

**Barrhaven Light Rail Transit
(Baseline Station to Barrhaven Town Centre)
and Rail Grade-Separations
Planning and Environmental Assessment
Study Update**

**Woodroffe Avenue Median LRT Plan
Knoxdale to Nepean Sportsplex**

Public Consultation Event #3

February 8, 2023



Virtual Meeting Participation Protocol

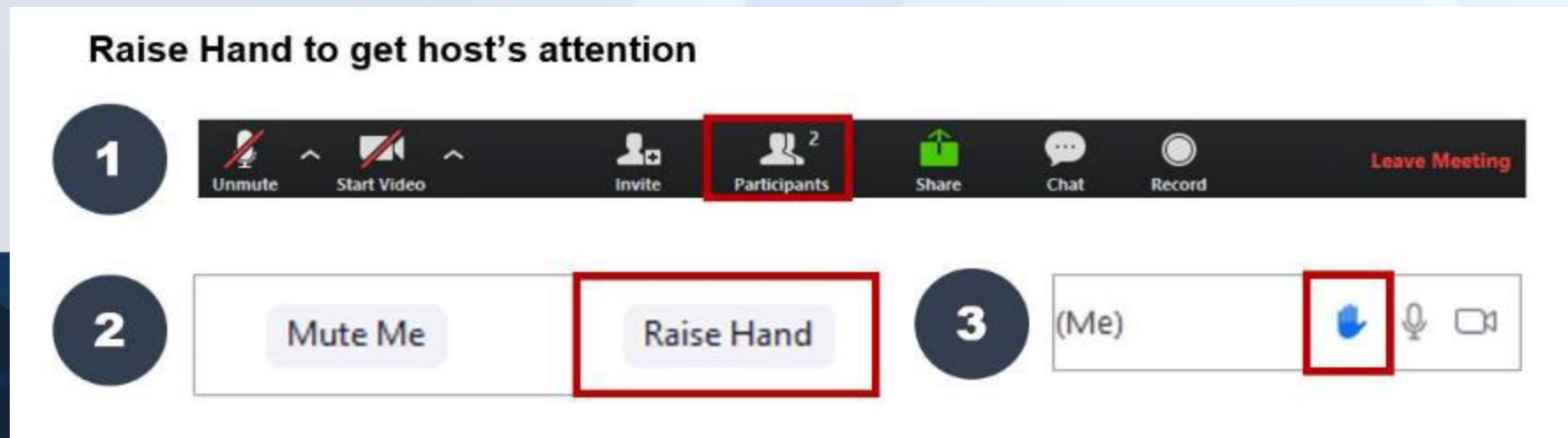
- 1) All participants are automatically on mute during presentation.
- 2) If you have a question you can submit those through the chat function.
- 3) If you have any IT questions, you can send them to the IT help option.

Thank you for your patience!

Protocole en place pour les réunions

- 1) Tous les participants seront automatiquement placés en mode silencieux pour la présentation.
- 2) Pour poser une question, utilisez l'espace de clavardage
- 3) Si vous avez une question technique, vous pouvez l'envoyer par l'intermédiaire de l'option de dépannage prévu à cet effet.

Merci de votre patience!



Land Recognition

Ottawa is located on unceded territory of the Anishinabe Algonquin Nation.

The peoples of the Anishinabe Algonquin Nation have lived on this territory for millennia.

Today, Ottawa is home to approximately 40,000 First Nations, Inuit and Métis people.

Ottawa's indigenous community is diverse, representing many nations, languages and customs.

The City honours the land of the First Peoples, as well as all First Nations, Inuit and Métis in Ottawa and their valuable past and present contributions to this land.

Reconnaissance du territoire

Ottawa est située sur un territoire non cédé de la nation Anishinabe algonquine.

Les peuples de la nation Anishinabe algonquine vivent sur ce territoire depuis des millénaires.

Aujourd'hui, Ottawa compte environ 40 000 membres des Premières Nations, Inuits et Métis.

La communauté autochtone d'Ottawa est diverse et représente de nombreuses nations, langues et coutumes.

La Ville rend hommage au territoire des premiers peuples, ainsi qu'à l'ensemble des membres des Premières Nations, des Inuits et des Métis d'Ottawa, de même qu'à leurs précieuses contributions passées et présentes à ce territoire.

