MEDIA RELEASE: IMMEDIATE

REGIONAL MUNICIPALITY OF WATERLOO
PUBLIC MEETING OF THE
PLANNING AND WORKS COMMITTEE
CONSOLIDATED
AGENDA

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

*Denotes Item(s) Not Part of Original Agenda

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

2. 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

3. STAFF PRESENTATION

4. DELEGATIONS

   i. Neil Taylor
   ii. Peter Benninger, Pearl Valley Development Corporation and Ted Rowe, MTE Consultants Inc.
   * iii. John Nother, Hidden Valley Residents
   * iv. Daphne Nicholls, The Friends of Hidden Valley
   * v. Terry Lalande
   * vi. Marcin Kasprzycki

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

DATE: December 3, 2013

FILE CODE: T04-20, 7087

SUBJECT: RIVER ROAD EXTENSION, KING STREET TO MANITOU DRIVE, KITCHENER, CLASS ENVIRONMENTAL ASSESSMENT - PUBLIC INPUT MEETING FOR PREFERRED DESIGN CONCEPT

RECOMMENDATION:

For information only.

SUMMARY:

This report is being submitted for the Committee’s information in advance of the Public Input Meeting for the River Road Extension from King Street to Manitou Drive Class Environmental Assessment Study to be held on December 3, 2013 at 7:00 p.m. at Regional Council chambers, 150 Frederick Street, Kitchener, Ontario.

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 an area bounded by 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 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.

Following the approval of Alternative 4C as the Preferred Planning Solution for this project, 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. 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 MNR 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 the recently held PCC on October 1, 2013. The main issues raised by the public during this Class EA were primarily related to potential negative effects on the natural environment within Hidden Valley. 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.

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.

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 Preferred Design Concept for this project. Plans showing the alignment and configuration of Preferred Design Concept 5 are included in Appendix “K”. The estimated cost of Preferred Design Concept 5 is approximately $72 million which is projected to be fully funded from Regional Development Charges. The Project Team is presenting its Preferred Design Concept 5 to the public and Regional Council for further public input prior to making a final recommendation for this project.

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 an area bounded by 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 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 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
- 2013 Draft Regional Active Transportation Master Plan (ATMP).

These studies have identified a number of network improvements intended to better manage expected traffic growth by dispersing traffic away from the most congested parts of the road network and by providing valuable links for cyclists and pedestrians in a network of active transportation corridors. One of the improvements recommended in these studies was the River Road Extension from King Street to Manitou Drive. The need for other network improvements such as the widening of Manitou Drive between Fairway Road and Bleams Road was also reaffirmed by these studies.

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 environmental inventories were undertaken to assess 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.
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 of the Jefferson Salamander habitat within the Hidden Valley forest area. 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.

2. 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.

3. 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 “B”. 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. 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 land in the Hidden Valley area. Each of these new Alternatives was evaluated in terms of its capability to address the transportation problem. Alternatives which would fail to address the transportation problem were not evaluated further.
After assessing how each new alternative would address traffic congestion in the study area and how each new alternative would function from a traffic operations and safety perspective, 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 “C”. From a transportation operations viewpoint, the Project Team concluded that both Alternative Design Concepts 4C and 5 would operate equally well.

4. Potential Impacts of Alternatives 4C and 5 on the Existing Woodlot

Both Alternative Design Concepts 4C and 5 are outside the Regulated Limits of the Jefferson Salamander habitat within the Hidden Valley Forest Core Environmental Feature (CEF), confirmed by MNR as shown in Appendix “D”. A relatively small proportion of the Jefferson Salamander population could potentially disperse further from the identified breeding ponds than the 300m distance which marks the extent of the regulated habitat. This potential extended dispersal range is subject to the availability of suitable habitat land and the absence of barriers and other significant threats. There is suitable habitat identified as mature woodlots, located between the regulated habitat and Highway 8. 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.

Although the proposed River Road Extension would not encroach on the Jefferson Salamander Regulated Habitat, there is some risk that any Jefferson Salamanders that have travelled beyond the limits of the regulated habitat could be impacted by the construction and operation of the new road. Because of this potential risk, the Region will enter into discussions with MNR staff for the purpose of obtaining a Permit under Section 17 of the Endangered Species Act. The purpose of the permit is to establish the measures for the Region to follow in the event that future road construction may encounter Jefferson Salamanders. 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.

