

**Subject: Huntmar Drive Widening and Stittsville Main Street Extension
Environmental Assessment Study - Recommendations**

File Number: ACS2023-PRE-TP-0004

**Report to Transportation Committee on 27 April 2023
and Council 10 May 2023**

**Submitted on March 23, 2023 by Vivi Chi, Director, Transportation Planning,
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Ward: Stittsville (6) and Kanata North (4)

**Objet : Étude d'évaluation environnementale de l'élargissement de la
promenade Huntmar et du prolongement de la rue Stittsville Main -
recommandations**

Dossier : ACS2023-PRE-TP-0004

**Rapport au Comité des transports le 27 avril 2023
et au Conseil le 10 mai 2023**

**Soumis le 23 mars 2023 Vivi Chi, Directrice, Planification des transports, Services
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REPORT RECOMMENDATION(S)

That the Transportation Committee recommend that Council:

- 1. Approve the functional design for the Huntmar Drive Widening and Stittsville Main Street Extension Environmental Assessment Study, as described in this report; 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.**

RECOMMANDATION(S) DU RAPPORT

Que le Comité des transports recommande au Conseil municipal ce qui suit :

- 1. Approuver la conception fonctionnelle de l'Étude d'évaluation environnementale de l'élargissement de la promenade Huntmar et du prolongement de la rue Stittsville Main, comme il est décrit dans le présent rapport; et**
- 2. Charger le personnel de la Direction de la planification des transports de finaliser le Rapport de l'étude environnementale et d'enchaîner avec la publication de ce rapport pour la période d'examen public de 30 jours conformément au processus de l'évaluation environnementale de portée générale du gouvernement de l'Ontario.**

EXECUTIVE SUMMARY

Assumption and Analysis

The 2013 Transportation Master Plan (TMP) identified the need for the widening of Huntmar Drive from Campeau Drive to Maple Grove Road (1.7 kilometres) to support the pace of Kanata West Development, and the extension of Stittsville Main Street from Maple Grove Road to Robert Grant Avenue (1.0 kilometre) as a new road required to provide connectivity and capacity for development in Stittsville. As outlined in this report, the Environmental Assessment (EA) Study resulted in the recommended plan and functional design for road widening of Huntmar Drive and the extension of Stittsville Main Street as complete streets.

The EA study informed the planning and development of surrounding lands and identified the right-of-way (ROW) requirements that need to be protected from encroaching development for future project implementation. The recommended plan

can accommodate four travel lanes on Huntmar Drive and two travel lanes on Stittsville Main Street extension to meet the forecasted travel demand associated with the full build-out of Kanata West and Stittsville communities. When constructed, the widened Huntmar Drive and extended Stittsville Main Street will be continuous and efficient multimodal corridors that will offer mobility choices and reinforce the area's transportation network.

The recommended plan results in a context-sensitive, complete street functional design that is compatible with surrounding land uses and developing communities. It includes the following key benefits:

- Connects communities and addresses forecasted travel demand to year 2046
- Supports new bus routes and services, improves bus stop locations and amenities
- Improves multi-modal connectivity to the future Palladium LRT Station as well as to adjacent existing and planned residential developments, employment centres and commercial uses
- Delivers new active transportation facilities such as segregated cycle tracks, wide sidewalks and multi-use pathways
- Implements protected intersection design features
- Provides new signalized intersections and roundabouts where appropriate
- Provides barrier-free access for all users and implements accessibility design standards
- Improves road safety for all users
- Provides accesses to connect to existing and proposed land uses
- Expands public realm and placemaking opportunities that include tree planting, shade and landscaping
- Encourages transit-oriented development and regeneration
- Incorporates climate change mitigation and adaptation strategies
- Minimizes property impacts, with further refinements possible at detailed design.

Implementation of the project will require approximately 1.60 hectares of private property for new active transportation facilities, protected intersections, a roundabout and general road widening.

Due to the existing need for a safe pedestrian and cycling crossing of Highway 417, the EA study included an optional stand-alone active transportation bridge which could be

built in advance of the Huntmar Drive widening and associated new crossing of Highway 417. However, this optional bridge has significant capital and operating budget impacts and would result in a duplication of active transportation infrastructure in the same vicinity when Huntmar Drive is widened between Campeau Drive and Maple Grove Road. The EA study defines what can be built, the project's footprint, and its environmental impact. If and when a component of a project is implemented are issues that are not EA-related. The prioritization of projects, timing, and affordability will be determined through the on-going work of the TMP Update (Part 2).

The study also identifies the need and opportunity for a new major collector road that would extend from the intersection of Stittsville Main Street and Derreen Avenue to the intersection of Carp Road and Westbrook Road. A proposed alignment of this future transportation link was developed as part of the EA study. The new major collector will improve the overall network connectivity and support the urban boundary expansion approved in the Official Plan. The exact road alignment and the associated environmental effects will be determined as part of a future study.

Financial Implications

Project costs were prepared in accordance with the Council-approved Project Delivery Review and Cost Estimating process for implementing capital projects. The total estimated cost in 2023 dollars is \$110 million for Huntmar Drive widening (including a new complete street bridge with cycle tracks and sidewalks), \$20.5 million for Stittsville Main Street extension, and \$24 million for the optional, stand-alone active transportation bridge.

Public Consultation/Input

Consultation efforts included three rounds of Consultation Group meetings, two virtual public open houses and individual stakeholder meetings throughout the study. Meetings were held with the Agency Consultation Group (regulatory agencies, Ontario Ministry of Transportation, Hydro Ottawa, Hydro One and other utility companies, various City contacts including from Road Safety, Traffic Services, Active Transportation Planning and OC Transpo), and the Business and Public Consultation Groups (landowners, businesses, organizations, school boards, community associations and interest groups). Feedback was also received from the City's Accessibility Advisory Committee representative through a focused stakeholder meeting. Consultation materials were made available on the project website, and consultation events were advertised through newspapers, emails, buckslips (mailouts) and social media.

Overall, there is strong public support for this project. Comments and questions that were raised during consultation have been addressed and are described in this report.

RÉSUMÉ

Hypothèse et analyse

Le Plan directeur des transports de 2013 mettait en relief la nécessité d'élargir la promenade Huntmar depuis la promenade Campeau jusqu'au chemin Maple Grove (1,7 kilomètre) afin de soutenir le rythme de développement de Kanata Ouest, et de prolonger la rue Stittsville Main depuis le chemin Maple Grove jusqu'à l'avenue Robert-Grant (1 kilomètre) en tant que nouvelle route nécessaire pour assurer la connectivité et la capacité de développement de Stittsville. Comme il est indiqué dans le présent rapport, l'Étude d'évaluation environnementale (EE) a donné lieu au plan et à la conception fonctionnelle recommandés pour l'élargissement de la promenade Huntmar et le prolongement de la rue Stittsville Main en tant que rues complètes.

L'étude d'EE a orienté la planification et le développement des terrains environnants et a défini les emprises municipales à protéger contre l'empiétement des aménagements pour la mise en œuvre éventuelle du projet. Le plan recommandé prévoit quatre voies de circulation sur la promenade Huntmar et deux voies de circulation sur le prolongement de la rue Stittsville Main afin de répondre à la demande prévue en déplacements suivant l'aménagement au maximum de leur capacité des communautés de Kanata Ouest et de Stittsville. Une fois construites, la promenade Huntmar élargie et la rue Stittsville Main prolongée seront des couloirs multimodaux continus et efficaces qui offriront diverses options de mobilité et renforceront le réseau de transport du secteur.