Agenda

1. Background
2. Recommended Plan
3. Constructability Review
4. Impact Assessment
5. Next Steps and Timelines
6. Roundtable Discussion

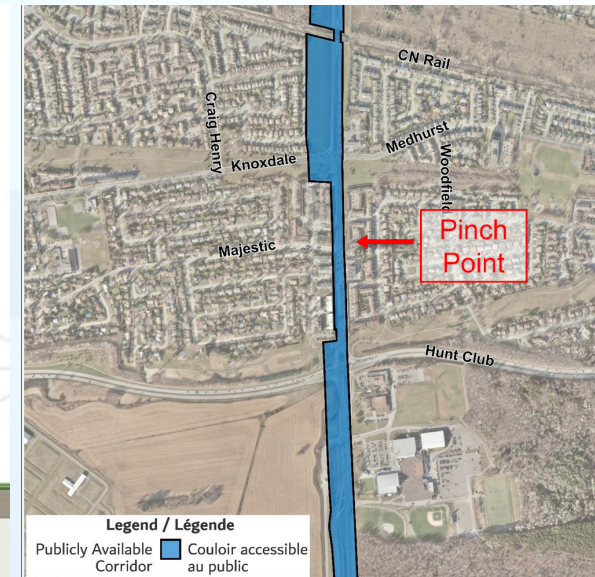
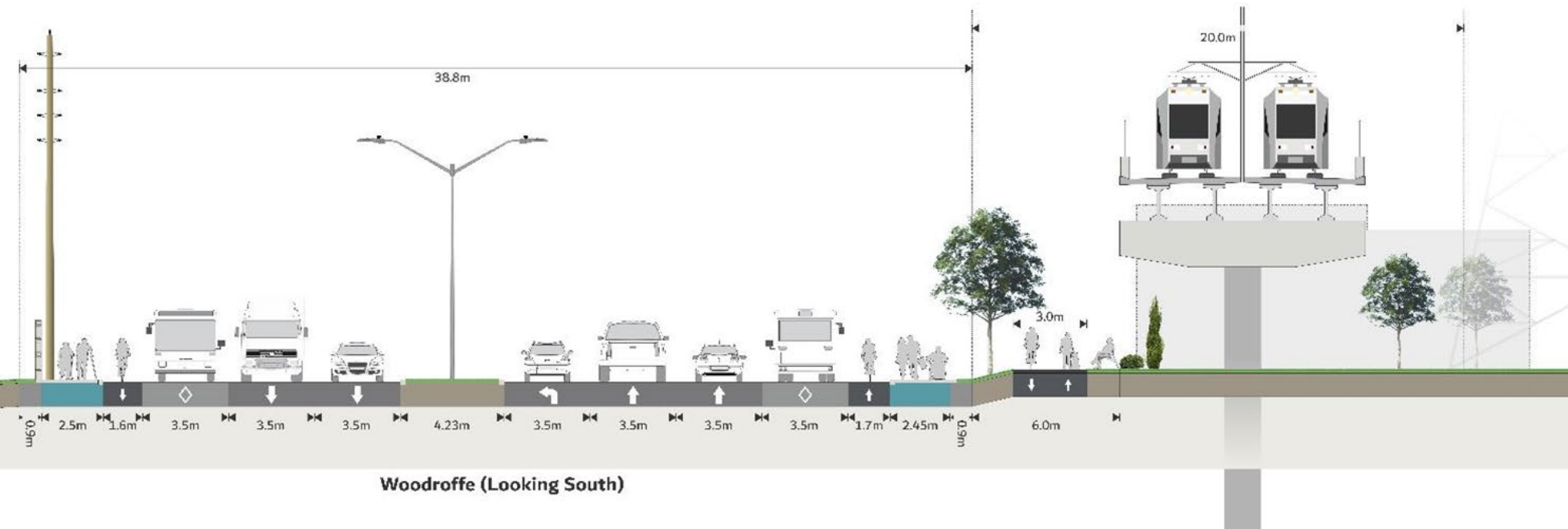
Background

Original Recommendation

- Functional design approved by City Council on Nov. 25, 2020
 - LRT corridor through “pinch point” (Knoxdale – West Hunt Club) required removal of approximately 100 affordable rental units
- Staff were directed to establish a working group to address issue of housing displacement



Original Recommendation



Stage 3 LRT Working Group (2021)

Working group chaired by Councillor Egli included participation from Councillor McKenney (Councillor Liaison for Housing and Homelessness), the Manordale Community Association, representatives for the tenants of Manor Village and Cheryl Gardens as well as members of ACORN and senior City Staff.

