Report: E-14-029

Region of Waterloo

Transportation and Environmental Services

Design and Construction

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

Date: March 4, 2014 **File Code:** C04-30**,** 7087

Subject: **River Road Extension, King Street to Manitou Drive, Kitchener, Class Environmental Assessment – Recommended Design Concept**

Recommendation:

That the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for the River Road Extension, King Street to Manitou Drive, in the City of Kitchener:

a) Approve the preliminary design for construction of the River Road Extension as described in Report E-14-029, dated March 4, 2014;
b) Direct staff to file the Notice of Completion for this Class Environmental Assessment Study by means of advertisements in the local newspapers and mailings to adjacent property owners, tenants, and agencies, and place the Environmental Study Report on the public record for a period of 30 days.

Summary:

The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study for the River Road Extension from King Street to Manitou Drive in the City of Kitchener. The study limits as shown in Appendix “A” include Fairway Road to the north, Wabanaki Drive to the south, Manitou Drive to the west and King Street to the east.

The initial stages of this Class EA study were completed as the South Kitchener Transportation Corridor Study (SKTCS). The purpose of the SKTCS was to develop alternative transportation planning solutions, including the establishment of potential new transportation corridors, to provide additional east-west mobility in South Kitchener for people and goods movement. During the initial phases of the SKTCS, the Project Team reviewed existing traffic operations and expected future traffic operations within the study area. This revealed that large areas of the existing road network in the study

area are currently congested during peak periods, including Fairway Road, Manitou Drive and King Street East at River Road. In addition, the intersections and mid-block sections along Fairway Road within the study area are among some of the worst locations in the Region for collisions. After extensive public consultation and technical studies to assess the traffic operations and environmental impacts, the Project Team identified the River Road Extension from King Street to Manitou Drive as the Preferred Planning Solution for this project. The entire SKTCS process and the resulting Preferred Planning Solution, identified as Alternative 4C, were detailed in Report P-06-071 and approved by Regional Council in July 2006.

In April 2007, following an advanced species survey conducted in the winter of 2007, the presence of Jefferson Salamanders, an Endangered Species, was confirmed in the Hidden Valley. In 2010, the Ministry of Natural Resources determined the Regulated limits of the Jefferson Salamander habitat within the Hidden Valley forest area.

There has been extensive public consultation undertaken as part of this project, including several reports to Regional Council, a stakeholder workshop and six Public Consultation Centres (PCC's), including special meetings with residents of the Stonegate Drive neighbourhood. One of the key issues raised by the public during this Class EA was primarily related to potential negative effects on the natural environment within Hidden Valley.

Although the Alternative Design Concept 4C would not encroach upon the Regulated Jefferson Salamander Habitat, the public continued to raise concerns about the impacts of Design Concept 4C on a high-quality mature woodlot adjacent to the Regulated Habitat which is likely used as dispersal habitat by the endangered salamanders. At a Regional Council meeting on October 5, 2011, the Project Team was directed by Regional Council to review the additional alternative design concepts recently provided by the public and in particular, to investigate any new Highway 8 configurations that could move River Road away from the mature woodlot just south of Hidden Valley Road near Highway 8. In response to the request by Regional Council, the Project Team developed a new Alternative Design Concept 5. Design Concept 5 is similar to Concept 4C except that it includes a tighter curve on the Highway 8 bridge that pulls River Road away from the mature woodlot. Although Design Concept 5 would cost approximately $5 million more to construct than Design Concept 4C, it would reduce the impact to the mature woodlot by 35%. As a result, the Project Team strongly believes that Design Concept 5 is a significant improvement over Design Concept 4C in addressing any potential for negative effects on Jefferson Salamander dispersal. Alternative Design Concept 5 was presented to the public at the PCC held on October 1, 2013 and at the Public Input Meeting on December 3, 2013.

In addition to the concerns about Hidden Valley, the residents of the Stonegate Drive neighbourhood expressed concerns about how Stonegate Drive would be connected to River Road, and what effects that connection would have on non-local traffic "infiltrating" through their neighbourhood. In response to those concerns the Project Team has developed and recommended a combination of full access to and from Stonegate Drive from the proposed River Road Extension with closure of the existing King Street intersection except for right-turns from King Street into Stonegate Drive.

Based on a review of all public consultation to date and all relevant technical information, the Project Team has identified Alternative Design Concept 5 as the Recommended Design Concept for this project. Plans showing the alignment and configuration of Preferred Design Concept 5 are included in Appendix "M". The estimated cost of Recommended Design Concept 5 is approximately $72 million which is projected to be fully funded from Regional Development Charges.

Report:

1. Background:

General Information

The Region of Waterloo is undertaking a Municipal Class Environmental Assessment (EA) Study for the River Road Extension from King Street to Manitou Drive in the City of Kitchener. The study limits as shown in Appendix "A" include Fairway Road to the north, Wabanaki Drive to the south, Manitou Drive to the west and King Street to the east.

The study area also includes the Hidden Valley natural area. This Class EA Study is being directed by a Project Team consisting of staff from the Region of Waterloo, City of Kitchener, Grand River Conservation Authority (GRCA), Ministry of Natural Resources (MNR), Ministry of Transportation Ontario (MTO), Regional Councillors Claudette Millar, Jean Haalboom, and Jim Wideman, and City of Kitchener Councillors John Gazzola and Berry Vrbanovic.

South Kitchener Transportation Corridor Study

The initial stages of this Class EA study were completed as the South Kitchener Transportation Corridor Study (SKTCS). The purpose of the study was to develop alternative transportation planning solutions, including the establishment of potential new transportation corridors, to provide additional east-west mobility in South Kitchener for people and goods movement. During the initial phases of the SKTCS, the Project Team reviewed existing traffic operations and expected future traffic operations within the study area. This revealed that large areas of the existing road network in the study area are currently congested during peak periods, including Fairway Road, Manitou Drive and King Street East at River Road. Fairway Road between Manitou Drive and King Street is heavily congested during peak periods with intersections at Wilson Avenue, King Street and the Highway 8 ramp terminals operating at or near capacity with current traffic volumes. In addition, the intersections and mid-block sections along this stretch of Fairway Road are among some of the worst locations in the Region for collisions. Fairway Road is identified as an important link in the Region's road network that is critically overloaded, partly due to its connection to Highway 8. The prime objective of this Class EA identified by the Project Team was to reduce delays and collisions on the corridors within the study area.

The initial tasks of the SKTCS required development of high-level alternative planning solutions to address the problems identified. The resulting alternative planning solutions included the following:

- Do nothing;
- Improvements to all or some of the corridors in the surrounding road network;
- Increased transit use on Fairway Road to reduce total vehicle volumes; and
- Creation of a new 4-lane road parallel to Fairway Road with a new interchange with Highway 8.

In order to evaluate the Alternative Solutions, extensive Natural Heritage studies assessed the types of plants and animals that exist within two large environmental areas within the study area: the Hidden Valley and the Schneider Creek Valley.

After extensive public consultation and technical studies to assess the traffic operations and environmental impacts, the Project Team identified the River Road Extension from King Street to Manitou Drive as the Preferred Planning Solution for this project. The entire SKTCS process and the resulting Preferred Planning Solution, identified as Alternative 4C, were detailed in Report P-06-071 and approved by Regional Council in July 2006.

Other Transportation Studies

The need for Transportation improvements in this study area have also been clearly established in the following transportation studies:

- 1981 River Road Extension Route Location and Feasibility Study;
- 1994 Fairway Road/River Road Traffic Study;
- 1999 and 2010 Regional Master Transportation Plans (RTMP); and
- 2014 Regional Active Transportation Master Plan (ATMP).

The new Region Transportation Master Plan (RTMP), completed in 2010, confirmed the need for the River Road Extension. The River Road Extension would complete the transportation network in Kitchener by offering a new east-west corridor alternative that would assist in the continued development in the Kitchener area. The Fairway Road corridor traffic growth would be reduced with the introduction of the River Road Extension as an alternative. Highway 8 access would be improved and future operational improvements at the Fairway Road interchange would be delayed or eliminated. The River Road Extension would delay or eliminate the need to widen King Street from Highway 8 to Fairway Road (including the Freeport Bridge over the Grand River). The River Road Extension would also delay the need for any longer term improvements on Manitou Drive (including the reconstruction of the railway bridge). The corridors of King Street through the Sportsworld Drive area and Homer Watson Boulevard would also see some benefit from the River Road Extension because of the additional highway access and reduced traffic growth.

River Road Extension

Following Council's approval of the SKTCS recommendation of Alternative 4C for the River Road Extension, the Project Team then developed and assessed various alternative design concepts for the River Road Extension, including various road cross sections, intersection designs, bridge crossing alternatives over Highway 8 and

Schneider's Creek and various Highway 8 interchange configurations.
During this study phase, some members of the public requested that further investigations be conducted to determine the presence of a threatened species in the Hidden Valley area, namely the Jefferson Salamander. In April 2007, following an advanced species survey conducted in the winter of 2007, the presence of Jefferson Salamanders in the Hidden Valley was confirmed. Once the presence of Jefferson Salamanders was confirmed in Hidden Valley, the River Road Extension Class EA study was put on hold to allow field studies to be undertaken to determine the extent of the Jefferson Salamander population in Hidden Valley.

In 2010, the Ministry of Natural Resources (MNR) determined the Regulated limits, under the Endangered Species Act (ESA), of the Jefferson Salamander habitat within the Hidden Valley forest area, as illustrated in Appendix "B". With this new information from the MNR, the Project Team once again reviewed and assessed the high-level alternative planning solutions and concluded that the River Road Extension (Alternative 4C) was still the Preferred Planning Solution.

Regional Council Meeting on October 5, 2011

At the October 5, 2011 Council meeting, staff presented the updated information (from the post-2007 field studies) supporting the previously recommended solution for the River Road Extension, identified as Alternative 4C, as the Preferred Planning Solution for this project. Several persons at the Council meeting expressed concern that the proposed River Road interchange at Highway 8 would negatively impact a high-quality woodlot adjacent to the south side of existing Hidden Valley Road near Highway 8. Several new options for this project were presented by various members of the public at the meeting, including some new interchange options that could potentially reduce the negative impacts on the woodlot. Regional Council, at the October 5, 2011 meeting, reaffirmed their previous approval of the River Road Extension (Alternative 4C) as the Preferred Planning Solution for this project and directed staff to review the additional alternative design concepts recently provided by the public and in particular, to investigate any new Highway 8 configurations that could move River Road away from the mature woodlot just south of Hidden Valley Road near Highway 8.

Additional Study of Alternative Design Concepts for the Highway 8 Interchange

The alternative Fairway Road solutions and Hwy 8 interchange options presented by the public to Regional Council on October 5, 2011 are displayed in Appendix "C". As per Regional Council's direction, staff have reviewed and evaluated these alternatives in an effort to reduce or eliminate the negative impacts of the approved Planning Solution on the existing woodlot adjacent to Hidden Valley Road.

In addition to the new alternatives received from the public, the Project Team developed a new alternative, Alternative Design Concept 5 by modifying one of the alternatives provided by the public. As shown in Appendix "D", Alternative Design Concept 5 is similar to Alternative Design Concept 4C and includes a highly skewed bridge crossing of Highway 8 to minimize direct impact on the sensitive land in the Hidden Valley area. Each of these new Alternatives was evaluated in terms of its capability to address traffic

congestion in the study area and how each new alternative would function from a traffic operations and safety perspective. Based on the evaluation, the Project Team concluded that only Alternative Design Concepts 4C and 5 would address the transportation problem. Therefore only these two alternatives were carried forward for additional evaluation as summarized in Appendix “D”. From a transportation operations viewpoint, the Project Team concluded that both Alternative Design Concepts 4C and 5 would operate equally well.

There are mature woodlots located between the Jefferson Salamander Regulated Habitat and Highway 8 which are identified as potential dispersal habitat for a relative small proportion of the Jefferson Salamander population. Highway 8 itself represents a formidable limit to dispersal of the Jefferson Salamanders beyond the Regulated Habitat. While Alternative Design Concept 4C would impact 1.29 hectares of these mature woodlots, Alternative 5 would reduce the impact to these mature woodlots by 35% and would move much of the impact to another woodlot which is located on the far side of Hidden Valley Road from the Regulated Habitat. Hidden Valley Road itself is also a significant deterrent to salamander dispersal. The Project Team therefore concluded that Alternative Design Concept 5 is a significant improvement over Alternative 4C in addressing any potential for negative effects on Jefferson Salamander dispersal.

