

EXECUTIVE SUMMARY

Introduction

The Transportation Master Plan (TMP) identifies Blair Road, from the Blair Light Rail Transit (LRT) Station to Innes Road, as a transit priority corridor in the 2031 Affordable Network. An environmental assessment for this Blair Road transit priority corridor had been included in the ongoing Brian Coburn Boulevard Extension and Cumberland Transitway Environmental Assessment (BCE/CTW EA) study as a result of proximity and transit system continuity. As the BCE/CTW EA study has become increasingly more complex, on April 22, 2020, the City of Ottawa Council approved a motion to separate out the Blair Road portion from the BCE/CTW EA study as a stand-alone project. This approximately two-kilometre section of Blair Road is shown in Figure EX-1 with the proposed recommendations and functional design of the widening described below.

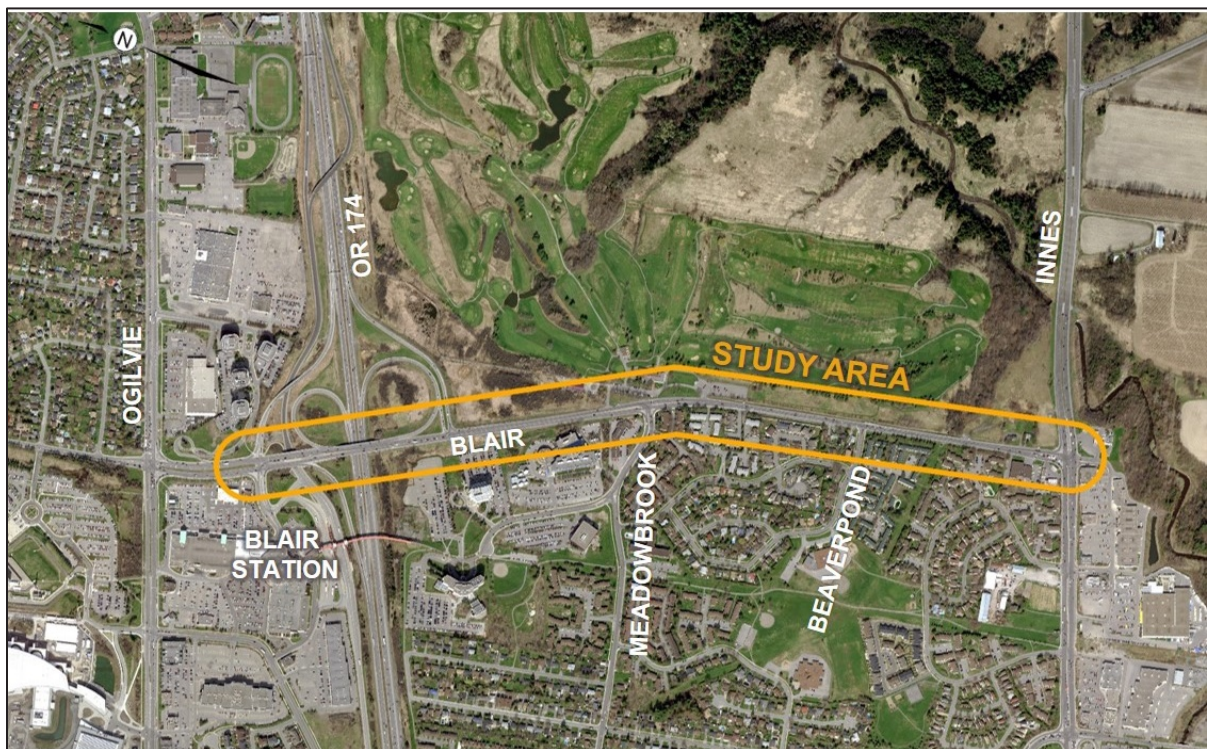


Figure EX-1: Study Area

Study Process

The study was undertaken in accordance with Schedule C of the Municipal Class Environmental Assessment (EA), which is an approved process under the *Ontario Environmental Assessment Act*. The process has involved developing, assessing, and evaluating alternatives, leading to a Recommended Plan.

Consultation

Consultation included two rounds of meetings with the Agency Consultation Group (National Capital Commission; Ontario Ministry of Environment, Conservation and Parks; Ontario Ministry of Natural Resources and Forestry; Ontario Ministry of Heritage, Sport, Tourism and Culture Industries; Rideau Valley Conservation Authority; Hydro Ottawa; and various City Departments), and the combined Business and Public Consultation Group (landowners, businesses, community associations, interest groups). Additionally, two public open houses were held along with focused consultation with the National Capital Commission (NCC) because of the impacts to and requirement for NCC Greenbelt lands.

Indigenous Peoples were also consulted in the form of email notices at various times during the study, though no responses were received.

