>
</tr>
<tr>
<td>Track – Siding (each)</td>
<td>$1,000,000</td>
<td>1</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Lights/Gates (each)</td>
<td>$350,000</td>
<td>11</td>
<td>$3,850,000</td>
</tr>
<tr>
<td>Redo Crossing</td>
<td>$500,000</td>
<td>11</td>
<td>$5,500,000</td>
</tr>
<tr>
<td>CTC Signalization Mainline (Low density) (km)</td>
<td>$125,000</td>
<td>18</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>CTC Signalization Siding (each)</td>
<td>$1,200,000</td>
<td>1</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Hespeler-Speed River Bridge Repair</td>
<td>$600,000</td>
<td>1</td>
<td>$600,000</td>
</tr>
<tr>
<td>Rolling stock, storage facility, track work in Guelph, Pinebush GO Station</td>
<td></td>
<td></td>
<td>$25,000,000</td>
</tr>
<tr>
<td>Hard Costs</td>
<td></td>
<td></td>
<td>$57,400,000</td>
</tr>
<tr>
<td>Contingency (30%)</td>
<td></td>
<td></td>
<td>$17,220,000</td>
</tr>
<tr>
<td>Hard Costs (with Contingency)</td>
<td></td>
<td></td>
<td>$74,620,000</td>
</tr>
<tr>
<td>Soft Costs</td>
<td></td>
<td></td>
<td>$8,000,000</td>
</tr>
<tr>
<td>TOTAL CAPEX</td>
<td></td>
<td></td>
<td>~$85M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($82,620,000)</td>
</tr>
</tbody>
</table>
Economic Impact/Benefits – Summary (in $ millions)

<table>
<thead>
<tr>
<th>Variables – Economic Benefits</th>
<th>Low Ridership Scenario</th>
<th>High Ridership Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident Reduction Benefits</td>
<td>$4M</td>
<td>$5M</td>
</tr>
<tr>
<td>Green House Gas (GHG) Emissions</td>
<td>$0.5M</td>
<td>$1M</td>
</tr>
<tr>
<td>Time-Travel Savings</td>
<td>$32M</td>
<td>$36M</td>
</tr>
<tr>
<td>Auto Operating Costs Savings</td>
<td>$70M</td>
<td>$80M</td>
</tr>
<tr>
<td>Sub-total</td>
<td>$106.5M</td>
<td>$123M</td>
</tr>
<tr>
<td>Wider Economic Benefits (20 – 30% of transportation user benefits)</td>
<td>~$20M</td>
<td>~$35M</td>
</tr>
<tr>
<td>Reliability Benefits</td>
<td>$32M</td>
<td>$36M</td>
</tr>
<tr>
<td>Total</td>
<td>~$159M</td>
<td>~$194M</td>
</tr>
</tbody>
</table>
Region of Waterloo
Transportation and Environmental Services
Water Services

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019 File Code: E13-40

Subject: P2019-10 Aerobic Biosolids Management Contract

Recommendation:

That the Regional Municipality of Waterloo accept the proposal of JTC Group Limited for Aerobic Biosolids Management Contract for a three (3) years and four (4) months term at unit rates of $4.97/m³ and $7.97 /m³ (excluding all applicable taxes) for biosolids haulage and biosolids land application, respectively, as detailed in Report TES-WAS-19-13 dated June 18, 2019.

Summary:

The current Aerobic Biosolids Management Program includes haulage, land application and/or disposal of aerobic biosolids generated at Hespeler, Conestoga, St. Jacobs, Wellesley, Heidelberg, Foxboro, New Hamburg and Ayr Wastewater Treatment Plants (WWTPS).

This program is essential as services provided through this contract are critical for the continuous and efficient operation of the Region’s smaller and rural wastewater treatment facilities. The new aerobic biosolids management program will optimize the haulage, reprocessing, and disposal of aerobic biosolids.

The Request for Proposals (P2019-10) for Aerobic Biosolids Management Program was advertised in the Record, on the Ontario Public Buyers Association Website and on the Region’s Purchasing website on Tuesday April 9, 2019. Four proposals for this assignment were received by the Region. The selection process was completed in accordance with the Region’s selection policy and Purchasing By-law. Upon a review of the proposals and upset fee costs, the project team recommends that JTC Group
Limited be retained to undertake this assignment at unit rates of $4.97 /m³ and $7.97 /m³ (excluding all applicable taxes) for biosolids haulage and biosolids land application, respectively. It is normal practice to base the biosolids management contracts on unit rates ($/m³) as the volumes of handled aerobic biosolids vary due to fluctuating flows, environmental and seasonal conditions. The actual annual cost of this contract will be based on the volume of biosolids processed.

Report:

Background

The Regional Municipality of Waterloo (Region) is responsible for providing wastewater treatment services to the seven municipalities within its boundaries. The wastewater facilities are owned by the Region and are currently operated and maintained by the Ontario Clean Water Agency (OCWA).

Kitchener, Galt, Waterloo and Preston Wastewater Treatment Plans (WWTPs) process approximately 80% of the Region’s total wastewater flow. Remaining 20% of the wastewater flow is treated at a number of smaller and rural wastewater treatment plants. Biosolids, a by-product of the wastewater treatment process is stabilized either through anaerobic or aerobic digestion.

Currently, anaerobic biosolids generated at Kitchener, Waterloo, Galt and Preston WWTPs are managed by the Region through a separate contract with Revolution Environmental Solutions LP.

Biosolids generated at the remaining smaller Regional WWTPs are currently either aerobically digested and land applied on agricultural land or hauled to other plants for further processing and disposed through the anaerobic program.

This new aerobic biosolids management program will include Hespeler, Conestoga, St. Jacobs, Wellesley, Heidelberg, Foxboro, New Hamburg and Ayr WWTPS. The services provided through this program include biosolids haulage, land application and/or disposal. These services are critical for continuous and efficient operation of our wastewater treatment facilities.

Both biosolids management contracts are set to expire on December 31, 2021. This allows the Region to align contracts with potentially implementing recommendations outlined in the recently completed Region of Waterloo Biosolids Master Plan.

Scope of work

The scope of this contract is to implement an Aerobic Biosolids Management Program which includes:
1) haulage of aerobic biosolids from Hespeler, Conestoga, St. Jacobs, Foxboro, Wellesley and Heidelberg WWTPs to either New Hamburg WWTP, Waterloo WWTP, Galt WWTP, Manitou Wastewater Residual Management Centre or combination of thereof for further processing;

2) management of biosolids from New Hamburg and Ayr WWTPs through haulage and either disposal or application to agricultural land during spreading season.

Ongoing upgrades at Hespeler WWTP include sludge thickening and will result in the decreased volumes of sludge to be hauled from this facility. These upgrades are expected to be completed by summer 2021. The anticipated annual cost of the aerobic biosolids management contract is expected to decrease after the upgrades are completed since the actual annual cost of the contract is based on the actual volume of biosolids processed. The contract was therefore separated into two phases: phase 1 (before sludge thickening) and phase 2 (after sludge thickening).

Contractor selection

The Request for Proposals (P2019-10) for Aerobic Biosolids Management Program was advertised in the Record, on the Ontario Public Buyers Association Website and on the Region’s Purchasing website on Tuesday April 9, 2019.

The Region received four (4) proposals as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wessuc Inc.</td>
<td>Brantford, ON</td>
</tr>
<tr>
<td>Revolution Environmental Solutions LP d/b/d Terrapure Organics Solutions</td>
<td>Burlington, ON</td>
</tr>
<tr>
<td>JTC Group Limited</td>
<td>Tillsonburg, ON</td>
</tr>
<tr>
<td>Bartels Environmental Services Inc.</td>
<td>Ancaster, ON</td>
</tr>
</tbody>
</table>

Proposals were opened in the presence of T. Reay, T. Bellamy and A. Perrin.