The proposed River Road Extension would not encroach on the Jefferson Salamander Regulated Habitat as shown in Appendix “B”. The Region will enter into discussions with MNR staff for the purpose of obtaining a Permit under Section 17 of the Endangered Species Act to establish the measures for the Region to follow in the event that future road construction may encounter Jefferson Salamanders that have travelled beyond the Regulated Habitat. Preparation of the Region’s request for the Permit and MNR review of that request would proceed during the detailed design phase of the River Road Extension.

Stonegate Drive Access

It is planned as part of the River Road Extension project to connect River Road with existing Stonegate Drive where the northbound Highway 8 ramp terminal would intersect with River Road on the east side of Highway 8 near King Street. The proposed intersection would be a signalized highway ramp terminal operating under the control of the MTO and subject to MTO requirements for its design and operation. The Stonegate Drive neighbourhood currently has access to the intersection at King Street and River Road via a temporary road though a building lot that has been in place since the subdivision was constructed, as shown in Appendix “E”. This temporary road was planned to remain in operation until the River Road Extension is constructed. The temporary road cannot remain in operation, even as a right-in and right-out intersection, once the River Road Extension is in place because of its close proximity to the King Street intersection. Frequently during peak periods, vehicle queues from the King Street intersection would extend beyond the location of the temporary access. The queues across the access and the challenge of “getting over” to the left-turn lane in a short distance would result in long delays and collisions for motorists to exit the neighbourhood and would result in some residents who wish to turn left on King Street to instead turn left from the other end of Stonegate Drive at King Street.

At several public consultation events for the Class EA and special meetings with residents of the Stonegate Drive neighbourhood, Project Team representatives heard conflicting concerns from neighbourhood residents including:

- Full access should be provided at the River Road Extension/Hwy 8 ramp intersection for the convenience of residents in the neighbourhood;
- Access to the neighbourhood should be restricted to discourage "shortcutting" of non-local traffic between King Street and the Highway 8 ramps; and
- Stonegate Drive is a local, residential road; much of which is not suitable for increased traffic due to sharp bends, lack of sidewalk and on-street parking.

2. Public Consultation:

There has been extensive public consultation undertaken as part of this project including several reports to Regional Council, a stakeholder workshop and six Public Consultation Centres (PCC's) including the recently held PCC on October 1, 2013. The formats, attendance and comments received at all public meetings held for this project have been detailed in previous reports for this Class EA Study. A summary of the public meetings is included in Appendix "F".

3. Public Input Meeting, December 3, 2013:

A Public Input Meeting (PIM) of the Planning and Works Committee was held on December 3, 2013 at which Alternative Design Concept 5 was presented as the Project Team's Preferred Design Concept. The Project Team's summary of and response to all public comments received to date were also presented at the PIM. 38 people signed in at the meeting. Appendix "G" shows the meeting minutes, which were approved by Council on December 17, 2013 and mailed to all meeting attendees who indicated they would like to receive them. Comments received from 12 delegations at the meeting have been grouped into several main categories as follows:

- Natural Environment Impacts
- Stonegate Drive Access
- Changes in Design Requested by a Land Owner
- Changes in Views and Traffic Noise Caused By the River Road Extension

Natural Environment Impacts

Throughout this Class EA, many comments were received containing concerns about the potential negative impacts of the proposed River Road Extension on the natural environment. While this report cannot attempt to detail all these comments, the Project Team has grouped the main issues raised into four categories as follows:

- Loss of trees and wetlands, primarily in Hidden Valley;
- Destruction of habitat of Species at Risk (SAR) or endangered species, such as the Jefferson Salamander;
- Presence in the study area and potential impacts to other SAR in addition to Jefferson Salamander; and
- Negative effects of road salt on the surface and groundwater in the area including potential negative effects on the Region's water supply wells in the

vicinity of Schneider Creek, and potential negative effects on the surface water intake at the Manheim Water Treatment Plant on the Grand River located just downstream from the Highway 8 Bridge.

Project Team Response:

The Project Team acknowledges that the construction of the River Road Extension would result in some removal of trees and wetlands within the Hidden Valley area. To the greatest extent possible, the Project Team believes it has developed an alignment for this new road that minimizes the negative effects on these features. In sharp contrast to the original alignment for River Road that traversed directly through the middle of the Hidden Valley wetlands, the proposed alignment would follow the existing Hidden Valley Road alignment as much as possible and would impact only natural areas that are adjacent to the existing Hidden Valley Road and Hwy 8. All reasonable efforts will be made during detailed design of the alignment to establish a road footprint that would minimize tree loss. To a large extent, the alignment of Alternative Design Concept 5 makes use of existing disturbed areas as much as possible so that tree loss is kept to a minimum. In addition, Design Concept 5 represents a huge improvement over Design Concept 4C in reducing the negative impacts of the new road on the existing mature woodlot (adjacent to and south of Hidden Valley Road near Highway 8) by reducing the tree loss by 35%.

The Project Team has made great efforts to document the existence of and to mitigate any potential negative effects on any known Species-at-Risk (SAR) or Endangered Species within the project limits. The proposed road alignment completely avoids the Regulated Jefferson Salamander Habitat established by the MNR. The alignment of Design Concept 5 further reduces the encroachment of the new road into the existing woodlot (adjacent to and south of Hidden Valley Road near Highway 8), a potential dispersal area for the Jefferson Salamanders. The Project Team concluded that the proposed alignment within Hidden Valley avoids as much known SAR habitat as possible, and more will be done in detailed design to ensure compliance with MNR requirements.

The Project Team was asked how any new SAR and ESA requirements will be addressed since SAR requirements continue to change. MNR's response is that some SAR such as bird species can move around so potential impacts on their habitat are not as critical as potential impacts to the Jefferson Salamander habitat. The Project Team acknowledges that there will be a need for further species inventory during detailed design and prior to construction. Specific measures will be implemented in accordance with any required MNR permits to minimize the potential impact to all known SAR during and after construction.

In order to address concerns about the potential effects of salt on surface and groundwater resources in the study area, the Project Team undertook a comprehensive water resources impact study that included a thorough assessment of the existing water resources via an extensive set of monitoring wells and surface water samples. The study methodology was developed with assistance from the MNR and the GRCA. After monitoring in 2012 and 2013 and an assessment of the potential salt impacts from a new road, the study concluded that there are currently high chloride levels notably in Schneider Creek and in the wetland pools in Hidden Valley, and also concluded that the

new road would have a negligible effect on the surface water and groundwater resources in the study area. The Region is committed to making all reasonable efforts to reduce the potential salt impacts of a new road on the area. The detailed design will incorporate appropriate best management practices for capturing and diverting road drainage. Continued implementation of the Region's salt management plans for use of alternative de-icing measures during future winter maintenance operations will prevent significant impacts on the Hidden Valley Wetlands.

The Region's Ecological and Environmental Advisory Committee (EEAC) reconstituted a sub-committee to advise staff concerning the environmental implications of the Recommended Design Concept for the River Road Extension. EEAC received and adopted report EEAC-14-001, February 25, 2014, which supports the Recommended Design Concept and which will be included in the documentation for the Class EA. Further documentation regarding the natural environment and a comprehensive set of mitigation measures to be incorporated into the detailed design and construction will be included in the final documentation for this study. Please refer to Appendix "H" for a summary of the proposed mitigation measures for this project.

Stonegate Drive Access

At the December 3, 2013, PIM, the Project Team's Preferred Design was presented which included the following option for access to the Stonegate Drive neighbourhood:

- Entry for Emergency Vehicles Only at River Road –This concept would allow all movements out of Stonegate Drive and allow no entry except by emergency vehicles as shown in Appendix "I-2". The existing intersection of Stonegate Drive and King Street would be not be changed.

5 of the 12 delegations that addressed Regional Council at the PIM voiced concern with the preferred design for access to Stonegate Drive. The concerns expressed included:

- Full access should be provided at the River Road Extension/Hwy 8 ramp intersection, for the convenience of residents. If this results in any increase in collisions or infiltration of commuter traffic through the neighbourhood, further assessment of the operation may lead to corrective measures;
- Vehicles will shortcut from King Street, west-bound via Stonegate Drive to the Highway-8 on-ramp increasing traffic on Stonegate Drive;
- Increased use of the Intersection at King Street/Stonegate Drive to access the neighbourhood is undesirable because the King Street end of Stonegate Drive is poorly suited to any increase in traffic volume; and
- Access to Stonegate Drive at the River Road Extension/Hwy 8 ramp intersection should be restricted to emergency vehicles and only used for right-turn out.

Subsequently, on December 10, 2013, the City of Kitchener held a neighbourhood meeting for the Stonegate residents to discuss concerns with the design for access to Stonegate Drive. The meeting was hosted by two of the City representatives on the Project Team and was well attended. At the meeting, City representatives heard concerns similar to the ones expressed at the PIM and received suggestions to consider design concepts to reduce access to Stonegate Drive from the existing intersection at King Street.

Project Team Response:

All Stonegate Drive neighbourhood access alternatives considered to date are summarized in Appendix I. The Project Team reviewed the input received at the PIM and by the City of Kitchener at the neighbourhood meeting December 10, 2013 including all the alternative access alternatives suggested to date. The Project Team has concluded that an additional alternative will best ensure an elimination of "cut-though" traffic while ensuring that a high level of access by local traffic and an alternate emergency access route will also be provided. That alternative is described as follows:

- Close Stonegate Drive at King Street except for Right-turn Entry and allow full movements at River Road and Stonegate Drive - This concept would allow all movements into and out of Stonegate Drive at River Road and Highway 8 on and off-ramps, as shown in Appendix "I-3". The intersection of Stonegate Drive and King Street would be closed except to allow local traffic to enter making a right-turn from King Street and to allow entry and exit by emergency vehicles. This is supported by the Project Team as the Recommended Design Concept.

A tabular summary of the technical evaluation of all access alternatives for Stonegate Drive access is presented in Appendix "I". The Project Team has selected the "Close Stonegate Drive at King Street Except for Right-turn Entry and full movements at the River Road and Stonegate Drive neighbourhood" option as the recommended option because it represents the best balance of competing needs. Although it does not completely satisfy the desire of some neighbourhood residents for an unimpeded access to/from King Street, it does provide adequate emergency access to the neighbourhood while eliminating traffic infiltration on to Stonegate Drive. In selecting this option as the Recommended Design option, the Project Team is acknowledging the greater good of eliminating "cut-through" traffic when compared to the convenience of easy access to/from King Street. City of Kitchener Operations and Fire Department and Regional Emergency Medical Services were consulted and all confirmed that the design is acceptable. Liaison with those three groups will be required to finalize a detailed design for the King Street/Stonegate Drive intersection. MTO has confirmed that the recommended option will be permitted.

In January, the City of Kitchener sent a questionnaire to residents of the Stonegate Drive neighbourhood asking them to respond indicating their preference for either of two choices to which the following response was received:

- Entry for emergency vehicles only at River Road – not preferred
- Close Stonegate Drive at King Street except for right turn entry and full movements at River Road and Stonegate Drive- preferred

Changes in Design Requested by a Land Owner

Mr. Peter Benninger is the owner of Pearl Valley Developments (PVD) which owns almost all of the undeveloped land in the Hidden Valley Area. A significant portion of that land will be required for construction of the Recommended Design Concept. Mr. Benninger appeared as a delegation and proposed two changes in the Preferred Design Concept as shown in Appendix J and described as follows:

1. Design the River Road/Hidden Valley Road intersection to permit full movement entry and exit instead of right-in and right-out as per the current Preferred Design Concept. If that is not possible, a roundabout or permitted U-turn at the new Highway 8 south-bound on-ramp is requested to reduce the distance by 460m for a west-bound vehicle to make a U-turn and then return to access the Hidden Valley Drive intersection.
2. Move the proposed roundabout at Wabanaki Drive further from the CP-Rail crossing.

Project Team Response:

Project staff have met with Mr. Benninger on two occasions to discuss the proposed changes. The Project Team evaluated the merits of the proposed changes based on the benefits for the Study area, with no consideration of access to future development on PVD land which have not been submitted to the City of Kitchener for approval. Such approval would be contingent upon PVD's compliance with the Official Plan, zoning, traffic impact study and environmental impact study requirements. During detail design, staff will work with PVD to access the merits of minor changes to the road and intersection designs as PVD progresses through the land development process.

The Project Team's evaluations of the proposed changes to the Preferred Design Concept are as follows:

1. Conversion of the River Road/Hidden Valley Drive intersection to a full movement intersection was previously supported by some members of the public but was opposed by 3 other delegations at the PIM. The intersection is located in the middle of a tight banked curve within the highway interchange area. The sight distance in both directions is insufficient for left turns, even when improved by a widening of the Highway 8 bridge to provide an extra turn lane and would be expected to result in collisions due to left-turning vehicles being overtaken by vehicles approaching from the rear. Therefore, this change is not recommended by the Project Team.