Overall, there is general public support for this project with some issues that were raised during consultation which have been addressed. Concerns about increased traffic noise were raised for the widening of Blair Road and based on a noise study, sound barriers are proposed, where warranted along the west side of Blair Road.

Project Need and Opportunities

Blair Road, between Meadowbrook Road and Innes Road, is currently a congested two-lane rural arterial roadway with direct access to the Ottawa Road 174 (OR174). Approximately 430 buses destined to and from the Blair LRT Station currently travel daily along Blair Road in mixed traffic, resulting in delays to transit service. To address these delays, road widening for transit priority is required to improve transit travel time and service reliability. In accordance with the City's Complete Streets policy, also needed are pedestrian, cycling and accessible infrastructure improvements to provide connectivity to transit, retail (Gloucester Centre), employment (Canadian Security Intelligence Service, Canadian Security Establishment among others), and nearby communities.

Based on a traffic study in the area, the widening of Blair Road is proposed to accommodate combined transit and HOV lanes. The transit and HOV lanes are required to address current and projected travel demand to the 2031 planning horizon and beyond. Various design options to improve pedestrian, cycling and accessibility, such as multi-use pathways (MUPs), sidewalks and cycle tracks or a combination thereof, were assessed and evaluated, which led to the selection of the preferred design.

Development of the Recommended Plan

The Blair Road project is divided into two distinct sections:

1. OR174 Interchange area; and,
2. South of OR174 to Innes Road.

1. Blair Road/OR174 Interchange Area

The existing Blair Road bridge structure over the OR174 includes two general traffic lanes in each direction, a shared northbound OR174 on and off high-speed auxiliary lane, and discontinuous cycling lanes in each direction terminating at each end of the bridge overpass. There are safety concerns regarding the northbound cycling lane as it ‘floats’ between two traffic lanes and conflicts with vehicles merging on and off the interchange ramps. Pedestrian facilities are also non-existent along this segment. Road cross-section and plan views of these existing conditions are illustrated in Figures EX-2 and EX-3.

