

2. LEITRIM ROAD REALIGNMENT AND WIDENING (RIVER ROAD TO BANK STREET) ENVIRONMENTAL ASSESSMENT STUDY – RECOMMENDATIONS

ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE POUR LA MODIFICATION DU TRACÉ ET L'ÉLARGISSEMENT DU CHEMIN LEITRIM (DU CHEMIN RIVER À LA RUE BANK) – RECOMMANDATIONS

COMMITTEE RECOMMENDATIONS

That Council:

- 1. Approve the functional design for the Leitrim Road Realignment and Widening Environmental Assessment Study, as described in this report and supporting documents one through six; and,**
- 2. Direct Transportation Planning staff to finalize the Environmental Study Report and proceed with its posting for the 30-day public review period in accordance with the Ontario Municipal Class Environmental Assessment process.**

RECOMMANDATIONS DU COMITÉ

Que le Conseil municipal :

- 1. approuve la conception fonctionnelle de l'étude d'évaluation environnementale pour la modification du tracé et l'élargissement du chemin Leitrim, comme présentée dans le présent rapport et dans les documents un à six; et,**
- 2. demande au personnel de la Planification des transports de parachever le rapport de l'étude d'évaluation environnementale et de procéder à sa publication aux fins de consultation publique pour une période de 30 jours, conformément au processus d'évaluation environnementale municipale de portée générale de l'Ontario.**

DOCUMENTATION / DOCUMENTATION

1. General Manager, Transportation Services Department's report, dated
 17 April 2018 (ACS2018-TSD-PLN-0003)

 Rapport du directeur général, Direction générale des transports, daté le
 17 avril 2018 (ACS2018-TSD-PLN-0003)
2. Extract of Draft Minute, Transportation Committee, 2 May 2018.

 Extrait de l'ébauche du procès-verbal de la Comité des transports, le 2 mai 2018

Report to
Rapport au:

Transportation Committee
Comité des transports
2 May 2018 / 2 mai 2018

and Council
et au Conseil
9 May 2018 / 9 mai 2018

Submitted on April 17, 2018
Soumis le 17 avril 2018

Submitted by
Soumis par:

John Manconi, General Manager / Directeur général, Transportation Services
Department / Direction générale des transports

Contact Person

Personne ressource:

Vivi Chi, Director / Directeur, Transportation Planning / planification des
transports, Transportation Services Department / Direction générale des
transports

(613) 580-2424, 21877, Vivi.Chi@ottawa.ca

Ward: GLOUCESTER-SOUTHGATE
(10); OSGOODE (20); AND
GLOUCESTER-SOUTH NEPEAN
(22)

File Number: ACS2018-TSD-PLN-0003

SUBJECT: Leitrim Road Realignment and Widening (River Road to Bank Street)
Environmental Assessment Study – Recommendations

OBJET: Étude d'évaluation environnementale pour la modification du tracé et l'élargissement du chemin Leitrim (du chemin River à la rue Bank) – Recommandations

REPORT RECOMMENDATIONS

That the Transportation Committee recommend that Council:

- 1. Approve the functional design for the Leitrim Road Realignment and Widening Environmental Assessment Study, as described in this report and supporting documents one through six; and,**
- 2. Direct Transportation Planning staff to finalize the Environmental Study Report and proceed with its posting for the 30-day public review period in accordance with the Ontario Municipal Class Environmental Assessment process.**

RECOMMANDATIONS DU RAPPORT

Que le Comité des transports recommande au Conseil municipal :

- 1. d'approuver la conception fonctionnelle de l'étude d'évaluation environnementale pour la modification du tracé et l'élargissement du chemin Leitrim, comme présentée dans le présent rapport et dans les documents un à six; et,**
- 2. de demander au personnel de la Planification des transports de parachever le rapport de l'étude d'évaluation environnementale et de procéder à sa publication aux fins de consultation publique pour une période de 30 jours, conformément au processus d'évaluation environnementale municipale de portée générale de l'Ontario.**

EXECUTIVE SUMMARY

Assumption and Analysis

The Environmental Assessment (EA) study for the Leitrim Road realignment and widening is needed at this time to establish the future right-of-way requirements in order to protect the corridor from encroaching development. The study findings will also inform and guide the ongoing planning and development of adjacent lands. The

realignment is required due to the Ottawa International Airport Authority's plans for a new southern runway, with potential implementation in 20-25 years from now. The study also provides an opportunity to re-imagine the role of Leitrim Road and design it as a complete street that serves all modes of transportation. Although this project is identified in the Transportation Master Plan (TMP) and is needed to protect the right-of-way, its implementation is not part of the TMP's Affordable Network and as such, no funding has been identified for construction.

The EA study recommends that the future realigned road be four lanes in order to meet the forecasted demand associated with the full build-out of the Riverside South and Leitrim communities. However, widening is not required in the section between River Road and Limebank Road, and one travel lane in each direction will be sufficient. This will encourage commuting traffic from Leitrim Road to use Limebank Road as the north-south arterial, rather than River Road.

The study's Recommended Plan will:

- Protect the roadway corridor from encroaching development;
- Enable the Airport Authority to plan for a future southern runway;
- Provide a planned network that connects existing and new collector roads to serve the growing south urban communities;
- Improve cycling and pedestrian networks; and,
- Provide a new multi-modal connection to the Leitrim LRT Station and Park and Ride on the Trillium Line.

Key elements of the Recommended Plan for the 9 km project are:

- New four-lane undivided roadway in all sections, except between River Road and Limebank Road (which remains as two lanes);
- Protected intersections to improve safety for cyclists and pedestrians;
- Signalized intersections and roundabouts where appropriate;
- 2.0 m concrete sidewalk and 1.8 m segregated and raised cycle track on both sides, or a 3.0 m multi-use pathway along one or both sides of the roadway;

- 3.5 m outer travel lane and 3.25 m inner travel lane;
- Curbs in urban areas and ditches along the Greenbelt;
- Lighting to be provided in accordance with the City's Right-of-Way Lighting Policy;
- Posted speed of 60 km/h in urban areas, and 70 km/h through the Greenbelt;
- Closure of existing Leitrim Road for sections where the road will be realigned (east of Limebank to Trillium Line, and east of Albion to the new Leitrim Road);
- Retain existing Leitrim Road (Trillium Line to Albion) to provide access to adjacent land uses;
- New roadway between realigned Leitrim and Gilligan Road, providing a multi-modal connection to the Leitrim LRT Station and Park and Ride;
- Grade separation of Leitrim Road over the Trillium Line; and,
- Minimal footprint to minimize environmental impacts on the Greenbelt and natural environment.

Even with this tight design, there is still a need for some property. Approximately 30 hectares in total is required from Transport Canada, the National Capital Commission (NCC), and private land owners.

Noise attenuation is not required as a result of this project. Notwithstanding, where future residential developments are being proposed and communities continue to develop, the requirement for noise attenuation measures will be evaluated at that time and any necessary mitigation will be included as a condition of development approval.

Financial Implications

The preliminary cost estimates for design, construction, property, and contingencies is \$86M, in 2018 dollars.

Public Consultation/Input

A comprehensive consultation plan with stakeholders was undertaken and is described in Document 5. The project website provided easy access to information and provided notifications to project stakeholders. There were additional meetings with Transport Canada, the Airport Authority, the NCC, and other federal and provincial agencies. First Nations were invited to meetings and to provide feedback but no comments or questions were forwarded to the study team.

Feedback received through consultation was primarily about: support for the project since the realigned and widened Leitrim Road will be better integrated with the Riverside South and Leitrim communities; project timing; environmental considerations including impacts to the Greenbelt; proximity of the realigned roadway to residences; downstream traffic effects; and accessibility issues related to multi-use pathways. The Recommended Plan considered all of these comments. There was also concern that the protected corridor could potentially sterilize adjacent development lands due to the uncertainty in timing of project implementation. This risk is mitigated through the Recommended Plan which will be used to guide current and future Community Design Plans, development applications, and related land use and transportation infrastructure decisions.