   While a roundabout at the new Highway 8 south-bound on-ramp would provide a small reduction in distance for traffic heading west to make a U-turn at the roundabout at the new Hwy 8 south-bound on-ramp versus the Wabanaki Drive roundabout, it would result in delays and collisions. The sight distance in both directions would be insufficient for U-turns at the Highway 8 south-bound on-ramp. Therefore, these two changes are not recommended by the Project Team. The Project Team has advised Mr. Benninger that in future if a development plan is approved that would justify a roundabout or if during detailed design, the requirements for a permitted U-turn can be satisfied, those changes will be considered, subject to MTO approval.

2. Shifting the proposed Wabanaki Drive roundabout would provide increased separation and storage for vehicles between the roundabout and the CP-Rail crossing and could potentially reduce the net impact on the lands remaining for development after the Region acquires property for the recommended corridor alignment. The Project Team recommends that this change be evaluated during

the detailed design, in discussion with the property owner to address concerns with the design, noting that the roundabout location is subject to approval by MTO because of its close proximity to the Highway-8 on-ramp.

Changes in Views and Traffic Noise Caused By the River Road Extension

Two delegations asked for clarification of the expected changes in elevation at the intersection of Stonegate Drive and the new River Road Extension and at the proposed Highway-8 bridge crossing. They expressed concern with the change in view that would result from these elevation changes and from tree removals that would be required near those locations. They and other delegations who spoke of concerns with the Stonegate Drive Access also expressed concern that noise levels will increase not only because of the River Road Extension traffic but because of the existing and increased noise expected to come from Highway-8 traffic.

Project Team Response:

The River Road extension approaching from both King Street and from Hidden Valley Road will need to be built on embankments to raise the new road so that it will cross safely above Highway-8. The Project Team acknowledges that there will be an expected change in the views which will be most significant from properties at the south side of Stonegate Drive and west side of Woodview Crescent beside the intersection of Stonegate Drive, overlooking Highway-8 and the proposed bridge across Highway-8.

The Project Team acknowledges that the construction of a new road will result in increases in noise levels to adjacent properties. As part of this Class EA Study, the Region has completed a Noise Assessment Study in accordance with Ministry of Environment (MOE) guidelines to determine the potential noise impact of the new road on adjacent properties. The key area within the River Road project where applicable noise sensitive locations are present includes the south side of River Road between Highway 8 and King Street as this section of River Road would be directly adjacent to the backyards and side-yards of the existing homes along Woodview Crescent and Stonegate Drive. The Noise Assessment Study completed for this Class EA Study determined that noise barriers are not warranted at any location adjacent to the new road, and therefore no noise walls will be recommended for this project. The findings of the noise study are summarized in Appendix “K”.

During the detailed design, it will be determined whether or not the grading for the proposed interchange and extension of River Road will result in surplus soil between King Street and Highway 8. Staff will determine if an earth berm can be constructed by using any surplus soil in the space within the road allowance adjacent to the rear of homes on Woodview Crescent. The berm would provide some visual screening to mitigate the potential changes to views from the homes.

4. The Project Team’s Recommended Design Concept:

Based on the public input received to date, the Project Team’s investigations and studies and other relevant technical data, the Project Team has completed an evaluation of the Alternative Design Concepts and has identified Alternative Design Concept 5 as the Recommended Design Concept for the River Road Extension.

Plans of the functional Design of the Recommended Design Concept 5 are shown in Appendix L and posted in more detail on the Region's website, www.regionofwaterloo.ca. A brief description of Recommended Design Concept 5 is as follows:

Horizontal Alignment and Cross Section Elements

Most of the proposed road for Recommended Design Concept 5 would follow the alignments of the existing Goodrich Drive, Wabanaki Drive and a portion of Hidden Valley Road with the exception of two areas: the western section where the road crosses Schneider Creek and at the Highway 8 interchange. The proposed road cross-section includes 4 lanes from King Street to Manitou Drive. A multi-use trail for pedestrians and cyclists is proposed on both sides of the proposed River Road Extension. The proposed cross-section includes a continuous raised centre median. The proposed centre median would vary in width from 1.5 metres to 5 metres and would be landscaped where there is sufficient width.

River Road Extension - Highway 8 Interchange

The proposed Highway 8 interchange includes:

- Ramps that would allow motorists to travel to and from Highway 401 to the south; and
- A ramp allowing River Road traffic to travel north on Highway 8.

The ramps onto and off Highway 8 northbound would be located opposite the end of Stonegate Drive. The on-ramp to Highway 8 southbound would be located mid-way between the Hidden Valley Road intersection and Wabanaki Drive. The bridge over Highway 8 would include two spans of a total length of 108 metres and would be 28 metres in width. The bridge would carry four lanes, a multi-use trail on each side and a continuous raised median in the centre. Construction of the new Highway 8 interchange would require the adjustment or relocation of four Hydro-One transmission towers and some existing Highway 8 drainage and retaining structures.

River Road Extension Bridge Over Schneider Creek

The proposed Schneider Creek Bridge would include a single span of 45 metres and would be 24 metres wide. The bridge would carry four lanes, a multi-use trail on each side and would have a continuous raised centre median. As part of detailed design, the Project Team will select an open-type railing on the bridge to allow pedestrians on the bridge to have a good view of the Schneider Creek Valley. The proposed height and length of the bridge will satisfy Regional flood plain requirements and would also allow passage of animals safely under the bridge. In addition, the bridge would accommodate the existing City of Kitchener multi-use trail on the north bank of Schneider Creek (beneath the proposed bridge) and facilitate trail connections to the multi-use trails on both sides of the River Road Extension.

Intersection Designs

Based on a comparison of life-cycle costs for roundabouts versus traffic signals, the

Project Team has identified a roundabout as the preferred traffic control at the Wilson Avenue, Goodrich/Wabanaki/Hidden Valley and the Wabanaki Drive (north end of Wabanaki Drive near Fairway Road) intersections. A roundabout at the Manitou Drive and Bleams Road extension has already been approved as part of the Manitou Drive widening Class EA that was completed in 2010 and is planned for construction in 2015. Traffic signals are preferred at the Highway 8 northbound ramp at Stonegate Drive and at the King Street intersection due to property constraints and the proximity of the CP Rail crossing east of King Street. The existing intersection of Stonegate Drive at King Street would be closed except for right-turn entry only from King Street to Stonegate Drive. A section of centre-median would be constructed on King Street at the Stonegate Drive intersection. No traffic control is required at the Highway 8 southbound on-ramp. Stop control would be required on Hidden Valley Road where it intersects with the new River Road Extension.

Property Impacts

While it is the intent of the planning and design process to minimize the need to acquire property, the proposed River Road Extension would require the acquisition of private property at several locations; however, the precise locations and amounts of land to be acquired will not be fully known until the detailed design stage.

After the Recommended Design Concept is approved by Regional Council, the affected property owners will be contacted by Regional Real Estate staff to discuss the necessary property acquisitions and related issues. It is the Region's standard practice to negotiate agreements of purchase and sale with the affected property owners, based on an independent appraisal of the land's fair market value. If agreements cannot be reached in time to meet the project schedule, the Region will acquire the needed lands through expropriation. Please see **Appendix "M",** the Property Acquisition Process Information Sheet (Projects Requiring Class EA Approval), for more detailed information.

What are the Benefits of the Recommended Design Concept 5?

Recommended Design Concept 5, by providing a four lane extension of River Road from King Street to Manitou Drive, will provide the following benefits:

- Reduced congestion and delay for all modes of traffic along Fairway Road (which is already at capacity) and other routes in South Kitchener;
- Creation of a cycling facility that would facilitate cycling trips in the east-west direction in South Kitchener and provide for a new cycling and pedestrian link in South Kitchener as planned in the 2014 Regional Active Transportation Master Plan; and
- Recommended Design Concept 5 includes a new Highway 8 interchange thereby providing additional access to the widened Highway 8 for the improved movement of people and goods in South Kitchener.

In addition to all of the above benefits that the Recommended Design Concept would bring, Design Concept 5, when compared to the previously Preferred Design Concept 4C, would:

- Reduce potential impact on an endangered species and other plants and animals by reducing direct and indirect impact on woodlots that are potential dispersal habitat for the Jefferson Salamanders; and
- Utilize existing road alignments for more of the proposed new road and as a result would minimize the segregation of adjacent lands including environmentally sensitive land, conserve more of the core environmental features and minimize the direct and indirect impacts of the new road on those adjacent lands.

5. Preliminary Cost Estimate of the Recommended Design Concept 5

The preliminary cost estimate for the Recommended Design Concept 5 is approximately $72 million and includes engineering, property acquisition and construction. The preliminary cost estimate of Recommended Design Concept 5 is $5 million greater than the estimated cost of the previously Preferred Design Concept 4C ($67 million). This cost difference can be mainly attributed to the increased cost of the Highway 8 bridge and associated Highway 8 interchange works in Concept 5.

All capital costs for the River Road Extension are projected to be fully funded by the Regional Development Charges Reserve Fund, and on this basis, the construction of this project would not result in an increase in property taxes.

6. Next Steps in Completing the River Road Extension Class EA

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

Subject to Regional Council approval of the Recommended Design Concept, the Environmental Study Report (ESR) documenting the planning and decision process for the project will be completed and a “Notice of Study Completion” will be ‘filed’ in the public record for a 30 day review period. This filing will be advertised by mail-outs, on the Region’s website and notices in newspapers. During this filing period, anyone concerned that the study did not fully follow the appropriate requirements of the Class EA process or address all of the issues may request that the Minister of Environment order the project to a more detailed environmental assessment, referred to as a Part II Order request. The Minister of Environment must receive such requests in writing, with a copy sent to the Region’s Commissioner of Transportation and Environmental Services. The Minister will determine if a more detailed environmental assessment is required and the Minister’s decision will be final. If there are no significant unresolved objections following the 30 day review period, the project will be considered approved and proceed to detailed design and construction.

It is anticipated that construction of the improvements will commence in 2017, subject to budget approval. This schedule is also dependent on completion of property acquisitions, co-ordination of utilities and securing necessary approvals. It is anticipated that some utility relocations will be completed in advance of the road improvements.

Corporate Strategic Plan:

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

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

It is also consistent with the development of Strategic Focus Area 3 (Sustainable Transportation) in terms of:

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

Financial Implications

The 2014 Transportation Capital Budget and Ten-Year Capital Forecast includes $72 million over the years 2014 to 2023 for the design and construction of this project to be funded from the Development Charges Reserve Fund. The estimated cost to construct the River Road Extension is approximately $72 million.

Other Department Consultations/Concurrence:

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

Attachments

Appendix A – Key Plan of Study Area

Appendix B – Regulated Habitat of Jefferson Salamander

Appendix C – Alternative Fairway Road and Highway 8 Interchange Options Presented by the Public in 2011

Appendix D – Evaluation of Design Concepts 4C and 5

Appendix E – Key Plan of Stonegate Drive Neighbourhood

Appendix F – Summary of Public Consultation

Appendix G – Minutes of Public Input Meeting (PIM), December 3, 2013.