Evaluation of the contractor’s submissions was conducted by the Region’s Project Team:

- T. Bellamy, Senior Project Engineer, Engineering and Wastewater Programs, Water Services
- D. Celmer – Repin, Project Engineer, Engineering and Wastewater Programs, Water Services
The proposals were evaluated in accordance with the Region’s selection policy and the Region’s Purchasing By-law in order to select the contractor offering the best overall value to the Region. The evaluation criteria and their respective weightings were as follows:

Quality Factors (70%)
- Description of proposed aerobic biosolids program (35%)
- Equipment & Infrastructure Availability (15%)
- Company and Team Profile (20%)

Price Factor (30%)
- Estimated Annual Cost (30%)

All submitted proposals demonstrated good understanding of the program, capable project teams and experience with similar projects. After the project team finalized the evaluation of the Proposals, the price envelopes were opened and overall scores, including the Price Factor, were calculated. The JTC Group Limited submission received the highest overall score, with the lowest estimated annual cost. Based on the evaluation, the project team recommends that JTC Group Limited be retained to undertake this assignment.

Schedule

Subject to Council’s approval of this report, the proposed schedule is for 3 years and 4 months, commencing on September 1, 2019 and ending December 31, 2022.

Corporate Strategic Plan:

The Aerobic Biosolids Management Program supports the Corporate Strategic Plan Focus Area 1: Environmental Sustainability; and Strategic Objectives to protect the quality and quantity of our drinking water sources.
Financial Implications:

<table>
<thead>
<tr>
<th>Estimated Annual Cost (phase #1)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency (due to fluctuation of volumes)</td>
<td>$ 75,000</td>
</tr>
<tr>
<td>Sub-total</td>
<td>$ 564,500</td>
</tr>
<tr>
<td>Plus: Applicable net HST of 1.76%</td>
<td>$   9,900</td>
</tr>
<tr>
<td>Total</td>
<td>$ 574,400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Annual Cost (phase #2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency (due to fluctuation of volumes)</td>
<td>$ 75,000</td>
</tr>
<tr>
<td>Sub-total</td>
<td>$ 307,000</td>
</tr>
<tr>
<td>Plus: Applicable net HST of 1.76%</td>
<td>$   5,400</td>
</tr>
<tr>
<td>Total</td>
<td>$ 312,400</td>
</tr>
</tbody>
</table>

Note: all figures are rounded to the nearest $100

The contract was separated into two phases: phase 1 before sludge thickening and phase 2 after sludge thickening.

It is normal practice to base the biosolids management contracts on unit rates ($/m³) as the volumes of handled aerobic biosolids vary due to fluctuating flows, environmental and seasonal conditions. At the unit rates of $4.97 /m³ and $7.97 /m³ for biosolids haulage and biosolids land application, respectively; the estimated annual cost for the contract is $574,400 (phase #1) and $312,400 (phase #2). The actual annual cost associated with this operating contract will reflect the actual biosolids volumes produced and managed throughout the duration of this contract. Due to the variability in flows and corresponding biosolids produced a $75,000 contingency has been added.

The approach for this operational contract was approved under the 2018 Biosolids Master Plan. The 2019 budget for the aerobic biosolids management contract was established at $580,000. Future operating budgets will be prepared accordingly to reflect the changes in the volumes of the sludge managed under this contract.
Other Department Consultations/Concurrence:
Corporate Services, Treasury Services (Procurement)

Attachments
Nil

Prepared By: Dominika Celmer-Repin, Project Engineer, Engineering and Wastewater Programs, Water Services

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
Region of Waterloo
Transportation and Environmental Services
Waste Management

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 18, 2019   File Code: E20-40
Subject: Blue Box Program Update

Recommendation:
For Information

Summary:
In April 2019, Committee was apprised of the Ministry of Environment, Conservation and Parks’ (MECP) discussion paper on Reducing Litter and Waste in Our Communities (TES-WMS-19-01). Once enacted, this legislation will have significant impact on our recycling collection, processing and other waste reduction and diversion programs. As well, China’s 2018 decision to ban the import of international recycling resulted in tough competition for markets and only quality, well-sorted recyclables are attracting buyers. There has been significant media attention on the recycling industry, with well-founded concern on the turbulent markets for collected materials. This report provides an update on our blue box program, our ability to find end markets for the materials we collect, litter reduction efforts, and the expected impacts of the pending provincial legislation.

Report:

Background

The blue box program is known worldwide, and began as a pilot in the city of Kitchener in 1981. Over the years, municipalities have adopted various curbside collection methods, including blue boxes, grey boxes, large carts, or clear plastic bags, as well as sorting practices that are either single-stream (all materials mixed together in one container) or two-stream (usually containers and fibres collected in separate blue boxes).

While many municipalities have transitioned to single-stream collection, the Region of
Waterloo (Region) maintains a two-stream system. Initially, residents are encouraged to sort recyclables into two separate blue boxes, curbside collection crews further sort the materials into the collection trucks, and a final sort is done at the materials recycling centre. With today’s stringent quality requirements for recyclable materials, the quality control of two-stream programs can bring the best available price per tonne despite the challenging marketplace.

The materials collected in the Region’s blue box program has expanded over the years. From the early 1990s, the Province mandated the following material which are still in force today:

- Glass bottles and jars
- Old newsprint and telephone books
- #1 PET plastic bottles
- Aluminum food/beverage cans
- Steel food/beverage cans

In subsequent years, the Region added additional materials that are generally accepted in most recycling collection programs across urban Ontario and where sustainable end markets exist and include:

- Old corrugated cardboard
- Boxboard (cereal, cracker and shoe boxes)
- Household fine paper, magazines, and catalogues
- #2, #3, #4, #5, #6 and #7 plastic bottles, jugs, tubs and lids
- Plastic film shopping bags
- Aluminum foil trays and wrap
- Empty paint cans, empty aerosol cans
- “Gable top” food and beverage cartons and TetraPak food and beverage drink boxes

Waterloo Region citizens continue to actively participate in recycling and other diversion programs such as the green bin. In 2018, this resulted in a residential diversion rate of 65%, which is one of the highest municipal diversion rates in the province for similar sized municipalities.

Market impacts

For many years, China accepted approximately half of the world’s recyclables, and re-sorted and re-processed them into higher value individual material types for re-use in products to export around the world. As the world’s biggest recyclable materials market, China’s 2018 decision to abruptly ban international recyclables created a noticeable
supply glut in the rest of the industrialized world. This has resulted in a corresponding significant drop in revenue paid for blue box materials.

Many municipalities, particularly those with single-stream collection have had greater challenges to find markets for their materials as the mixed material stream becomes difficult to cleanly sort. This ultimately results in reduced quality of marketable products and affects their ability to find buyers and/or maximize pricing.

While we also have seen a reduction in revenue, the impacts observed so far have been limited in comparison to a number of other municipalities. This is due to the Region’s two-stream recycling process together with the extensive sorting efforts of citizens, collection crews and our processing sites, resulting in much cleaner recyclables that are easier to market. As shown in the following graph, regardless of the present market issues, volatility in recycling markets (both tonnage and revenue) has always been observed.

Due to the high quality and value of our recyclables, typical end destinations for our recyclables are processors or final end markets within Ontario and Quebec, as well as the Northeastern United States. As part of our process, we audit downstream destinations as best as possible and retain the transporter’s end destination bill of lading. With the exception of contamination (residue) that is collected in blue boxes, the Region does not landfill collected recyclable materials. Of note, the Region’s current residual rate ranges from between 6 and 8 per cent which is considered very good.

Ensuring citizens understand what does and does not go into the blue box as well as proper sorting into two blue boxes is vital to our programs continued success. Staff engage and educate citizens through various media, including print, radio, calendars, community events, social media, our mobile app, and our education program for school children.
Litter reduction

Litter on roadways and on public and private property has been a consistent challenge for citizens and municipalities for decades. Each year’s snowmelt exposes litter that has accumulated over the winter months, prompting citizen and community cleanups every spring. Certain locations are hot spots for accumulating litter, creating unsightly views and unhappy citizens who tire of the constant clean up on their properties. While legislation has not yet been finalized, it appears the Province will take a leadership role in raising litter awareness and strengthening existing community litter programs. They intend to develop and implement a comprehensive strategy, including a day of action on litter, support for community-based cleanups, and a province-wide messaging and education program.