- Examined options on how to assist residents who are facing future relocation because of the rail transit alignment
 - Potential wait list for low-cost housing
 - Potential alternative sites for community housing development
 - No expropriation for at least five years
- Revisited corridor option to eliminate loss of housing units – in the median of Woodroffe

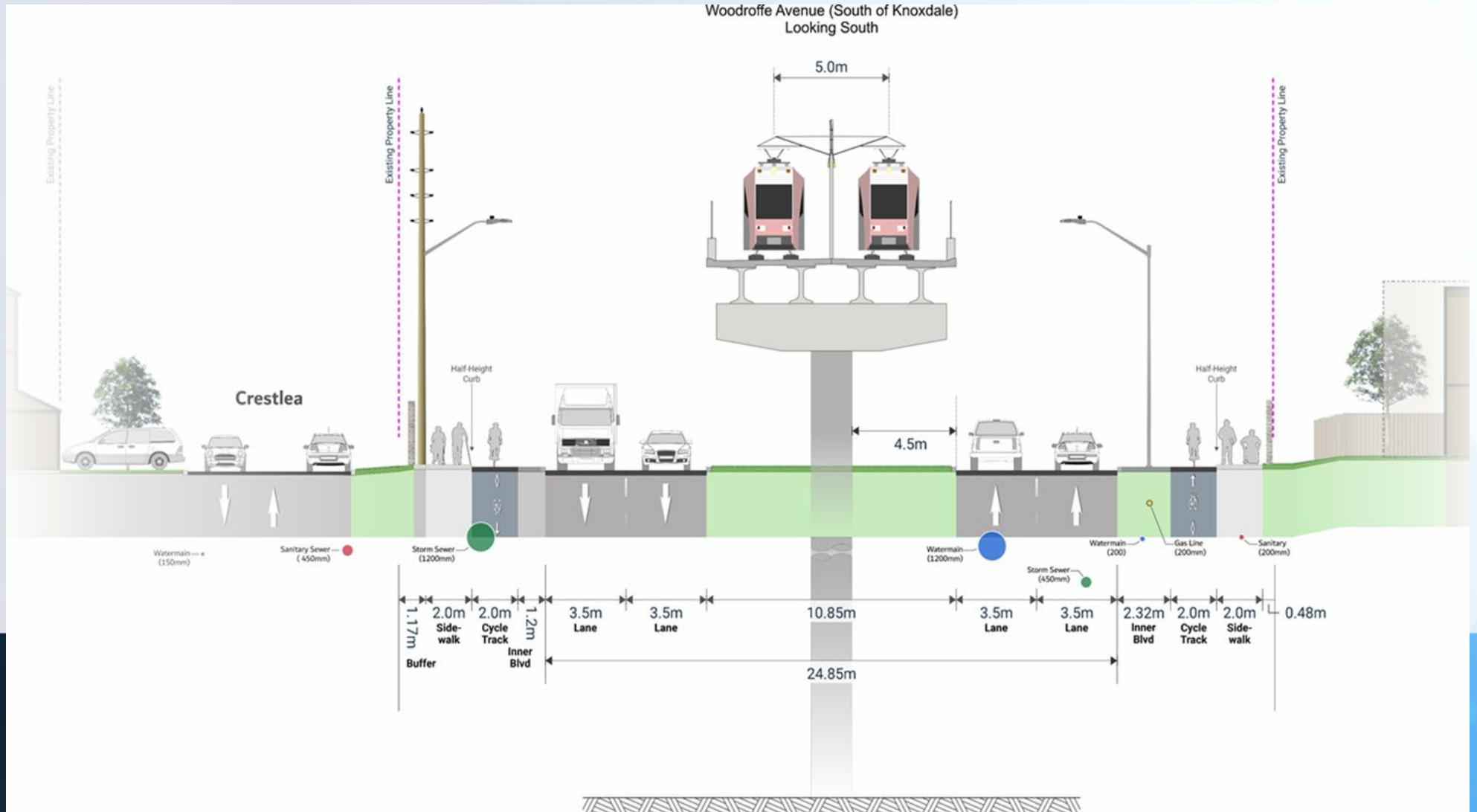
Based on recommendation from working group the Study Team prepared a functional design for a median LRT consistent with the approved Recommended Plan