5. 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 but the most recent public meetings held for this project have been detailed in previous reports and will be documented as part of the final documentation for this Class EA Study. A summary of the public meetings and a detailed summary of the comments provided by the public the Project Team’s responses for the October 1, 2013 PCC are detailed in Appendices “E” and “F” respectively.

6. Main Concerns Raised by the Public

Over the course of this project, the public has raised many concerns, most have which have been documented in previous reports. From all the comments received over the course of this study, the Project Team has grouped the concerns raised into several main categories as follows:
Natural Environment Impacts

Hundreds of 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 three 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; 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. Through discussions with the MNR and prior to finalizing the documentation for this study, the Project Team will develop additional measures to reduce or mitigate potential negative impacts of the new road on the Jefferson Salamanders and any other SAR or Endangered Species identified within Hidden Valley.

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 a full year of monitoring and an assessment of the potential salt impacts from a new road, the Stage 1 phase of the study concluded that the new road would have a negligible effect on the surface water and groundwater resources in the Hidden Valley.
area. This study is ongoing with continued monitoring of the water resources for a second year. In addition, the Region is committed to making all reasonable efforts to reduce the salt impacts on the area by incorporating appropriate best management practices during detailed design for capturing and containing road drainage and by continued implementation of its salt management plans during future winter maintenance operations.

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 “G” for a summary of the proposed mitigation measures for this project.

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. Many residents on Stonegate Drive have expressed a desire for no access to River Road or a very restricted access because of concerns of traffic “shortcutting” through the neighbourhood via Stonegate Drive to avoid delays on King Street. Other residents on the local streets within the Stonegate neighbourhood have expressed a desire for a “full-movements” intersection of Stonegate Drive with River Road to allow convenient access to/from Highway 8 and River Road.

Project Team Response:

The Stonegate neighborhood 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. This temporary road was planned to remain in operation until the River Road Extension is constructed. That temporary access must be removed when the River Road Extension is constructed so that the intersection of River Road at King Street and at the Highway 8 ramps can operate well. Based on comments received on two separate occasions from residents of the neighborhood and a review of traffic operations, the Project Team proposed two options for comment by the neighborhood residents at the October 1, 2013 PCC. At the time of the October 1, 2013 PCC, other more restrictive traffic options that were previously presented were not presented to the public because the City of Kitchener’s requirement for emergency vehicle access would not be satisfied. The two options presented at the October 1, 2013 PCC are displayed in Appendix “H” and described as follows:

- **Full Movements Option** - Full access (no restricted turning movements) at the Stonegate/River Road intersection would facilitate easy access to and from the Stonegate neighbourhood. This could result in some increased traffic on Stonegate Drive as a result of motorists’ desire to avoid use of the intersection at King Street and River Road.

- **Right-turn Entry Only Option** - Restricted access whereby only right turns would be permitted entering Stonegate Drive and all movements permitted exiting Stonegate Drive.
After the October 1, 2013 PCC, the Project Team participated in discussions with the City and Regional EMS staff and determined that a third option, the **Entry for Emergency Vehicles Only** design concept will satisfy the requirement for a continuously available second emergency access route to and from the Stonegate Drive neighbourhood. This third option is described as follows:

- **Entry for Emergency Vehicles Only** – This concept would allow all movements out of Stonegate Drive and allow no entry except by emergency vehicles as shown in Appendix “H”. This is supported by the Project Team as the Preferred Design Concept.

While the full movements option would provide improved access for the neighborhood and for emergency services, the additional left-turns at the Stonegate Drive/River Road intersection would be expected to result in some more collisions than the other two options; however, all three options would be acceptable from Region’s and the MTO’s perspectives. The Project Team has selected the **Entry for Emergency Vehicles Only** option as the preferred 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 Highway 8 and River Road, it does provide adequate emergency response times to the neighbourhood while limiting the amount of traffic infiltration on to Stonegate Drive. In selecting the Entry for Emergency Vehicles Only option as the preferred option, the Project Team is acknowledging the greater good of limiting “cut-through” traffic when compared to the convenience of easy access to/from Highway 8 and River Road.

**Noise Impacts**

A number of comments were received with respect to concerns that the new River Road Extension will increase noise levels associated with traffic, trucks and the close proximity of the new road to residential properties. Many have requested consideration of noise walls.

**Project Team Response:**

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 study assessed the average existing and 10-year projected noise levels at several key noise sensitive locations where the backyards or side-yards of existing homes are adjacent to the proposed new road. 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. According to Regional Policy, noise attenuation will be provided when:

- The projected 10-year noise level exceeds 65 dBA; OR
- The projected 10-year noise level exceeds 60 dBA AND the difference between the existing and 10-year projected noise levels is 5 dBA or more.