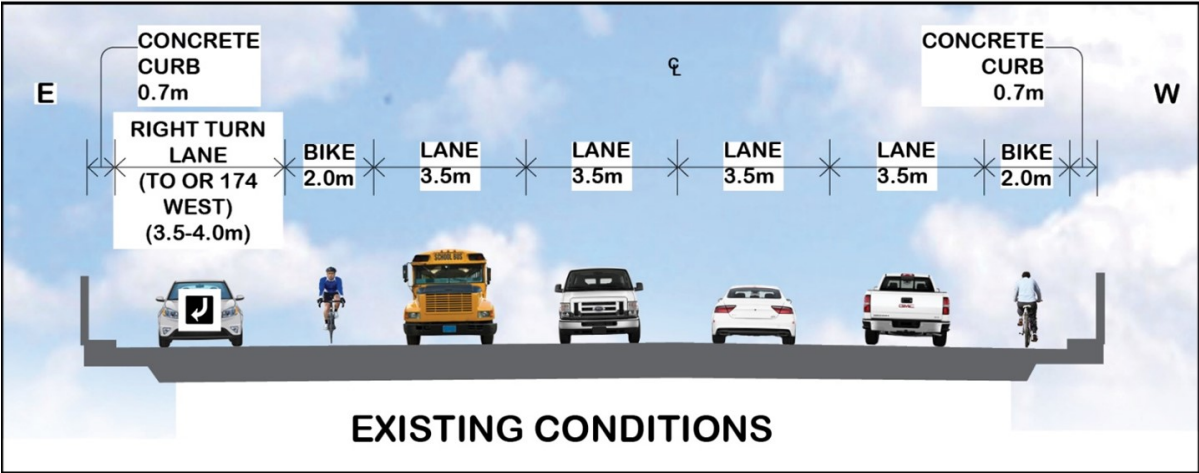


Figure EX-2: Existing Blair Road/OR174 Bridge Cross-Section

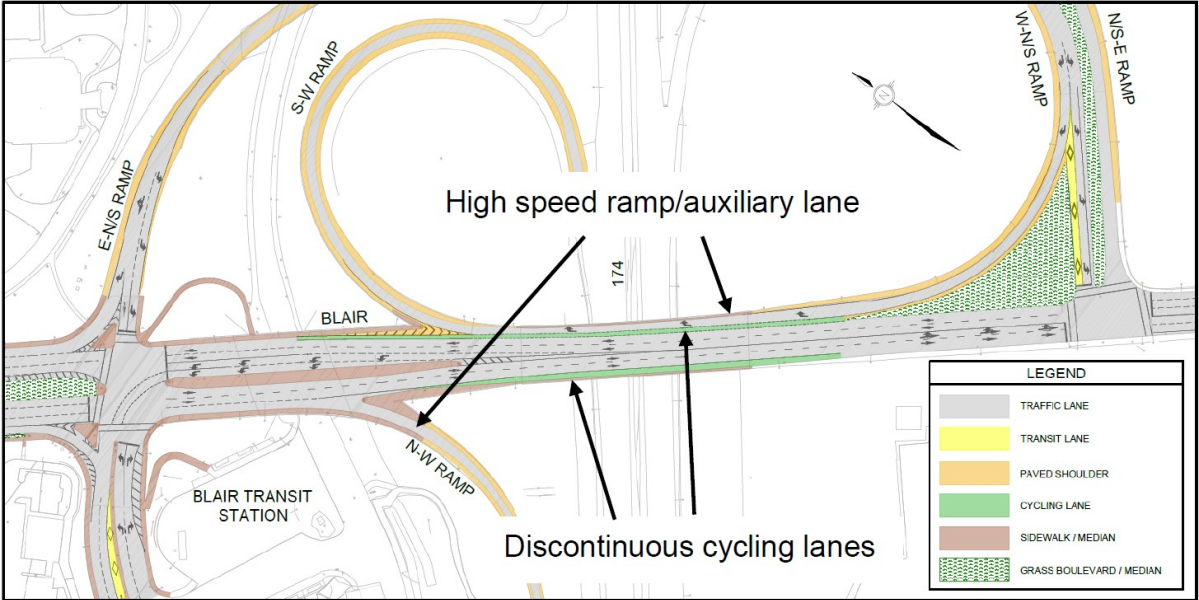


Figure EX-3: Existing Blair Road/OR174 Interchange Plan View



The recommended redesign (Figure EX-4) proposes providing fully accessible facilities for all modes of transportation while maintaining the two general traffic lanes per direction as well as avoiding major modifications to the structure. To reduce vehicle speeds, all three free flow interchange ramps will be realigned with smaller turning radii provided where they intersect with Blair Road. The space allocated to the existing cycling lanes and shared northbound OR174 on and off ramp auxiliary lane is proposed to be repurposed to accommodate a 4.0 m MUP on the west side and a 1.8 m sidewalk and 1.8 m cycle track on the east side. Figure EX-5 illustrates the realigned OR174 ramps and the modifications to the original high-speed ramps.

Additional enhancements for pedestrians, cyclists and accessibility include protected signalized intersections at the two intersections at Blair Station and south of OR174.

Shown on Figure EX-6 is the protected intersection design at Blair Station with improved connections to the proposed MUP on the west side of Blair Road and a separate sidewalk and cycle track on the east side. The existing pathway loop on the east side of Blair Road that passes under the Blair Road structure connecting to the LRT Station will be upgraded to a fully accessible MUP with a connection to the upcoming Stage 2 LRT Confederation Line East Extension MUP. On the west side of Blair Road, a proposed MUP will replace the existing sidewalk and connect further west into the station.