Appendix H – Mitigation of River Road Extension Natural Environment Impacts

Appendix I – Evaluation of Stonegate Drive Access Options

Appendix J – Design Concepts Proposed by a Land Owner at the PIM

Appendix K – Acoustical Report Summary and Conclusions

Appendix L – Functional Design Plans and Cross Section

Appendix M – Property Acquisition Process Information Sheet

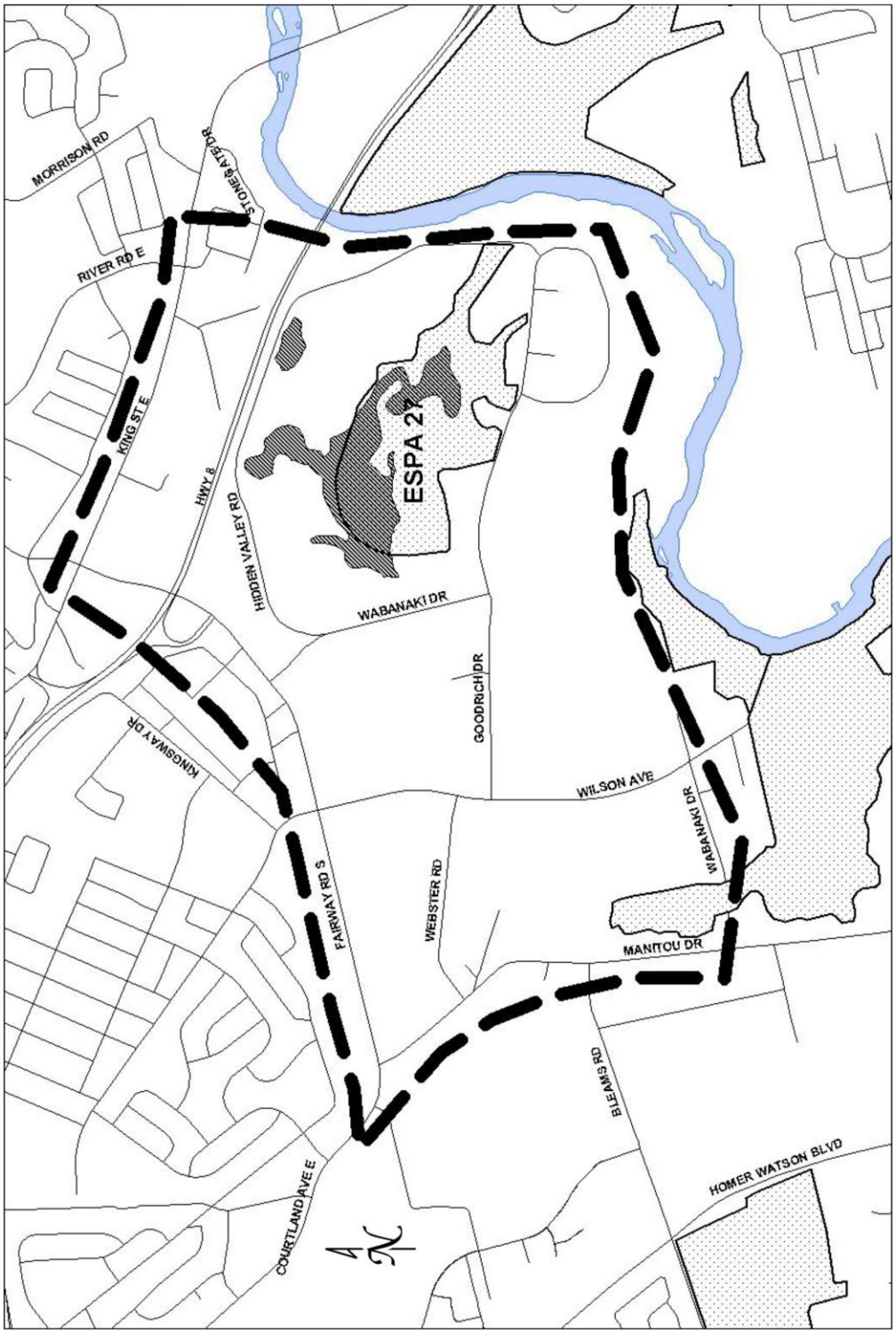
Docs #1526240

Prepared By: **Wayne Cheater**, Senior Project Manager

Approved By: **Thomas Schmidt**, Commissioner Transportation and Environmental Services

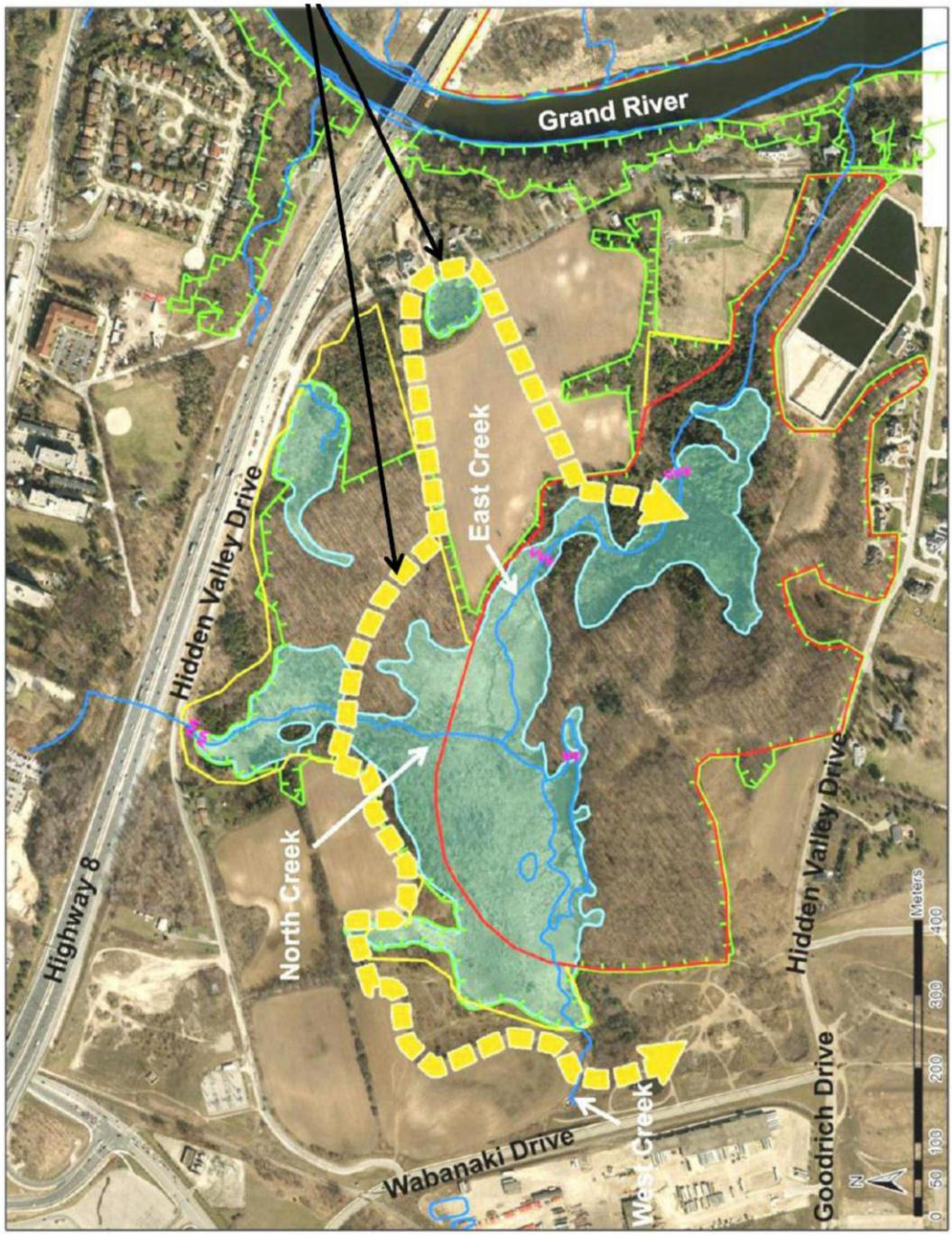
APPENDIX A

KEY PLAN AND STUDY AREA
REGION OF WATERLOO
RIVER ROAD EXTENSION CLASS ENVIRONMENTAL ASSESSMENT



APPENDIX B

Jefferson Salamander Regulated Habitats
Natural Resources Inventory & Impact Assessment in Hidden Valley



Alternative Fairway Road Solutions Studied

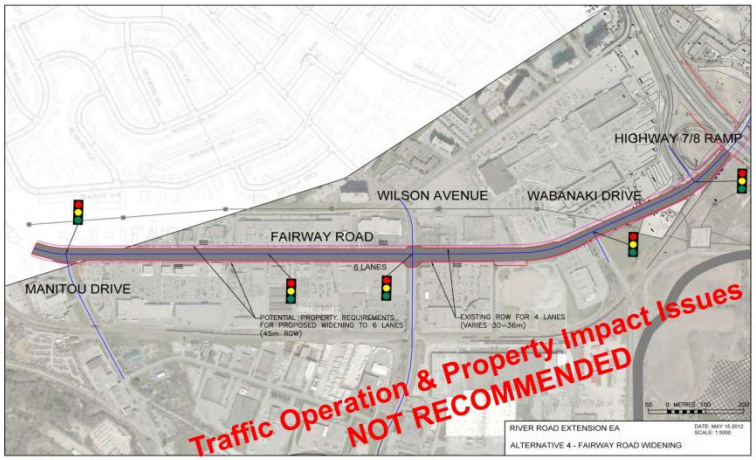
Roundabout Corridor

Fairway Road capacity improvements with roundabouts does not provide enough relief capacity along Fairway Road to solve forecasted traffic attractions. Ramps at the Highway 8 and Fairway Road interchange, and the Manitou intersection still operate over-capacity.

6 Lane Fairway Road Widening

Fairway Road capacity improvements did not provide enough relief capacity along Fairway Road to solve forecasted traffic attractions. Ramps at the Highway 8 and Fairway Road interchange, and the Manitou intersection still operate over-capacity.

Conclusion: Fairway Road remains a congested corridor. Roundabouts or widening would provide added capacity, but also attracts added traffic to the corridor so congestion is not relieved.



APPENDIX C-2

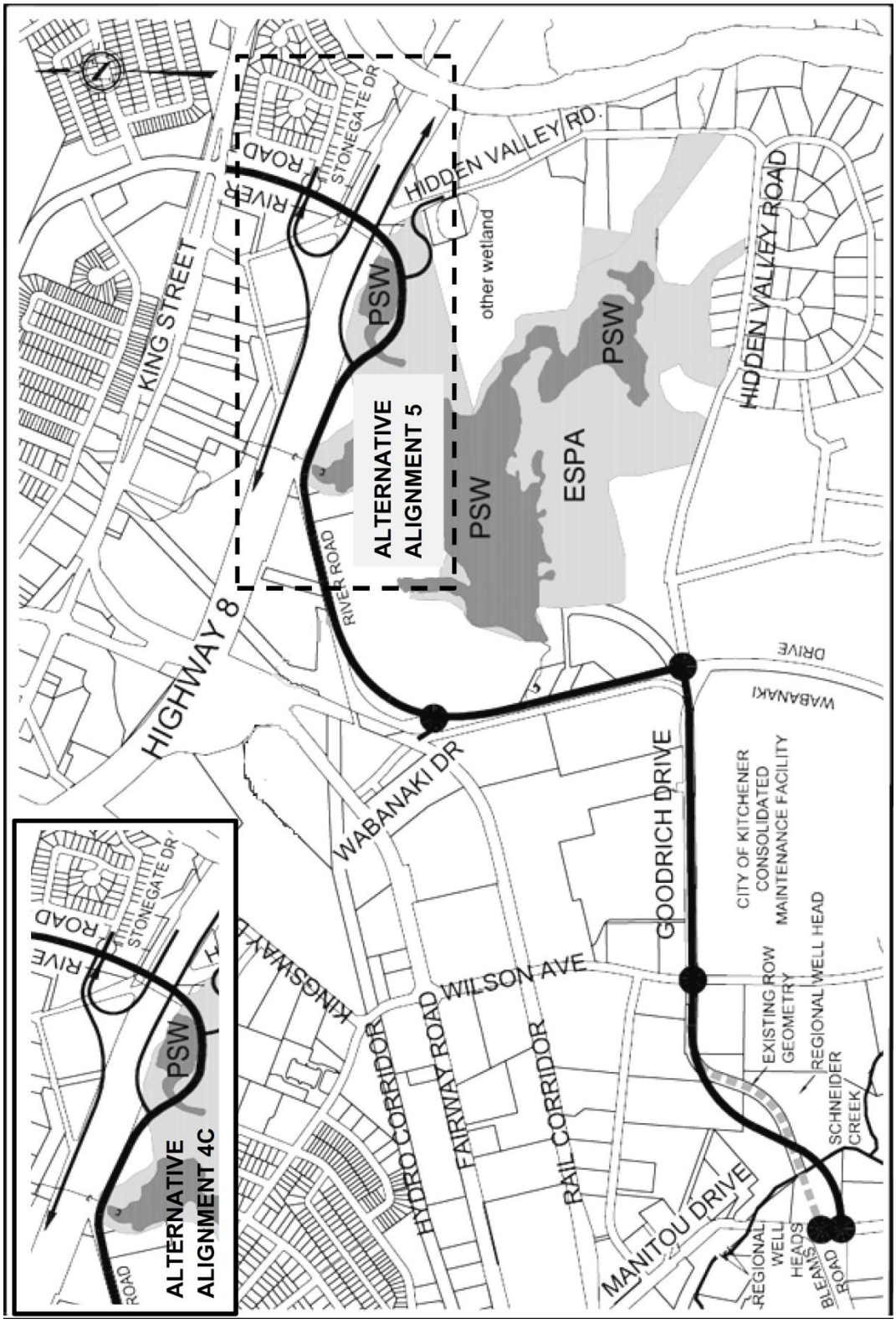
Additional Interchange Concepts resulting from May 17, 2011 Public Consultation Centre

Unacceptable Operational Issues:

Having these tight turns on a River Road Extension could have the following adverse impacts :

- mislead driver expectations;
- cause vehicle control problems at higher speeds , especially under wet/snowy weather conditions; and
- increase the potential for more collisions, particularly rear-ends.