The Noise Assessment Study completed for this Class EA Study determined that the requirements for noise attenuation are not warranted at any location adjacent to the new road, and therefore no noise walls will be recommended for this project. A summary of the findings of the noise study are located in Appendix “I”.
Property Impacts

Some concerns were received from landowners with respect to potential property acquisition to facilitate the proposed River Road Extension. Other concerns were raised regarding implementation of a continuous centre median on the River Road Extension because this median would restrict access to/from private properties adjacent to the new road to right-in-right-out turns only.

Project Team Response:

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 after the Final Design Concept is approved. The initial property requirements will be subject to further refinements as part of detailed design.

After the Final Design Concept is approved by the 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 “J”, the Property Acquisition Process Information Sheet (Projects Requiring Class EA Approval), for more detailed information.

A continuous centre median is warranted on the River Road Extension to reduce conflicts with vehicles turning to and from adjacent properties. Concern with loss of left-turn access was identified as a concern by owners of properties that currently have access to Goodrich Drive. Since the new River Road Extension follows the entire 650 metres length of the existing Goodrich Drive, the continuous centre median proposed for the new River Road Extension will only permit right-in-right-out turns from properties currently adjacent to Goodrich Drive. Roundabouts are preferred at both ends of the existing Goodrich Drive. Left-turns in this section of the new River Road Extension would be accommodated by U-turns at these proposed roundabouts thereby avoiding the need for a left-turn entry to or exit from any of these properties. Access impacts associated with property acquisitions and alternatives for mitigation will be reviewed as part of future detailed design and property negotiations. Alternatives for mitigation may include modification or relocation of an existing access and/or construction of a new access as necessary.

7. The Project Team’s Preferred 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 Preferred Design Concept for the River Road Extension.

Detailed displays of a complete functional design of the River Road Extension Preferred Design Concept 5 were presented at the October 1, 2013 PCC and on the Region’s website, consisting of:

- Typical 4-lane Road Cross-Section Drawing as shown in Appendix “K”
- Plans of the functional design for the roads as shown in Appendix “K”
- General arrangement drawings for the Hwy 8 Bridge and the Schneider Creek Bridge.
A brief description of Preferred Design Concept 5 is as follows:

**Horizontal Alignment and Cross Section Elements**

Most of the proposed road for Preferred 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 vehicular lanes, a multi-use trail on each side and would have a continuous raised median. Construction of the new Highway 8 interchange would require the 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 vehicular 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 would be sufficient to pass the Regional Storm and would also be sufficient to allow passage of a variety 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. 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.

**What are the Benefits of the Preferred Design Concept 5?**

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

- Reduced congestion and delay for all modes of traffic along Fairway Road (which is already at capacity) and other east-west 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 Draft Regional Active Transportation Master Plan;
- Reduced noise and air pollution, in the study area overall, which is currently resulting from vehicle idling and increased travel time due to congestion;
- Preferred 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; and
- Preferred Design Concept 5 would provide improved access for the Hidden Valley business park and residential development lands designated in the City of Kitchener Official Plan.

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

- Reduce potential impact on an endangered species 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.

**8. Preliminary Cost Estimate of the Preferred Design Concept 5**

The preliminary cost estimate for the Preferred Design Concept 5 is approximately $72 million and includes engineering, property and construction. The preliminary cost estimate of Preferred 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.
9. **Next Steps in Completing the River Road Extension Class EA**

Based on all comments from the public, stakeholders and involved agencies, including those received at the December 3, 2013 Public Input Meeting, and in conjunction with all of the other relevant technical information, the next step is for the Project Team to identify a final Recommended Design Concept for this project.

To complete this Class EA study, the major completion milestones are:

- Present the Recommended Design Concept to the City of Kitchener Council in January 2014;
- Present the Recommended Design Concept to the Public and to Regional Council for consideration in February 2014;
- Subject to Regional Council endorsement of the Recommended Design Concept, compile all the project documentation in an Environmental Study Report (ESR) and place the ESR on the public record for review and approval in March 2014;
- Detailed design, property acquisition, and utility relocations would occur in 2014-2016; and
- Road construction is planned to commence in 2017, subject to budget approval.

**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 2013 Transportation Capital Budget and Ten-Year Capital Forecast includes $60 million over the years 2013 to 2022 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. The cost estimate will be refined as the project progresses through detailed design. The additional funding required to construct this project will be considered by Regional Council as part of future Transportation Capital Budget deliberations.