Woodroffe Avenue Median LRT (Knoxdale to Hunt Club)

- The plan is a refinement of median alternative evaluated as part of the original study that:
 - Avoids displacement of residential units
 - Addresses impacts identified in original evaluation
 - Minimizes property requirement
- Plan developed with input from City technical committee



Woodroffe Avenue Median LRT (Knoxdale to Hunt Club)



2022 Council Recommendation

New median alignment presented to Transportation Committee and **approved** by City Council on June 8th, 2022, with the following recommendations:

- 1. Approve the replacement of the previously approved alignment for the Barrhaven LRT for the section between north of Knoxdale Road and the Nepean Sportsplex, with the revised alignment as described in this report, to avoid displacing the tenants of Manor Village and Cheryl Gardens*
- 2. Direct staff to finalize the functional design for the revised alignment, conduct public consultation on the design change, document the process and inform Transportation Committee of the consultation outcome prior to re-initiating the Transit Project Assessment Process with the revised alignment as part of the larger Light Rail Transit project from Baseline Station to the Barrhaven Town Centre*

Work To Date

Based on Council's recommendation:

- Refined functional design
- Evaluated impacts and identified mitigations
- Consulted with key stakeholders
- Undertook a constructability review
- Updated project cost estimate

Consultation Feedback to Date

- Support for new median alignment
- Sightlines/safety and cross section design on Woodroffe Avenue
- Traffic flow during construction
- Noise and privacy for residential areas
- Cut through traffic
- Implications to hydro lines
- Landscaping
- Active transportation
- Public realm

Recommended Plan

Overview

- Rail geometry – introduction of gentler curves to reduce noise and improve ride comfort
- Knoxdale Station – shift in location due to gentler curves
- Sightlines and safety for all modes
- Reconstruction of Woodroffe Avenue to support accessibility for all modes
- Construction complexity



Woodroffe Avenue looking north

Knoxdale Station

- Station layout similar to original plan
- Location shifted north to accommodate transition into median
- On-street bus stops for local and rail replacement bus services
- Planned future Multi-Use Pathway connection to north
- Landscaping opportunities to screen/buffer and enhance station area to be explored as part of detailed design



Proposed Knoxdale Station looking southeast

Elevated Median LRT Alignment

- Existing bus-only lanes are removed to provide space for the median LRT
- Safety mitigation is required for piers
- Snow storage and removal operations for LRT are accommodated as part of the design of the elevated guideway



Woodroffe Avenue looking north

Woodroffe Avenue Reconstruction

- Two general purpose lanes per direction are maintained
- Existing accesses onto Woodroffe are maintained
- Protected intersections and raised cycle tracks at all (5) intersections
- Smart-channels for right-turns at some locations to meet traffic operational requirements
- Wide median to provide road safety barriers around piers

Future detailed design will include further analysis of:

- Traffic signal and roadway lighting installations
- Sightlines for turning vehicles
- Shadows created by the overhead guideway



Woodroffe/Knoxdale intersection looking south

Nepean Sportsplex Station

- Station layout and location remains unchanged
- Protected intersections added at both north and south Nepean Sportsplex entrances