RÉSUMÉ

Hypothèses et analyse

L'étude d'évaluation environnementale pour la modification du tracé et l'élargissement du chemin Leitrim est nécessaire en ce moment afin de déterminer les besoins futurs d'emprise et de protéger le couloir contre l'empiètement des aménagements à venir. Les résultats de cette étude auront également pour effet d'étayer et d'orienter la planification et l'aménagement des terrains adjacents. La modification du tracé est nécessaire en raison du projet de l'Administration de l'aéroport international d'Ottawa d'aménager une nouvelle piste sud, possiblement dans 20 - 25 ans. L'étude donne aussi l'occasion de repenser le rôle du chemin Leitrim et de le concevoir comme une rue complète apte à recevoir tous les modes de déplacement. Quoique ce projet soit mentionné dans le Plan directeur des transports (PDT) et qu'il soit nécessaire pour protéger l'emprise, sa mise en œuvre n'est pas prévue dans le réseau abordable du PDT et, cela étant, aucun financement n'est prévu pour sa réalisation.

En vertu de l'étude d'évaluation environnementale, le tracé modifié devrait avoir quatre voies de manière à pouvoir répondre à la demande anticipée attribuable à l'aménagement à terme des collectivités de Riverside-Sud et de Leitrim. Par ailleurs, il n'est pas nécessaire d'élargir le tronçon de route entre les chemins River et Limebank; une voie dans les deux sens suffira. De cette façon, les navetteurs qui arrivent du chemin Leitrim seront encouragés à emprunter le chemin Limebank comme artère nord-sud plutôt que le chemin River.

Le plan recommandé aura pour effet :

- de protéger le couloir routier contre l'empiétement des aménagements;
- de permettre à l'Administration de l'aéroport d'Ottawa de planifier la construction d'une future piste sud;
- de fournir un réseau planifié qui connecte des routes collectrices existantes et futures afin de desservir les collectivités urbaines du sud en croissance;
- d'améliorer les réseaux cyclables et piétonniers; et,
- de fournir une nouvelle liaison multimodale à la station de TLR Leitrim et au parc-o-bus sur la Ligne Trillium.

Les principaux éléments du plan recommandé de ce projet de 9 km sont les suivants :

- Nouvelle route à quatre voies à chaussée unique sur toute la distance, sauf pour le tronçon de route entre les chemins River et Limebank, qui demeure à deux voies;
- Intersections protégées pour améliorer la sécurité des cyclistes et des piétons;
- Intersections avec signalisation et carrefours giratoires, s'il y a lieu;
- Trottoir de 2,0 m de largeur et voie cyclable séparée et surélevée de 1,8 m de largeur des deux côtés de la route, ou sentier polyvalent de 3 m de largeur longeant un ou les deux côtés de la route;
- Voie de circulation extérieure de 3,5 m de largeur et voie de circulation intérieure de 3,25 m de largeur;

- Bordures dans les secteurs urbains et fossés dans la Ceinture de verdure;
- Éclairage fourni conformément à la politique de la Ville pour l'éclairage des emprises;
- Vitesse affichée de 60 km/h dans les secteurs urbains et de 70 km/h dans la Ceinture de verdure;
- Fermeture des tronçons du chemin Leitrim où le tracé sera modifié (à l'est du chemin Limebank jusqu'à la Ligne Trillium et à l'est du chemin Albion jusqu'au nouveau chemin Leitrim);
- Conserver l'actuel chemin Leitrim (de la Ligne Trillium au chemin Albion) pour permettre l'accès aux terrains adjacents;
- Nouvelle route entre le nouveau tracé du chemin Leitrim et le chemin Gilligan fournissant une liaison multimodale à la station de TLR Leitrim et au parc-o-bus;
- Saut-de-mouton à l'intersection du chemin Leitrim et de la Ligne Trillium; et,
- Empreinte écologique minimale pour réduire l'impact environnemental sur la Ceinture de verdure et l'environnement naturel.

Malgré cette conception resserrée, l'acquisition de terrains s'avère nécessaire. Environ 30 hectares au total seront requis de Transport Canada, de la Commission de la capitale nationale (CCN) et de propriétaires fonciers privés.

Ce projet ne requiert pas de mesures d'atténuation du bruit. Néanmoins, lorsque de futurs aménagements résidentiels seront proposés et suivant la croissance des collectivités, le bien-fondé d'instaurer des mesures d'atténuation du bruit sera examiné en temps voulu et, s'il y a lieu, des mesures d'atténuation du bruit seront incluses comme condition d'approbation des aménagements.

Répercussions financières

L'estimation provisoire des coûts pour la conception, la construction, l'acquisition de terrains et les impondérables est de 86 millions de dollars (dollars de 2018).

Consultations publiques et commentaires

Un plan de consultation exhaustive auprès des intervenants, décrit dans le Document 5, a été mis en œuvre. Le site Web du projet offrait aux intervenants un accès facile aux renseignements sur le projet et aux avis qui leur étaient destinés. D'autres réunions ont été organisées avec Transport Canada, l'Administration de l'aéroport d'Ottawa, la CCN et d'autres organismes fédéraux et provinciaux. Les Premières Nations ont été invitées aux réunions et à fournir leurs commentaires. Toutefois, elles n'ont pas acheminé de commentaires ni de questions à l'équipe chargée de l'étude.

Les commentaires provenant de la consultation ont principalement porté sur : l'appui au projet puisque le chemin Leitrim modifié et élargi s'intégrera plus aisément aux collectivités de Riverside-Sud et de Leitrim; le calendrier de réalisation du projet; les considérations environnementales, notamment l'impact sur la Ceinture de verdure; la proximité du nouveau tracé aux résidences; les répercussions en aval sur la circulation; et des questions liées à l'accessibilité des sentiers polyvalents. Le plan recommandé a pris en considération tous ces commentaires. On s'inquiétait également que le couloir protégé nuise à l'aménagement de terrains adjacents en raison de l'incertitude du calendrier de mise en œuvre du projet. Ce risque est atténué par le plan recommandé qui sera utilisé pour orienter les actuels et futurs plans de conception communautaire, demandes d'aménagement et décisions liées à l'utilisation des terrains et aux infrastructures de transport.

BACKGROUND

The Transportation Master Plan (TMP) identifies the realignment and widening of Leitrim Road between River Road and Albion Road in the Network Concept in order to support the planned growth of adjacent communities and to accommodate the Ottawa Macdonald-Cartier International Airport Authority's plan for a future southern runway. The timing for the road realignment and widening is beyond year 2031. However, development in the area is encroaching on the City's ultimate plan, and a study was required to identify the right-of-way requirements and to inform the ongoing planning and development of adjacent lands.

On May 4, 2016, Transportation Committee approved the Statement of Work for the Leitrim Road Realignment and Widening (River Road to Bank Street) Environmental Assessment (EA) Study. Figure 1 illustrates the study area. The EA Study's

recommendations are described in this report for Transportation Committee and Council approval.