**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 – Alternative Fairway Road and Highway 8 Interchange Options Presented by the Public in 2011
Appendix C – Evaluation of Design Concepts 4C and 5
Appendix D – Regulated Habitat of Jefferson Salamander Habitat
Appendix E – Summary of Public Consultation
Appendix F – Comment/Response Summary of Public Consultation Centre, October 1, 2013
Appendix G – Mitigation of River Road Extension Impacts on the Natural Environment
Appendix H – River Road/Stonegate Drive Intersection Options
Appendix I – Noise Study Results
Appendix J – Property Acquisition Process Information Sheet
Appendix K – Functional Design Plans and Cross Section

PREPARED BY: Wayne Cheater, Senior Project Manager

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

**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.

**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.
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.

Alternative ‘H’

Traffic Operation & Property Impact Issues

NOT RECOMMENDED

Alternative ‘S’

Traffic Operation Issues

NOT RECOMMENDED
Note: The Endangered Species Act-regulated habitat which is not shown on this page is shown in Appendix “D”
# Natural, Social & Economic Impact Comparisons in Hidden Valley

## GOAL 1: MINIMIZE NATURAL ENVIRONMENT IMPACTS

**Measured Criteria**

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

## GOAL 2: MINIMIZE SOCIAL ENVIRONMENT IMPACTS

**Measured Criteria**

<table>
<thead>
<tr>
<th>Measured Criteria</th>
<th>Alternative 4C</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Property Displacement/Fragmentation</td>
<td>W of Hwy 8 – 8.23 ha E of Hwy 8 – 2.67 ha 10.90 ha</td>
<td>W of Hwy 8 – 4.96 ha E of Hwy 8 – 2.61 ha 7.57 ha</td>
</tr>
<tr>
<td>+ Property Acquisition Cost $ Not including legal &amp; injurious affectation</td>
<td>+/- $5.5 Million</td>
<td>+/- $5.2 Million</td>
</tr>
</tbody>
</table>

## GOAL 4: PROVIDE COST-EFFECTIVE ECONOMIC ENVIRONMENT

<table>
<thead>
<tr>
<th>Measured Criteria</th>
<th>Alternative 4C</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Hwy 8 Crossing Structure Construction Cost</td>
<td>Single span, 68m $8.7 Million</td>
<td>2- span, 108m $15.7 Million</td>
</tr>
<tr>
<td>4.2 Potential comparative cost of mitigation &amp; compensation for Natural Environment impacts</td>
<td>Allowance of $750,000 (plantings, erosion controls, slope treatment, etc.)</td>
<td>Allowance of $250,000 (plantings, erosion controls, slope treatment, etc.)</td>
</tr>
</tbody>
</table>
### Natural Resources Impact Assessment in Schneider’s Creek Valley

#### GOAL 1: MINIMIZE NATURAL ENVIRONMENT IMPACTS

<table>
<thead>
<tr>
<th>Measured Criteria</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Direct Impacts on PSW Wetlands</td>
<td>There are no PSWs in the vicinity of the Schneider Creek crossing.</td>
</tr>
<tr>
<td>1.2 Indirect Impacts to PSW Wetlands</td>
<td>There are no PSWs in the vicinity of the Schneider Creek crossing.</td>
</tr>
<tr>
<td>1.3 Direct Impact to Hidden Valley ESPA (existing &amp; candidate ESPA)</td>
<td>The alternative will not directly impact the Homer Watson Park ESPA.</td>
</tr>
<tr>
<td>1.4 Indirect Impact to Hidden Valley ESPA (existing &amp; candidate ESPA)</td>
<td>The alternative will indirectly impact 0.11 ha of the Homer Watson Park ESPA.</td>
</tr>
<tr>
<td>1.5 Direct Impact to Core Environmental Features</td>
<td>The alternative will not directly impact Core Environmental Features.</td>
</tr>
<tr>
<td>1.6 Indirect Impact to Core Environmental Features</td>
<td>The alternative will indirectly impact 0.11 ha of Core Environmental Features.</td>
</tr>
</tbody>
</table>
| 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 (Continued)

<table>
<thead>
<tr>
<th>Measured Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9 Wildlife Resources</td>
</tr>
<tr>
<td>1.10 Fisheries and Aquatic Habitat</td>
</tr>
<tr>
<td>1.11 Regional Significant Species</td>
</tr>
</tbody>
</table>
Jefferson Salamander Regulated Habitats
Natural Resources Inventory & Impact Assessment in Hidden Valley
APPENDIX E

SUMMARY 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. Please refer to Appendix “F” for a summary of the comments received and the Project Team’s responses for the PCC that was conducted on October 1, 2013.
The 66 comments submitted to the Project Team are all tabulated below with a summary of responses which were prepared by Region staff, MNR staff, IBI Group and LGL Limited.