APPENDIX D



Evaluation of Alternative Design Concepts 4C and 5

APPENDIX D-2

Natural, Social & Economic Impact Comparisons in Hidden Valley

GOAL 1: MINIMIZE NATURAL ENVIRONMENT IMPACTS Measured Criteria	Alternative 4C	Alternative 5
1.1 Direct Impacts on PSW Wetlands	2.3% - 0.45 ha	2.0% - 0.39 ha
1.2 Indirect Impacts to PSW Wetlands	15.4% - 2.92 ha	11.5 % - 2.19 ha
1.3 Direct Impact to Hidden Valley ESPA (existing & candidate ESPA)	3.01 ha	1.29 ha
1.4 Indirect Impact to Hidden Valley ESPA (existing & candidate ESPA)	8.28 ha	7.02 ha
1.5 Direct Impact to Core Environmental Features	2.07 ha	0.97 ha
1.6 Total Impact to Vegetation Community Low, Medium High Vegetation Sensitivity	Low – 3.10 ha Med – 1.60 ha High – 1.29 ha 5.99 ha	Low – 2.50 ha Med – 1.14 ha High – 0.84 ha 4.48 ha
1.7 Direct Impact to Woodlands	17% - 1.29 ha	11% - 0.84 ha
1.10 Direct Impacts to Known Locations of Regional Significant Species	Impacts approximately 50-60% of the Regionally Rare Fringed Gentian locations as well as other known species locations.	Avoids clusters of known Regionally Rare Species locations (only 1 known Fringed Gentian record affected by access road location).

GOAL 2: MINIMIZE SOCIAL ENVIRONMENT IMPACTS Measured Criteria	Alternative 4C	Alternative 5
2.1 Property Displacement/Fragmentation	W of Hwy 8 – 8.23 ha E of Hwy 8 – 2.67 ha 10.90 ha	W of Hwy 8 – 4.96 ha E of Hwy 8 - 2.61 ha 7.57 ha
+ Property Acquisition Cost $ Not including legal & injurious affection	+/- $5.5 Million	+/- $5.2 Million
GOAL 4: PROVIDE COST-EFFECTIVE ECONOMIC ENVIRONMENT		
4.1 Hwy 8 Crossing Structure Construction Cost	Single span, 68m $8.7 Million	2- span, 108m $15.7 Million
4.2 Potential comparative cost of mitigation & compensation for Natural Environment impacts	Allowance of $750,000 (plantings, erosion controls, slope treatment, etc.)	Allowance of $250,000 (plantings, erosion controls, slope treatment, etc.)

APPENDIX D-3

Natural Resources Impact Assessment in Schneider's Creek Valley

GOAL 1: MINIMIZE NATURAL ENVIRONMENT IMPACTS Measured Criteria	Alternative 5
1.1 Direct Impacts on PSW Wetlands	There are no PSWs in the vicinity of the Schneider Creek crossing.
1.2 Indirect Impacts to PSW Wetlands	There are no PSWs in the vicinity of the Schneider Creek crossing.
1.3 Direct Impact to Hidden Valley ESPA (existing & candidate ESPA)	The alternative will not directly impact the Homer Watson Park ESPA.
1.4 Indirect Impact to Hidden Valley ESPA (existing & candidate ESPA)	The alternative will indirectly impact 0.11 ha of the Homer Watson Park ESPA
1.5 Direct Impact to Core Environmental Features	The alternative will not directly impact Core Environmental Features.
1.6 Indirect Impact to Core Environmental Features	The alternative will indirectly impact 0.11 ha of Core Environmental Features.
1.7 Impact to Vegetation Communities (ELC Classifications)	Low – 0.37 ha Med – 0.1 ha High – 0.74 ha 1.2 ha
1.8 Impacts to Woodlands	Will directly impact 16% (0.74 ha out of 4.56 ha total) of Deciduous Woodland Community

GOAL 1: MINIMIZE NATURAL ENVIRONMENT IMPACTS Measured Criteria (Continued)	
1.9 Wildlife Resources	The alternative affects remnant forested, meadow and wetland communities behind industrial properties, where no 'significant wildlife habitat' is indentified. Local and resident animal habitat linkages and movement corridor function along Schneider Creek will be mitigated with bridge structure crossing that accommodates wildlife passage.
1.10 Fisheries and Aquatic Habitat	The alternative will cross Schneider Creek which supports a warmwater and coolwater fish community. Mitigation measures include spanning the creek meander belt with a bridge structure crossing to maintain creek corridor functions and maintain fish habitat along this reach.
1.11 Regional Significant Species	The alternative crosses existing disturbed and remnant forested and wetland habitat. No Regionally Significant Species have been identified within these areas.

APPENDIX E


KEY PLAN OF STONEGATE DRIVE NEIGHBOURHOOD
Full Access
KING STREET
WOODVIEW CRES.
RIVER ROAD
Stonegate Dr, Kitchener, ON N2A, Canada
Existing Temporary Access
Proposed River Road Extension
Google earth
© 2013 Google

APPENDIX F

SUMMARY OF PUBLIC CONSULTATION CENTRES

The following public consultation events were completed as part of the South Kitchener Transportation Corridor Study (SKTCS) and further documented in **Report P-06-071**, July 4, 2006:

- PCC No. 1, **May 27, 2004** -project initiation
- Stakeholder Workshop, **July 27, 2004**
- PCC No. 2, **January 19, 2005** Alternative Planning Solutions
- PCC no. 3, **October 4, 2005** –Preferred Solution
- Regional Council Approval of Preferred Planning Solution, **July, 2006**

The following additional public consultation events were completed for the River Road Extension Class EA:

- Meeting on **November 16, 2006** with residents of the Stonegate Drive Area to discuss concerns with access from Proposed River Road Extension to Stonegate Drive. The Comments concerning alternatives for access to and from Stonegate Drive, at an area residents meeting November 16, 2006 were inconclusive so an additional questionnaire was included at PCC No. 1 for that concern.

- A PCC for showing alternative Design Concepts for the River Road Extension was held **February 27, 2007**.

- The second PCC for the River Road Extension was held **May 17, 2011** at Conestoga Place, formerly Columbus Hall, 110 Manitou Drive, in order for the Project Team to ask for public comments on the Preferred Planning Solution and to update the public on work that had been completed since the previous PCC.

- At an **October 5, 2011** meeting of Regional Council, staff presented the updated information confirming the River Road Extension, identified as Alternative 4C, as the Preferred Planning Solution for this project. Regional Council reaffirmed their previous approval of the River Road Extension (Alternative 4C) as the Preferred Planning Solution for this project and directed staff to proceed to the consideration of Alternative Design Concepts for Fairway Road and to study the new options for the Highway 8 interchange presented by the public with the objective of reducing the impact on the existing woodlot.

- The third PCC for the River Road Extension was held on **October 1, 2013** at Conestoga Place, 110 Manitou Drive. A total of 114 members of the public signed in at the PCC. Design Alternatives, 4C and 5 were presented with the evaluation of transportation benefits, impact on the woodlots and other environmental and cultural heritage features and capital cost. Alternative Design Concept 5 was developed by the Project Team as it reviewed additional alternative design concepts recently provided by the public and investigated configurations that could move River Road Extension further away from the

mature woodlot than Alternative Design Concept 4C. Alternative Design Concept 5 is similar to Alternative Design Concept 4C and includes a highly skewed bridge crossing of Highway 8 to minimize direct impact on the mature woodlot. The public was asked to respond using two comment sheets provided.

Sheet 1 requested comments on the Project Team's Preferred Alternative Design Concept 5 and Sheet 2 requested Comments on the two alternatives presented for access to/from Stonegate Drive from River Road. The 66 comments submitted to the Project Team were reviewed and all tabulated with a summary of responses which were prepared by Region staff, MNR staff, IBI Group and LGL Limited. The summary of all comments and responses was sent to all who commented and was appended to the Report E-13-135 for the Public Input Meeting, December 3, 2013.

- A Public Input Meeting (PIM) of the Planning and Works Committee was held on **December 3, 2013** to receive further public input about the study. 38 people signed in at the meeting. Appendix F shows the meeting minutes, which were approved by council on December 17, 2013 and mailed to all meeting attendees who indicated they would like to receive them.

- Subsequently, on **December 10, 2013**, the City of Kitchener held a neighbourhood meeting for the Stonegate residents to discuss concern with the design for access to Stonegate Drive. The meeting was hosted by 2 of the City representatives on the Project Team and was well attended. The meeting heard more concerns and received suggestions to consider design concepts in addition to those presented at the PIM.

APPENDIX G

MINUTES OF PLANNING AND WORKS COMMITTEE, DECEMBER 1, 2013 – PUBLIC INPUT FOR PREFERRED DESIGN CONCEPT

REGIONAL MUNICIPALITY OF WATERLOO
PUBLIC MEETING OF THE
PLANNING AND WORKS COMMITTEE
MINUTES

Tuesday, December 3, 2013
7:00 p.m.
Regional Council Chambers
150 Frederick Street, Kitchener

Present were: Chair J. Wideman, J. Brewer, T. Cowan, R. Deutschmann, T. Galloway, J. Haalboom, R. Kelterborn, G. Lorentz, K. Seiling, and C. Zehr

Members Absent: L. Armstrong, D. Craig, B. Halloran, C. Millar, J. Mitchell, and S. Strickland

OPEN REMARKS

Chair J. Wideman provided opening remarks regarding the purpose of the meeting and the advertisement history. He thanked the Councillors who sat on the project team from the Region of Waterloo as well as the City of Kitchener. Chair J. Wideman introduced Wayne Cheater, Project Manager and Don Drackley the Consultant from IBI Group.

DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

None declared.

REPORT – PLANNING, HOUSING AND COMMUNITY SERVICES - COMMUNITY PLANNING

a) Report E-13-135, River Road Extension, King Street to Manitou Drive, Kitchener, Class Environmental Assessment – Public Input Meeting for Preferred Design Concept

Received for information.

Steve Van de Keere, Head, Transportation Expansion Program provided a presentation that highlighted:

- Project Study Area;
- What Are The Problems;
- Planning Solutions Developed;
- Alternatives;
- Key Concerns Raised by the Public;
- Preferred Design Concept Alternative 5;
- What Are The Benefits of The Preferred Design Concept; and
- Next Steps in the Study.

A copy of the presentation is appended to the original minutes.

S. Van de Keere provided clarification to Committee members on the right in right out turns, the project cost and where the money will be coming from.

DELEGATIONS

i. Neil Taylor appeared before Committee providing a presentation highlighting; background information on the project, staff responses to concerns, costs, response to public, history, and species at risk. A copy of the presentation is appended to the original minutes.

ii. Peter Benninger, Pearl Valley Development Corporation and Ted Rowe, MTE Consultants Inc. appeared before Committee. P. Benninger stated he owns property in Hidden Valley. He provided Committee members with a handout as well provided a presentation. He stated his support for River Road extension and noted that he hired MTE consulting to provide some modifications to the preferred concept. He suggested that a roundabout be installed at the new Hwy 8 ramp South "on ramp" and suggested moving the Wabanki traffic circle location to the South East to allow for better use of the land. A copy of the presentation is appended to the original minutes.

Committee members asked the delegation if MTE provided an estimated cost for the proposed recommendations. T. Rowe responded saying they did not provide a cost but did provide an estimate cost for the roundabout.

iii. John Nother appeared before Committee representing Hidden Valley Residents. He stated the residents have talked about the impact the River Road extension has on them as citizens in the area. He noted their biggest concern is the entrance going in and out at River Road. He pointed out that with traffic problems on Wabanki Drive at the intersection of Fairway Road the residents are concerned about traffic cutting through Hidden Valley Drive. He asked that this issue be addressed during the planning stage.

iv. Daphne Nicholls, The Friends of Hidden Valley appeared before Committee. During her presentation she showed pictures of Hidden Valley. She noted that Ginny Quinn could not be there but wanted to thank staff and the community for coming together for option 5 the preferred concept. D. Nicholls went in detail about Hidden Valley and what it has to offer stating Hidden Valley is a well functioning eco system. She talked about the various species and wondered if the Region was complying with the Species at Risk Act. She recommended that more tree planting occur.