Le plan recommandé se traduit dans une conception fonctionnelle de rue complète sensible au contexte et compatible avec la vocation des terrains environnants et les communautés en expansion. Il compte les avantages principaux suivants:

- Il relie entre elles les communautés et répond à la demande prévue en déplacements jusqu'en 2046
- Il soutient de nouveaux circuits et services d'autobus, il améliore l'emplacement des arrêts d'autobus et les autres aménagements
- Il améliore la connectivité intermodale à la future station de TRL Palladium ainsi qu'aux projets domiciliaires adjacents actuels et planifiés, aux centres d'emplois et aux utilisations commerciales
- Il prévoit la construction de nouvelles installations de transport actif, comme des bandes cyclables séparées, des trottoirs larges et des sentiers polyvalents
- Il met en œuvre des caractéristiques pour la conception des intersections protégées.

- Il prévoit l'aménagement, le cas échéant, d'intersections et de carrefours giratoires avec signalisation
- Il prévoit l'accès sans obstacle pour tous les utilisateurs et il met en œuvre les normes de conception de l'accessibilité
- Il améliore la sécurité routière pour tous les usagers
- Il prévoit des accès pour relier des utilisations de terrains actuelles et proposées
- Il agrandit le domaine public et accroît les possibilités d'aménagement de l'espace, incluant la plantation d'arbres, l'aménagement d'espaces ombragés et l'aménagement paysager
- Il encourage l'aménagement axé sur le transport en commun et la régénération
- Il intègre des stratégies d'atténuation et d'adaptation aux effets du changement climatique
- Il minimise les incidences sur la propriété, ouvrant la voie à d'autres améliorations possibles dans la phase de conception détaillée

La mise en œuvre du projet exigera environ 1,6 hectare de biens-fonds privés pour l'aménagement des nouvelles installations de transport actif, les intersections prévues, le carrefour giratoire et l'élargissement en général de la voie

Compte tenu du besoin d'assurer un passage sécuritaire pour piétons et cyclistes à la hauteur de l'autoroute 417, l'étude d'EE a pris en compte l'option de construire, avant l'élargissement de la promenade Huntmar et l'aménagement du nouveau passage enjambant l'autoroute 417, une passerelle de transport actif indépendante. Cependant, cette passerelle facultative a d'importantes répercussions sur le budget d'immobilisations et de fonctionnement et elle deviendra une deuxième infrastructure de transport actif dans le même secteur une fois la promenade Huntmar élargie entre la promenade Campeau et le chemin Maple Grove. L'étude d'EE définit ce qui peut être construit, l'empreinte du projet et son impact environnemental. Mais la mise en œuvre ou non d'une composante d'un projet et le moment de sa mise en œuvre sont des aspects qui ne sont pas reliés à l'évaluation environnementale. La priorisation des projets, leur calendrier et leur abordabilité seront déterminés dans le cadre des travaux entourant la mise à jour du PDT (2^e partie).

L'étude souligne aussi le besoin et la possibilité de construire une nouvelle route collectrice principale qui s'étendrait depuis l'intersection de la rue Stittsville Main et de l'avenue Derreen à l'intersection des chemins Carp et Westbrook. Le tracé proposé de cette future liaison de transport a été conçu dans le cadre de l'étude d'EE. La nouvelle route collectrice principale améliorera la connectivité globale du réseau et appuiera l'expansion de la limite du secteur urbain approuvée dans le Plan officiel. Le tracé

précis de la route et les effets associés sur l'environnement seront examinés dans une étude subséquente.

Répercussions financières

Les coûts du projet ont été calculés conformément au processus approuvé par le Conseil municipal pour l'examen de la réalisation des projets et l'estimation des coûts liés à la mise en œuvre de projets d'infrastructures. Le coût total estimé en dollars de 2023 est de 110 millions de dollars pour l'élargissement de la promenade Huntmar (incluant un nouveau pont de rue complète avec bandes cyclables et trottoirs), 20,5 millions de dollars pour le prolongement de la rue Stittsville Main et 24 millions de dollars pour la passerelle de transport actif indépendante facultative.

Consultations publiques et commentaires

Les activités de consultation se sont articulées autour de trois rondes de rencontres avec les groupes de consultation, deux séances portes ouvertes en mode virtuel et des rencontres individuelles avec des intervenants tout au long de l'étude. Des réunions ont eu lieu avec le Groupe de consultation des organismes (organismes de réglementation, le ministère des Transports de l'Ontario, Hydro Ottawa, Hydro One et d'autres entreprises de services publics, diverses personnes-ressources au sein de la Ville, incluant des Services de la circulation, de la sécurité routière, de la planification des modes de transport actifs et d'OC Transpo), ainsi qu'avec le groupe de consultation publique et celui du milieu des affaires (propriétaires fonciers, entreprises, organismes, conseils scolaires, organismes communautaires et groupes d'intérêts). Des commentaires ont également été reçus des représentants du Comité consultatif sur l'accessibilité de la Ville dans le cadre d'une rencontre ciblée. Des documents de consultation ont été publiés sur le site Web du projet et les activités de consultation ont été annoncées dans les journaux, par voie de courriel et envois postaux et dans les médias sociaux.

Dans l'ensemble, le public est très favorable à ce projet. Les commentaires reçus et les questions soulevées dans le cadre des consultations ont été traités et sont décrits dans le présent rapport.

BACKGROUND

Two distinct road projects, a widening of Huntmar Drive as an Arterial Road (including the bridge crossing opportunities over Highway 417) and an extension of Stittsville Main Street as a Major Collector Road, were assessed within one study due to their proximity and benefits of addressing them together, given their context and role within the City's transportation network.

The 2013 TMP identified the need to widen Huntmar Drive from Campeau Drive to Maple Grove Road to accommodate Kanata West Development. The TMP also identified the need for an extension of Stittsville Main Street from Maple Grove Road to the future Robert Grant Avenue to provide capacity for development in Stittsville.

The study area (Figure 1) includes Terry Fox Drive to the east, Carp Road to the west, Campeau Drive to the north and Hazeldean Road to the south.