The Comment/Response Summary does not address every comment received by the 66 submissions between the October 1, 2013 Public Consultation Centre and October 18, 2013. All comments received will be included in the Environmental Study Report (ESR). It is also noted that some comments offer constructive recommendations that will be incorporated into the process; however, the Comment/Response Summary does respond to most comments, and involves the following main comment topics and how they are generally addressed:

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. Additional comment was provided by telephone call, email or other correspondence, which is included in the summary below.

<table>
<thead>
<tr>
<th><strong>COMMENT SHEET 1 – PREFERRED DESIGN CONCEPT 5</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question #1:</strong> Please indicate your opinion on the Preferred Design Concept 5 for this project:</td>
</tr>
<tr>
<td>I support it: 12 Responses</td>
</tr>
<tr>
<td>I do not support it: 15 Responses</td>
</tr>
<tr>
<td><strong>Question #2:</strong> Do you have any concerns or suggestions not identified or adequately addressed through this Class EA study?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>MAIN COMMENT TOPICS</strong></th>
<th><strong>GENERAL RESPONSE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Environment Impacts</strong></td>
<td>• 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%.</td>
</tr>
<tr>
<td>• Loss of trees and wetlands, primarily in Hidden Valley;</td>
<td></td>
</tr>
<tr>
<td>MAIN COMMENT TOPICS</td>
<td>GENERAL RESPONSE</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>• Destruction of habitat of Species at Risk (SAR) or endangered species, such as the Jefferson Salamander; and</td>
<td>• 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. Through discussions with the MNR and prior to finalizing the documentation for this study, the Project Team will develop additional measures to reduce or mitigate potential negative impacts of the new road on the Jefferson Salamanders and any other SAR or Endangered Species identified within Hidden Valley.</td>
</tr>
<tr>
<td>• Negative effects of road salt on the surface and groundwater in the area including 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.</td>
<td>• 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 a full year of monitoring and an assessment of the potential salt impacts from a new road, the Stage 1 phase of the study concluded that the new road would have a negligible effect on the surface water and groundwater resources in the Hidden Valley area. This study is ongoing with continued monitoring of the water resources for a second year. In addition, the Region is committed to making all reasonable efforts to reduce the salt impacts on the area by incorporating appropriate best management practices during detailed design for capturing and containing road drainage and by continued implementation of its salt management plans during future winter maintenance operations.</td>
</tr>
<tr>
<td>• Mitigation to protect endangered species and their habitat from contaminated run-off is absent even though there has been years of opportunity to take such measures. No concrete measures to mitigate or protect endangered species from road kills even though there has been years of opportunity. This is not new science.</td>
<td>• 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 “G” for a summary of the proposed mitigation measures for this project.)</td>
</tr>
</tbody>
</table>
### MAIN COMMENT TOPICS

<table>
<thead>
<tr>
<th>Noise Impacts</th>
<th>GENERAL RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- A number of comments were received with respect to concerns that the new</td>
<td>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</td>
</tr>
<tr>
<td>River Road Extension will increase noise levels associated with traffic,</td>
<td>Class EA Study, the Region has completed a Noise Assessment Study in accordance with Ministry of Environment (MOE) guidelines to determine the potential</td>
</tr>
<tr>
<td>trucks and the close proximity of the new road to residential properties.</td>
<td>noise impact of the new road on adjacent properties. The study assessed the average existing and 10-year projected noise levels at several key noise</td>
</tr>
<tr>
<td>Many have requested consideration of noise walls.</td>
<td>sensitive locations where the backyards or side-yards of existing homes are adjacent to the proposed new road. The key area within the River Road</td>
</tr>
<tr>
<td>- Increased noise - Our neighbourhood is located close to the highway and to</td>
<td>project where applicable noise sensitive locations are present includes the south side of River Road between Highway 8 and King Street as this section</td>
</tr>
<tr>
<td>King Street. We are already dealing with high levels of noise as a result of</td>
<td>of River Road would be directly adjacent to the backyards and side-yards of the existing homes along Woodview Crescent and Stonegate Drive. According</td>
</tr>
<tr>
<td>our location. To add in the additional noise of potentially constant traffic</td>
<td>to Regional Policy, noise attenuation will be provided when:</td>
</tr>
<tr>
<td>accessing the new road would substantially lessen the enjoyment of our</td>
<td>- The projected 10-year noise level exceeds 65 dBA; OR</td>
</tr>
<tr>
<td>properties.</td>
<td>- The projected 10-year noise level exceeds 60 dBA AND the difference between the existing and 10-year projected noise levels is 5 dBA or</td>
</tr>
<tr>
<td></td>
<td>more.</td>
</tr>
<tr>
<td></td>
<td>The Noise Assessment Study completed for this Class EA Study determined that the requirements for noise attenuation are not warranted at any</td>
</tr>
<tr>
<td></td>
<td>location adjacent to the new road, and therefore no noise walls will be construction for the project. (A summary of the findings of the noise study</td>
</tr>
<tr>
<td></td>
<td>are located in Appendix “I”.)</td>
</tr>
</tbody>
</table>
### MAIN COMMENT TOPICS