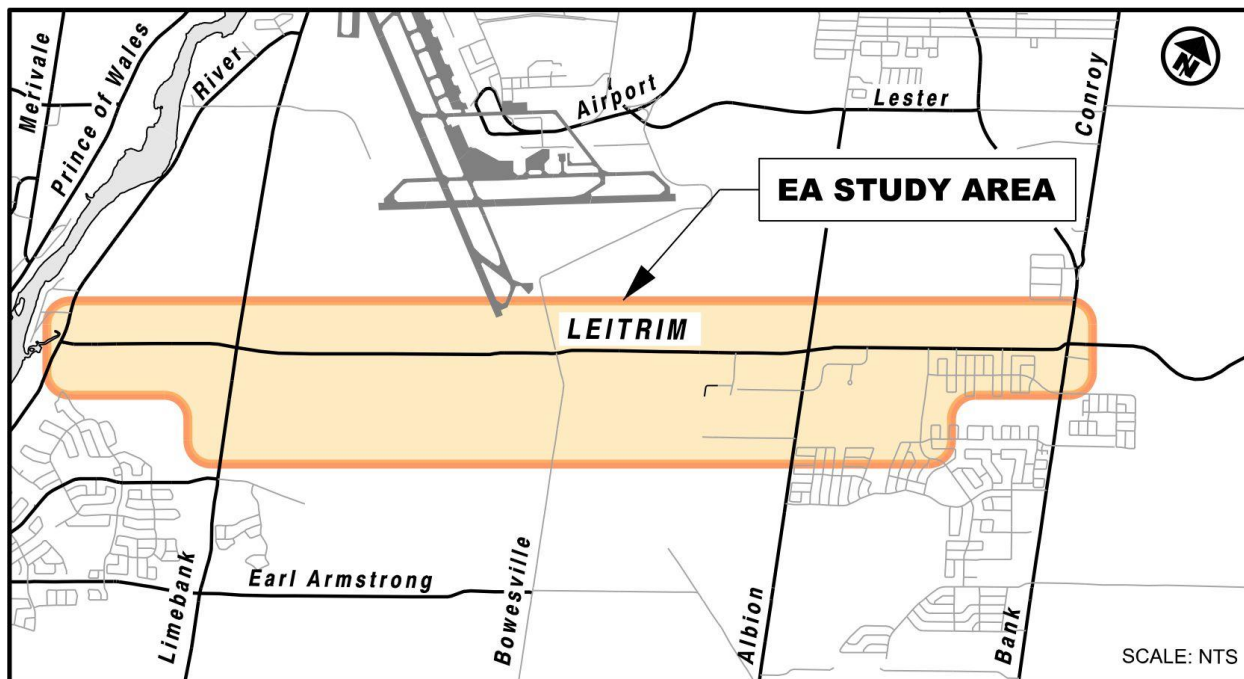


Figure 1: Leitrim Road Realignment and Widening EA Study Area

DISCUSSION

Leitrim Road is an east-west arterial road and part of the rural truck route network. It is located south of the Airport between the Rideau River and Russell Road, and provides connectivity to several north-south arterial roads: River Road, Limebank Road, Albion Road, Bank Street, Hawthorne Road, and Ramsayville Road. At the west end, Leitrim Road ends at River Road. In the east, the road extends past Bank Street through the rural area of the City, ultimately providing a connection to Highway 417. Along the corridor, this two-lane undivided rural roadway connects the adjacent communities of Leitrim and Riverside South, the airport sector, and other rural and village communities to the south. The corridor crosses and runs alongside the NCC's Greenbelt. It also provides access to the existing Leitrim Transit Station and Park and Ride, and crosses the future Trillium Line Light Rail Transit (LRT) extension. For the majority of the existing corridor there are no sidewalks or cycling facilities, although paved shoulders are present in some sections.

Project Need and Opportunities

The Leitrim Road realignment is required due to the Airport Authority's plans for a new southern runway. The Airport Authority indicated that the runway may be built in 20-25 years from now. In addition, the TMP's Network Concept (post 2031) identifies a need to widen certain sections of Leitrim Road to support planned growth in adjacent communities. The Riverside South Community Design Plan (2016) forecasts for full build-out are: population of 54,788; 20,469 dwellings; and 17,703 jobs within the designated employment areas, plus 9,960 more jobs within the combined mixed-use, commercial and institutional areas. The Leitrim Community Design Plan (2005) forecasts a population of 14,800; 5,301 dwellings; and 5,536 jobs within the designated employment areas, plus 1,359 more within the combined mixed-use, commercial and institutional areas. Furthermore, the Airport Secondary Structure Plan Concept shows plans to develop employment lands south of the future new runway. Leitrim Road will serve as a major access route to and from future residential and employment lands identified in these plans.

The TMP also identified a longer-term need for an additional Rideau River crossing somewhere between Fallowfield and Limebank Road, at a location north of Leitrim. Leitrim Road will be an important east-west connection to that future crossing.

Although the timing for Leitrim Road reconstruction is beyond year 2031, it was essential to complete the planning and functional design now to establish the future right-of-way requirements and protect the corridor from encroaching development. The EA study's recommended plan will allow the City to respond effectively to development applications and to inform community design plans. Furthermore, the recommended plan will help facilitate negotiations regarding land transfers and land leases between Transport Canada, the Airport Authority, the NCC, and the City, for the Leitrim Road realignment. In the future, the City may wish to seek cost-sharing arrangements with the Airport Authority because the future runway is the impetus for the realignment of Leitrim Road.

The road realignment and widening also presents an opportunity to enhance other transportation and environmental aspects, such as:

- Improve cycling and pedestrian networks;

- Provide a new multi-modal connection to the Leitrim LRT Station, and Park and Ride on the Trillium Line;
- Improve community connectivity;
- Provide a planned network that connects existing and new collector roads and local streets to serve the growing south urban communities; and,
- Enhance natural and cultural heritage features and function, including the edge and landscape treatment for the abutting sections of the Greenbelt.

Alternative Solutions

Several alternative solutions were reviewed and evaluated. With the exception of the “do nothing” alternative (which serves as a baseline to compare the options), all alternatives included the closure and abandonment of a section of Leitrim Road to accommodate the future runway. The alternative solutions examined were:

- Enable the runway and close that section of Leitrim Road;
- Construct a tunnel (under the airfield) to accommodate a below-grade arterial road;
- Construct only new active transportation facilities to the south;
- Convert and extend Spratt Road to Findlay Creek Drive as a new arterial road and complete street serving the adjacent communities;
- Implement enhanced Transportation Demand Management and transit strategies;
- Add transportation capacity to other arterial roads;
- Construct a replacement arterial road and complete street only within the section that would be closed and abandoned; and,
- Construct a replacement arterial road within the section that would be closed and abandoned, and also reconstruct the remainder of Leitrim Road as an arterial road and complete street serving the adjacent communities.

The recommended solution is the last option identified above: to reconstruct Leitrim Road from River Road to Bank Street as an arterial road and a complete street serving

adjacent communities. This solution was evaluated to best meet the transportation and community needs. The solution will provide a planned network that connects existing and new collector roads and local streets servicing the communities, and give the greatest opportunity to enhance the visual character of the roadway and minimize the environmental footprint.

Details of the evaluation and assessment of alternative solutions are summarized in Document 1.

Alternative Corridors

The evaluation of alternative corridors focused on 11 alternative alignments identified as part of the study. Context-sensitive criteria and associated indicators were developed to evaluate the alignments. The criteria were grouped into broad categories listed below:

- Transportation System Sustainability;
- Greenbelt Value and Ecological Sustainability;
- Land Use, Community Sustainability, and Climate Change;
- Natural and Physical Sustainability; and,
- Economic Sustainability.

Notable constraints that had to be taken into account were:

- Grade separation over the Trillium Line extension, and opportunities for pathway connections;
- Crossing the southernmost corner of the former Gloucester Landfill;
- Appropriate locations for eco-crossing treatments where the alignment crosses the NCC Greenbelt; and
- Integration with existing and planned stormwater management facilities.

The recommended corridor is shown in Figure 2. This realignment of Leitrim Road will bring the arterial roadway closer to the growing communities of Riverside South and Leitrim, and enable it to effectively serve employment lands, general urban areas and

the National Capital Greenbelt. The realigned Leitrim Road will remain an arterial road and serve as a cycling spine route within the City’s transportation network. The road will intersect the same north-south arterials as today. It will also intersect the existing collector (Bowesville Road) and future collectors planned in the growing communities of Riverside South and Leitrim, as well as part of the southern business park on Airport lands.