Committee members asked the delegation if she is opposed to the road or if she is in support of option 5 being presented with planting more trees. D. Nicholls stated she is opposed to the road but noted that option 5 is the least obnoxious and would like to see enhanced tree planting.

v. Terry Lalande appeared before Committee stating he would like to make comments on the new access road for the Stonegate/Woodview subdivision. He highlighted that currently there are 2 roads allowing access into the subdivision and the one access will be closed down and replaced with the new access on River Road. He noted the current debate is whether access should be restricted at River Road and cars only be allowed to exit. He stated that he is concerned that if access is restricted at River Road then traffic will be forced to enter at King Street and Stonegate Drive highlighting this entrance is very dangerous due to the hill and curvy road. He suggested that the Region start with open access then assess the situation.

vi. Duncan Clemens, Tri Cities Transportation Action Group (TriTAG) appeared before Committee stating his comments are his views and not of TriTAG. He did state that TriTAG is not pro road or anti road but supports the most effective use of funds for

effectively moving people. He stated that although there is a need to promote the use of active transportation it is still necessary to drive indicating road construction can be beneficial in order to connect missing links to the network to benefit all road users. He pointed out the delays currently for buses traveling on Fairway Road noting the River Road extension could elevate some of those delays. He asked that staff be directed to proceed with the extension.

Chair J. Wideman made a call for additional delegations.

vii. Ken Somers appeared before Committee stating his house is up for sale and potential buyers have asked a few questions. He inquired if Hofstetter Avenue will be rerouted to Stonegate Drive and wondered what the elevation of River Road will be.

viii. Peter Pople a resident at 56 Woodview Crescent stated he is concerned that there will only be one entrance into the subdivision off of King Street onto Stonegate Drive. He stated that access is slippery in the winter and there are no sidewalks on either side. He asked that if this is the only entrance into the subdivision it should be made safer.

Committee members asked the delegation if he would like to see accesses remain. P. Pople noted that if one access needs to be closed he asked that the access at King Street and Stonegate Drive be closed.

ix. Sonya Kochanski appeared before Committee stating she lives at 104 Woodview Crescent noting currently her house backs onto green space and wanted to know what the elevation of River Road would be.

x. Keith Townsend appeared before Committee stating he lives on Hidden Valley Road. He expressed his concerns about the traffic volumes on Hidden Valley Road connecting to River Road.

xi. Brian Ellacott a resident at 108 Stonegate Drive stated that the access to Stonegate Drive from River Road should only be used for emergency vehicles and only allow for a right turn out. He noted the inconvenience of this but highlighted that it will prevent traffic from cutting through the subdivision.

Committee members asked the delegation if he would be opposed to having two accesses into the subdivision and reevaluate at a later time. B. Ellacott stated he would be concerned about the politics on who would make that decision and he would want the guarantee that area would be monitored.

xii. Marcin Kasprzcyki a resident at 4 Stonegate Drive wondered if staff has looked at the potential impact and congestion on Hwy 8 with the additional ramp being installed.

Committee members asked staff if consideration has been made at the top end of River Road closest to Wabanki Drive for a right of way that is required for phase 2 of the LRT.

ADJOURN

MOVED by G. Lorentz
SECONDED by J. Haalboom

THAT the meeting adjourn at 8:43 p.m.

1517319

CARRIED

COMMITTEE CHAIR, J. Wideman

COMMITTEE CLERK, E. Flewwelling

1517319

APPENDIX H

MITIGATION OF RIVER ROAD EXTENSION NATURAL ENVIRONMENT IMPACTS

In order to reduce or mitigate some of negative impacts of the River Road Extension on the natural and social environment, Region staff would implement the Mitigation measures which are detailed in “Natural Heritage Impact Analysis”, By LGL Limited, February 2014, which is available on the Regions website, at www.regionofwaterloo.ca including the following measures, where appropriate and feasible:

- Apply minimum acceptable road design standards in some locations to minimize the loss of Provincially Significant Wetland (PSW) and mature woodland loss caused by the roadway and fill slopes along elevated portions across Hidden Valley and the Schneider Creek Valley;

- Create steeper side slopes, and consider using bio-engineered slope reinforcement techniques along the road extension to reduce the “footprint” of the road to minimize tree loss and near all environmentally sensitive areas;

- Develop and implement a stormwater management plan which incorporates appropriate Best Management Practices (BMPs) in accordance with the completed stormwater management concept and the water resources impact study;

- Develop and implement, a plan that will ensure that the water quality of the watercourses, wetlands, and vernal pools that are part of the Jefferson Salamander habitat will not be adversely affected by construction and operation of the proposed road, and will work closely with MNR and GRCA to determine the best means of achieving this objective. As part of this objective, potential salt impacts to Jefferson Salamander habitat and the features and functions of the natural areas, will need to be addressed in the overall mitigation plan for the species, and it is expected that details of that mitigation plan will be developed at detailed design in close consultation with the MNR and the GRCA

- Provide for safe wildlife passage, beneath the bridge structure over Schneider Creek .

- In the Hidden Valley portion of the corridor, provide low vertical walls as an effective barrier to prevent Jefferson Salamanders and most small animals from crossing the road.

- Consider means to provide controlled public access from the new road to the Hidden Valley natural area;

- Develop and implement, a plan to locate and protect, as necessary Jefferson Salamanders prior to and during construction. This plan could require an application to the MNR for a permit under the Species at Risk Legislation;

- Conduct further species inventory during detailed design and prior to construction. Native species of plants that are encountered within the area of construction will be salvaged and relocated to nearby areas to preserve local biodiversity. Specific measures will be implemented in accordance with any required MNR permits to minimize the potential impact to all known SAR during and after construction.

- Develop an erosion and sedimentation control plan to prevent sedimentation into the adjacent natural areas during construction. Ensure that controls remain in place and in good working order until the road side slopes of the fill areas are stabilized and re-vegetated;

- Utilize open areas created by the new road for extensive tree planting such as on the side slopes of the River Road extension between Manitou Drive and Wilson Avenue and between Wabanaki Drive and Stonegate Drive;

- As soon as feasible after acquiring any required property for the road extension, pre-stress the future new edges of the woodland (i.e. selectively clear some of the trees/vegetation on the surrounding edges) along the approved road right-of-way to allow the residual trees some time to adjust to increased exposure to sun, wind, etc.;

- Identify and implement measures to protect the population of Regionally significant Fringed Gentian (a rare plant) through protection from indirect impact and/or transplanting the plants to nearby suitable habitat;

- Provide construction monitoring on site by a qualified independent environmental inspector ensure that mitigation measures are in place and working and respond to significant observations that require additional documentation and response;

- Implement an environmental monitoring and adaptive management plan to assess the effectiveness of measures to mitigate impacts of the new road on the natural environment, identify opportunities to improve the mitigation plan, and enforce compliance with the plan.

APPENDIX I

Evaluation of Alternative Options for Access to Stonegate Drive					
Stonegate/ River Road	**Stonegate/ King Street**	**Traffic Operations**	**Traffic Safety**	**Cut-Through Traffic**	**Overall Rating**
1.Restricted access: full out movements, emergency only in	Full Access	Delay and congestion are acceptable.	Moderate conflicts at one end of Stonegate and moderate volume on Stonegate.	Left-turn to avoid use of King/River Road Extension intersection in one direction.	This was preferred by the Project Team at the PIM
2. Full Access – (Subject to acceptance by MTO)	Full Access	Delay and congestion are acceptable. Drivers will choose preferred routes.	Highest conflicts at both ends of Stonegate and highest volume on Stonegate.	Worst - Avoiding use of King/River Road Extension intersection in two directions.	Not recommended due to poor rating for cut-through and conflicts
3.Restricted access: full out movements, emergency only in	Restricted access: full in movements, emergency only out	Delay and congestion are acceptable. Enforcement is a concern.	Moderate conflicts at one end of Stonegate and moderate volume on Stonegate.	Left-turn to avoid use of King/River Road Extension intersection in one direction.	Not recommended - Elimination of left-out at King Street would not reduce cut-through.
4.Full Access (Subject to acceptance by MTO)	Right-in /Right-out	Delay and congestion are acceptable. Enforcement is a concern.	Some reduced left-turn conflicts.	High use of shortcut from River Road to King Street southbound.	Not recommended due to poor rating for cut-through
5.Full Access (Subject to acceptance by MTO)	**Closed: Emergency access only or right-in only**	Delay and congestion are acceptable. Improved operation at King/Stonegate but small delays at River Road/Hwy 8 ramp	Reduced conflicts at King Street end of Stonegate Drive.	No cut-through traffic.	**Recommended, subject to acceptance by MTO**

APPENDIX I-2

Evaluation of Alternative Options for Access to Stonegate Drive (continued)					
Stonegate/ River Road	**Stonegate/ King Street**	**Traffic Operations**	**Traffic Safety**	**Cut-Through Traffic**	**Overall Rating**
6.Closed: Emergency access only	Full Access	Delay and congestion are acceptable.	High- Increased use of King Street /Stonegate intersection for all access to/from Neighbourhood .	No cut-through traffic.	Not recommended due increased use of the King Street end of Stonegate Drive.
Note: All of the above options provide for access between the neighbourhood and all destinations and provides for emergency access. Details of Stonegate/River Road access options and overall plan of Option 5 are shown on the following two pages.					

APPENDIX I-3

RIVER ROAD / STONEGATE DR. INTERSECTION OPTIONS

Alternative Options 2, 4 and 5
Full Access

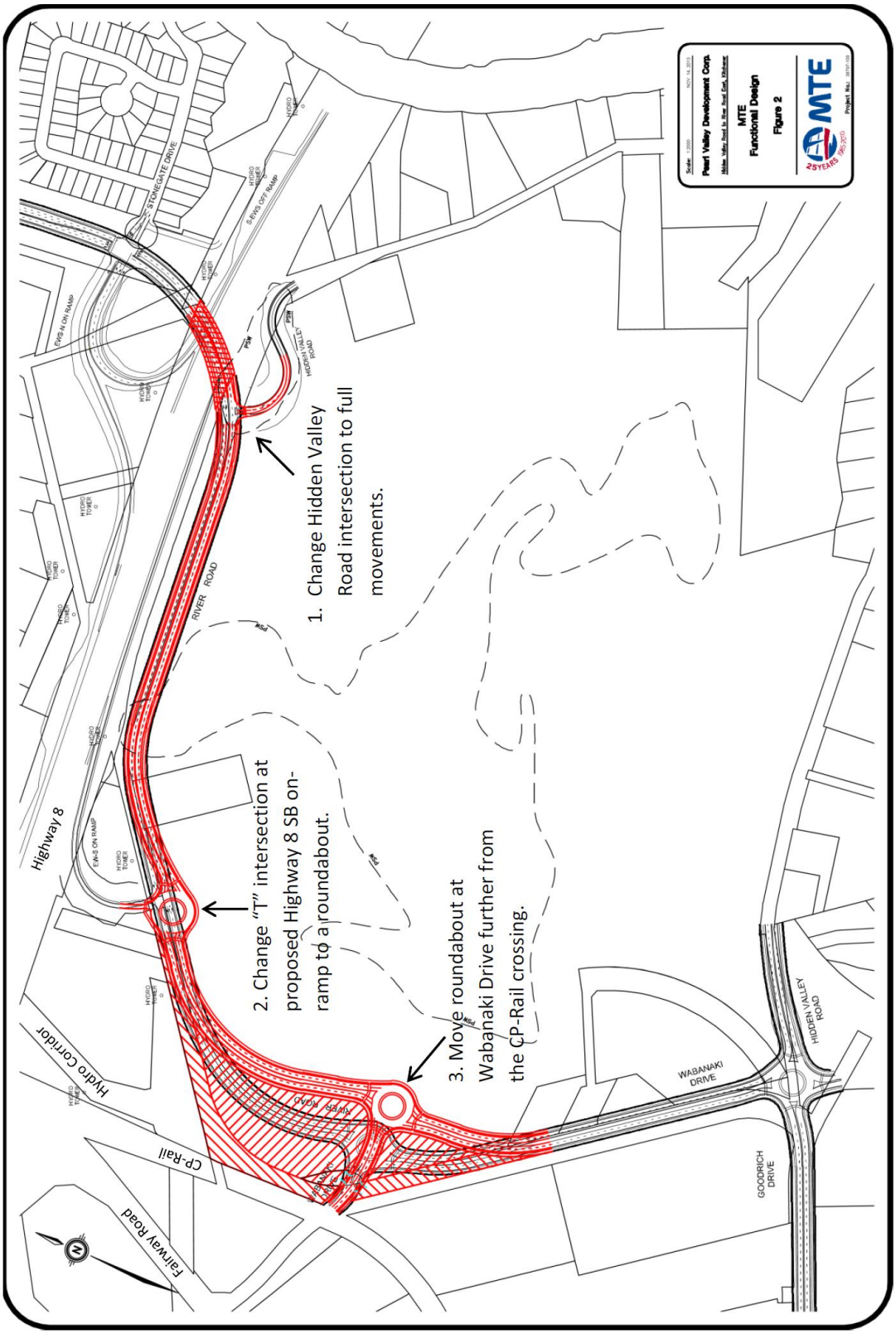
Alternative Options 1 and 3
Restricted Access: full out movements, entry only for emergency vehicles

APPENDIX I-4


STONEGATE DRIVE RECOMMENDED ACCESS ALTERNATIVE
Close Stonegate Drive/King Street Except Right-in Only & Full Access Stonegate/River Rd.
Right-in Only
KING STREET
WOODVIEW CRES.
RIVER ROAD
Stonegate Dr, Kitchener, ON N2A, Canada
Remove Existing Temporary Access
Proposed River Road Extension
Full Access
Google earth
© 2013 Google

APPENDIX J

Design Changes Presented by a Land Owner, Delegation at the Public Input Meeting (PIM), December 3, 2013



APPENDIX K

ACOUSTICAL REPORT (from IBI October 2013, updated January 2014

Background and Noise Criteria

IBI Group was retained to conduct a noise study for the River Road Class Environmental Assessment (EA) Study. This acoustical study examined the impacts of noise created by the proposed River Road extension on existing residential development located between King Street and Highway 8 along the proposed River Road extension, and recommends any mitigation, if required, based on criteria set by the Region of Waterloo and the Ministry of the Environment (MOE).