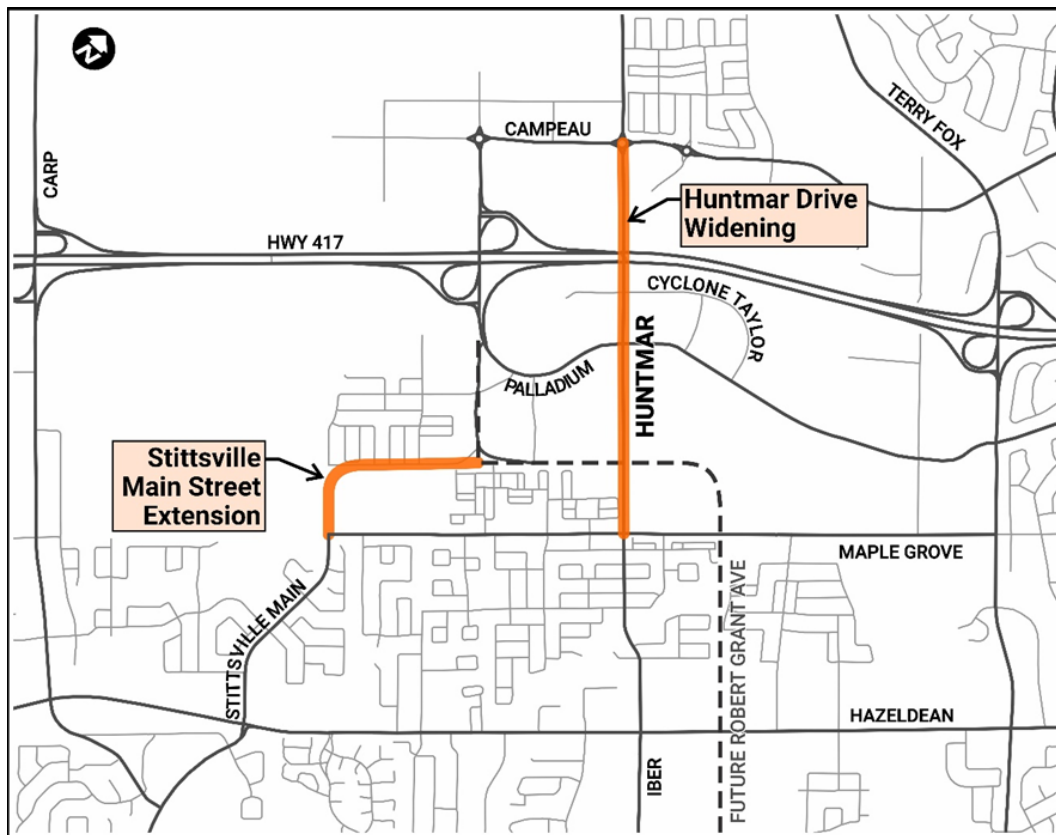


Figure 1: Huntmar Drive Widening and Stittsville Main Street Extension Study Area

In 2003, Ottawa City Council approved the general land use and development principles of the [Kanata West Concept Plan](#) (KWCP). The KWCP is a major component of urban growth, with a mix of uses that includes office, housing, retail, institutional, entertainment and leisure activities. This planned development is being implemented as a mixed-use community in Stittsville and Kanata. The KWCP included the transportation network, environmental protection and servicing infrastructure that are required to support the plan. Following the approval of KWCP, three Class EA studies were undertaken: the Kanata West Master Servicing Plan; the Kanata West Transportation Master Plan; and the Carp River, Poole Creek and Feedmill Creek Restoration Class Environmental Screening Report. Furthermore, the Road Network Implementation Plan

for the Kanata West Development Area was approved in 2007 as a response to the increasing transportation pressures created by accelerated levels of development in the area.

The City's Official Plan (OP) includes Right-of-Way (ROW) protection of 37.5 metres for Huntmar Drive, and 26.0 metres for a new major collector such as Stittsville Main Street extension. The area's existing and future transportation network is shown in Figure 2.



Figure 2: Road network identified in the Official Plan (2022)

The OP identifies Huntmar Drive as a Minor Corridor that is part of the suburban transect policy area. The Minor Corridor designation means that lands are planned for higher density of development and a mix of uses. The area east of Huntmar Drive,

south of Highway 417 to Palladium Drive, is also identified as a Hub. Hubs are centered on planned or existing rapid transit stations, are meant to support diverse functions, mixed uses, higher density of development and higher level of transit connectivity.

The OP also includes new Industrial and Logistics land uses as part of the urban expansion area on both sides of Carp Road.

This EA study ties into the following key projects:

- The Huntmar Drive and Maple Grove Road new traffic control device: this project will improve the existing temporary signalized intersection by addressing the intersection capacity needs, while also improving pedestrian and cycling infrastructure. The intersection improvement project is scheduled to be constructed in 2023 and will result in the addition of eastbound, westbound, and southbound left turning lanes, as well a southbound right and northbound through lane.
- The planned extension of Robert Grant Avenue project: Robert Grant Avenue will extend northerly across Maple Grove Road and westerly across Huntmar Drive and form new intersections with Huntmar Drive and Stittsville Main Street extension. The EA study for Robert Grant Avenue was completed through the Kanata West Transportation Master Plan (2006) in which it was identified as the North-South Arterial.
- The Stage 3 Kanata LRT project: The functional design approved in the Kanata LRT Environmental Assessment Study (2018) includes an elevated rapid transit station adjacent to the east side of Huntmar Drive between Cyclone Taylor Boulevard and Palladium Drive. The proposed Palladium Station will be connected to a new combined bus terminal and park and ride lot on the west side of Huntmar Drive via an elevated walkway.

Connecting the EA study's recommended plan into these projects will contribute to the overall multi-modal connectivity and planned integration of the transportation network with land use.

The outcome of the EA study will:

- Protect the roadway corridors from encroaching development. A protected corridor also provides the opportunity to request the land be transferred to the City as a condition of development approval
- Address planned growth and forecasted travel demand to 2046

- Improve multimodal mobility and connectivity with adjacent land uses and the future Palladium Station
- Provide new active transportation facilities across Highway 417
- Add new bus stops and amenities, active transportation facilities, and accessibility features
- Improve boulevard space for landscaping, tree planting and snow storage
- Encourage transit-oriented development and regeneration of existing development
- Guide planning and development of existing and future land uses.

DISCUSSION

Huntmar Drive is a north-south arterial road beginning at March Road in the north and terminating at Hazeldean Road in the south. South of Hazeldean Road, it continues as Iber Road to Fernbank Road. Huntmar Drive connects with Campeau Drive in the north at a roundabout and with Maple Grove Road in the south at a signalized intersection. Within the project limits, Huntmar Drive crosses over Highway 417 on a two-lane bridge which lacks pedestrian and cycling facilities. The bridge is within the jurisdiction of the Ministry of Transportation (MTO), built in 1978 and rehabilitated in 2013/2014 without any sidewalks or cycling facilities. North of Highway 417, Huntmar Drive provides a connection to the Tanger Outlets and the developing residential community along Campeau Drive. South of Highway 417, Huntmar Drive traverses between the Canadian Tire Centre (CTC) to the east and the Kanata Autopark to the west while continuing southerly to Maple Grove Road.

The existing roadway cross-section varies from two to four lanes within the project limits with auxiliary lanes at major intersections. Near Campeau Drive, where the roadway abuts Tanger Outlets site, there is a short 130 metre segment that has a four-lane urban cross-section with sidewalks and cycle tracks. South of it, the roadway transitions to a two-lane rural cross-section where it crosses Feedmill Creek. The section between Cyclone Taylor Boulevard and Palladium Drive has a four-lane cross-section with a sidewalk provided on the east side only. South of Palladium Drive, the roadway transitions to a rural two-lane roadway.

Huntmar Drive has low pedestrian and cycling volumes due to the lack of active transportation facilities, particularly at the Highway 417 crossing. However, the demand for safe and accessible active transportation facilities is strong and growing. The existing crossing is particularly desirable for pedestrians and cyclists since it is a flyover

without any high-speed access ramps that typically present significant crossing challenges. Local transit operates in mixed traffic and its reliability and travel time is negatively impacted by congestion. A range of land uses exist along the corridor, including the Canadian Tire Centre (sports and entertainment, special events), institutional, commercial, employment, residential, a private school, and vacant lands which are being planned for development.

Stittsville Main Street is a major north-south roadway that starts in the south at Flewellyn Road and ends in the north at a cul-de-sac near Maple Grove Road. Stittsville Main Street north of Hazeldean Road is a major collector while the section south of it is an arterial road. It generally has two travel lanes with auxiliary turn lanes at major intersections. South of Hazeldean Road, it intersects with Carp Road which provides access to Highway 417 via the Carp Road interchange.