Widening from two to four lanes is recommended for all sections of Leitrim Road except the existing section between River and Limebank roads, where capacity increase is not needed. The timing of implementation of realigned Leitrim Road west of Limebank Road is dependent on the development of adjacent employment lands in Riverside South, and the required number of lanes will be based on the timing and location of the future Rideau River crossing.

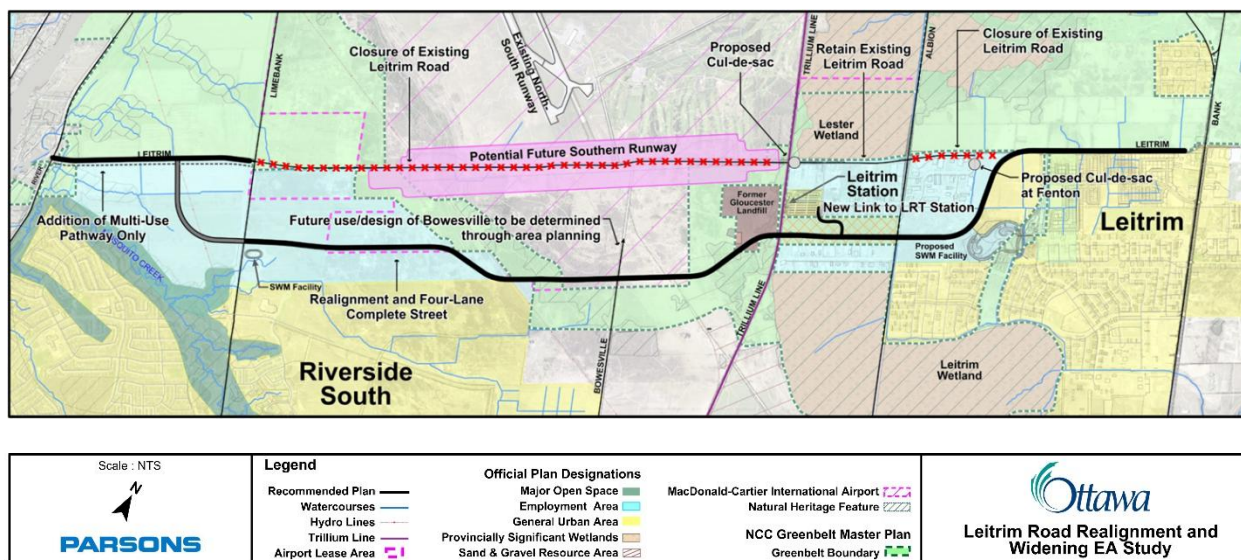


Figure 2: Recommended Corridor for Leitrim Road Realignment

The evaluation and assessment of alternative corridors are summarized in Document 2.

Alternative Designs

A number of design concepts were developed for the recommended corridor to address various roadway elements such as:

- Alignment alternatives (widen to the north, to the south or from centerline);

- Cross-section alternatives (urban, rural, combination, compactness);
- Intersection alternatives (roundabout, signalized);
- Intersection spacing;
- Median treatments (divided versus undivided);
- Adjacent land use and property access;
- Requirements for road closures and new cul-de-sacs;
- Ability to use existing intersections;
- Pedestrian and cycling facilities;
- Noise attenuation considerations;
- Management of drainage;
- Wildlife movement and opportunity for eco-crossing treatments;
- Minimizing fragmentation of habitat;
- Net environmental gain; and,
- Efficiency and cost effectiveness.

The resulting Recommended Plan for the roadway realignment and widening is based on the evaluation and assessment of these design concepts. The evaluation and assessment effort is summarized in Document 3.

Recommended Functional Plan

The recommended design for the realigned and widened Leitrim Road is described below, by section, and is depicted by representative cross-sections (Figures 3 to 9).

EXISTING LEITRIM ROAD – RIVER ROAD TO LIMEBANK ROAD

Through this section, Leitrim Road will remain a two-lane arterial road in its existing location. Widening is not required as the existing capacity will be sufficient to meet future demand. The reconstruction will focus on upgrading the road to a two-lane

complete street, with a rural cross-section along the north side adjacent to the Greenbelt, and an urban cross-section on the south side adjacent to future urban employment lands. Additional right-of-way is identified to the south to avoid impacts to NCC's agricultural lands to the north.

The key features are:

- Two lanes undivided with a paved shoulder on the north side;
- New multi-use pathway (MUP) on the south side. The MUP will connect to the existing bike lanes and sidewalks on Limebank Road and paved shoulders on River Road;
- New single-lane roundabout at the intersection of existing Leitrim Road and River Road;
- New protected signalized intersection of existing Leitrim Road with realigned Leitrim Road;
- Drainage ditch with enhanced bioswales to accommodate stormwater on the north side; and,
- New roadway lighting on the south side, within the road edge that will also accommodate snow storage. During the detailed design phase, evaluate the "back lighting" effect of this roadway lighting and determine if an appropriate level of illumination is provided on the multi-use pathway as required to meet City standards.

The corridor modifications will tie into the existing intersection of Leitrim and Limebank roads. This intersection will be converted to a T-intersection by closing off existing Leitrim Road east of the intersection. The future use of the closed corridor would be determined at the time of the Leitrim Road realignment and in consultation with surrounding land owners, and will be in conformity with area plans.