It is recognized that the blue box program contributes to litter, largely due to wind and inclement weather that overturns boxes and blows materials onto neighbourhood roads and properties. Lightweight plastics, now more common in the blue box, easily blow around. Overfilled boxes and boxes perched insecurely on snowbanks also contribute to litter. Over the years, a number of mitigation options such as blue box lids and net style covers have been trialed by municipalities to help contain litter. Few municipalities have formally implemented them into their programs. Recently, the Region of Niagara undertook a review that outlined some of the challenges, which include:

- Increased time per stop for collection crews to remove the lids/nets safely
- Lids/nets blow away with windy weather; become entangled
- Boxes can be overfilled and removal of the nets causes material to spill out
- Covers can freeze in the winter time
- Each lid style fits a particular box; there are multiple box styles out in the community
- Lids/covers are generally not available at retail stores

Many municipalities have also transitioned to a cart based, single stream collection program (no sorting and all materials are placed in one large cart), which does reduce litter. However, single stream collection affects the quality of the recyclables, has higher levels of non-recyclable material, and increases processing costs, often with residue rates in the 20 to 25 per cent range. For comparison, and as mentioned previously, the Region’s residue rate is typically between 6 and 8 per cent.

Some municipalities have the ability to process recyclables in clear plastic bags to contain overflow materials when the blue box is full. For the Region, this presents significant challenges for our two-stream sort requirements, and collection issues increase when non-recyclable material is identified in the bag. The entire bag must be stickered and left behind. As well, a debagging system and increased resources would be required at the Region’s recycling centre.
To raise awareness of litter issues, the Region engages in several initiatives:

- Actively promotes options for litter reduction at the curb through various media channels, including the annual waste calendar, social media, and flyers (see flyer, Attachment A)
- Promotes anti-litter messaging such as “The Only Cure for Litter is You”; maintains the CureLitter website (www.curelitter.ca)
- Supports area municipal and community-lead spring litter cleanups through the provision of CureLitter garbage bags and gloves, and radio and media coverage
- Oversees the Adopt-A-Road program on Regional roads
- Introduced larger “containers-only” blue boxes to prevent overfilling
- Delivers wind related flyers in neighbourhoods identified as litter hot spots, and in response to citizen requests

Area municipalities also actively participate in and offer litter cleanups and provide citizen support.

Concluding remarks/next steps

The province has identified that transitioning to full extended producer responsibility (EPR) is one of the most critical components to focus on to achieve the best outcomes consistent with their discussion paper. With a producer responsibility framework for recycling, costs are shifted off of the taxpayer and onto producers who have more control over the types of products put into the marketplace, and how the products are managed at end-of-life. The Region supports this direction.

Although the province has not yet identified details related to transitioning, they recently announced that a special advisor has been retained to provide a report that is expected to provide advice on how best to improve recycling through the blue box program and better manage plastic pollution. Key public policy objectives identified as part of the report include standardizing and expanding the list of materials collected for recycling across the province, maintaining or improving the frequency of blue box collection and provision of a process/timeline to implement full producer responsibility. This report has been requested to be submitted to the Minister of MECP no later than July 20th, 2019. A copy of the Minister’s mandate letter is included as Attachment B.

At this time, staff has not pursued any changes or additions to the blue box collection program due to the pending regulation changes. Staff will continue to actively promote clean and sorted blue box practices with citizens, as well as maintain support for anti-litter behaviour through messaging and support for municipal and community based litter clean-ups. As further direction on EPR and litter reduction is provided by the province, staff will report back to Committee as required.
Corporate Strategic Plan:

This Report has been prepared consistent with the Corporate Strategic Objective of Environment and Sustainable Growth, particularly 3.1 Increase the amount of waste diverted from the landfill.

Financial Implications:

There are no immediate financial implications at this time. As mentioned previously, staff will continue to monitor further developments and provide updates to Committee accordingly.

Other Department Consultations/Concurrence: Nil

Attachments:

A: Region of Waterloo, Flyer – Blue Box preparation – windy weather

B: Minister of MECP, Mandate Letter - Special Advisor

Prepared By: Susan White, Manager, Waste Collection & Diversion

Mike Ursu, Manager, Waste Management Operations

Approved By: Thomas Schmidt, Commissioner, Transportation and Environmental Services
June 7, 2019

Dear Mr. Lindsay,

I would like to express my appreciation to you for agreeing to volunteer to help the people of Ontario and their government tackle the serious problem of plastic pollution, a key commitment in the Made-in-Ontario Environment Plan.

Ontario families take pride in doing their part for the environment. Ontarians are leaders in Canada in reducing greenhouse gas emissions and our own city of Kitchener was the birthplace of the world’s first Blue Box program. Knowing this, I was disappointed to learn that, while Ontario families do their part by diligently sorting their recycling, government and industry are failing them.

Today, Ontario’s recycling rates have been stalled for 15 years and up to 30% of what is put into blue boxes is sent to landfill. Some of Ontario’s plastic litter and waste is being shipped across the ocean to the Philippines and Malaysia. Meanwhile, plastic and other litter is increasingly plaguing our parks, highways, rivers and lakes.

This is unacceptable—both industry and government must do better.

It is for these reasons that I look forward to you providing me with advice on how to improve recycling through the Blue Box Program and better manage plastic pollution.

In addition, I ask that your work be guided by the following public policy objectives:

- Standardization across the province of what can be recycled in offices, parks, public spaces and homes;
- Improve diversion rates and increase what materials can be recycled;
- Reduce litter and waste in communities and parks;
- Improve Ontario’s Blue Box program by requiring producers to pay for the recycling of the products they produce, through achieving producer responsibility; and
- Maintain or improve frequency of Blue Box collection.
- When increasing diversion in the residential sector, consider how these policies can also enable diversion in the institutional, commercial and industrial sector.

.../2
Your work will consist of two roles: a mediation role where you, as an impartial mediator, will foster discussion and help producers, municipalities and other stakeholders to move closer to or reach agreement on key issues; and an advisory role, where you will provide me with advice on how these issues may be best addressed to ensure Ontario’s recycling system is more consistent, reliable and cost-effective for Ontarians.

To assist you in this work, I have also requested a jurisdictional review on how leading jurisdictions are employing innovative technologies to improve recycling efficiency and diversion rates for you to consider.

The current Blue Box Program has been in place since the 1980s and had great early, world-renowned success in recovering residential printed paper and packaging for recycling. In recent years, however, waste diversion rates have stalled in Ontario and been surpassed in other provinces. Meanwhile the costs to operate the program are rising.

While many countries used to take our recycled material, they are increasingly shutting their doors. In 2018, China launched "National Sword", a policy which bans the importation of many recycled plastics and other materials – including from Ontario. This has resulted in increased recycling costs, increased material being sent to landfill, and more plastic litter and waste in our communities.

Mandating producer responsibility will allow for a province-wide obligation for producers to pay for and manage their materials. It will also allow for a single common list of what can be recycled across the province. This system is a cost-effective and accountable way to promote innovation and to make sure that Ontarians' efforts to recycle are more effective, resulting in increased recycling and diversion rates.

At the conclusion of your work, please provide me with a report that outlines where the parties reached agreement and your recommendation on how to address any outstanding issues by July 20, 2019.

Thank you again for volunteering your time to help government and industry live up to the expectations of Ontarians when it comes to plastic pollution and recycling.

Regards,

Rod Phillips
Minister
Region of Waterloo

Transportation and Environmental Services

Waste Management

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019  File Code: E20-40

Subject: Single Use Plastics Strategy

Recommendation:

That the Regional Municipality of Waterloo request that the Federal and Provincial
governments continue to take steps to regulate and limit the production and use of single
use plastics and that Report TES-WMS-19-05 be submitted to Environment and Climate
Change Canada and the Ministry of Environment, Conservation and Parks. [TES-WMS-
19-05]

Summary: Nil

Report:

At the April 9th Planning & Works committee meeting, committee endorsed report TES-
WMS-19-01 (Reducing Litter and Waste in Our Communities: Discussion Paper
Comments) for formal submission to the Ministry of Environment, Conservation and Parks (MECP). Committee also passed a resolution asking staff to investigate
mechanisms, including by-laws, for the possible banning of single use plastics in the
Region of Waterloo. This report is in response to committee’s resolution.