Proposed Nepean Sportsplex Station looking southwest

Constructability Review

Phasing

Complexities due to limited space and impacts to transportation and utilities

Potential Phasing

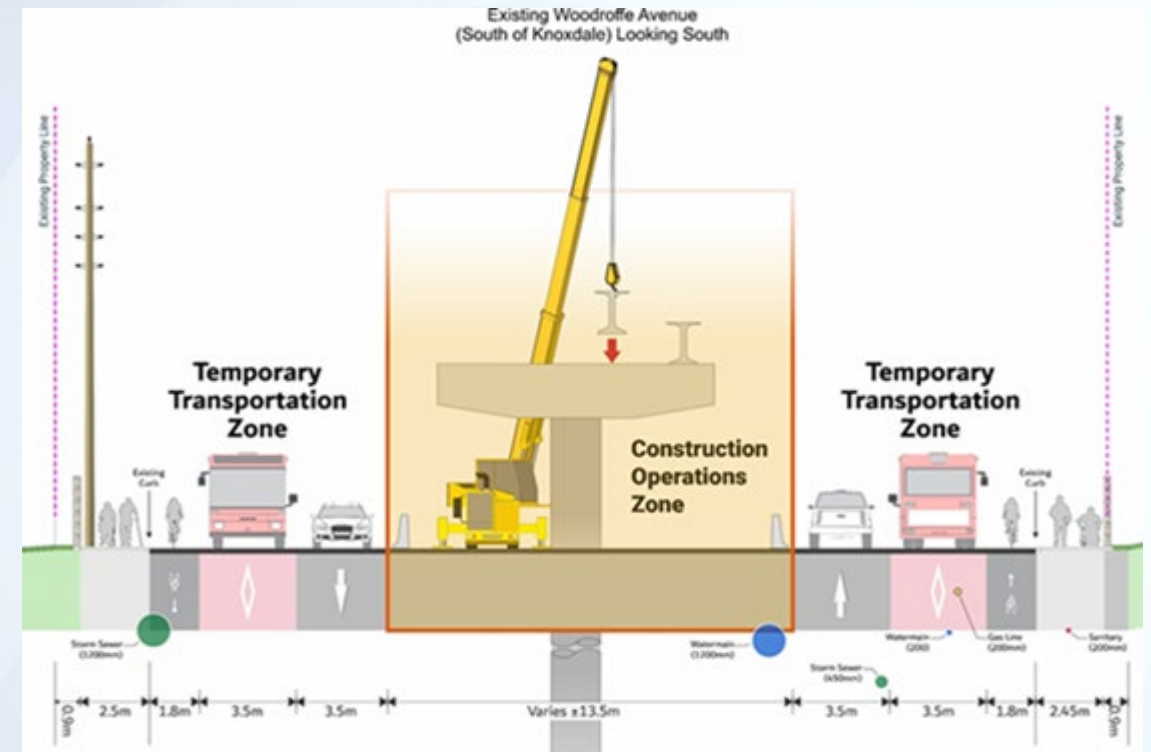
- 4-year construction period for this segment anticipated
- Woodroffe Avenue to be limited to one general-purpose and one bus-only lane in each direction
- Active transportation facilities to be maintained

Transportation Impacts

- Delays and detours for transit services
- Periodic lane reductions on West Hunt Club Road

Construction

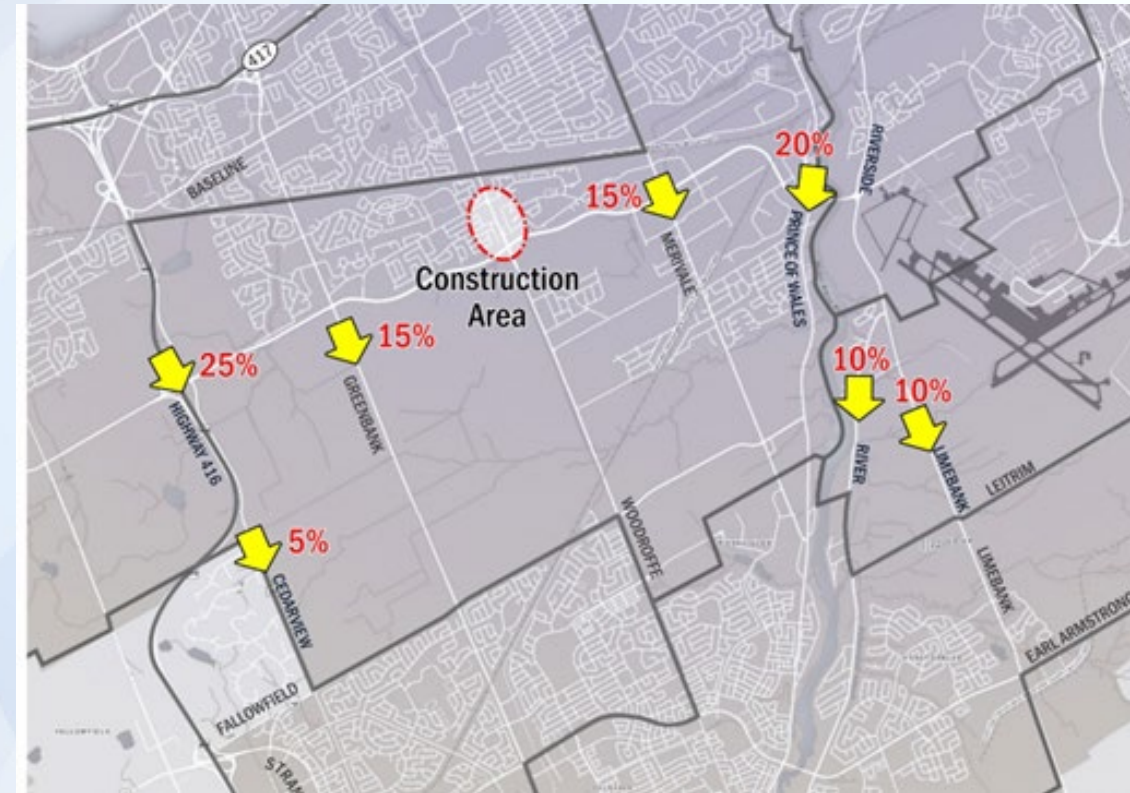
- Deliveries and crane swing/staging during off-peak periods
- Protection measures for existing utilities during construction