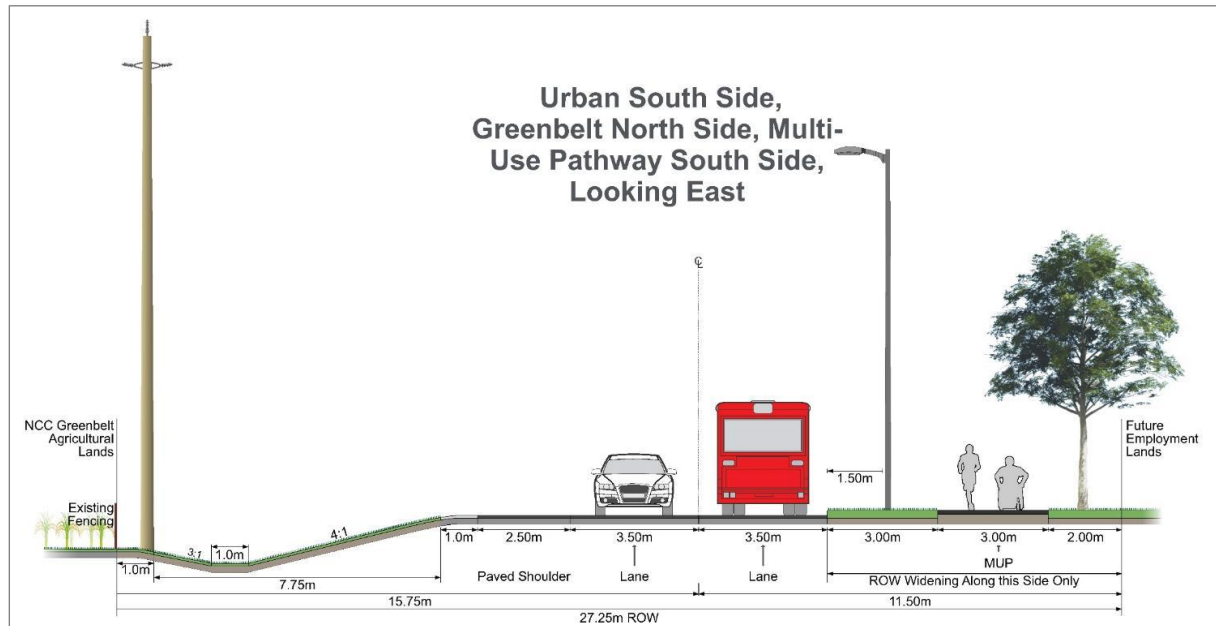


Figure 3: Recommended Plan, Leitrim Road – River Road to Limebank Road

REALIGNED LEITRIM ROAD THROUGH RIVERSIDE SOUTH EMPLOYMENT LANDS

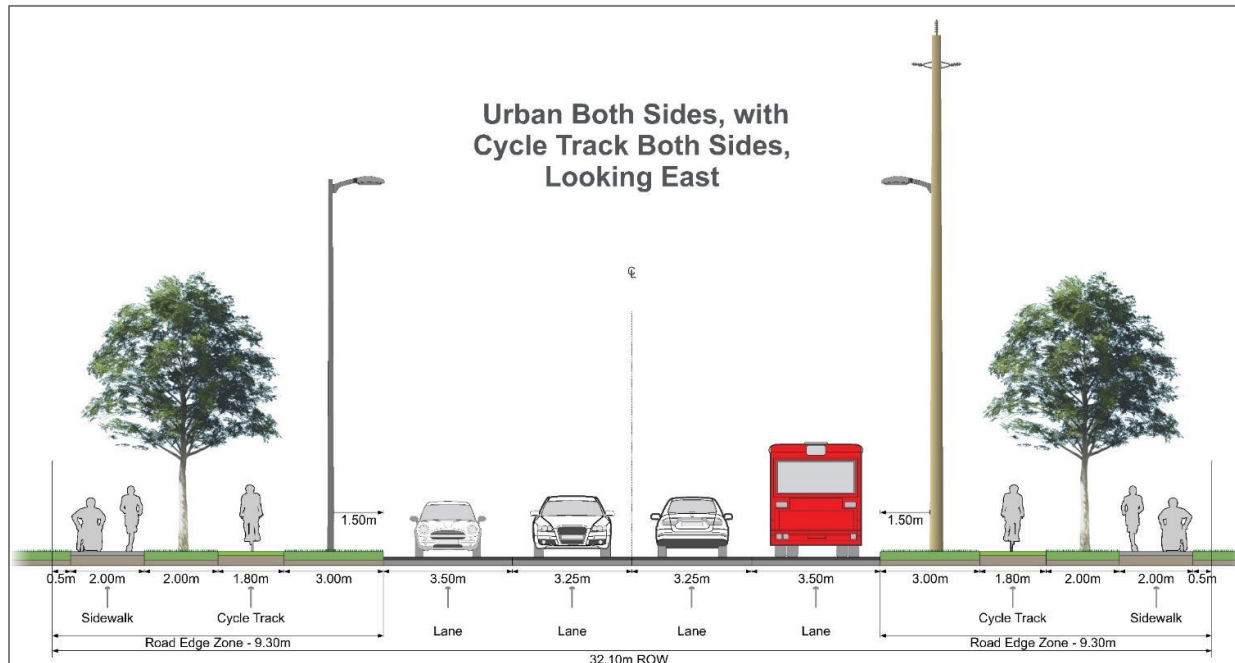
This section includes a new four-lane complete street between the existing Leitrim Road, through the future employment lands in Riverside South, and extending to the western edge of the Greenbelt's Airport Natural Link. The roadway will have an urban cross-section to include grade-separated pedestrian and cycling facilities behind the curb.

Intersection control for future collector roads with realigned Leitrim Road will be determined through the Riverside South Community Design Plan Update and future plan of subdivision processes.

The key features are:

- New four lanes, undivided;
- New cycle track and sidewalk on both sides;
- New protected signalized intersection of realigned Leitrim Road with Limebank Road;

- New corridor lighting on both sides, within the road edge that will also accommodate snow storage; and,
- Landscaped green space buffer between the cycle track and sidewalk on both sides, wide enough space for tree planting.



**Figure 4: Recommended Plan, Realigned Leitrim Road Through Riverside South
THROUGH THE GREENBELT AND SOUTH OF THE AIRPORT BUSINESS PARK**

This section includes a new four-lane complete street, with an urban cross-section on the north side along the future Airport development lands, and a rural cross-section on the south side along the Greenbelt.

The key features are:

- New four lanes, undivided, with paved shoulder on the south side;
- New multi-use pathway on both sides;
- Roadside drainage with enhanced bioswales on the south side;

- New corridor lighting on the both sides, within the road edge that will also accommodate snow storage; and,
- New roundabout at the intersection of realigned Leitrim Road and Bowesville Road, to match the rural context and utilize the opportunity for a gateway feature to the future airport business park.

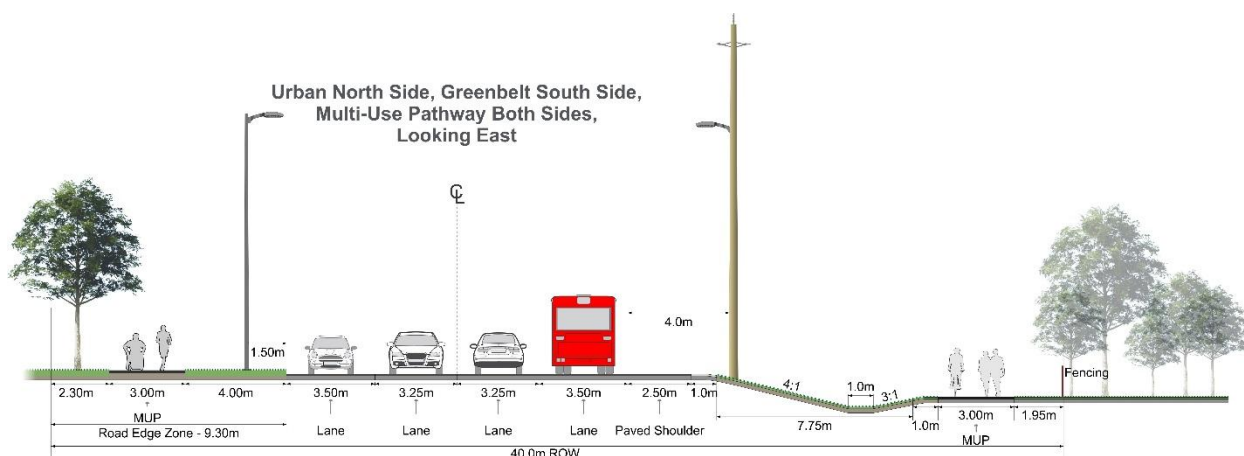


Figure 5: Recommended Plan, Realigned Leitrim Road Trough Greenbelt and South of Airport Business Park

EAST OF AIRPORT BUSINESS PARK TO ALBION ROAD

This section includes a new four-lane complete street with a rural cross-section on both sides to match the adjacent land use context. A new road connection from the realigned Leitrim Road to the future Leitrim LRT Station and Park and Ride is recommended on the eastern side of the LRT corridor. The location of this new road connection is controlled by the design of the Leitrim Road overpass and associated embankment and transition back to grade and the proximity of Gilligan Road.

The existing Leitrim Road between the Trillium Line and Albion Road will be kept open as a local road in order to provide access to existing businesses and residences. A new cul-de-sac will be implemented at the west end of this local road.

The key features are:

- New four lanes, undivided with paved shoulders on both sides;
- New multi-use pathways on both sides;

- New ditches with enhanced bioswales on both sides;
- New roadway lighting on both sides within the road edge that will also accommodate snow storage;
- New roadway connecting realigned Leitrim Road to existing Gilligan Road;
- New signalized intersection of the new roadway with realigned Leitrim Road; and,
- New cul-de-sac at the west end of existing Leitrim Road section (future local road), just east of the Trillium Line.