Over the past several decades there has been an increasing trend towards products and
packaging made of different types of plastics that are used once and then thrown away.
The increase in single use items is driven by a number of factors such as convenience
for consumers, food safety and security and, marketing and branding. The most
common single use plastics found in the environment include plastic bags, plastic water
bottles, cups and other drink containers, cup lids, drinking straws, stir sticks, cutlery,
plates and fast food take-out containers. These are products that are typically viewed as
disposable material rather than a valuable resource.
Although the Region’s current blue box recycling program does accept many single use plastics such as plastic beverage bottles and plastic grocery/retail bags, limitations on processing equipment and the lack of sustainable end markets does not allow for recycling of other single-use plastics such as plastic straws and take-out food containers. These single use items are ultimately disposed of in landfill and is done without the assistance of producers of these products or other levels of government with costs being borne by residents. Even with advanced recycling systems, Canada only captures 11 per cent of plastic for recycling leaving the rest for disposal. Improper disposal can result in contamination of waterways with plastics ending up in lakes and rivers from storm water runoff through rivers or streams, or litter blown directly into the waterways.

Some municipalities have undertaken efforts to enact local by-laws, however, producer impacts are global in nature and therefore, action on a national scale (or at least provincially) is required for any meaningful or substantive impact. To this end, the Region supports recent announcements by both the Federal and Provincial governments that are intended to address the issue of single-use plastics. Specifically, the Federal government announced their intention to consider a ban on single–use plastics across Canada by 2021 (at the earliest), while the Provincial government announced that they had retained a special advisor to foster discussion and provide a report by July 20th, 2019, that will help develop a path forward for transition of the Blue Box program to full producer responsibility. Although no specific details on either of these initiatives has yet been provided, continued collaboration with other provinces, territories and the Federal government through organizations such as the Canadian Council of Ministers of the Environment (CCME) is recommended. This would enable a harmonized approach to policy development aimed at better management of plastic waste across all levels of government.

As an example, and similar to other jurisdictions internationally, the federal and provincial governments should consider a combination of policy directives and targets including:

- the creation of incentives for improved product design through the implementation of extended producer responsibility including requiring producers to be financially and operationally responsible for the materials they provide to market;
- options to incentivize the use of secondary materials over virgin material through tools such as deposit return, tax incentives and/or green procurement practices;
- ensure mechanisms are in place to support facilities to process the collected materials and reuse them as an input to another product that can be marketed and used;
- encourage collaboration amongst all levels of government and the private sector to achieve the discontinuation of single use plastics, where alternatives are available; and,
- raising consumer awareness aimed at modifying consumption and littering habits, and encouraging the use of environmentally friendly products.
Reducing the prevalence of single use plastics in the environment has gained global attention leading many national governments to initiate efforts to reduce the use of single use plastics and increase the capture of plastics for recycling. The Region is encouraged that both the federal and provincial governments have identified plastic waste as a priority issue and are actively consulting on actions with further strategy/policy announcements expected over the next several months. Given the global scale of business, national and provincial initiatives to reduce single-use plastic waste are more effective, easier to implement and better-received than individual municipal actions. A national and provincial approach also ensures accommodations are in place for people with disabilities who may rely on single use plastics such as drinking straws.

Based on the above, it is staff’s recommendation that the Region continues to support federal and provincial efforts to develop policies and action plans to regulate and limit the production and use of single-use plastics in Canada.

**Corporate Strategic Plan:**

This Report has been prepared consistent with the Corporate Strategic Objective of Environment and Sustainable Growth, particularly 3.1 Increase the amount of waste diverted from the landfill.

**Financial Implications:**

There are no immediate financial implications at this time. As mentioned previously, staff will continue to monitor further developments and provide updates to Committee accordingly.

**Other Department Consultations/Concurrence:** Planning, Development and Legislative Services

**Attachments:** Nil

**Prepared By:** Jon Arsenault, Director, Waste Management Division

**Approved By:** Thomas Schmidt, Commissioner, Transportation and Environmental Services
Region of Waterloo
Planning, Development and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019

File Code: D16-60

Subject: Regional Official Plan Review

Recommendations:

1. That the Regional Municipality of Waterloo establish a Steering Committee as described in Report PDL-CPL-19-25, and appoint three Regional Councillors to the Steering Committee; and,

2. That the Regional Municipality of Waterloo authorize the holding of a special meeting of Council related to the Regional Official Plan Review in accordance with the requirements of the Planning Act on September 18, 2019 to identify any revisions of the Regional Official Plan, as outlined in Report PDL-CPL-19-25.

Summary:

An Official Plan for the Region of Waterloo is required under the Provincial Planning Act. It functions as a legal document, guiding the growth and development of the community. Section 26 of the Planning Act requires that official plans be reviewed at least every five years to ensure they conform with provincial plans, have regard to matters of provincial interest in accordance with the Planning Act and are consistent with provincial policy statements. The Regional Official Plan (ROP) is being reviewed in order to bring it into conformity with A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019 (Growth Plan) and to be consistent with the 2014 Provincial Policy Statement (PPS).

This report seeks to establish a Steering Committee to provide high level input, leadership and strategic direction on the ROP Review. The Steering Committee will include the Regional Councillors, Commissioners and Directors. This report is also seeking Council’s authorization for staff to hold a special meeting of Council related to the
Regional Official Plan Review.

Report:

The ROP is the Region of Waterloo’s guiding document for directing growth and change to 2031. The current ROP was adopted by Regional Council in June 2009 and came into effect in June 2015 upon approval by the former Ontario Municipal Board. Since that time, there have been a significant number of changes to provincial legislation, policies and plans including:

- Provincial Policy Statement, 2014,
- Planning Act changes through Bill 73, Smart Growth for Our Communities Act, 2015,
- Places to Grow: Growth Plan for the Greater Golden Horseshoe, 2017, and
- A Place to Grow: Growth plan for the Greater Golden Horseshoe, May 16, 2019

Section 26 of the Planning Act requires that official plans be reviewed at least every five years to ensure they conform with provincial plans, have regard to matters of provincial interest in accordance with the Planning Act and are consistent with provincial policy statements. The ROP is being reviewed to bring it into conformity with A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019 (Growth Plan) and to be consistent with the 2014 Provincial Policy Statement.

Scope of the ROP Review

The vision, goals and objectives of the ROP continue to be relevant and provide a strong foundation to guide the Region’s growth and development. The scope of the review is to update the ROP to conform to the Growth Plan and to be consistent with the PPS (2014). An essential component of the review will be to plan for forecasted growth to 2041 while maintaining existing protections such as the Countryside Line, the Protected Countryside, the Regional Recharge Area and the Environmentally Sensitive Landscapes.

The ROP review is based upon the principle of integrated growth management, meaning that planning for growth is integrated with planning for complete communities, infrastructure and public services facilities. The work required will be generally be undertaken in an iterative manner.

Framework for Regional Official Plan Review

The ROP review is being completed in four phases as outlined below and illustrated in Attachment No. 1. Regional staff will report to Council during each phase to present the technical work completed; share highlights of public and stakeholder engagement including what was heard and how the input being received has been incorporated into the review; and seek direction as appropriate.
Phase 1: How have we grown?

The first phase includes background work and data collection. It examines how the region has grown over the past decade and reviews the key social, demographic and economic trends affecting the region.

Phase 2: How do we want to grow?

The second phase includes the technical analysis of the data and background work and the development of strategies (noted below), land needs assessment, ROP policies review and mapping of the Provincial Agricultural System and Natural Heritage System. Components of phase 2 include:

Urban Structure

The Growth Plan provides policy direction to ensure that growth occurs in a socially, fiscally and environmentally sustainable manner. It emphasizes the need to concentrate growth in settlement areas. One of the first tasks of the review will be to establish an Urban Structure (formerly Planned Community Structure) to determine a hierarchy of settlement areas and prioritize where within settlement areas forecasted growth will be directed. Components of the Urban Structure include the Urban Area, Township Urban Areas, Major Transit Station Areas, Urban Designated Greenfield Area and the Prime Industrial/Strategic Reserve lands. In addition, the urban structure usually establishes a hierarchy of nodes and corridors that will identify where intensification should be focused. The Urban Structure will be a key part of evaluating the location of potential settlement area boundary expansions.

Employment Strategy

The Employment Strategy will assess and evaluate employment growth in the Region to 2041, identify and designate employment areas in the Regional Official Plan, establish a minimum density target for employment areas and identify opportunities for intensification of existing employment areas. A key element of the Employment Strategy is the review of existing employment areas and recommendations on which employment areas need long terms protection and areas where conversions to non-employment uses can be considered.