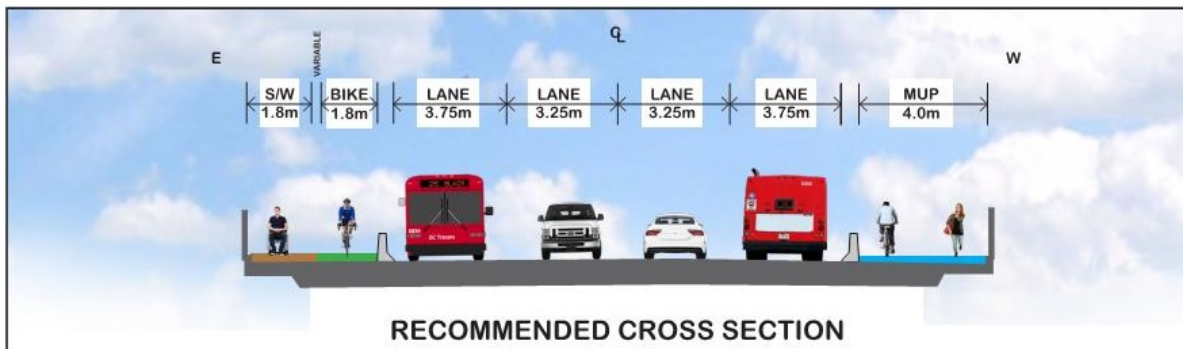


Figure EX-4: Recommended Blair Road/OR174 Bridge Cross-Section

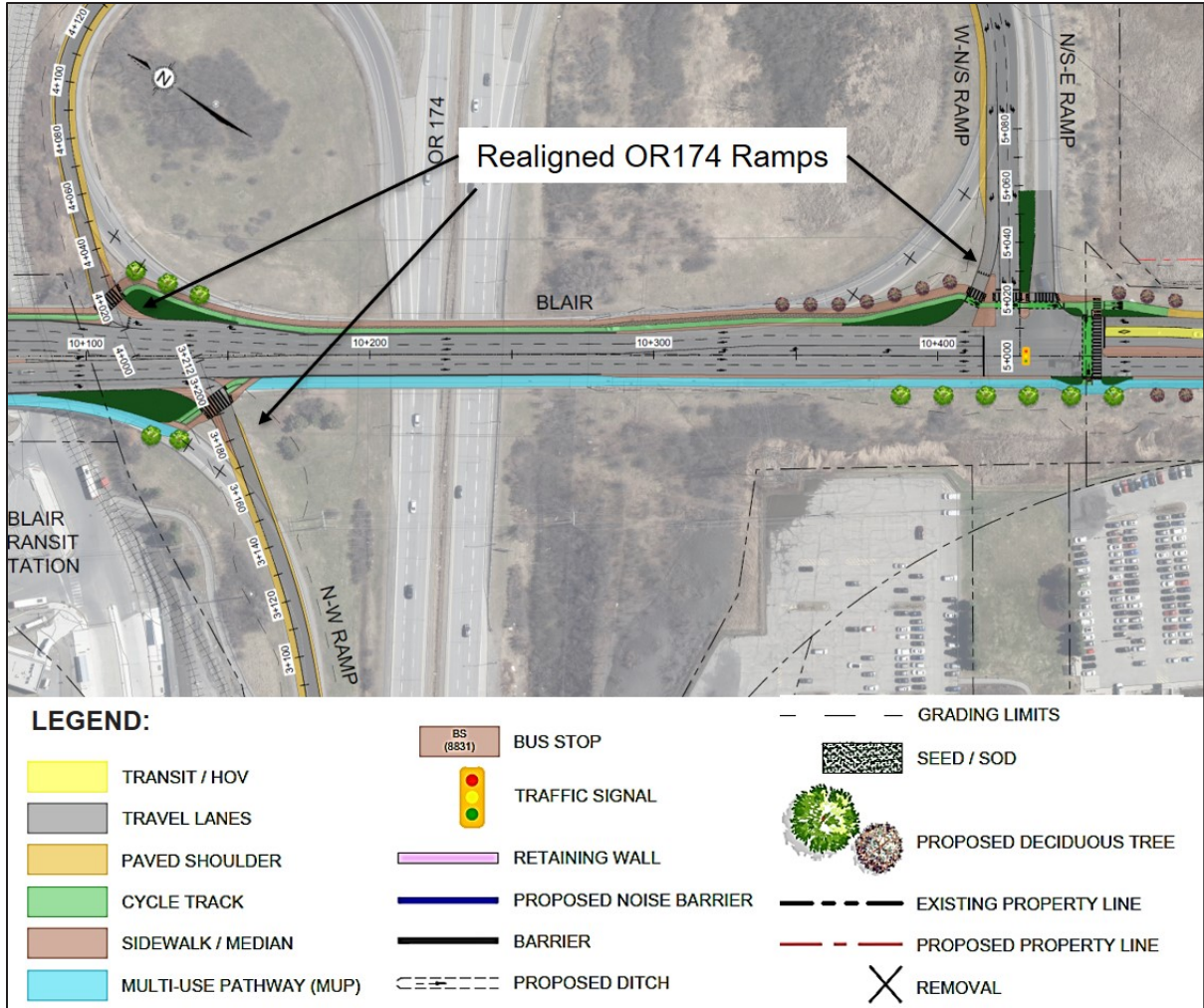


Figure EX-5: Realigned OR174 Interchange Ramps

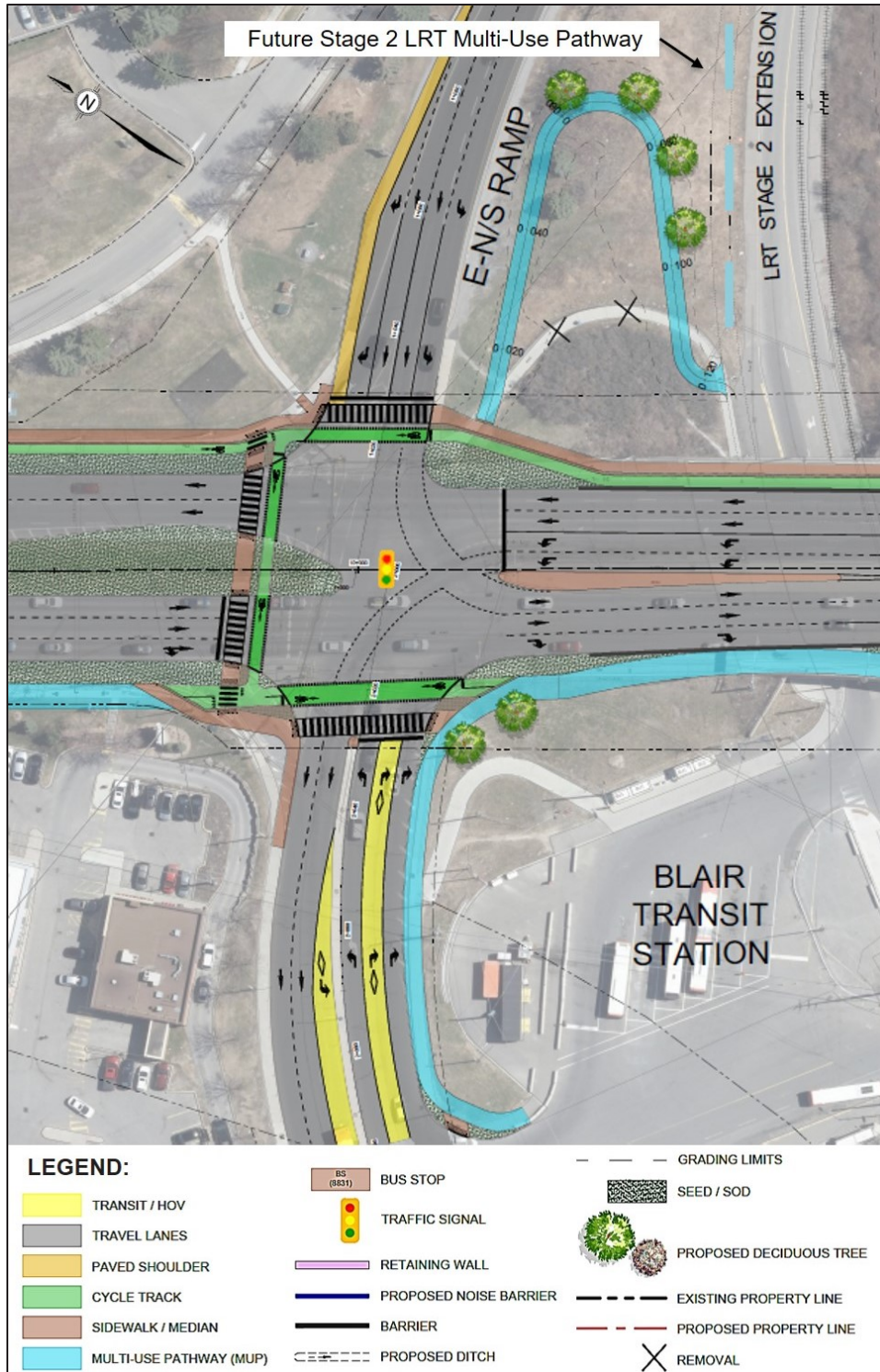


Figure EX-6: Protected Intersection and Highlights at Blair Station

2. Blair Road - South of OR174 to Innes Road

South of OR174, Blair Road currently transitions from four to two lanes just south of Meadowbrook Road. Where there are currently four lanes from south of OR174 to Meadowbrook Road, only minor widening is required and a conversion of the two outer general traffic lanes to transit and HOV lanes is proposed. The northbound transit/HOV lane terminates at the intersection south of OR174 to allow buses destined to Blair Station to weave across to the left lane. Further