The Stittsville Main Street corridor is surrounded primarily by vacant lands which are being planned for residential development. The absence of continuous Stittsville Main Street connection to the Arterial Road network creates a gap in the overall transportation network.

Project Need and Opportunities

Although Huntmar Drive widening and Stittsville Main Street extension have been identified in the TMP and OP, a review of assumptions and confirmation of the need for additional travel capacity was conducted as part of the EA study. The study reviewed the forecasted travel demand to 2046 and confirmed the need for additional east-west and north-south travel capacity in the study area.

The study also confirmed that the existing crossing of Huntmar Drive over Highway 417 is a significant barrier for accessibility, active transportation mobility and connectivity and does not meet City standards. The existing bridge has multiple traffic signs indicating that pedestrians are not permitted on the bridge, but these signs are disregarded by pedestrians and cyclists who need to cross Highway 417 to access services. The sharp vertical curve in the middle of the bridge may also obstruct sightlines for drivers. The documented use of the bridge by pedestrians and cyclists as well as the forecasted increased demand for active transportation crossing confirms that a safe crossing solution is needed.

For Huntmar Drive, there is a need to:

- Provide additional travel capacity to accommodate growth and development in surrounding communities
- Improve crossing of Highway 417 for pedestrians and cyclists
- Maintain the Arterial Road function, joining Campeau Drive to Maple Grove Road, with an improved crossing of Highway 417.

For Stittsville Main Street, there is a need to implement a Major Collector Road extension to serve new development and connect communities to the existing and future transportation network.

Alternative Solutions

Numerous alternative solutions were reviewed and evaluated, including the “do nothing” alternative that served as a baseline for comparison. The evaluation of alternative solutions is summarized in Document 1.

Following the evaluation process, it was reconfirmed that:

- Huntmar Drive be widened and reconstructed as a complete street between Palladium Drive and Maple Grove Road.
- Stittsville Main Street be extended as a complete street providing for all modes from Maple Grove Road to the future Robert Grant Avenue.

Furthermore, it is proposed that the Huntmar Drive bridge over Highway 417 be replaced with a new complete street bridge at the same location, which would maintain continuity of the protected and accessible pedestrian and cycling facilities on each side of Huntmar Drive. The existing bridge has a substandard vertical clearance of 4.5 metres under the bridge instead of the required 5.0 metres. It is also a post tensioned structure which is not recommended for widening given the configuration and layout of the existing post tensioning strands. Widening the bridge would involve constructing a structure directly adjacent to the existing bridge on its own substructure/foundations. However, this structure would also have substandard vertical clearance. For these reasons, it is recommended that a new complete street bridge be constructed.

Due to the existing need for a safe pedestrian and cycling crossing of Highway 417, the EA study included an optional stand-alone active transportation only bridge which could be built in advance of the Huntmar Drive widening and associated new crossing of the Highway if funding is available.

Alternative Designs and Development of the Recommended Plan

The process chosen to determine and evaluate alternative designs for the preferred solutions was a stepwise process that considered the varied opportunities, constraints, policies, geometric design requirements and environmental effects. Criteria were developed to evaluate alternative designs within their specific context. The criteria were grouped into the following sustainability categories:

- Transportation System
- Ecological and Physical
- Land Use, Social and Community
- Economic

Key design considerations were:

- Provide safe, equitable, accessible design considering all modes and users
- Ensure pedestrian and cycling facility connectivity
- Increase tree canopy, improve landscaping, provide rest areas, ensure space for snow storage
- Consider traffic and transit operations and level of service
- Improve quality of transit service and transit travel time reliability
- Integrate surrounding land uses and future developments, including their access and turning movement needs
- Coordinate with the approved functional design for Kanata LRT and the Palladium Station
- Enhance urban design and pay special attention to the Hub designation, as identified in the Official Plan
- Incorporate climate change mitigation and adaptation goals
- Ensure stormwater management
- Incorporate traffic calming opportunities on Stittsville Main Street
- Respect for and protection of the natural environment context
- Minimize right-of-way requirements and property impacts.

Both the roundabout and signal-controlled protected intersection options were evaluated for the major intersections along both corridors. The evaluation was based on the following criteria:

- Route consistency
- Accessibility
- Pedestrian and cycling safety
- Traffic volumes and traffic flow balance
- Community context
- ROW requirements

Several alternative cross-sections were prepared and evaluated. The evaluation of alternative designs is summarized in Document 1.

Recommended Plan

The recommended plan will result in improvements to Huntmar Drive and Stittsville Main Street that are appropriate for the context of each corridor. The recommendations are summarized as follows:

Huntmar Drive Widening

The recommended plan is a four-lane complete street. This best supports its Arterial Road and Minor Corridor functions, supports major adjacent land uses, addresses long term travel capacity and network resiliency, enables enhanced public realm in a design control area, and provides multi-modal connectivity and accessibility.

The recommended cross-section is shown in Figure 3 and it features:

- four-lane undivided roadway (two lanes in each direction)
- 2.0 metre unidirectional cycle tracks, 2.0 - 2.5 metre sidewalks on both sides (with an option to separate the cycle track and sidewalk with a landscaped planting zone, or to have them adjacent)
- Improved bus stop platforms and locations
- Wide inner boulevards for snow-storage that also act as a buffer to active transportation facilities
- Space for tree planting and benches
- Pedestrian scale lighting in the planting zone.

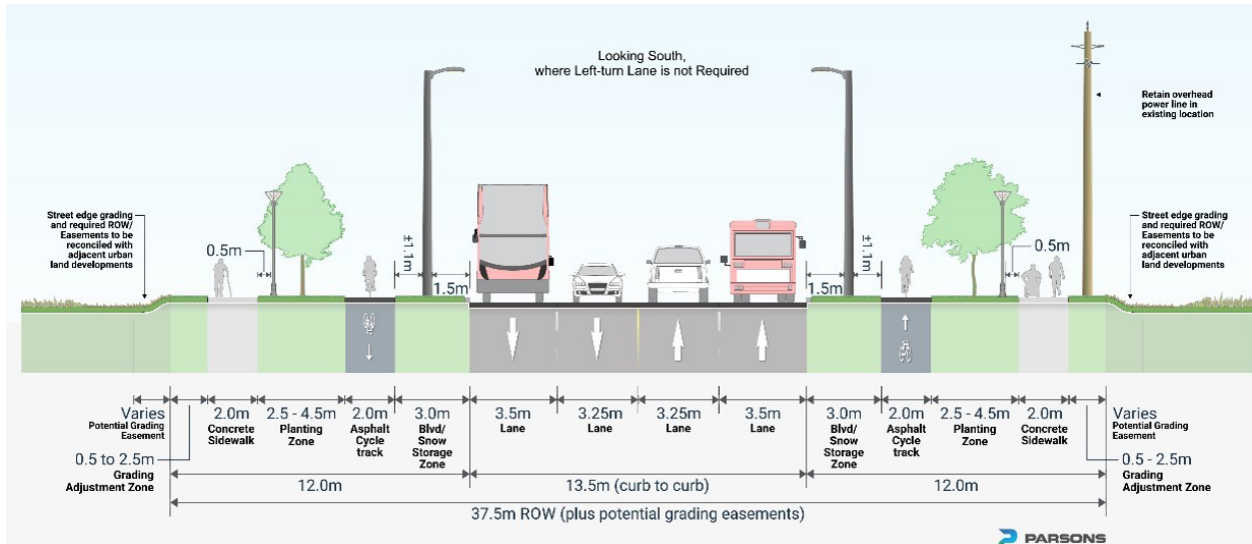


Figure 3: Recommended cross-section for Huntmar Drive Widening

The recommended plan also includes:

- Protected signalized intersections with Huntmar Drive and Cyclone Taylor Boulevard, Palladium Drive, and Robert Grant Avenue
- Potential protected signalized intersections at 130 Huntmar Drive and at 320 Huntmar Drive for future development access.