Major Transit Station Areas

Major Transit Station Areas (MTSA) are areas including and around any existing or planned light rail transit station which will be planned to achieve minimum density targets set out by the Growth Plan. Generally, MTSAs will be defined as an area within an approximate 500-800 metre radius of a transit station. Transit Stations associated within the ION will need to be delineated in accordance with Growth Plan standards and will be subject to the Growth Plan’s minimum density target of 160 residents and jobs per 3006077
hectare. The delineation of each MTSA and associated density targets will be undertaken through the Intensification Strategy.

**Intensification Strategy**

The Growth Plan establishes a minimum intensification target for all residential development within the Built Up Area (BUA) of 50%. To support the achievement of this target or assess whether an alternative target is required, the Region and its area municipalities are required to complete an Intensification Strategy. This strategy will assess the capacity of the BUA, including the capacity within the Urban Growth Centres, MTAS and the identification of other Strategic Growth Areas where intensification will be focused.

**Designated Greenfield Area Density Analysis**

The Growth Plan requires that the Region plan for a minimum density target of 50 people and jobs per hectare in the Designated Greenfield Areas (DGA). The DGA Density Analysis will examine the Region’s DGA lands to determine the existing density and the anticipated future density to determine how the Region will meet the minimum required density target.

**Housing Policy Review**

The Housing Policy Review will ensure we plan for the right mix of housing types for over the next 20 years to support housing choice, aging in place opportunities and improved affordability. The Growth Plan requires the Region to establish targets for both affordable ownership and rental housing in alignment with the Region’s 10 Year Housing and Homelessness Plan. Currently, the Region’s Plan is being updated and is targeting this fall for completion.

**Natural Heritage System**

A Natural Heritage System has been mapped by the Province to support a comprehensive, integrated and long-term approach to planning for the protection of the Greater Golden Horseshoe’s natural heritage and biodiversity. Watershed planning is another requirement of the Provincial framework which will further ensure water resources and issues like storm water management are properly addressed. Staff will identify and implement the policies, mapping and definitions of the Natural Heritage System for the Growth Plan into the Regional Official Plan.

A review of the Region’s current mineral aggregate policies will also be undertaken to ensure conformity with the policies of the Growth Plan.

**Agricultural System**
An Agricultural System for the Greater Golden Horseshoe has been identified and mapped by the Province. It has two components: 1. An agricultural land base comprised of prime agricultural areas and rural lands that together create a continuous productive land base for agriculture; 2. An agri-food network which includes infrastructure, services and assets important to the viability of the agri-food sector. Work will be undertaken by Regional staff to identify and align the Region’s policies and mapping with the Provincial Agricultural System.

**Climate Change**

The Growth Plan’s focus on public transit supportive densities, complete communities, multi-modal transportation, complete streets, watershed planning and natural heritage system protection are related to climate change. Climate Change policies will be developed and assessed through the ROP Review.

**Land Needs Assessment**

The Growth Plan requires that municipalities use a standardized Provincial methodology, the Lands Needs Assessment Methodology for the Greater Golden Horseshoe, to assess land needs. The Land Needs Assessment will determine the amount of land required to accommodate population and employment growth forecasted by the Province. The Lands Needs Assessment may also identify whether there are excess lands. Excess lands are lands that are vacant, unbuilt but developable within settlement areas but are in excess of what is needed to accommodate the 2041 growth forecast.

**Phase 3: How do we Get There?**

Building on the results of the strategies, a number of growth scenarios will be developed. This phase will first include the analysis and the evaluation of the growth scenarios, allocations of population and employment growth and allocation of density and intensification targets to the Area Municipalities. Second, this phase will include the consideration and evaluation of any proposed employment land conversions, and third, policy work related to the Natural Heritage System, Agriculture and Climate Change.

A fiscal impact analysis will also be completed to assess the transportation, water and wastewater costs associated with the Provincial forecasts.

**Phase 4: How can the ROP Guide Us?**

This final phase will include the finalization of strategies, the preparation of documentation required by the Growth Plan and the preparation of the ROP amendment.

**Consultation**

3006077  Page 5 of 9
Section 26 of the Planning Act also requires that a special meeting of Council, open to the public, be held to discuss revisions that may be required to the Official Plan. As recommended, this special meeting will occur on September 18, 2019. The Planning Act also requires that at least one open house be held to provide the public with the opportunity to review and ask questions about the information and material available, including the current proposed plan (e.g. the ROP amendment).

Attachment No. 1, the ROP Review Framework, identifies major points of public and stakeholder consultation and target timelines. Key stakeholders, agencies and groups such as the GRCA, School Boards, Waterloo Region Homebuilders Association, Waterloo Federation of Agriculture, Waterloo Region Economic Development Corporation and the broader public will be consulted. While not depicted in the Framework, each phase will also include inter-departmental collaboration, engagement with the Technical Advisory Committee and Area Municipal Working Group and input from the Steering Committee.

The Region is required to consult with Provincial staff throughout the ROP Review process, particularly at key decision points including the delineation of MTSAs and undertaking the Land Needs Assessment. Ultimately, the ROP Review will be implemented through a ROP Amendment which requires approval from the Province.

Steering Committee

It is recommended that a Steering Committee be established to provide high level input, leadership and strategic direction on the ROP Review. The Steering Committee will include the Regional Councillors, Commissioners and Directors. This Committee will meet once during each phase on the ROP Review corresponding to the completion of various phases of work. It is recommended that the Steering Committee include the three Regional Councillors (including one from the Township of North Dumfries, Wellesley, Wilmot or Woolwich), and staff members representing Transportation and Environmental Services (Transportation and Water Services), Community Services (Housing Services), Public Health and Emergency Services (Healthy Living), Corporate Services (Financial Services and Development Financing), Planning Development and Legislative Services (Legal Services and Cultural Services).

Technical Advisory Committee

A Technical Advisory Committee will also be established to provide input on technical tasks at key milestones during the project process. This group will be comprised of Regional staff from various departments, Grand River Conservation Authority staff, and staff from the Ministry of Municipal Affairs. It is recommended that the Technical Advisory Committee include staff members with expertise in the following:
Area Municipal Working Group

A significant level of collaboration with the Area Municipalities is required throughout the ROP Review project. As a result, an Area Municipal Working Group will be established to provide input throughout the project. Planners and technical staff from each of the Area Municipalities will be engaged through this Working Group. It is anticipated that some meetings of the Technical Advisory Committee and Area Municipal Working Group will be held jointly.

Stakeholder Committee

A stakeholder committee will be formed to engage community stakeholders throughout the ROP Review project. Representatives from key stakeholder groups, including Agriculture, Environment/Natural Heritage, the development industry, and the business community will be selected by invitation to participate on the Committee. The Committee will meet during each phase of the ROP Review project.

Corporate Strategic Plan:

The review of the Regional Official Plan meets the Region’s strategic objectives 1.2 (Plan for and provide the infrastructure and services necessary to create the foundation for economic success) and 3.6 (Improve environmental sustainability and livability in intensifying urban and rural settlement areas).

Financial Implications:

The Region’s approved 2019 - 2028 Community Planning Capital Program includes a budget of $1,148,000 in 2019 for the Regional Official Plan Review (project 22007). The costs are to be funded from Development Charges (90%, $1,033,000) and the Community Planning Capital Reserve (10%, $115,000). Should Bill 108 be enacted, this project will become ineligible for Regional Development Charge funding, and accordingly would require funding from the tax levy and/or property tax reserves. It is expected that there will be sufficient funding in the existing RDC reserve funds to cover the growth related portions of 2019 projects that are underway for airport and library.
Other Department Consultations/Concurrence:

Corporate Services (Finance), Community Services (Housing), Transportation and Environmental Services (Water Services and Transportation) and Legal Services staff have been consulted.