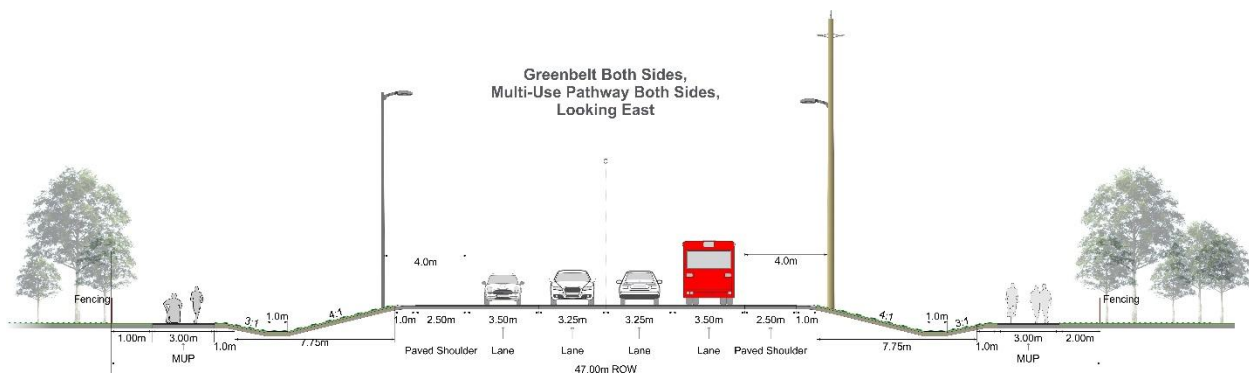


Figure 6: Leitrim Road – east of Airport Business Park to Albion Road

This section also includes a new grade-separated crossing over the Trillium Line and multi-use pathway connections to the pathway planned along the east side of the Trillium Line. The key features are:

- New bridge overpass with four lanes undivided and paved shoulders on both sides; and,
- New multi-use pathway on both sides, separated by a physical barrier from general traffic.

Crossing Over Trillium Line (LRT)
Bridge, Looking East

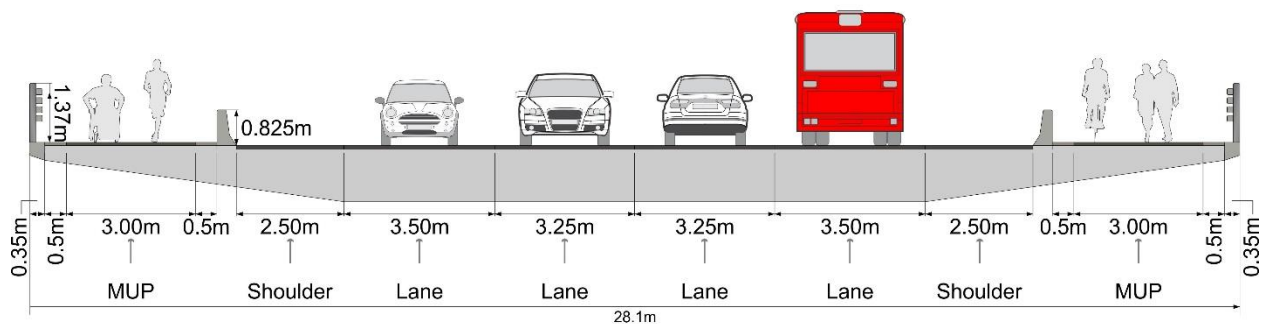


Figure 7: Leitrim Road crossing over Trillium Line

ALBION ROAD TO EXISTING LEITRIM ROAD

This section includes a new four-lane complete street with an urban cross-section and grade-separated cycle tracks and concrete sidewalks behind the curb. Intersection control with future collectors within employment and residential land uses will be determined through the Leitrim Community Design Plan and future plan of subdivision processes. The existing Leitrim Road between Albion Road and the realigned Leitrim Road will be closed. The future use of the closed corridor would be determined at the time of the Leitrim Road realignment, and in consultation with surrounding land owners and will be in conformity with area plans.

The key features are:

- New four lanes, undivided;
- New cycle tracks and sidewalks on both sides;
- New corridor lighting system on both sides, within road edges that will also accommodate snow storage;
- Landscaped green space buffer between the cycle tracks and sidewalks on both sides;
- New protected signalized intersection of realigned Leitrim Road and Albion Road, with associated modifications proposed along Albion Road; and,

- New cul-de-sac on the west end of Fenton Road, to be implemented when existing Leitrim Road is closed.

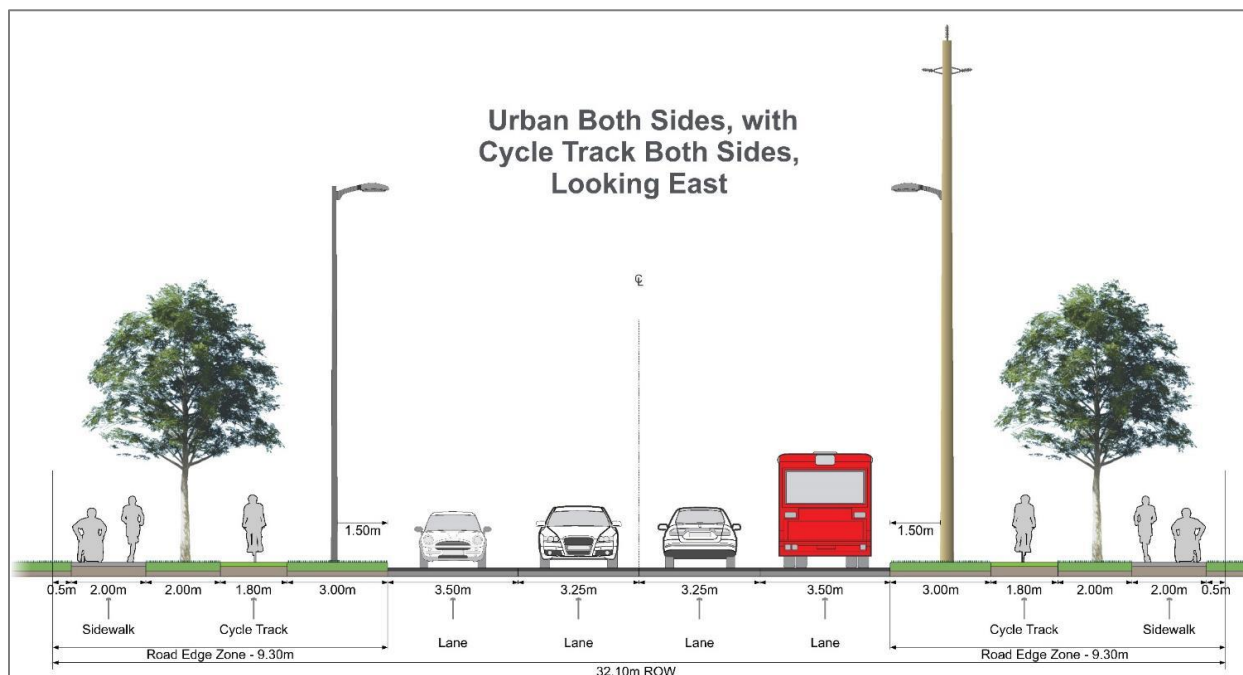


Figure 8: Leitrim Road – Albion Road to Existing Leitrim Road

EXISTING LEITRIM ROAD TO BANK STREET

This section includes reconstruction of the existing Leitrim Road as a four-lane complete street. The reconstructed roadway will include a rural cross-section on the north side adjacent to the Greenbelt, and an urban cross-section on the south side, adjacent to planned residential development. Widening of the road will be to the north and south.

A signalized intersection is proposed at Kelly Farm Drive. As part of the development of Barrett Lands, a signalized intersection at Kelly Farm Drive and the existing two-lane Leitrim Road will be implemented in the near future. The Recommended Plan provides a functional design for the intersection modification to take into account widening of Leitrim Road.

The reconstructed Leitrim Road will tie into the signalized intersection design at Bank Street, approved as part of the Bank Street Widening EA Study.