Highway 417 Crossing

The recommended plan is to construct a replacement Huntmar Drive Complete Street bridge in the existing bridge alignment. The recommended cross-section is shown in Figure 4. The new bridge:

- Provides for needed travel capacity, active transportation, and transit service
- Maintains continuity of the Arterial Road
- Connects communities north and south of Highway 417
- Bundles investment into one structure.

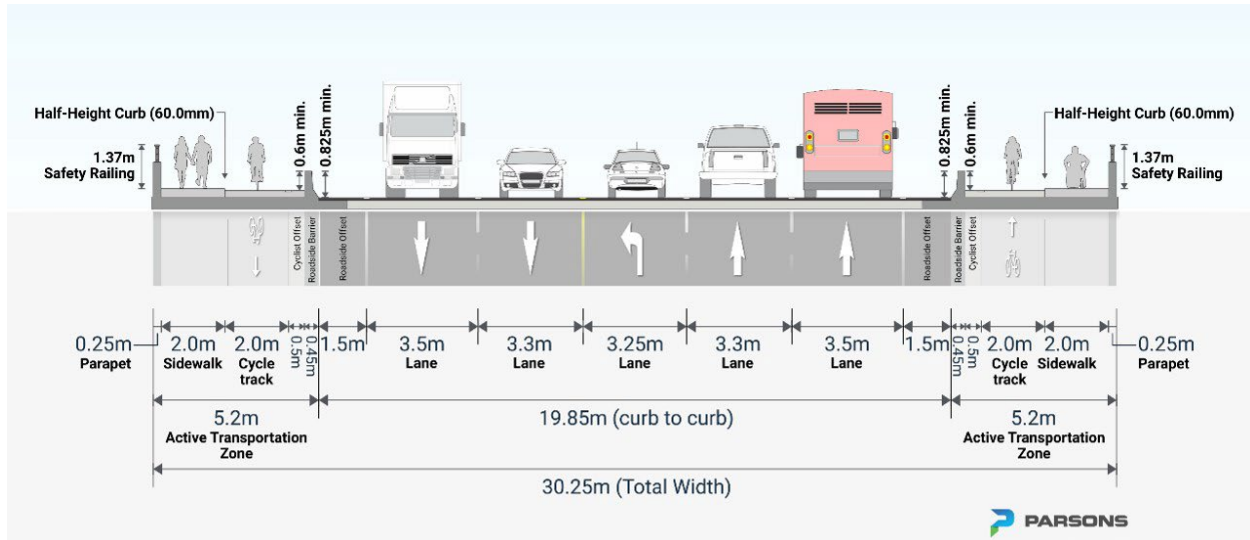


Figure 4: Recommended cross-section for Huntmar Drive Complete Street Bridge

The EA study also includes an optional Active Transportation (AT) bridge crossing and new multi-use pathway approaches on both sides of the AT bridge, on the east side of Huntmar Drive, from Cyclone Taylor Boulevard intersection in the south, and toward Campeau Drive to the north. This optional AT bridge would be covered and provide approximately 4.0 metres of shared space for pedestrians and cyclists.

Including this optional AT bridge as part of the study allows the City to have flexibility in implementation phasing should the timing for the Huntmar Drive widening be further into the future due to capital budget limitations. Timing (and affordability) will be determined through the on-going Transportation Master Plan (TMP) Update which will examine project priorities across the City's transportation network. The conclusion of the TMP Update (Part 2), expected in 2025, will help determine phasing priorities within this project. It should be noted that this optional standalone AT bridge has significant capital, operating, and life cycle cost implications. It would result in duplication of active transportation infrastructure in the same vicinity when Huntmar is widened from Campeau Drive to Maple Grove Road.

Stittsville Main Street Extension

The recommended plan to extend the road as a two-lane Major Collector and a complete street. This extension completes the network of community streets, addresses capacity and network resiliency, provides connection to major adjacent land uses and servicing, provides accessibility, active transportation and transit, and includes design features to reduce vehicle travel speeds.

The recommended cross-section is illustrated in Figure 5 and features:

- One travel lane in each direction
- 2.0 metre unidirectional cycle tracks and 2.0 metre sidewalks on both sides, with an option for a half-height curb delineator or facilities separated by a boulevard
- Traffic calming design elements including periodic, alternating side parking bay bulb-outs
- Wide inner boulevard for tree-planting and landscaping improvements.

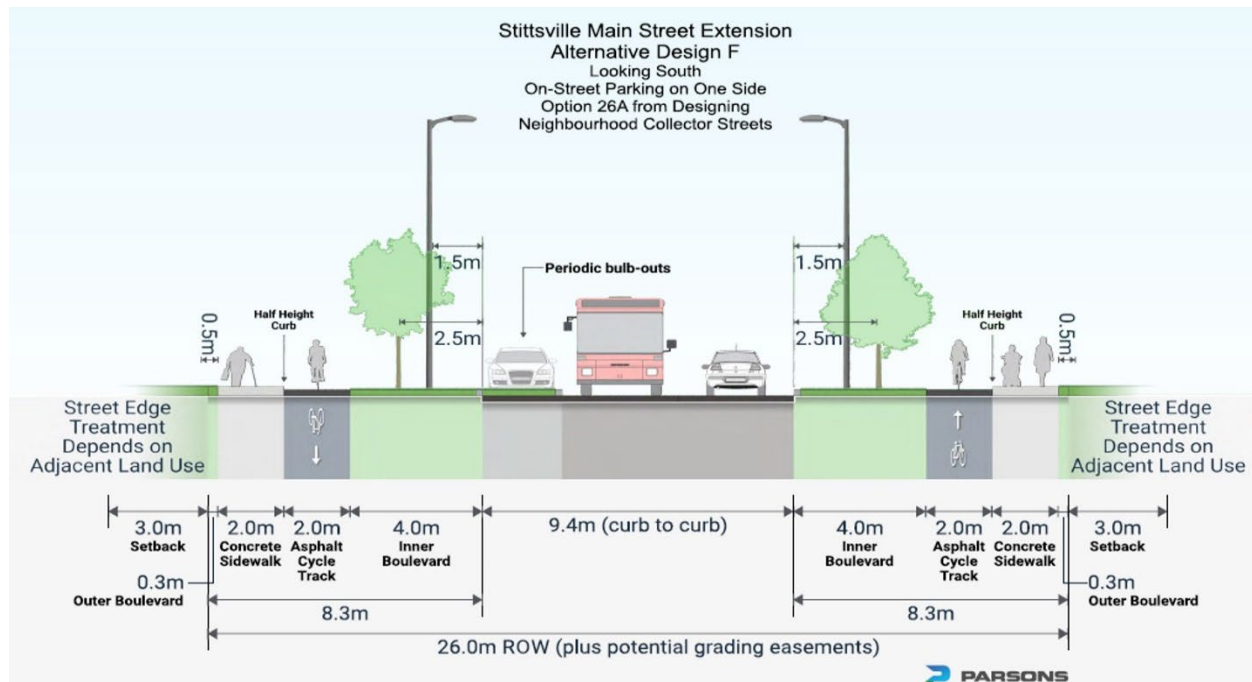


Figure 5: Recommended cross-section for Stittsville Main Extension

The recommended plan also includes:

- A new roundabout at the intersection of Stittsville Main Street and Derreen Avenue
- A new stop-controlled intersection with protected intersection design features at Stittsville Main Street and Maple Grove Road
- A number of minor intersections of Stittsville Main Street with local access roads, which will be stop-controlled. The location of the local roads corresponds to the planned and existing developments adjacent to the corridor. All intersecting side streets implement the City's 30 km/h Street Design toolbox, with design features like neckdowns (reduced width of the roadway throat at the Major Collector Road

intersection), and continuous active transportation crossings.