Attachments:

Attachment No. 1: Framework for the Regional Official Plan Review

Prepared By: Brenna MacKinnon, Manager, Planning

Approved By: Rod Regier, Commissioner, Planning, Development and Legislative Service
REGIONAL OFFICIAL PLAN REVIEW FRAMEWORK

1. Spring 2019
   - How Have We Grown?
   - Background Work
   - Data Collection
   - Urban Structure
   - Employment Strategy
   - Intensification Strategy
   - Major Transit Station Areas (MTSAs)
   - Designated Greenfield Area Density Analysis
   - Housing Policy Review
   - Land Needs Assessment
   - Provincial Agricultural System Mapping
   - Provincial Natural System Mapping

2. Fall 2019
   - How Do We Want To Grow?
   - Technical analysis is an input into the growth scenarios
   - Preferred growth scenario is used to finalize the technical strategies
   - Iterative Process

3. Winter 2020
   - How Do We Get There?
   - Preferred growth scenario is used to finalize the technical strategies
   - Iterative Process
   - Identification of growth scenarios
   - Evaluation of growth scenarios
   - Identification of Preferred Growth Scenario
   - Allocation of density targets and intensification targets to Area Municipalities
   - Consideration and evaluation of proposed employment land conversions
   - Policy work related to Natural Heritage System, Agricultural System and Climate Change
   - Finalization of strategies
   - Preparation of ROP Amendment

4. Spring 2020
   - How Can the ROP Guide Us?
   - Preferred growth scenario is used to finalize the technical strategies
   - Iterative Process
   - Spring 2019 - Winter 2020
   - Winter 2020 - Fall 2020

   - Steering Committee
   - Technical Advisory Committee
   - Area Municipal Working Group
   - Stakeholder Committee
   - Community Consultation
   - Provincial Check-in

   - How Can the ROP Guide Us?
   - Preferred growth scenario is used to finalize the technical strategies
   - Iterative Process
   - Spring 2019 - Winter 2020
   - Winter 2020 - Fall 2020

   - Steering Committee
   - Technical Advisory Committee
   - Area Municipal Working Group
   - Stakeholder Committee
   - Community Consultation
   - Provincial Check-in
   - Provincial Approval of ROP Amendment
Region of Waterloo
Planning, Development and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: June 18, 2019
File Code: D12-40/KBT/ANN RPT

Subject: Kissing Bridge Trail Lease and Disposition Process and the 2018 Annual Report of the Kissing Bridge Trailway Advisory Committee

Recommendation:

That the Region of Waterloo request that the Province of Ontario:

a) pause the disposition process for Guelph to Goderich Trail lands (including Kissing Bridge Trail lands), and ensure that the corridor remains in public or not-for-profit ownership for public use; and

b) consider a longer lease term when the Region of Waterloo renegotiates the renewal of the Kissing Bridge Trail lease, to provide for greater certainty and to facilitate long-term planning and investment for infrastructure improvements along the Kissing Bridge Trail; and,

That Regional Council accept the Twenty-first Annual Report of the Kissing Bridge Trailway Advisory Board for information. [PDL-CPL-19-26]

Summary:

The Kissing Bridge Trailway (KBT) was jointly created by the County of Wellington and the Regional Municipality of Waterloo and is situated on a section of the former Goderich Guelph Railway line. In 1997, the Region of Waterloo and the County of Wellington obtained a joint lease on the 44.5 kilometre stretch between the City of Guelph and the Village of Millbank for development as a multi-use recreational trailway. This lease is subject to renewal at five-year intervals. The trailway is part of the 148 km Guelph to Goderich (G2G) Trail, a significant tourism and recreational resource.
The KBT makes up the eastern part of a longer rail trail which comprises the entire length of the abandoned CPR rail right-of-way from Guelph to Goderich. The western stretch of the G2G Rail Trail is made up of the Lake Huron Route and the Perth Harvest Trailway. In its entirety, the trail is known as the G2G (Guelph to Goderich) Rail Trail. The G2G Rail Trail began as a concept in 2010 and in 2013, G2G Rail Trail Inc. was formed to spearhead efforts for its completion and to encourage public engagement with the recreational, tourism and economic potentials of the trail. While the trail is currently open from end to end, the final vision is for the trail to be fully accessible along its entire length with parking areas and rest stops at regular intervals.

Recent developments in the Provincial government make it appear that the Province may be in the process of declaring the Guelph to Goderich former railway line lands as surplus. This process could potentially lead to the sale of the lands on which the KBT is located with the resultant loss of this locally and Regionally significant asset.

Staff recommend that the Region request that the Province of Ontario pause the disposition process for G2G Trail lands (including the KBT lands), and ensure that the corridor remains in public or not-for-profit ownership for public use. It is also recommended that the Region request that the Province consider a longer lease term when the Region of Waterloo renegotiates the renewal of the KBT lease, to provide for greater certainty and to facilitate long-term planning and investment for infrastructure improvements along the KBT.

In addition, The Kissing Bridge Trailway Advisory Board is required to report to the Councils of the County of Wellington and the Region of Waterloo each year on its activities. The Board adopted the attached report as its Twenty-first Annual Report for the year 2018 at its February 2019 meeting.

During 2018, the trail steward groups carried out a range of activities including routine maintenance, application of stone dust, tree planting, and generally improving the overall appearance of the trailway. The “Spring on the Trail” event was held for the ninth year and continues to be successful in promoting the trailway and raising funds for the trail. These activities have had a positive impact on the profile and use of the trail, particularly among local residents.

Report:

The KBT which is situated on a section of the former Goderich to Guelph Railway line was jointly created by the County of Wellington and the Regional Municipality of Waterloo. In December 1988, the Canadian Pacific Railway (CPR) was given permission to abandon the right-of-way from Goderich to Guelph. Numerous
petitions were sent to the Inter-Ministerial Association Co-ordinating Committee on Alternative Uses of Abandoned Railway Rights-of-ways by municipalities and interest groups recommending that the right-of-way be preserved for public users. The Regional Municipality of Waterloo and the Counties of Wellington, Perth and Huron all expressed a strong interest in the retention of the right-of-way for future use for a pipeline corridor to carry water from Lake Huron south to the urbanizing areas. Various environmental and recreational groups also expressed interest in maintaining the right-of-way as a corridor for public use. In June 1990, the Province approved the acquisition of the Goderich to Guelph abandoned rail right-of-way by the Ministry of Transportation to protect the long-term use as a pipeline/utility corridor. In the interim period, it was decided appropriate agencies would be allowed to use and manage the corridor under the guidance of the Inter-Ministerial committee.

The Province acquired the right-of-way from CPR in 1994, and in 1997 the Region of Waterloo and the County of Wellington were successful in obtaining a joint lease on the 44.5 kilometre stretch between the outskirts of the City of Guelph and the Village of Millbank for development as a multi-use recreational trailway. This lease is subject to renewal at five-year intervals.

Renewal of Lease and Moving Ahead

The five-year recurring lease agreement (between the Province and the Region and the County of Wellington) for the former railway line on which the KBT is situated is up for renewal in June 2020. While in previous years the lease renewal has been a straightforward process involving review of the terms of the lease and possibly some minor wording adjustments, recent developments in the Provincial government make it appear that the Province may be in the process of declaring the entire length of the former Guelph to Goderich Railway line lands as surplus, which could potentially lead to them selling the land.

If the Province opens up the corridor for direct sales to adjoining property owners, it would be the end of both the KBT and the G2G Trail as an entity as a number of landowners would likely purchase and fence the adjoining property and restrict public access across them. It is not apparent that the costs of such an endeavour in terms of individual sales would result in significant financial returns or administrative savings for the Province.

To avoid the fragmentation of the former railway line, G2G Rail Trail Inc. is looking for avenues that would enable the lands to be kept in public ownership and has approached the municipalities along the corridor (Region of Waterloo, Wellington County, Perth County and Huron County) to explore options. G2G Rail Trail Inc. is
a not for profit group that was formed in 2013 to spearhead efforts for the completion of the trail between Guelph and Goderich and to encourage public engagement with the recreational, tourism and economic potentials of the trail.

The County of Wellington and the Region of Waterloo have been supporting the G2G Rail Trail initiative through their ongoing participation as leaseholders of the former railway lands, maintained as the KBT. Perth and Huron Counties are also supportive of the G2G initiative, but have not sought to become leaseholders. G2G Rail Trail Inc. currently holds the lease for most of the remaining former railway lands in Perth and Huron Counties.

The G2G Trail is a valuable tourism resource, and will continue to increase in importance over time. From a long-term perspective, staff is of the opinion that the corridor should be maintained as a complete linear asset, preferably under single ownership or as a single, long-term lease held by a not for profit organization interested in developing the former railway lines as a recreational and tourism asset with links to the local communities along the length of the trail.