The key features are:

- Four lanes undivided, with a paved shoulder on the north side;
- Multi-use pathway on the south side serving the adjacent community;
- New roadway lighting system on both sides, within the road edge that will also accommodate snow storage; and,
- New ditch with bioswales on the north side.

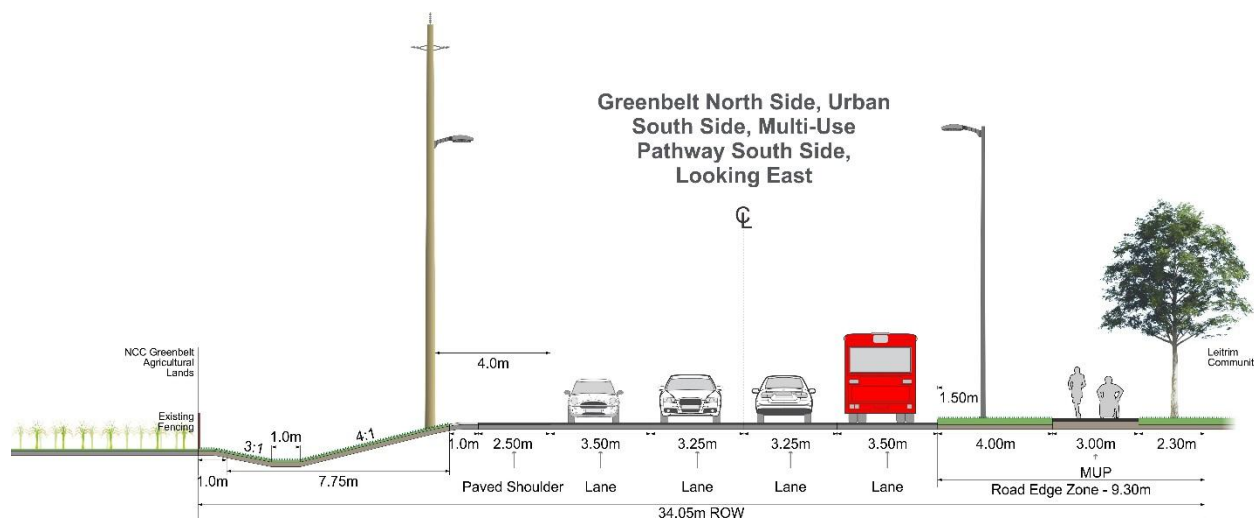


Figure 9: Leitrim Road – Existing Leitrim Road to Bank Street

The Recommended Plan is developed with a design speed of 70 km/h for urban areas and 80 km/h through the Greenbelt to reflect adjacent land uses and context. A posted speed of 60 km/h is anticipated in urban areas, and 70 km/h through the Greenbelt. Despite the general direction in the Recommended Plan to not include medians, in locations where higher operating speeds may be experienced (such as in rural contexts) and around curves, the cross-section width provides for a 1.5m raised concrete median.

Noise, Vibration and Air Quality

The Recommended Plan's impacts on adjacent noise sensitive receivers, including outdoor living spaces of residential and institutional uses, were assessed. The results of the noise study indicate that the 60 dBA threshold is not met. The nearest noise sensitive receiver is approximately 160m from the planned roadway. Based on the distance from the proposed realigned and widened roadway to existing sensitive receivers and the forecasted noise levels, noise attenuation is not required as part of

this project. Notwithstanding, where future residential developments are being proposed and communities continue to develop, the requirement for noise attenuation measures will be evaluated at that time and any necessary mitigation will be included as a condition of development approval.

Vibrations associated with the long-term operation of the roadway are expected to fall below perceptible levels for existing sensitive receivers by the project area. Vibration impacts to adjacent land uses are not anticipated, and as such no mitigation measures are required.

Air quality

Air quality modelling of the corridor was completed to determine existing and future ground level concentrations of key contaminants from vehicle emissions. Concentration levels of these contaminants for existing and future conditions were compared to the Ministry of the Environment and Climate Change's (MOECC) Ambient Air Quality Criteria (AAQC). The modeling is based on the provincial standard for air dispersion modelling and takes into account intersections in the corridor. The Leitrim Road realignment and widening is anticipated to have a negligible impact on local air quality. For future and existing conditions, almost all products of combustion fall below the MOECC's AAQC. Over time, pollutant concentrations are expected to improve with vehicle environmental controls and newer engine technologies. The general trend is that the concentrations of all pollutants decrease going from existing to future conditions. Daily emissions of greenhouse gas are estimated to be 82 kg/day for existing conditions, and by 2031 the daily emission rate is expected to fall to 23 kg/day. This is a reduction of approximately 72%, which is the result of improved vehicle emission technology.

Risk Assessment for Contamination from Former Gloucester Landfill

The recommended corridor extends through lands owned by Transport Canada, including land leased to the Ottawa International Airport, and land adjacent to the Airport. Transport Canada and the Airport Authority were consulted to ensure that the Recommended Plan adequately considers potential impacts, limitations and mitigation measures related to both the Airport and the Landfill Treatment Facility, which is owned by Transport Canada. Specifically, the Leitrim Road realignment will traverse the former municipal waste (domestic garbage) portion of the former Gloucester landfill. Project-

related risks due to contamination in soil and groundwater were evaluated. Recommended risk management measures include soft or hard capping of soils within the road corridor. Measurement and monitoring of vapours is recommended as well as personal protective equipment for workers during subsurface construction and road maintenance.

Property Impacts

The land requirement as shown on the Functional Plan (Document 4) represents the minimum footprint needed to realign and widen Leitrim Road as well as to construct a new connection to the Leitrim LRT station and implement two cul-de-sacs. In total, approximately 18.5 hectares of Transport Canada lands, 1.9 hectares of NCC lands, and 8.8 hectares of private lands will be needed for this project.

Managing Impacts on Greenbelt and Natural Heritage Features

The Joint Study to Assess Cumulative Effects of Transportation Infrastructure on the National Capital Greenbelt (2012) identified Leitrim Road realignment as a high contributing project to the overall cumulative effects on the NCC's Greenbelt. The EA's Recommended Plan is mindful of the need to minimize impacts on the Greenbelt lands. The roadway corridor crosses the Greenbelt at two locations (same number of crossings as today), both at the narrowest points. The location of the corridor also provides an opportunity for the Greenbelt to have a directly abutting ecological connection to a similar rural landscape (designated General Rural Area).

The realigned and widened Leitrim Road travels adjacent to and through the NCC Greenbelt. Natural landscapes include the Greenbelt forest edge and the Greenbelt agricultural lands. Integration with the landscape and surrounding natural environment was a key design consideration. The recommended rural cross-sections provide a design that reflects the nature of the Greenbelt. Low Impact Design features for stormwater management were applied to protect the Greenbelt lands. Context-sensitive landscaping and lighting strategy is also proposed.

Built into the Recommended Plan are measures to minimize the environmental impacts, including:

- Minimizing the footprint of the widened and realigned roadway;

- Rehabilitation/naturalization of adjacent lands and features;
- Avoiding direct impacts to the Leitrim and Lester Provincially Significant Wetlands;
- Incorporating low-impact design for stormwater management and the use of enhanced grass swales along the rural cross-sections; and,
- Incorporating recommendations for eco-crossings including exclusionary fencing.

The project requires land from the National Capital Greenbelt. The study recommendations provide a strategy that considers the policy directions of the NCC for “No Net Loss” of Greenbelt lands and the requirement for a net environmental gain in ecological function. While detailed mitigation measures will be fully developed during detailed design, this study has identified some lands that could be considered as part of future land exchanges, along with recommendation for restoration and enhancement of adjacent Greenbelt lands in the form of:

- Improvements to the aquatic and terrestrial habitats;
- Slope stabilization in the vicinity of Mosquito Creek;
- Enhanced road edge treatments in keeping with the character of adjacent lands; and,
- Providing opportunities for eco-crossings within Greenbelt areas at appropriate locations.