New East-West Major Collector (Stittsville Main Street to Carp Road)

Through this study, it was revealed that there was a need for a future westerly extension of a new east-west Major Collector from Stittsville Main Street to Carp Road. This new connection would support the new industrial and logistics lands as well as general urban lands identified in the Official Plan and help inform the future development applications in this area. General recommendations are made to orient the Industrial and Logistics traffic to Carp Road/Westbrook Road including to the Highway 417 interchange with Carp Road. A planning rationale for the new Major Collector Road has been prepared as well as its alignment, as shown in black in Figure 6. The alignment was based on additional transportation forecasts and review of natural environment conditions. This future link will extend from the intersection of Stittsville Main Street and Derreen Avenue to the intersection of Carp Road and Westbrook Road. The exact road alignment, property requirements and the associated environmental effects will be determined as part of a future study.

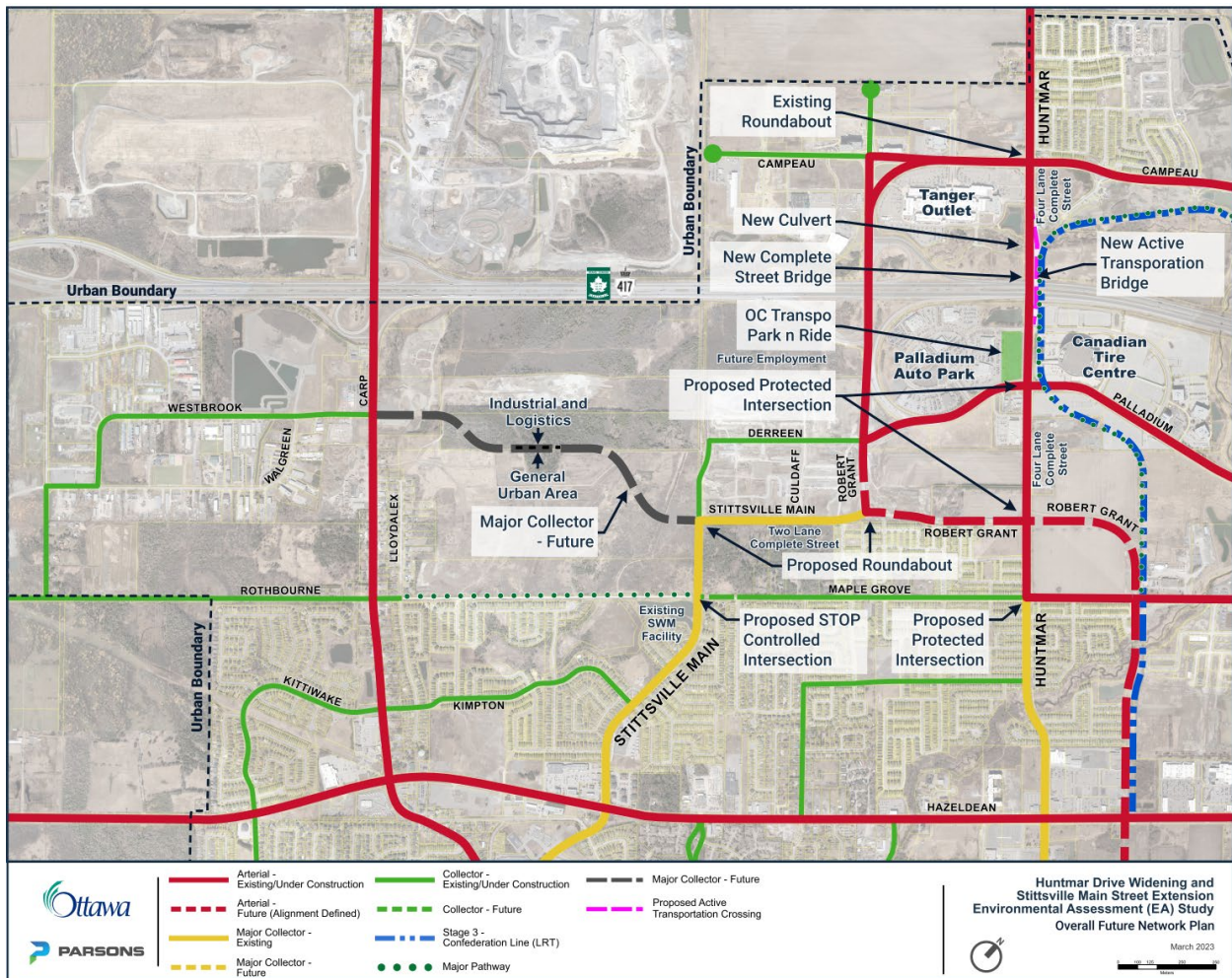


Figure 6: Overall Future Network Plan

In summary, the EA study's recommended plan will result in the following benefits at the time of project implementation:

- Provide complete streets that address the diverse mobility needs of all residents, businesses and visitors
- Separate active transportation facilities and provide space for trees and greenery, improving road safety and promoting better public health
- Integrate transportation and land use, providing access and connecting existing and future developments to wider transportation network, including to the future Kanata LRT
- Provide sufficient transportation capacity and multiple modal choices; support economic activity and enhance the economy
- Protect the environment through context-sensitive design, attention to surrounding natural features, and consideration for opportunities to enhance the environment through stormwater management, landscape design and tree planting.

Property Impacts

The implementation of the project will require approximately 1.6 hectares of private property for new active transportation facilities, protected intersections, a roundabout and general road widening.

Cost Estimate

The total estimated cost in 2023 dollars is \$110 million for Huntmar Drive widening (from Campeau Drive to Maple Grove Road) - this includes a new multi-modal bridge with cycle tracks and sidewalks.

The Stittsville Main Street extension is estimated to be \$20.5 million.

The optional, stand-alone active transportation bridge, with pathway connections is \$24M. This bridge would duplicate active transportation facilities already incorporated in the new Huntmar Bridge design, and it will not be needed should the road widening project be prioritized. It would be financially prudent to build just one roadway crossing that accommodates all modes, than have two separate bridges in the same vicinity. One comprehensive project would achieve economies of scale and reduce the number of structures to maintain.

FINANCIAL IMPLICATIONS

Funding for this EA study is in capital account #908210 2016 EA Studies Arterial Roads. Project costs were prepared in accordance with the Council-approved Project Delivery Review and Cost Estimating process for implementing capital projects. The total estimated cost in 2023 dollars is \$110 million for Huntmar Drive widening (including a new complete street bridge with cycle tracks and sidewalks), \$20.5 million for Stittsville Main Street extension, and \$24 million for the optional, stand-alone active transportation bridge. The project is not currently within the City's current envelope, and would still be subject to the City's future capital budget priorities and affordability.