In addition to supporting the long-term viability of the trail, community members have been working to replace missing bridges along the G2G Trail route. The KBT section requires two major bridges to be reconstructed in order to provide an unbroken off-road trail from Guelph to Millbank. Currently, trail users are directed to use nearby road bridges. One bridge would cross the Grand River (north of West Montrose), while the second would cross the Conestogo River south of Line 86 in Wallenstein. The Region’s Transportation and Environmental Services (TES) staff has provided assistance in evaluating the integrity of the existing bridge abutments and piers at both locations. It should be noted that the piers and abutments are owned by the Province and not considered Regional infrastructure.

**Options**

Staff is of the opinion that the Region should express support for the G2G Trail as a provincially significant tourism and recreational asset, and recommend that the Province of Ontario pause the disposition process for G2G lands (including the KBT lands), and ensure that the corridor remains in public or not-for-profit ownership for public use.

If the disposition process is paused or stayed, the Region should request that the Province consider a longer lease term when the Region of Waterloo renegotiates the renewal of the KBT lease. The current lease is subject to renewal at five-year intervals. A longer-term lease would provide for greater certainty and help facilitate long-term planning and investment for infrastructure improvements along the KBT.
As an alternative to the current lease arrangement, staff would support a long-term renewable lease of the full rail corridor by G2G Rail Trail Inc. which would provide both G2G and the Province a more streamlined resource to manage.

If the land is put up for sale, the Region should play a role in supporting an initiative to purchase the asset by an interested and not-for-profit third party such as the G2G Rail Trail Inc. Support could include municipal endorsement of the project, a small amount of matching funding, promotion of fundraising efforts, and/or some in-kind support such as participation by planning or legal staff.

Further discussion among the municipalities along the G2G Trail and consultation with the G2G Rail Trail Inc., as well as the Province are warranted to explore the various options and arrive at an opportunity that would serve to protect the significant asset linking Guelph and Goderich with a 148 km off-road trail available for residents of, and visitors to, this part of the Province, and provide for its long-term management and maintenance.

**Annual Report and Trailway Activities in 2018**

Since 1998, the County and the Region have entered into Trailway Steward agreements with community groups to develop and operate sections of the KBT. Representatives of these groups, as well as some adjacent landowners and representatives from the agricultural community formed the Kissing Bridge Trailway Advisory Board with the mandate to oversee the management and maintenance of the KBT. The Terms of Reference governing the Advisory Board required the Board to report to County of Wellington and Region of Waterloo Councils each year on its activities.

Over the years changes have been made to the stewardship groups with some section realignments and membership changes. Currently, the Advisory Board is made up of representatives from the West Montrose Residents Association, the Lions Club of Elmira, the Linwood and District Lions Club and the Guelph Trail Hiking Club. Several unaffiliated individuals including an agricultural community member and a non-farm landowner fill the remaining seats of the Advisory Board.

At its February 2019 meeting, the board adopted the attached report (Attachment 1) as its Twenty-first Annual Report for the year 2018.

The Trailway Advisory Board met three times in 2018. The meetings focused on activities involving development of infrastructure, encroachments, promotion of trail use and maintenance required to ensure that trail users are provided with a safe and enjoyable experience.
During 2018, all steward groups were busy with routine maintenance activities along the trailway including the application of stone dust, mowing the grasses sides and resting areas, vegetation control including grass mowing, and tree and shrub trimming. At several locations trees were planted to provide shade and improve the aesthetics. Several parking areas were enlarged and/or improved to allow safer access to the trailway. This ongoing work ensures that trail users can use the trailway safely and maintains the overall appearance of the trailway.

The annual “Spring on the Trail” event promotes activities along the length of the trail in order to help to raise the local profile of the trailway. The priority for the event is to raise funds for the two bridges required across the Grand River (near West Montrose) and the Conestogo River (near Wallenstein). While the cost of developing recreational trails can be high, there has been an encouraging increase in private donations over the past three years, due in large part to the “Spring on the Trail” event.

Over the past years, there have been a number of encroachments onto the KBT right-of-way by neighbouring landowners in the Ariss and Elmira areas. Region and County staff continue to work with local land owners to resolve the issue and find a long-term solution that is satisfactory to all parties.

The Trailway Advisory Board anticipates that 2019 will be another busy year along the entire length of the trailway. The enthusiasm generated by the activities of the various steward groups is expected to result in increased overall support for the KBT.

**Area Municipal Consultation/Coordination:**

Staff liaises with the Townships of Wellesley and Woolwich staff as required. The Township of Woolwich Trails Coordinator attends Trailway Advisory Board meetings on a regular basis, and the Mayor of Woolwich is the Regional representative on the Board. A copy of this report will be circulated to Wilmot and Wellesley Township staff.

In addition to coordinating with trails in Woolwich and Wellesley Townships, the Kissing Bridge Trailway is in collaboration with six community groups, the County of Wellington, the Ontario Realty Corporation, the Trans Canada Trail Foundation and the Ontario Trails Foundation.

**Corporate Strategic Plan:**

The Kissing Bridge Trailway is helping to achieve the Sustainable Transportation Focus Area of the Region of Waterloo’s Strategic Focus 2015-2018, as it
addresses Strategic Objective 2.3, “Build infrastructure for, and increase participation in, active forms of transportation (cycling and walking)".

The Kissing Bridge Trailway has been identified as a major bicycle route in the Regional Cycling Master Plan.

Financial Implications:

There is no Regional Budget allocation to the development and operation of the Kissing Bridge Trailway. The Region provides in-kind staff support to the Kissing Bridge Trailway Advisory Board.

Other Department Consultations/Concurrence:

Finance staff has sent municipal receipts to those who made donations to the “Spring on the Trail” event and manage the accounts of the trailway.

Attachments

Attachment 1 – Twenty-first Annual Report of the Kissing Bridge Trailway Advisory Board for the Year 2018

Prepared By: Albert Hovingh, Principal Planner, Environmental and Stewardship

Approved By: Rod Regier, Commissioner, Planning, Development and Legislative Services
Twenty-First Annual Report

of the Kissing Bridge Trailway Advisory Board

for the Year 2018

Submitted to the Councils of

The County of Wellington

and

The Regional Municipality of Waterloo

March 2019
Introduction

In September 1997, the County of Wellington and the Region of Waterloo jointly leased a 44.5 kilometer stretch of abandoned rail right-of-way from the Province for development as a multi-use recreational trail between the outskirts of the City of Guelph and the Village of Millbank. During the winter and spring of 1998, the County and Region concluded Trailway Steward Agreements with five community groups to develop and operate sections of the trailway.

In May 1998, the County and Region jointly approved Terms of Reference for the Trailway Advisory Board, and appointed fifteen persons and four alternate representatives to the Board. Section 1.8 of the Terms of Reference states that the Board "will prepare an annual report to the Councils of the County of Wellington and Regional Municipality of Waterloo on its activities, initiatives, and proposals for the coming year." The twenty-first annual report covers the year 2018.

Figure 1  Kissing Bridge Trailway
The current steward groups and their respective segments are as follows:

**Figure 2** Trail Sections and Respective Steward Groups

<table>
<thead>
<tr>
<th>SECTION</th>
<th>TRAILWAY STEWARD GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand River to Northfield Drive</td>
<td>• West Montrose Residents’ Association Inc.</td>
</tr>
<tr>
<td>Northfield Drive to Wallenstein</td>
<td>• Lions Club of Elmira</td>
</tr>
<tr>
<td>Wallenstein to Linwood (Ament Line)</td>
<td>• Linwood Lions Club</td>
</tr>
<tr>
<td>Linwood to Perth Road 116</td>
<td>• Golden Triangle Snowmobile Association*</td>
</tr>
<tr>
<td>Perth Road 116 to Perth Road 121</td>
<td>• Guelph Hiking Trail Club</td>
</tr>
<tr>
<td>Guelph to Grand River</td>
<td>• Guelph Hiking Trail Club</td>
</tr>
</tbody>
</table>

*Note: The Golden Triangle Snowmobile Association was disbanded in 2018. Trailway Steward Agreements may need to be reviewed as a result of this change.