<table>
<thead>
<tr>
<th>Property Impacts</th>
<th>GENERAL RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Some concerns were received from landowners with respect to potential</td>
<td>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 Final Design Concept is approved. The initial property requirements will be subject to further refinements as part of detailed design.</td>
</tr>
<tr>
<td>property acquisition to facilitate the proposed River Road Extension.</td>
<td>After the Final Design Concept is approved by the 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. <em>(Please see Appendix “J”, the Property Acquisition Process Information Sheet Projects Requiring Class EA Approval), for more detailed information.</em></td>
</tr>
<tr>
<td>• Other concerns were raised regarding implementation of a continuous centre</td>
<td>A continuous centre median is warranted on the River Road Extension to reduce conflicts with vehicles turning to and from adjacent properties. Concern with loss of left-turn access was identified as a concern by owners of properties that currently have access to Goodrich Drive. Since the new River Road Extension follows the entire 650 metres length of the existing Goodrich Drive, the continuous center median proposed for the new River Road Extension will only permit right-in-right-out turns from properties currently adjacent to Goodrich Drive Roundabouts are preferred at both ends of the existing Goodrich Drive. Left-turns in this section of the new River Road Extension would be accommodated by turning at these proposed roundabouts thereby avoiding the need for a left-turn entry to or exit from any of these properties. Access impacts associated with property acquisitions and alternatives for mitigation will be reviewed as part of future detail design and property negotiations. Alternatives for mitigation may include modification or relocation of an existing access and/or construction of a new access as necessary.</td>
</tr>
<tr>
<td>median on the River Road Extension because this median would restrict access to/from private properties adjacent to the new road to right-in-right-out turns only.</td>
<td>The project team is investigating River Road extension design refinements that would eliminate or at least reduce these impacts to Webster Road properties. Provision of special access for 55 Webster Road directly from River Road is being considered to reduce the effect of the required property acquisition on the business operation.</td>
</tr>
<tr>
<td>• Another concern was expressed that the property acquisition required for the new road would seriously impact operation of a business at 55 Webster Road.</td>
<td></td>
</tr>
<tr>
<td>MAIN COMMENT TOPICS</td>
<td>GENERAL RESPONSE</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Project Cost</strong></td>
<td></td>
</tr>
<tr>
<td>Several comments were received about the cost and value of the River Road Extension, including:</td>
<td>The historical cost for South Kitchener Transportation Corridor Study (SKTCS) and River Road Extension Class EA from 2004 to 2012 inclusive is $1.7M including consultants fees, study expenses and regional staff charges. The additional estimate for 2013 and 2014, to complete the Class EA is $800K. The current estimated cost for Alternative Design Concept 5, including engineering, property, contingencies = $72M. While the funding of the design and construction costs for this project will be mostly through Development Charges, deferral of this project would not free up these funds for other non-growth related infrastructure improvements. For the current estimate the additional cost of the new preferred design concept plus additional cost to mitigate impacts that have been identified in the Class EA study increase the budget estimate to $72M.</td>
</tr>
<tr>
<td>- The cost is too high;</td>
<td></td>
</tr>
<tr>
<td>- Make developers pay for the road; and</td>
<td></td>
</tr>
<tr>
<td>- How much has the Region spent on the Class EA study?</td>
<td></td>
</tr>
<tr>
<td><strong>Hidden Valley Road Access</strong></td>
<td></td>
</tr>
<tr>
<td>Some comments were received including:</td>
<td>The City of Kitchener requires two points of access into the Hidden Valley area for emergency response purposes, in the event of road closure/blockage, and therefore the Hidden Valley access road connection must be included. The Hidden Valley access road cannot be removed based on value engineering as it is required for emergency access purposes, including provision for the temporary blockage of one road access. The access will be limited to right-turn entry and exit because of the need for satisfactory sight distance from the Stonegate Drive/Highway 8 ramp intersection.</td>
</tr>
<tr>
<td>- Hidden Valley Road access requires too much land and grading consider removing the access from River Road Extension based on value engineering;</td>
<td></td>
</tr>
<tr>
<td>- Reduce access to right-in only; and</td>
<td></td>
</tr>
<tr>
<td>- Provide full left-turn and right-turn access</td>
<td></td>
</tr>
<tr>
<td>- Questions: the regulatory status, cost and need for a proposed S-curve at Hidden Valley Road.</td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX F-6