LEGAL IMPLICATIONS

There are no legal impediments to approving the recommendations as outlined in this report.

COMMENTS BY THE WARD COUNCILLOR(S)

Councillor Curry provided the following comments:

I was very pleased with the consultation process and appreciate the many options considered, including the separate active transportation bridge. However, I would highly recommend that the full concept bridge be a priority due to the problematic crossing of pedestrians currently without pedestrian infrastructure in place. I support the project going ahead as early as possible due to this safety risk. And, I definitely support the EA report that highlights the option to have all of the required and safe infrastructure built at once instead of building two different structures.

Councillor Gower provided the following comments:

I am happy to see that the importance of pedestrian and cyclist safety is highlighted in this report. I continue to hear from concerned residents about the lack of safe active transportation infrastructure along Huntmar Drive, and in particular crossing the 417, as well as the need to extend Stittsville Main Street to accommodate our growing community. The possible solutions recommended by City staff are appreciated.

I also want to thank the public for their input on these projects. The magnitude of engagement reflects just how important this is to the community. I am committed to continuing to work with City staff to move these projects forward as quickly as possible.

ADVISORY COMMITTEE(S) COMMENTS

The Accessibility Advisory Committee (AAC) was engaged by the study team by liaising directly with one of its representatives who has experience in reviewing and

commenting on draft transportation facility designs. Specifically, the AAC supports the proposed segregated facilities for pedestrians and cyclists on Huntmar Drive, on the new Huntmar Drive Complete Street bridge over Highway 417, and on the Stittsville Main Street extension. The AAC is also in support of the potential (optional) new Active Transportation bridge over Highway 417, which would also be accessible, have a smooth rolling surface and pathways to/from the bridge with slopes meeting accessibility design guidelines. The AT bridge would also have multi-use pathway connections on both bridge ends, and exterior seating would be provided at each end, based on a recommendation from the AAC. Overall, the AAC encourages the City to invest in segregating pedestrians and cyclists as much as possible and provide maximum achievable widths for the multi-use space on the AT bridge and its approaches. The AAC is also supportive of the recommended plan's application of the City's design guidance for protected intersections and for bus stop and 'off road' cycling facilities interaction zones. The AAC is supportive of the EA study providing space for tree planting, shade, and rest areas to maximize the usability of boulevards and sidewalks. The AAC also encourages design flexibility and opportunity to implement interim shade (to address the need for shade before planted trees have matured). Provision of shade in the interim should be explored at detailed design and could be achieved by implementing built shade structures, including potentially in combination with public art. Overall, AAC is supportive of the EA's recommended plan that implements accessibility design standards and City's policies for complete streets, active transportation, and healthy communities.

CONSULTATION

Consultation included three rounds of meetings with the Agency Consultation Group (regulatory agencies, Ontario Ministry of Transportation, Hydro Ottawa, Hydro One and other utility companies, various City Departments), Business Consultation Group (landowners, developers, school boards, businesses) and Public Consultation Group (community associations, Bike Ottawa, Accessibility Advisory Committee, and special interest groups). Several additional consultation meetings were held with individual landowners to discuss specific issues and contexts. Also, two virtual public open houses were delivered, consisting of a presentation and question and answer period. Consultation materials and a survey were made available on the project website, and consultation events were advertised through newspapers, emails, buckslips (mailouts) and social media.

Representatives of Indigenous communities were invited to review consultation materials and provide feedback. The EA study's Cultural Heritage Evaluation report and Stage 1 Archaeological Assessment report were also shared with Indigenous contacts. No comments were received.

Overall, there is strong public support for this project. The following summarize key themes and comments received:

- Need to provide additional transportation capacity to serve the rapidly developing area
- Ensure coordination and integration with the planned and active subdivision developments, including location, provision and type of additional property accesses and intersections
- Strong support to construct both corridors as complete streets featuring accessible sidewalks, cycle tracks and transit amenities
- Strong support for a safe active transportation crossing of Highway 417 and for the early implementation of the Active Transportation bridge
- Support for the safety and accessibility for all users of all ages and abilities to be considered in the design
- Desire for enhanced landscaping and tree planting throughout both corridors
- Support for emphasizing sustainability in design, considering user experience related to future climate change impacts
- Support for the project to be built as soon as possible, and for the City to explore phasing opportunities.

Also, some residents inquired how it was decided to recommend roundabouts in some locations and protected signalized intersections in other locations. It was explained that the recommendations were based on several factors and evaluation criteria, as outlined in the Alternative Designs section of this report. The roundabout at Stittsville Main Street and Derreen Avenue is recommended because it will act as an effective traffic calming measure and a community gateway, featuring landscaping elements in the centre island. It will also tie in well to the proposed roundabout at Stittsville Main Street and Robert Grant Avenue, providing east-west route consistency. The protected signalized intersections with Huntmar Drive and Cyclone Taylor Boulevard, Palladium Boulevard, and Robert Grant Avenue are recommended because they offer greater pedestrian and cycling accommodation and safety. These intersections will provide cyclists with a

continuous, protected north-south cycling route, without the requirement to dismount to cross any intersecting roadways. Also, they require less space compared to roundabouts, which would have had notable impacts on existing land uses and/or required notable acquisition of property from developments.

ACCESSIBILITY IMPACTS

The City of Ottawa is committed to ensuring accessibility for persons with disabilities and older adults. Active transportation planning and the development of public spaces at the City of Ottawa is guided by a legislated accessibility framework that includes the City's Accessibility Policy, the *Accessibility for Ontarians with Disabilities Act, 2005*, the *Integrated Accessibility Standards Regulation, O.Reg. 191/11* and the City's Accessibility Design Standards.

The study included numerous opportunities for public consultation, including two virtual public consultation events, a project website that contained consultation material and surveys (Ottawa.ca/huntmardrivestittsvillemain), and consultation notices that were sent by email, mail and social media. A dedicated representative of the Accessibility Advisory Committee participated in the consultation process, as described in the Advisory Committee(s) Comments section of this report. Based on the feedback provided, the AAC member has taken the opportunity to make suggestions to improve the draft plans and is in support of the recommended plan.

The study resulted in a functional design that follows the City's *Accessibility Design Standards* and other relevant accessibility requirements. The study's recommended plan received considerable support given its focus on the provision of an accessible safe and integrated transportation network for pedestrians, cyclists and transit users; including those with disabilities.

Staff remain committed to addressing all accessibility concerns and eliminating barriers to persons with disabilities in the implementation of this project. Additional consultation with the AAC will occur at detailed design and construction phases, including on traffic management, ensuring pedestrian safety during construction and on other AODA consultative requirements.

The implementation of this project will result in several accessibility improvements, including:

- New and improved sidewalks, cycle tracks and multi-use pathways
- New and improved bus stop locations and amenities
- New boulevards that will include tree planting, rest areas and shade

- Protected intersections that incorporate design features of separated cycling and pedestrian crossings
- New active transportation facilities to improve crossing over Highway 417
- Additional crossing opportunities to reduce the spacing between existing intersections and improve connectivity to adjacent land uses and major destinations.

ASSET MANAGEMENT IMPLICATIONS

This report proposes that the City construct/acquire new assets and expand/enhance existing assets. Consideration of the implications of acquiring new or expanded assets on the City's management of its infrastructure portfolio forms an important step in the planning process. Acquisition of new assets require reflection on the City's commitment to fund future infrastructure operations, maintenance and renewal costs and must also account for future depreciation when reviewing long term financial sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value and lifecycle costing of the acquired assets being taken on by the City. This must be done in a socially, culturally, environmentally, and economically conscious manner and support the guiding principle of sustainability by considering climate impacts in the decision to acquire new assets.