south between Meadowbrook Road and Innes Road, Blair Road is currently a two-lane road and widening to four lanes is recommended to accommodate dedicated transit and HOV lanes.

The NCC Greenbelt is on the east side of Blair Road and this project proposes to maintain the rural grading and ditching to preserve the rural character of the Greenbelt. On the west side of Blair Road, the MUP will extend from the OR174 bridge overpass to Innes Road and will provide direct access to the adjacent Pineview Community. A MUP on the west side is preferred as it accommodates bi-directional cycling and reduces the need for northbound cyclists to cross Blair Road. Figure EX-7 illustrates a typical cross-section of the widening.

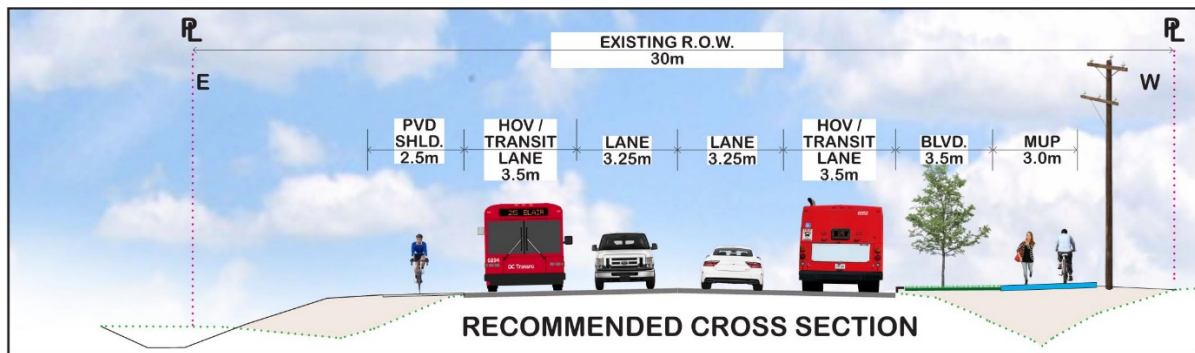


Figure EX-7: Typical Blair Road Cross-Section (South of OR174)