### COMMENT SHEET 2 – ALTERNATIVES FOR ACCESS TO/FROM STONEGATE DRIVE

<table>
<thead>
<tr>
<th>Question #1: Please indicate your opinion for Stonegate Drive access for this project.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I support the full unrestricted access option.</td>
<td>8 Responses</td>
</tr>
<tr>
<td>I support the right-turn access option.</td>
<td>6 Responses</td>
</tr>
<tr>
<td>I support neither of the two options presented.</td>
<td>17 Responses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question #2: Are you a resident or owner of property in the Stonegate Drive neighbourhood which requires access to Stonegate Drive?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes.</td>
<td>26 Responses</td>
</tr>
<tr>
<td>No</td>
<td>5 Responses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question #3: Do you have other comments or concerns regarding the requirements for access to Stonegate Drive neighbourhood?</th>
<th></th>
</tr>
</thead>
</table>

**MAIN COMMENT TOPICS**

- Many residents on Stonegate Drive have expressed a desire for no access to River Road or a very restricted access because of concerns of traffic “shortcutting” through the neighbourhood via Stonegate Drive to avoid delays on King Street.
- Other residents on the local streets within the Stonegate neighbourhood have expressed a desire for a “full-movements” intersection of Stonegate Drive with River Road to allow convenient access to/from Highway 8 and River Road.
- I am on the section (on Stonegate Drive) with no sidewalks. On one side of me there is a blind corner and on the other a curve on a hill with poor sight lines. The last thing we need is to allow increased traffic flow. If this situation is not addressed now at least give assurance that remedial action will be taken if traffic flows increase above current levels.

**GENERAL RESPONSE**

- 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 Stonegate neighborhood 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. This temporary road was planned to remain in operation until the River Road Extension is constructed. That temporary access must be removed when the River Road Extension is constructed so that the intersections of River Road at King Street and at the Highway 8 ramps can operate well. Based on comments received on two separate occasions from residents of the neighborhood and a review of traffic operations, the Project Team proposed the following two options for comment by the neighborhood residents at the October 1, 2013 PCC. At the time of the October 1, 2013 PCC, other more restrictive traffic options that were previously presented were not presented to the public because the City of Kitchener’s requirement for emergency vehicle access would not be satisfied. The two options presented at the October 1, 2013 PCC are displayed in Appendix “H” and described as follows:

- **Full Movements Option** - Full access (no restricted turning movements) at the Stonegate/River Road intersection would facilitate easy access to and from the Stonegate neighbourhood. This could result in some increased traffic on Stonegate Drive as a result of motorists’ desire to avoid use of the intersection at King Street and River Road.

- **Right-turn Entry Only Option** - Restricted access whereby only right turns would be permitted entering Stonegate Drive and all movements permitted exiting Stonegate Drive.
Some residents commented that the study does not address the train traffic that locks the access out of Stonegate subdivision at the King and River Road lights; And, that the study does not address bus traffic as four buses in the AM and four buses in the PM lock up River and King Street lights due to the proximity of intersections and train tracks.