As part of project implementation, the design of the Huntmar Drive widening will need to include a new trunk watermain from Cyclone Taylor to Maple Grove in order to support growth in the area. The portion of the watermain between Cyclone Taylor to Palladium is accounted for in the current DC By-law. The section south of Palladium is expected to be added to the 2024 DC By-law update. A watermain is also required in the Stittsville Main Street Extension corridor. This watermain does not meet DC eligibility criteria but is only required to support growth. Therefore, a funding agreement with the benefitting developers will be required.

CLIMATE IMPLICATIONS

The preparation of the EA study's recommended plan included consideration of climate change. The City's Climate Change Master Plan (2020) and the Climate Change Vulnerability and Risk Assessment report (2022) helped inform the evaluation of alternative solutions and designs and prepare mitigation measures for the recommended plan.

The climate projections for the National Capital Region (NCR) indicate that Ottawa will experience warmer, wetter and more unpredictable weather over the coming decades.

According to the Climate Projections for the National Capital Region report (2020), warming is anticipated in all seasons. An increase in precipitation is expected in all seasons, except summer. The timing of seasons will shift and periods of extreme heat will become more common. The volume and intensity of rainfall is expected to increase. Less snowfall and a shorter snow season are expected. Conditions favourable for extreme events such as freezing rain, tornadoes and wildfires will become more common.

The recommended plan's improvements to active transportation and transit facilities and connectivity will encourage use of sustainable modes of transportation and contribute to reducing greenhouse gas (GHG) emissions. Frequent active transportation crossings will limit unnecessary diversions and connect major desire lines such as at the Kanata LRT and Feedmill Creek pathway. Additional bus stops and high-quality transfer points, such as between local and rapid transit at the future Palladium LRT station, will minimize walking distances and support an efficient transit system. Street landscaping and tree planting will counteract the urban heat island effect. Shade will be provided from canopy trees and potential additional shade structures along the corridor, especially at bus stops. Rest areas and bus shelter enhancements will be provided to improve comfort.

More frequent severe storm events with increased runoff of roadway drainage may require larger roadside storm sewers. Appropriate in-corridor catch basins and pipes for stormwater conveyance and management will be provided. Permeable surfaces and green landscaping boulevards, and proper sloping/crowning of facilities, will be incorporated in the design. Winter maintenance will be supported by providing sufficient snow storage space in boulevards.

The recommended plan also provides the opportunity and flexibility for further refinement to maximize mitigation of potential climate change-related impacts. During the next phases of the project, at preliminary and detailed design, there are opportunities for additional mitigation through landscaping details, stormwater system enhancements, and utilization of contemporary, resilient asphalt mixtures or other paving materials. Best practices will also be explored at the construction phase to reduce lifecycle GHG emissions from construction materials and methods.

ECONOMIC IMPLICATIONS

This project will deliver an improved transportation network that will enhance connectivity and accessibility for existing and future commercial development along these corridors. New commercial development increases employment and economic

activity and supports economic growth and prosperity while advancing the objectives of 15-minute neighbourhoods as outlined in the city's Official Plan.

ENVIRONMENTAL IMPLICATIONS

The key environmental impacts and proposed mitigation measures identified by the EA study are highlighted below. The Environmental Study Report will include mitigation measures to reduce impacts on the environment, including strategies on corridor drainage and stormwater management, landscaping, tree conservation, and noise. In the future, at the detailed design phase, the project will also benefit from contemporary planning, engineering, and environmental best practices. The following plans will be prepared as part of detailed design: Stormwater Management Plan, Landscape Plan, Environmental Management Plan, Construction Waste Management Plan, Construction and Traffic Management Plan, and Public Communications Plan.

Stormwater Management

The EA study's recommended plan will result in an increase to impervious surfaces, including from the implementation of active transportation facilities and protected intersection design features. The recommended plan identifies a compact right-of-way that includes green boulevards and planting areas for trees. The drainage strategy has been informed by the Kanata West Master Servicing Study and has been prepared in coordination with the drainage plans of the planned and developing subdivisions. Runoff quality and quantity control will be achieved through existing and new storm services. Appropriate in-corridor catch basins and pipes for stormwater conveyance and management will be provided. The recommended plan does not identify the need for stormwater facilities (such as ponds) outside of the right-of-way.

Landscaping

The recommended plan includes new space for landscaping and rest areas (benches) along both corridors. Special attention was paid to maximizing the opportunity for tree planting in wide boulevards, including near bus stops and within proposed enhanced landscaping zones. Additional public realm embellishment areas are also proposed near the Palladium Hub. At detailed design, a landscape plan will be prepared to guide the species selection, location and planting details for all the proposed landscaping and streetscape elements.

Natural Environment

Some tree removal will be required to implement the recommended plan but will be mitigated through a tree inventory and tree conservation at detailed design. New trees will be planted in the wide boulevards provided in the design. Feedmill Creek crosses

the Huntmar Drive corridor east-west just north of the Highway 417 and provides cool-water fish habitat. West of Huntmar Drive the creek is identified as a significant valleyland, the riparian area of Feedmill Creek is noted floodplain. The City is currently completing a study to rehabilitate the creek through a separate initiative. Rehabilitation of Feedmill Creek is anticipated to occur prior to the widening of Huntmar Drive. During the time of the detailed design of the culvert crossing underneath Huntmar Drive, the new existing conditions resulting from the rehabilitation project will be surveyed and studied to inform this design and the culvert sized appropriately in consideration of maintaining fish passage, lengthening for the widened roadway and accommodating stormwater flows. Context sensitive lighting for the corridor in this location will be considered and based on the lighting treatment best practices that will be incorporated in design to ensure a balance of maintaining road safety while not over-illuminating the adjacent natural area.

Following targeted field surveys, 11 species listed as threatened or endangered Species at Risk (SAR) and 11 species of special concern have potential to occur or were confirmed present within the study area. There is potential for the project to interact with Species at Risk (SAR) or SAR habitat. Potential impacts on SAR will be mitigated through environmental site assessments at detailed design that will confirm presence/absence and potential impact to species in the corridor. Specific mitigation will be provided to avoid or minimize the risk in accordance with legislative requirements at that time including identifying any consultation with relevant federal, provincial and local authorities as needed.

Noise

A noise and vibration impact assessment was completed for both corridors based on the functional design. The assessment aligns with the municipal and provincial guidelines that apply to transportation projects. Future vibrations associated with the long-term operation of the roadways are expected to fall below perceptible levels for existing sensitive receivers. There are some noise sensitive uses along the corridors. Based on the distance from the proposed roadway to existing sensitive receivers and the forecasted noise levels, noise attenuation is not required as part of this project. The construction of noise attenuation measures, where warranted, will be evaluated and coordinated with the future development of adjacent lands. Any necessary mitigation will be included as a condition of development approval.

RISK MANAGEMENT IMPLICATIONS

There are no risk implications with approving this EA report. Any potential risks with the actual project will be addressed at the design phase.

RURAL IMPLICATIONS

The project limits are within the urban boundary.

SUPPORTING DOCUMENTATION

Document 1: Evaluation of Alternative Solutions and Designs

Document 2: Consultation Plan Summary

Document 3: Huntmar Drive Functional Design

Document 4: Stittsville Main Street Functional Design

DISPOSITION

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