Refer to the Noise Information Plan below for the layout of the proposed road and existing residences.

The Region of Waterloo has established noise level guidelines for existing residential development impacted by future road construction and reconstruction entitled "Implementation Guideline for Noise Policies Part B: Existing Development Impacted by Proposed Regional Road Undertakings" published in July 1999. This guideline requires noise attenuation measures if:

1. The future predicted noise levels after the proposed road work exceeds 65 dBA;
2. The future predicted noise levels exceed 60 dBA and the difference between the current and future noise levels exceed 5 dBA;
3. If there is no existing road, 55 dBA is to be used as the existing noise level.

Results

The noise modeling program "STAMSON 5.0" was used to predict noise levels produced by the existing and future (2031) traffic volumes along River Road and Highway 8 based on the information provided in Table 1.

As Highway 8 is a significant noise source, and the proposed River Road extension is independent of Highway 8 noise, it is beneficial to analyze River Road with and without Highway 8 noise included. From this analysis the impacts from the proposed River Road can be better understood. Accordingly, the results of noise from only River Road are summarized in Table 3.

Table 3 – Predicted Unattenuated Noise Levels (without Highway 8)

RECEIVER	EXISTING NOISE LEVEL (dBA)	FUTURE NOISE LEVEL (dBA)	DIFFERENCE (dBA)
A - 100 Woodview Crescent	55	58.2	+3.2
B - 137 Stonegate Drive	55	57.2	+2.2
C - 93 Stonegate Drive	N/A	N/A	N/A

As outdoor noise levels do not exceed 60dBA for the daytime and are not greater than 5 dBA over the 55 dBA existing (as per criteria) noise level, noise mitigation in the form of acoustical barriers is not warranted.

With Highway 8 noise included with the River Road noise, the results shown in Table 4 were obtained.

Table 4 – Predicted Unattenuated Noise Levels (with Highway 8)

RECEIVER	FUTURE NOISE LEVEL (dBA)			EXISTING NOISE LEVELS (dBA)	DIFFERENCE (dBA)
	RIVER ROAD	HIGHWAY 8	TOTAL	HIGHWAY 8	
A	58.2	60.6	62.6	58.2	+4.4
B	57.2	67.4	67.8	65.0	+2.8
C	N/A	64.8	64.8	62.4	+2.4

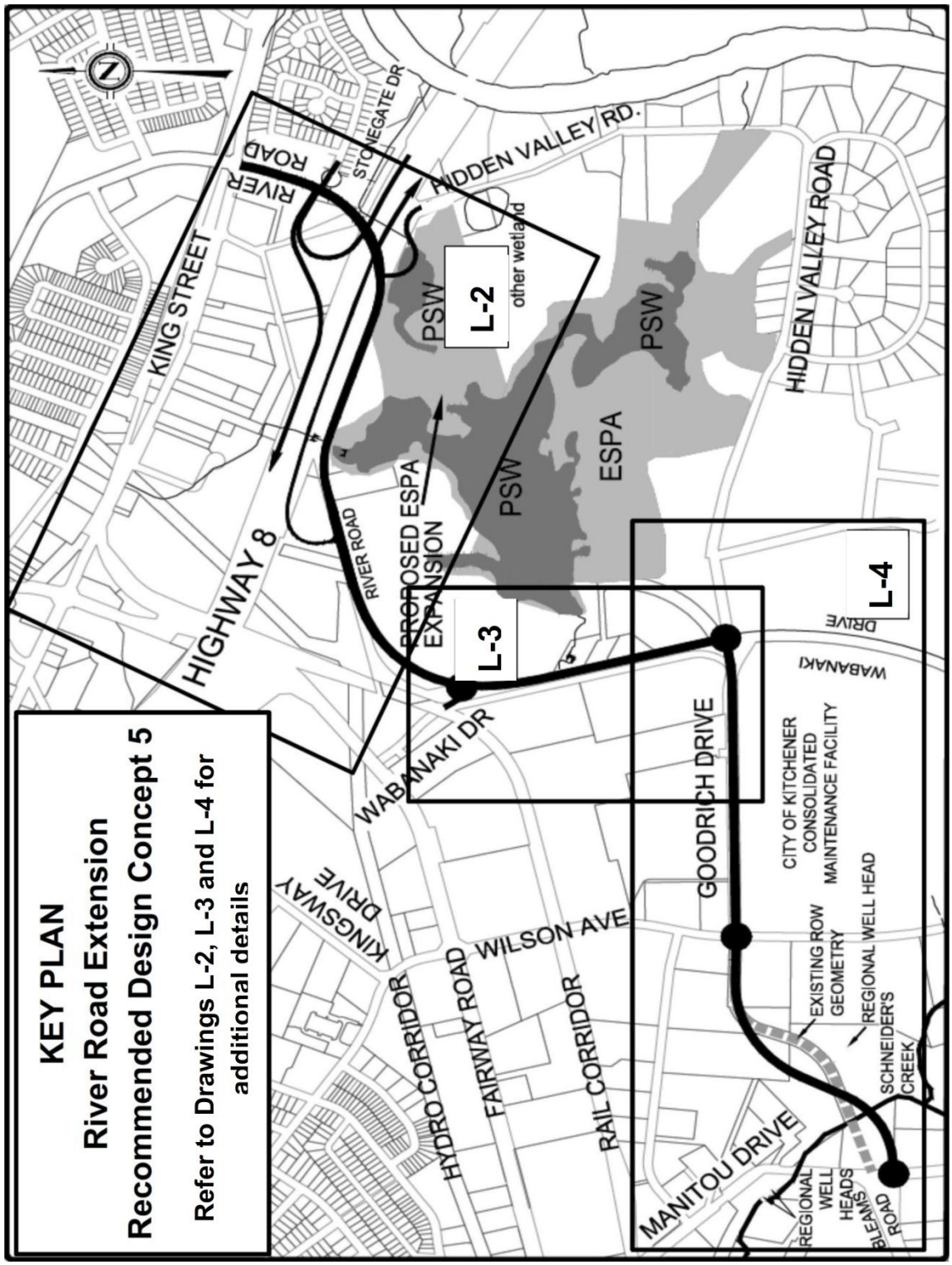
As shown in Table 4, the noise levels at the various receivers are dominated by Highway 8 and the addition of River Road does not have a significant impact (noise level increases due to River Road are a maximum of 2dBA). The only receiver that fails the Region criteria is Receiver B as the noise level exceeds 65 dBA (both in the existing scenario and in the future 2013 forecast). However, the exceedance is dominated by Highway 8 noise as the River Road noise only contributes 0.4dBA to the total noise environment. Accordingly, noise attenuation is not warranted for traffic noise generated by River Road, and even if noise attenuation were constructed for River Road it would have no discernable influence on the noise environment.

Recommendations

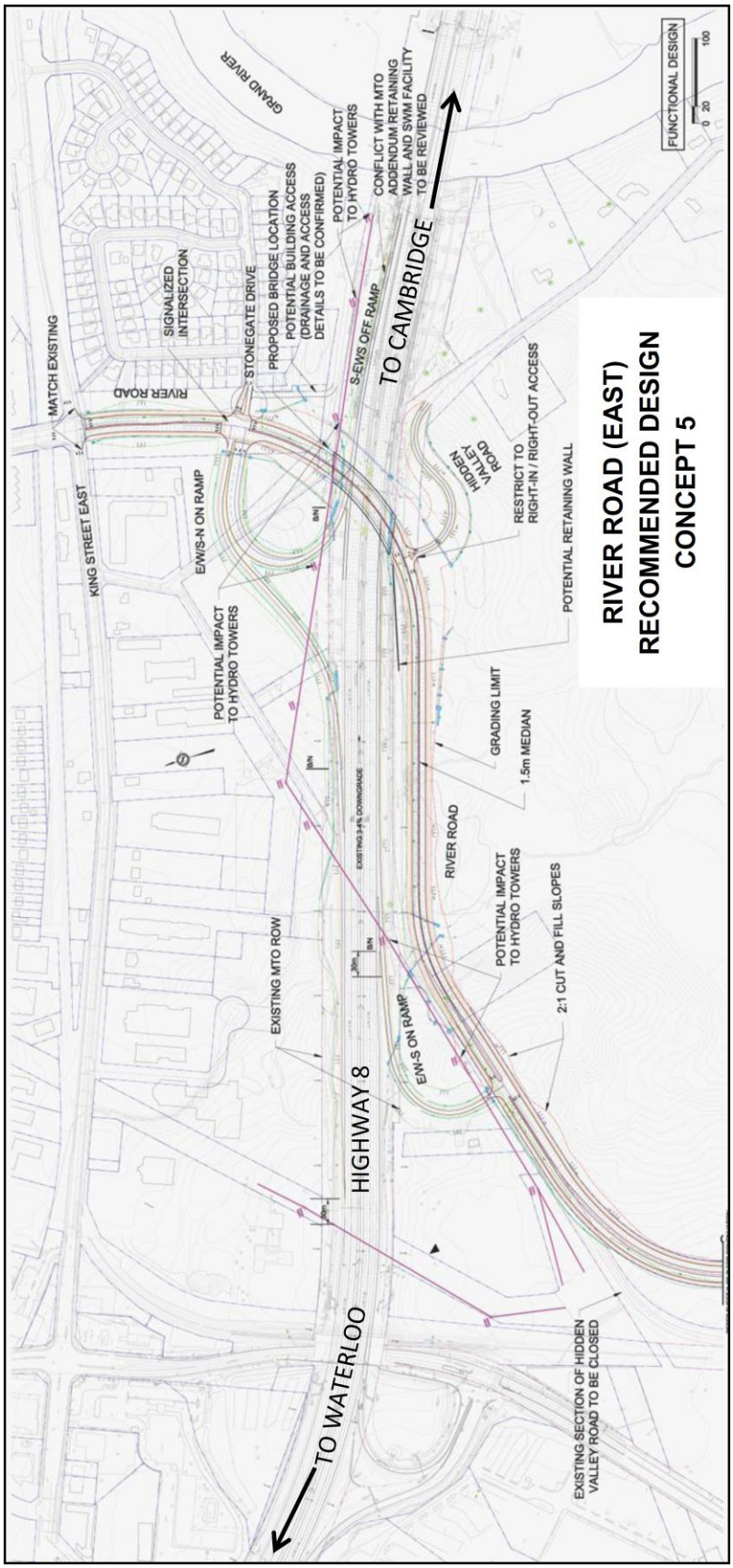
In conclusion, it is found that predicted noise from River Road will not have a significant impact on the noise environment of the adjacent sensitive receivers and noise resulting from River Road will be within the Region of Waterloo guidelines. Accordingly, no noise mitigative measures are warranted for the River Road extension**.**