<table>
<thead>
<tr>
<th>MAIN COMMENT TOPICS</th>
<th>GENERAL RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>While the full movements option would provide improved access for the neighborhood and for emergency services, the additional left-turns at the Stonegate Drive/River Road intersection would be expected to result in some more collisions than the right-turn entry only option; however, both options would be acceptable from Region’s and the MTO’s perspectives. The Project Team has selected the Right-turn Entry Only option as the preferred 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 Highway 8 and River Road, it does provide adequate emergency response times to the neighbourhood while limiting the amount of traffic infiltration onto Stonegate Drive. In selecting the Right-turn Only option as the preferred option, the Project Team is acknowledging the greater good of limiting “cut-through” traffic when compared to the convenience of easy access to/from Highway 8 and River Road. The Project Team acknowledges that the two options noted above are not the only configuration options available for this intersection. At the time of the writing of this report, City staff were still in discussions with City Fire Services and Regional Emergency Services staff to determine if a more restricted access (than that identified as preferred by the Project Team) would be acceptable from an emergency access perspective. The Project Team was unanimous in its direction that should the Region and City emergency services staff agree on a more restricted access, the Project team would revise the Preferred Option accordingly prior to making a final recommendation for this intersection.</td>
<td></td>
</tr>
</tbody>
</table>

Traffic pre-emption on River Road at the King Street rail crossing has been reviewed by the project team. They show that delays for railway crossings at the tracks are short and infrequent, causing minor disruptions to traffic operations. The same conclusion is made for school bus stops at the tracks.
APPENDIX G

MITIGATION OF RIVER ROAD EXTENSION IMPACTS ON THE NATURAL ENVIRONMENT

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 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;
• Use bio-engineering techniques to create steeper reinforced side slopes along the road extension to reduce the “footprint” of the road near all environmentally sensitive areas;
• Develop a stormwater management plan which incorporates appropriate Best Management Practices (BMPs) in accordance with the completed water resources impact study;
• Provide for safe wildlife passage, beneath the bridge structure over Schneider Creek and further reduce the potential for wildlife mortality by reducing accessibility to the proposed new road surface through the Hidden Valley and Schneider Creek natural areas;
• Consider means to control 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 and during the future operation of the proposed road. This plan could require an application to the MNR for a permit under the Species at Risk Legislation;
• 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;
• Implement an environmental monitoring and remediation response 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.
RIVER ROAD / STONEGATE DR. INTERSECTION OPTIONS

All Movements Allowed Out of Stonegate Dr., and only Right Turn Allowed into Stonegate Dr.
RIVER ROAD / STONEGATE DR. INTERSECTION

PREFERRED OPTION

Entry for Emergency Vehicles Only

After the October 1, 2013 PCC, the Project Team participated in discussions with the City and Regional EMS staff and have determined that an additional functional design concept will satisfy the requirement for a continuously available second emergency access route to and from the Stonegate Drive neighbourhood. This concept would allow all movements out of Stonegate Drive and allow no entry except by emergency vehicles. This is supported by the Project Team as the Preferred Design Concept.
APPENDIX I

NOISE STUDY RESULTS

The noise modeling program “STAMSON 5.0” was used to predict noise levels produced by the 2031 future traffic volumes along River Road. The results from this analysis are shown in Table 3.

Table 3 – Predicted Unattenuated Noise Levels

<table>
<thead>
<tr>
<th>RECEIVER</th>
<th>FLOOR</th>
<th>REPRESENTS</th>
<th>FUTURE NOISE LEVEL (dBA)</th>
<th>EXISTING NOISE LEVEL (dBA)</th>
<th>DIFFERENCE (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>OLA (Day)</td>
<td>58.2</td>
<td>55</td>
<td>+3.2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>Indoor (Day)</td>
<td>54.5</td>
<td>55</td>
<td>-0.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Indoor (Day)</td>
<td>55.3</td>
<td>55</td>
<td>+0.3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Indoor (Day)</td>
<td>56.2</td>
<td>55</td>
<td>+1.2</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Indoor (Day)</td>
<td>57.0</td>
<td>55</td>
<td>+2.0</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>OLA (Day)</td>
<td>57.2</td>
<td>55</td>
<td>+2.2</td>
</tr>
</tbody>
</table>

For the noise modeling, an assumed existing noise level of 55 dBA was used as required whenever there is no existing road with traffic volumes that can be used to calculate the existing noise level.

As indoor and outdoor noise levels do not exceed 60 dBA for the daytime and are not greater than 5 dBA over the 55 dBA assumed existing level, noise mitigation in the form of acoustical barriers is not required.
APPENDIX J

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

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

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

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

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

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

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

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

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

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

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

1) reasonable costs of the owner will be included in any compensation settlement;
2) 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
3) an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

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

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

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

For information on the expropriation process, please refer to ‘Expropriation Information Sheet’.
Appendix K

Functional Design Plans and Cross-Section

Key Plan
River Road Extension Preferred Alternative Design Concept 5

Refer to Drawings K-2, K-3, and K-4 for additional details.
Functional Design
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