At the east side bus stops, a 4.0 m pedestrian platform is proposed with the cycle track passing behind the shelter to avoid pedestrian and cycling conflicts (Figure EX-8). To strengthen connectivity to bus stops, new pedestrian crossings are proposed at two locations: one just north of Innes Road and the second just south of Laura Private.

The proposed design at the Meadowbrook Road intersection is a partial protected intersection (Figure EX-9). Channelized right turn lanes have been removed to better accommodate pedestrians and cyclists. Protected cycle lanes, shown in green will transition to on-street cycling on Meadowbrook Road. Along the east side of Blair Road, separate northbound cycle track and sidewalk are proposed at the bus stop just north of the intersection. Future consideration may be given to modifying access to the Pine View Golf Course to align with the signalized intersection at Meadowbrook Road.

A pedestrian signal currently exists at Beaverpond Drive and an upgrade to a fully signalized intersection is proposed with an added northbound left turn lane to provide safe crossing for pedestrians and cyclists as illustrated in EX-10.

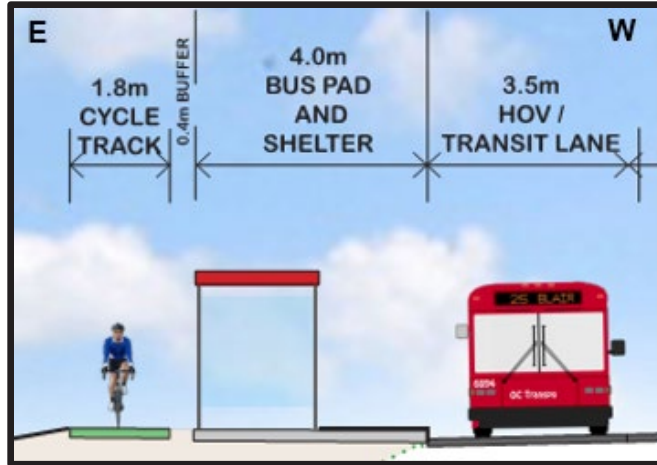


Figure EX-8: Typical Treatment at Bus Stops

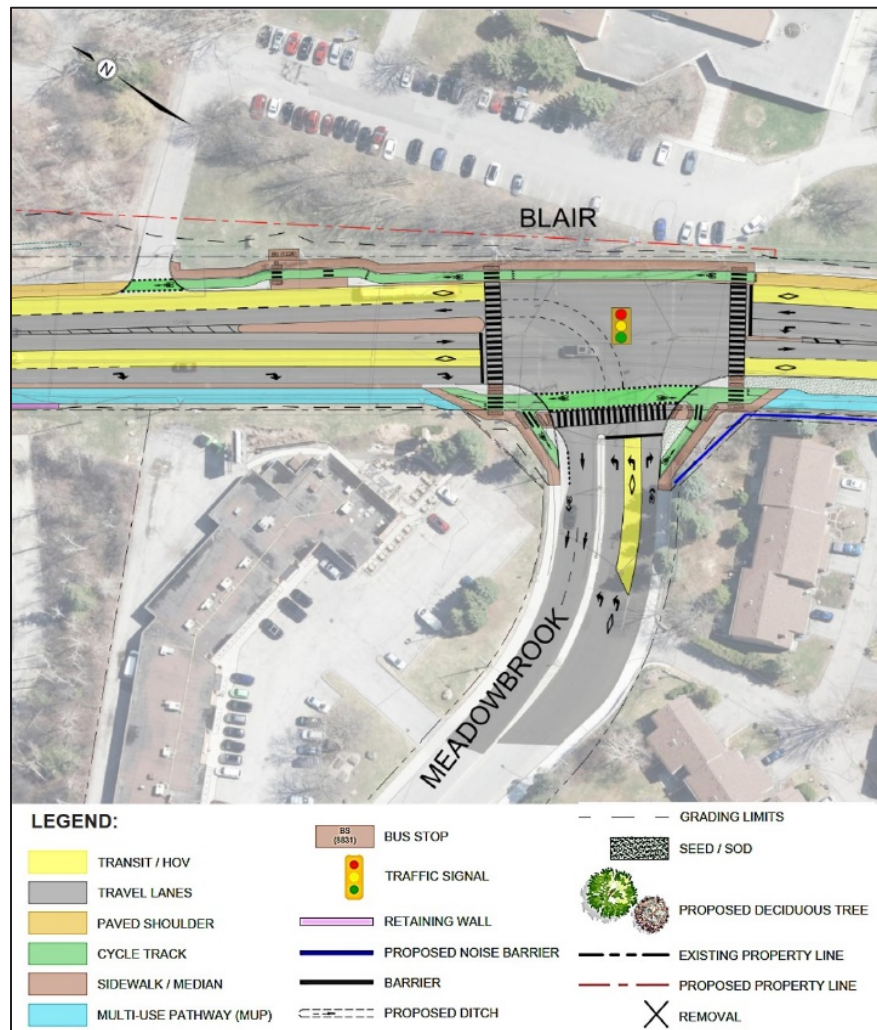


Figure EX-9: Recommended Design at Meadowbrook Road

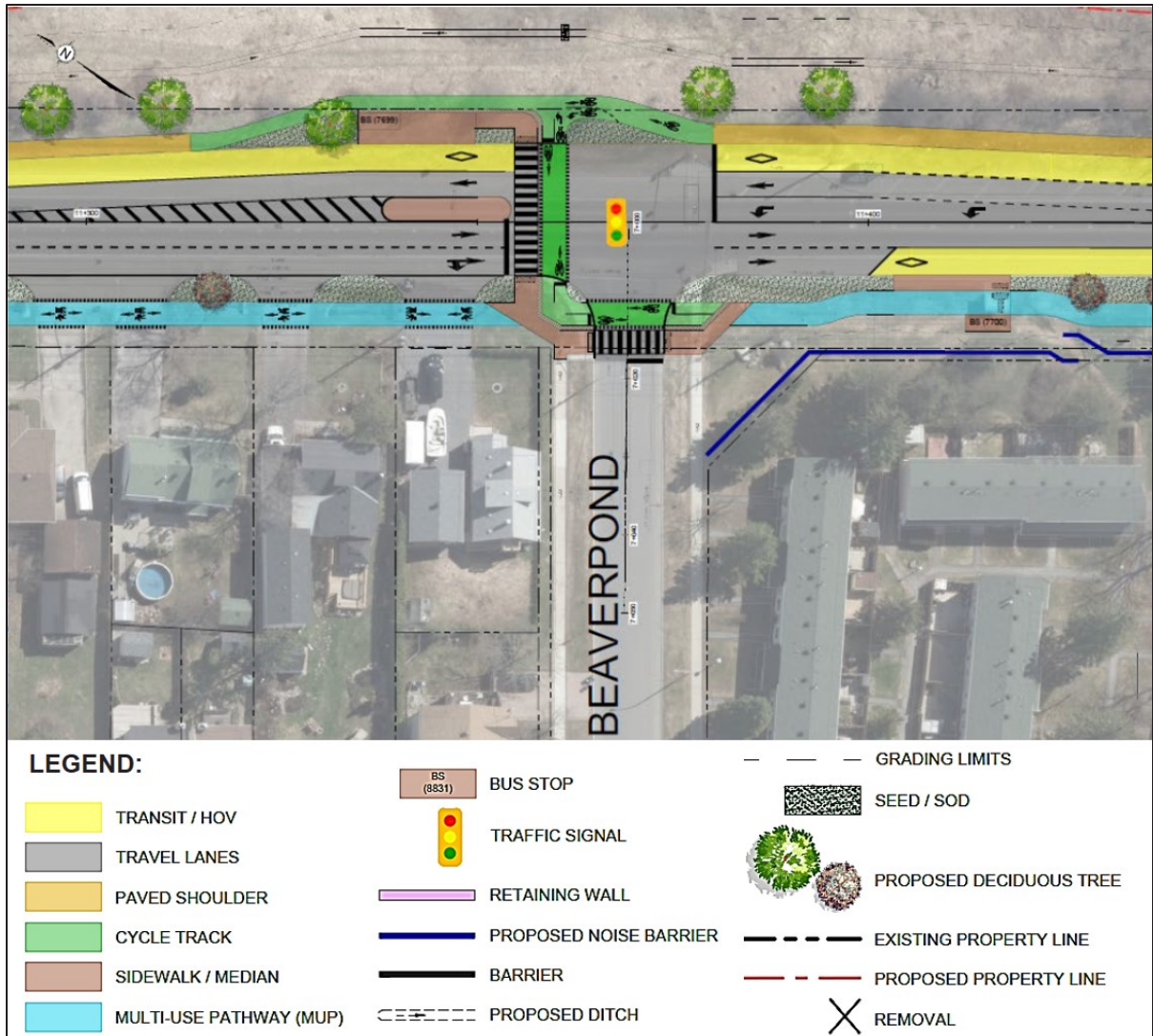


Figure EX-10: Recommended Design at Beaverpond Drive Intersection

At the southern limits of this project is the intersection of Blair Road with Innes Road, and a protected intersection (Figure EX-11) will provide pedestrian and cycling connectivity to the retail plaza and future facilities along Innes Road. Based on a traffic study of future travel demand, the channelized right turn lane from Blair Road south to Innes Road west is not required and is proposed to be removed in favour of a shared through and right turn lane to improve safety for pedestrians and cyclists. The removal of this channelized right turn also provides space to extend the MUP on the west side of Blair Road to the Innes Road intersection, as there is no opportunity to acquire additional property at this location due to the proximity of the fuel storage tanks at the gas station.