APPENDIX L

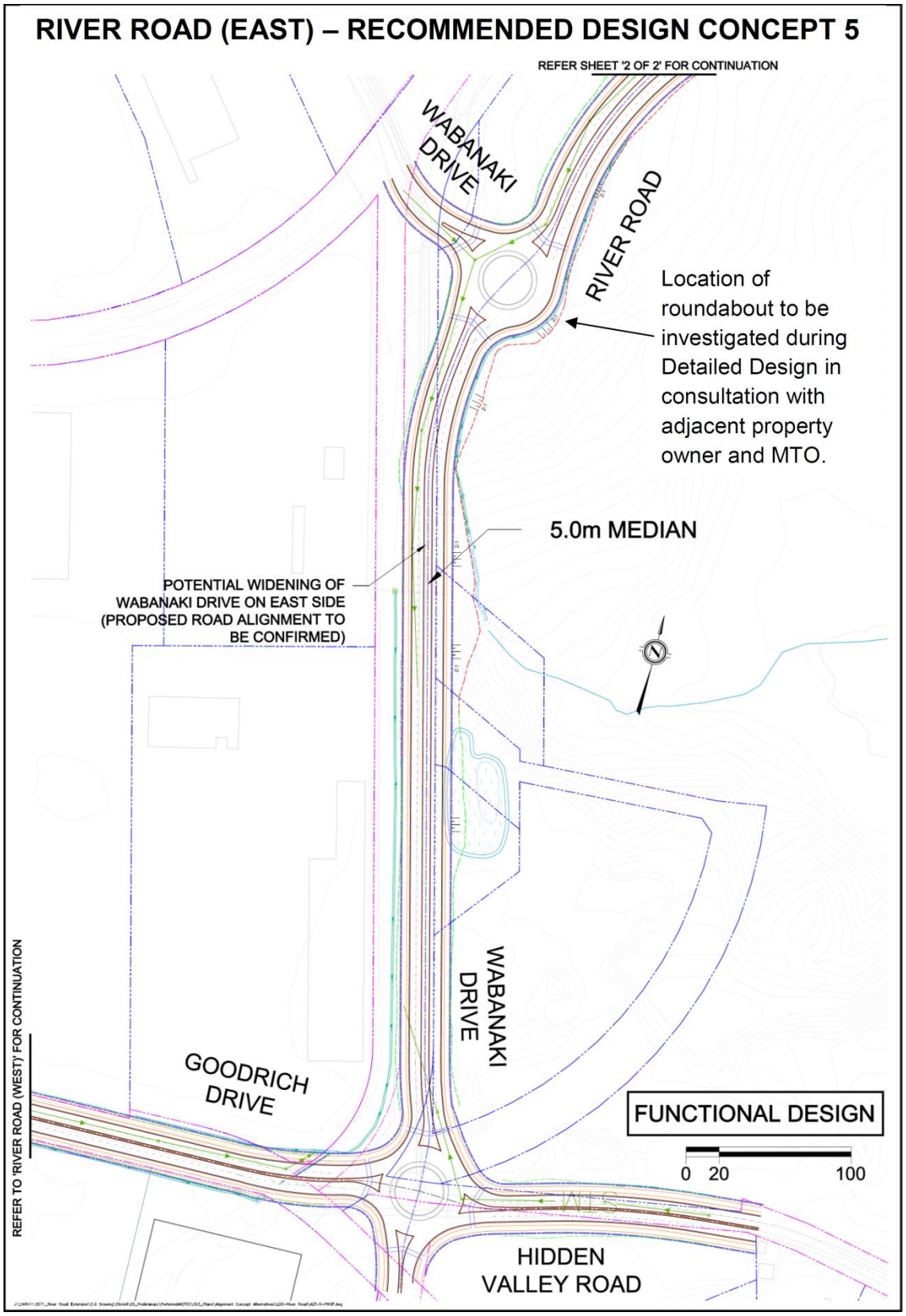
FUNCTIONAL DESIGN PLANS AND CROSS-SECTION



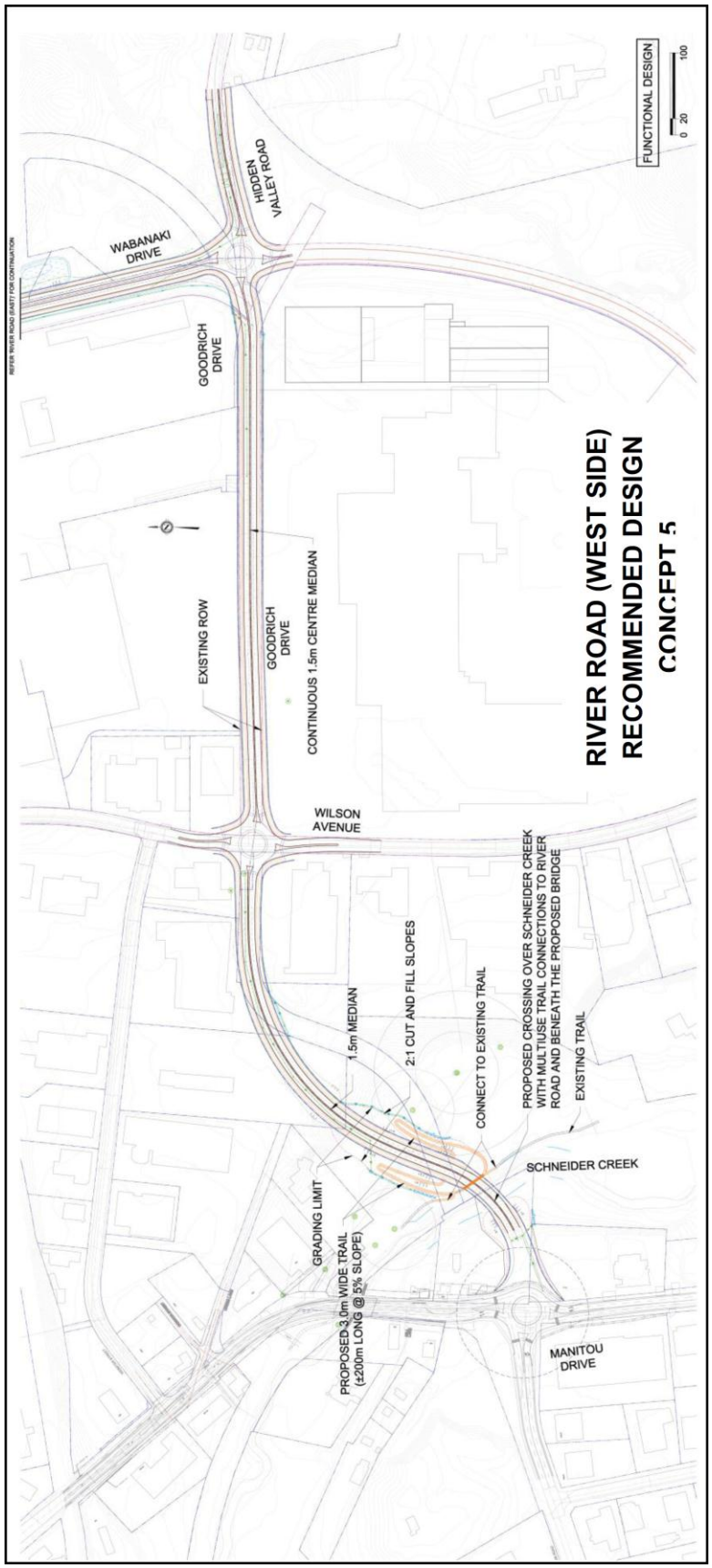
APPENDIX L-2


RIVER ROAD (EAST)
RECOMMENDED DESIGN
CONCEPT 5
FUNCTIONAL DESIGN
0 20 100
TO CAMBRIDGE
TO WATERLOO
HIGHWAY 8
GRAND RIVER
MATCH EXISTING
KING STREET EAST
RIVER ROAD
SIGNALIZED INTERSECTION
STONEGATE DRIVE
PROPOSED BRIDGE LOCATION
POTENTIAL BUILDING ACCESS (DRAINAGE AND ACCESS DETAILS TO BE CONFIRMED)
POTENTIAL IMPACT TO HYDRO TOWERS
CONFLICT WITH MTO ADDENDUM RETAINING WALL AND SWM FACILITY TO BE REVIEWED
S-E/WS OFF RAMP
E/W-S ON RAMP
HIDDEN VALLEY ROAD
RESTRICT TO RIGHT-IN / RIGHT-OUT ACCESS
POTENTIAL RETAINING WALL
GRADING LIMIT
1.5m MEDIAN
RIVER ROAD
EXISTING 2.4% DOWNGRADE
EXISTING MTO ROW
E/W-S ON RAMP
2:1 CUT AND FILL SLOPES
EXISTING SECTION OF HIDDEN VALLEY ROAD TO BE CLOSED

APPENDIX L-3

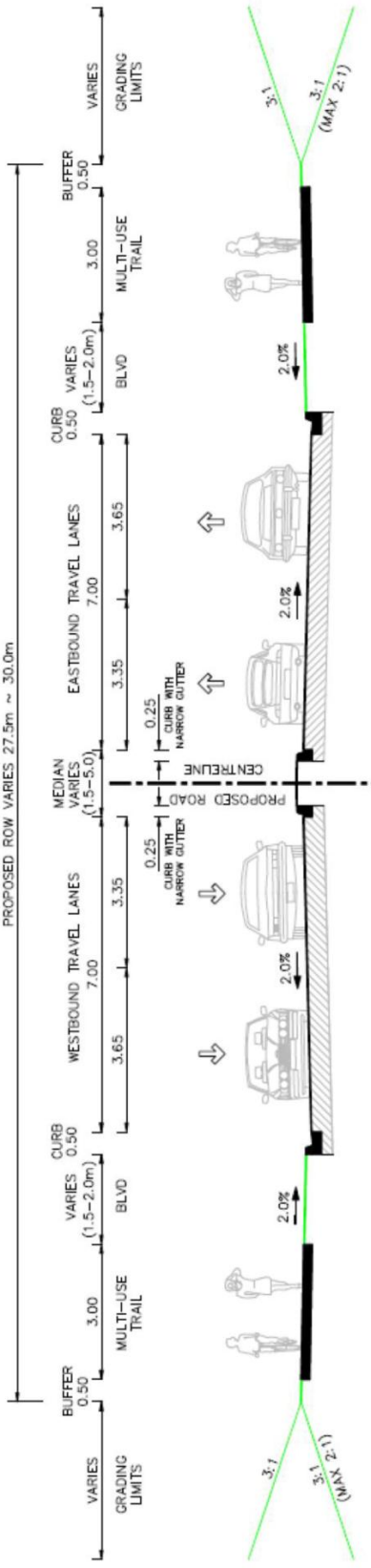

RIVER ROAD (EAST) – RECOMMENDED DESIGN CONCEPT 5
REFER SHEET '2 OF 2' FOR CONTINUATION
WABANAKI DRIVE
RIVER ROAD
Location of roundabout to be investigated during Detailed Design in consultation with adjacent property owner and MTO.
5.0m MEDIAN
POTENTIAL WIDENING OF WABANAKI DRIVE ON EAST SIDE (PROPOSED ROAD ALIGNMENT TO BE CONFIRMED)
N
WABANAKI DRIVE
GOODRICH DRIVE
FUNCTIONAL DESIGN
0 20 100
HIDDEN VALLEY ROAD
REFER TO 'RIVER ROAD (WEST)' FOR CONTINUATION

APPENDIX L-4


RIVER ROAD (WEST SIDE)
RECOMMENDED DESIGN
CONCEPT 5
FUNCTIONAL DESIGN
0 20 100
HIDDEN VALLEY ROAD
WABANAKI DRIVE
GOODRICH DRIVE
EXISTING ROW
GOODRICH DRIVE
CONTINUOUS 1.5m CENTRE MEDIAN
WILSON AVENUE
1.5m MEDIAN
2:1 CUT AND FILL SLOPES
CONNECT TO EXISTING TRAIL
PROPOSED CROSSING OVER SCHNEIDER CREEK WITH MULTIUSE TRAIL CONNECTIONS TO RIVER ROAD AND BENEATH THE PROPOSED BRIDGE
EXISTING TRAIL
SCHNEIDER CREEK
GRADING LIMIT
PROPOSED 3.0m WIDE TRAIL (±200m LONG @ 5% SLOPE)
MANITOU DRIVE

APPENDIX L-5

RECOMMENDED DESIGN CONCEPT 5
River Road Extension from King Street to Manitou Drive
Road Design Criteria: Typical Road Cross-Section



NOTE: Width of Road Will Vary to Minimize Natural Environment Impacts

APPENDIX M

PROPERTY ACQUISITION PROCESS INFORMATION SHEET (PROJECTS REQUIRING CLASS ENVIRONMENTAL ASSESSMENT APPROVAL)

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

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

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

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

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

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

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

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

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

APPENDIX M-2

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;

- reasonable costs of the owner will be included in any compensation settlement;
- 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
- an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

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

Expropriation

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

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

For information on the expropriation process, please obtain a copy of the 'Expropriation Information Sheet'.