During 2018 the steward groups all took part in routine trail maintenance activities including application of stone dust, tree planting, bench installation, grass cutting and generally improving the overall appearance of the trailway. The Spring on the Trail event was held for the ninth year and has been successful in promoting the trailway and raising funds for the trail. These activities have had a positive impact on the profile and use of the trail, particularly among local residents.

**Trailway Advisory Board Activities**

Mike Curtis, representative of the Guelph Hiking Trail Club was re-elected Chair of the Advisory Board for 2018 and Derek Kidnie, Linwood and District Lions Club representative, was elected as vice-chair.

The Trailway Advisory Board met three times in 2018. For the most part, the meetings focused on activities involving development of infrastructure, encroachments, promotion of trail use and maintenance required to ensure that trail users are provided with a safe and enjoyable experience.
Trans Canada Trail

A major gap in the Kissing Bridge Trailway continues to be the Grand River near West Montrose in Woolwich Township. The missing bridge results in a significant detour for trail users travelling between Guelph and Elmira and has been identified as a major gap in the Trans Canada Trail in Southern Ontario.

Cost of construction of the bridges is estimated to be approximately $2 million per bridge.

Spring on the Trail

Spring on the Trail is an annual event intended to promote activities along the length of the trail and to help to raise the local profile of the trailway. Each steward group is encouraged to host an activity designed to inform residents and visitors about the Kissing Bridge Trailway and to inspire them to explore the trailway on foot or by bicycle.

Money is being raised from the general public and is helping to make improvements to the Trail. Spring on the Trail has resulted in participation and interest from other community groups who want to make the event a success in their respective communities.

The priority for the event is to raise funds for the two major bridges required across the Grand River (near West Montrose) and the Conestogo River (near Wallenstein).

Trail Maintenance and Enhancement

During 2018, all steward groups were busy with maintenance along the trail including the application of stone dust, mowing along the edges and in resting areas, tree and shrub trimming, tree planting, and bench installation.

This ongoing work ensures that trail users can use the trailway safely and maintains the overall aesthetic appearance of the trail.
Many of the steward groups are engaging in community and memorial tree plantings along the trailway.

**Trailway Encroachment**

Over the past years there have been a number of encroachments onto the trailway right-of-way by neighboring landowners in the Ariss and Elmira areas. Region and County staff continue to work with local land owners. The province would like agreements for encroachments and for crossings.

Crossing agreements will be registered on title of adjoining farms, so that future owners will be aware of the existence of the crossing. There will be a cost associated with each agreement and landowners will have to cover the cost. The crossing agreements will run concurrently with the lease of the trailway and will also need to be renewed.

The ultimate goal of these agreements is to ensure the safety and convenience of trail users while maintaining good relationships with adjoining landowners.

**Finances and funding**

The cost of developing recreational trails can be high. When the Kissing Bridge Trailway was established, it was intended that most of the cost would be borne by the community groups who are jointly developing the trailway. To date, the majority of the funds expended on the trailway have come from the Trailway Steward Groups or private donations. In the past three years, private donations have increased, largely in part due to the Spring on the Trail event.

Regional and County staff provide assistance in a variety of ways to the steward groups including brochure and signage development, clerical support and technical expertise.

**Activities Planned for 2019**

During 2019, Trail Condition Reports will be completed by each of the steward groups. Trailway inspections cover all aspects of the trailway infrastructure including trail
surface, bridges, gates, signage, fencing and vegetation. Conducting the inspection and report regularly enables the steward groups to take the required actions in a timely fashion in order that all trail users will be able to enjoy themselves safely.

Conclusion

The Trailway Advisory Board anticipates that 2019 will continue as another busy year along the entire length of the trailway. The Advisory Board is confident that the enthusiasm generated by the activities of the various steward groups will result in increased overall support for the Kissing Bridge Trailway. The Advisory Board continues its participation in the ongoing development of the G2G initiative and the realization of an approximately 124 km, off-road trail connecting a network of communities across a significant portion of the southern Ontario landscape from Goderich to Guelph.

Respectfully submitted,

Mike Curtis, Chair (2018)
Trailway Advisory Board
February, 2019
Region of Waterloo
Planning, Development and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee
Date: June 18, 2019
File Code: D10-40 (A)

Subject: Proposed Addition to the 2019 Transit Supportive Strategy Implementation Plan for Cambridge - Transportation Demand Management Coordinator Position

Recommendation:

That the Regional Municipality of Waterloo approve funding a Transportation Demand Management Coordinator for the City of Cambridge as part of the 2019 Transit Supportive Strategy Implementation Plan as described in Report PDL-CPL-19-27.

Summary:

Nil.

Report:

As part of the approval for ION implementation in 2011, Regional Council approved an annual allocation of $1,000,000 for a period of ten years to implement a Regional Transit Supportive Strategy (TSS) for Cambridge. The ultimate goal of the TSS is to accelerate the implementation of Stage 2 ION LRT through initiatives that improve transit ridership and/or encourage transit supportive development, specifically within the Central Transit Corridor (CTC) in Cambridge.

The TSS Working Group, which consists of City of Cambridge and Regional staff representatives, recommends projects and develops an annual implementation plan for Regional Council’s consideration. The 2019 TSS Implementation Plan was approved by Regional Council in May 2019 (Report: PDL-CPL-19-19/TES-TRS-19-09).

As part of previous TSS Implementation Plans a Transportation Demand Management
(TDM) Coordinator for the City of Cambridge was funded from 2014-2018 at a total cost of $308,000. This position assisted City and Regional staff to further develop, implement, monitor and report on TSS activities, and to support transit station area planning. While the TDM Coordinator provided valuable support for the TSS, there were ongoing discussions between Region and City staff about the need to establish a permanent position funded by the City. Cost-sharing options were discussed; however at the time of the 2019 Implementation Plan, there was no commitment from the City to eventually fund a full time position and it was not included as part of the Plan.

The City has indicated that it now intends to fund the TDM Coordinator position in 2020. In an effort to transition this position into the City budget, City of Cambridge Staff have requested that the Region of Waterloo cost-share this position using Transit Supportive Strategy (TSS) funds. The request seeks Regional funding for the remaining 6 months of 2019 (July 1, 2019 to December 31, 2019) at a cost of approximately $50,000 and half of the cost of the salary for 2020 (January 1, 2020 to December 31, 2020) at a cost of approximately $50,000, for a total amount of approximately $100,000 which includes wages and benefits.

Given the City’s commitment to eventually fund the TDM Coordinator position and its role implementing transit supportive activities and projects approved through the TSS, Regional staff recommend that Council approve this addition to the 2019 TSS Implementation Plan using available and unspent TSS funds.

**Corporate Strategic Plan:**

The TSS aligns with the 2015-2018 Corporate Strategic Plan. This addition to the 2019 Implementation Plan supports Focus Area 2: Sustainable Transportation and several key objectives of the Community Building Strategy.

**Financial Implications:**

The Region’s 2019-2028 Transit Services Capital Program includes a budget of $1,600,000 for Cambridge Transit Initiatives (Project # 67010) to be funded from the RTMP Reserve Fund (100%). Since 2012, the TSS has been used to support 27 transit related initiatives in the City of Cambridge. To date, Regional Council approved a total of $7,000,000 and actual expenses totalled $5,941,000.

A total of $57,000 was unallocated in the 2019 TSS Implementation Plan which would cover the requested funds for this position in 2019. There are sufficient funds to cover the request in 2020 based on approved commitments to future TSS initiatives.

**Other Department Consultations/Concurrence:**

Staff from Planning, Development and Legislative Services, Transportation and Environmental Services including Grand River Transit, Rapid Transit, Transportation Services.
Planning, and Corporate Services along with City of Cambridge Staff continue to be involved with the development, implementation, administration, and monitoring of the Transit Supportive Strategy for Cambridge.

Prepared By: Peter Ellis, Principal Planner, Community Planning

Approved By: Rod Regier, Commissioner, Planning, Development and Legislative Services
<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>09-Apr-19</td>
<td>K. Redman</td>
<td>Banning of single use plastics</td>
<td>Waste</td>
<td>May-19</td>
</tr>
<tr>
<td>28-May-19</td>
<td>S. Strickland</td>
<td>Low Income Fare Recommendations</td>
<td>Transit Services</td>
<td>Aug-19</td>
</tr>
</tbody>
</table>