Figure EX-11: Protected Intersection at Blair Road and Innes Road

Environmental Implications

Property Impacts

Between Meadowbrook Road and Innes Road, the existing right-of-way for Blair Road is generally 30 m wide and becomes wider north of Meadowbrook Road. The widening is recommended on the east side of Blair Road to avoid impacts on private property and the existing hydro poles. An approximately 10 m strip of property is required from the NCC Greenbelt lands for an estimated one hectare in total and is primarily for grading and

drainage. Additional property of 0.01 hectares in total (100 m²) from two private properties is required for the proposed protected intersection design at Blair Road and Innes Road.

Noise Impacts

Based on a noise study carried out for this project, noise barriers are proposed along the west side of Blair Road for residential properties with backyards adjacent to Blair Road between Meadowbrook Road and Innes Road and where noise barriers do not already exist.

Landscaping

Some tree pruning will be required at the noise barrier locations and some scrub vegetation will be removed. Boulevard street tree planting, where utilities allow, will create a more pleasant environment for MUP users and create a visually narrower corridor.

Stormwater Management (SWM)

The Recommended Plan will result in a moderate increase in impervious surfaces due to the widening of Blair Road. Runoff quality treatment and quantity control (peak flow attenuation) will be achieved with enhanced grass swales, rock check dams and vegetated filter strips. This approach is preferred due to the number of outlets and the rural ditches versus an urbanized storm sewer approach to stormwater conveyance. The proposed stormwater management controls and any mitigation measures will be included within the proposed Blair Road right-of-way.

Natural Environment

There will be minor loss of vegetation within existing vegetation communities on the west side of Blair Road and temporary and minor disturbance of terrestrial communities on the east side of Blair Road. With mitigation, the potential impacts can be avoided. Retained vegetation will be protected from incidental disturbance during construction and a site restoration and planting plan will be implemented to replace removed vegetation with native plant species. Potential impacts to vegetation and wildlife will be reduced or eliminated.

There is potential for the project to interact with Species at Risk (SAR) and/or SAR habitat. The need for more targeted species studies/inventories has been documented, and following the application of mitigation measures, potential impacts will be reduced or eliminated. This project will adhere to the *City of Ottawa Protocol for Wildlife Protection during Construction*.

With respect to impacts to fish and fish habitat, ditches are proposed along the east side of the Blair Road corridor which will convey stormwater runoff to the unnamed tributary of Greens Creek located approximately 280 m north of Innes Road. Field investigations have determined that the unnamed tributary of Greens Creek at Blair Road supports indirect fish habitat. There were no important or sensitive fish habitats identified and no federally or provincially protected aquatic SAR identified. The proposed works can be completed in accordance with the fish and fish habitat protection provisions of the *Fisheries Act*.

Future commitments will require consultation with the Ministry of Natural Resources and Forestry and the Rideau Valley Conservation Authority to ensure potential impacts to the natural environment are reduced or eliminated.

Climate Change

In December 2017, the Ministry of the Environment, Conservation and Parks released guidelines titled “Considering Climate Change in the Environmental Assessment Process” which lay out the Ministry’s expectations for project proponents to consider including the potential effects of a project on climate change, and the potential effects of climate change on a project.

This EA considered the project’s potential impact on greenhouse gas emissions; assessed the resiliency or vulnerability of the project to changing climate conditions; and, identified potential climate change adaptations and future monitoring requirements based on regional climate and severe weather projections to 2050 and beyond. For example, more frequent severe storm events with increased runoff of roadway drainage may require larger storm sewers and/or roadside ditches. Increased frequency of extreme heat days may require additional landscaping protection at bus stops.

The redesign of Blair Road provides new infrastructure for sustainable modes of active transportation and transit, while encouraging carpooling through HOV lanes, thus reducing greenhouse gas emissions. The wider boulevards along Blair Road will also accommodate tree planting, which will serve as a carbon sink.

Financial Implications

Project costs were developed in accordance with the Council-approved Project Delivery Review and Cost Estimating process for implementing capital projects. Cost for design, construction, property, public art, and contingencies in 2020 dollars is estimated at \$32 million. While this project is identified in the City’s 2031 Affordable Rapid Transit Network Plan, funding will be subject to the City’s future capital budget priorities.