RURAL IMPLICATIONS

While the study area lies within the City’s urban area boundary and the Greenbelt, the project will result in benefits for the growing suburban and rural communities of Leitrim, Findlay Creek and Greely. These communities will rely on the roadway widening to accommodate future traffic demand, enable connectivity to the Trillium Line and the cycling and pedestrian networks.

The rural character of the area, specifically when passing through the Greenbelt, will be preserved and enhanced through use of grass swales for stormwater management and appropriate landscaping and fencing.

CONSULTATION

The comprehensive consultation plan included two rounds of public consultations and numerous additional meetings with stakeholders. Each round consisted of meetings with the Agency Consultation Group, Business Consultation Group, and Public Consultation Group (including representatives from the Accessibility Advisory Committee) prior to each Open House. In addition, meetings were held with Transport Canada, the Airport Authority, the National Capital Commission, other federal and provincial agencies, land owners, community associations and residents. First Nations were invited to attend meetings and to provide feedback, however no comments or questions were received.

A project webpage was set up at the commencement of the study (<http://ottawa.ca/leitrimroad>) and was updated with information displayed at the Open Houses. Notices for each Open House were advertised in the newspapers, on the project website, and through the study's stakeholder mailing list. Buckslips were mailed to a portion of the Leitrim community most affected by the future road realignment. Major issues that were raised during consultation are as follows:

- **Timing of project implementation:** The public has advocated for the widening of Leitrim Road and improvements to pedestrian and cycling facilities to be implemented earlier than post-2031, or before the new runway triggers the roadway realignment. The City will utilize opportunities from near-term resurfacing projects to improve pedestrian and cycling facilities, primarily by providing or improving paved shoulders. The planned near-term intersection modifications at Albion and Leitrim, and Bank at Leitrim, will result in capacity improvements.
- **Impacts on the Greenbelt:** The NCC and a few other stakeholders emphasized the importance of minimizing impacts on the Greenbelt lands, with focus on maximizing continuity and contiguity of the Greenbelt natural link, protection of existing vegetation, and accommodation of wildlife movement. The Recommended Plan includes numerous measures to minimize the environmental impacts to the Greenbelt, as described in this report.
- **Proximity of the realigned roadway to residences, and potential for adverse noise effects and cut-through traffic:** The Findlay Creek Community

Association asked about possible noise and cut-through traffic issues. Based on the distance from the proposed roadway to existing sensitive receivers and the forecasted noise levels, noise attenuation to existing residences is not required as part of this project. Also, Leitrim Road, as a four-lane arterial will be constructed as a high-capacity road and therefore there will be less desire for commuting traffic to use streets designated for lower volumes and slower speeds.

- **Downstream effects (River Road, Albion Road):** Concerns were expressed that the road widening may bring more traffic to River Road. The Recommended Plan does not include a widening of Leitrim Road between River and Limebank roads; therefore, River Road will not be viewed as an attractive commuter route. Traffic is much more likely to use Limebank Road, which can handle increased traffic. Similarly, the north end of Albion Road is already congested and traffic is not likely to be attracted to use this route to go north – traffic will more likely use Leitrim-Albion-Lester-Airport Parkway, or Leitrim-Bank.
- **Accessibility concerns related to multi-use pathways (MUPs):** A member of the Accessibility Advisory Committee (AAC) expressed a concern that shared multi-use pathways may be unsafe to pedestrians and people with mobility devices when interacting with cyclists. The concern is also that transition points between MUPs and uni-directional cycle tracks and sidewalks may be confusing to users. Instead, the AAC representative recommended separation of users where cyclists and pedestrians would each have their space. It was also recommended that benches be provided at frequent intervals. The AAC representative acknowledged that MUPs are a Council-approved pedestrian and cycling facility broadly utilized in the City. Furthermore, separation of pedestrians and cyclists will have implications on the right-of-way.
- **Potential for the protected corridor to sterilize adjacent development lands due to uncertainty in timing of project implementation:** Developers expressed a concern that the protected corridor may limit opportunities to develop adjacent lands until the project is actually implemented. The response is that this project provides an opportunity to re-imagine the role of Leitrim Road and design it as a complete street that is better integrated with the Riverside South and Leitrim communities. The Recommended Plan will inform current and

future Community Design Plans, development applications, and related land use and transportation infrastructure decisions. Furthermore, opportunities for phasing of project implementation can be examined by the developers and the City in the future to address growth-related needs.

Further details of the consultation plan, including comments and feedback received and actions taken, are noted in Document 5.

COMMENTS BY THE WARD COUNCILLOR(S)

Comments from Councillor Deans (Ward 10)

Overall, I am in support of the new realignment and widening plans for Leitrim Road. While traffic continues to be a concern for the community, the proposed phased implementation of the new alignment (east of Limebank Road) will serve to encourage vehicle traffic to use Limebank Road for north-south travel, instead of River Road. I am also pleased to see that the realigned Leitrim Road is being made into a complete street, which will help promote active transportation and improve connectivity in the south end.

Comments from Councillor Darouze (Ward 20)

Councillor Darouze is aware of the report and after attending the public consultations sees no issues with it thus far.

Comments from Councillor Qaqish (Ward 22)

Councillor Qaqish is aware of this report.

ADVISORY COMMITTEE(S) COMMENTS

The Accessibility Advisory Committee members attended the Public Consultation Group meetings and provided feedback. Their comments were noted earlier in the report.

LEGAL IMPLICATIONS

There are no legal impediments to implementing the recommendations in this report.

RISK MANAGEMENT IMPLICATIONS

Risk-related issues were noted earlier in the report.

ASSET MANAGEMENT IMPLICATIONS

The information documented in this report is consistent with the City's Comprehensive Asset Management (CAM) Program ([City of Ottawa Comprehensive Asset Management Program](#)) objectives. The realignment and widening of Leitrim Road between River Road and Bank Street as outlined in this report assists to fulfil the City's obligation to deliver quality services to the community, in a way that balances service levels, risk, and affordability.

Including the scope of work with planned renewal projects is an effective means of coordinating delivery of the targeted enhancement and changes in level of service to the community. Moving forward, there is a need to assess the impacts to renewal funding and objectives as a result of the coordinated enhancement construction. These impacts (reduced scope of renewal, ongoing operation and maintenance costs, future renewal costs of the new assets), and the strategies to maintain these assets, should be reflected in the Long Range Financial Plan and Asset Management Plan updates.

FINANCIAL IMPLICATIONS

There are no financial implications with the approval of the recommendations in this report. The project is beyond the City's 2031 Affordable Transportation Network Plan.

ACCESSIBILITY IMPACTS

There are no accessibility implications associated with this report. The City's Accessibility Design Standards and the requirements of the *Accessibility for Ontarians with Disability Act* were applied as part of the development of the functional design to ensure that the realigned and widened Leitrim Road supports inclusive communities and users of all ages and abilities.

ENVIRONMENTAL IMPLICATIONS

The study included an assessment of the environmental implications of the road realignment and widening and proposed mitigation measures to address those implications. Document 6 summarizes these issues.

TERM OF COUNCIL PRIORITIES

The recommendations contained herein aims to support the following Term of Council Priorities:

Transportation and Mobility

- TM2 Provide and promote infrastructure to support safe mobility choices.
- TM4 Improve safety for all road users.

SUPPORTING DOCUMENTATION *(Held on file with the City Clerk and Solicitor)*

Document 1 Evaluation of Alternative Solutions

Document 2 Evaluation of Alternative Corridors

Document 3 Evaluation of Alternative Designs

Document 4 Functional Design Plan

Document 5 Summary of Consultation Plan

Document 6 Environmental Implications and Recommended Mitigation Measures

DISPOSITION

Following Transportation Committee and Council approval of the functional design, the Transportation Services Department will finalize the Environmental Study Report and make it available to the public for the 30-day review period.