Girder Installation

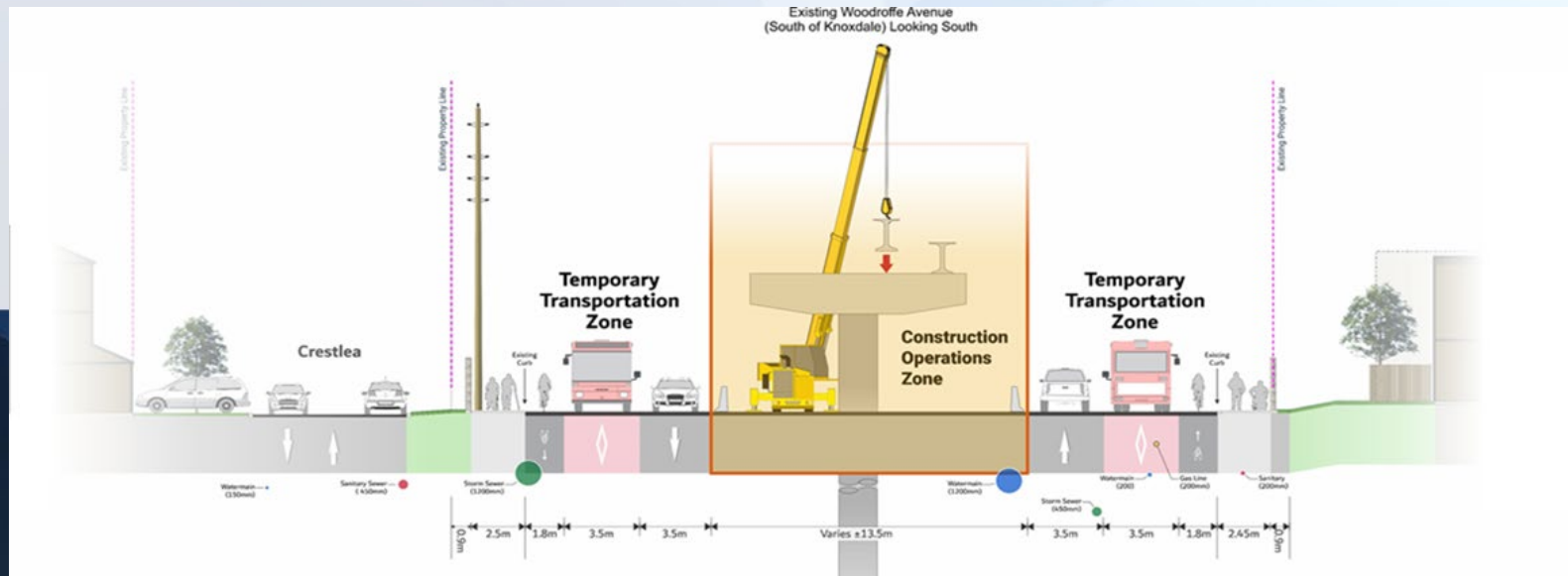
Transportation Impacts

- Up to 1,000 vehicles/hour (50%) during weekday peak hours need to shift from Woodroffe to alternative corridors
- Will require focus on transit as mitigation
- Traffic management plans will be developed as part of detailed design



Utilities

- Clearances under Hydro One transmission line crossings
- Implications to large diameter (1200 mm) watermain under Woodroffe Avenue:
 - 300 m relocation at Knoxdale Station
 - Piers must be located outside of future watermain maintenance area
 - Existing watermain will require special protection measures
 - Possibility of combining watermain replacement and LRT construction



Impact Assessment

Social Environment

Noise, Vibration and Air Quality

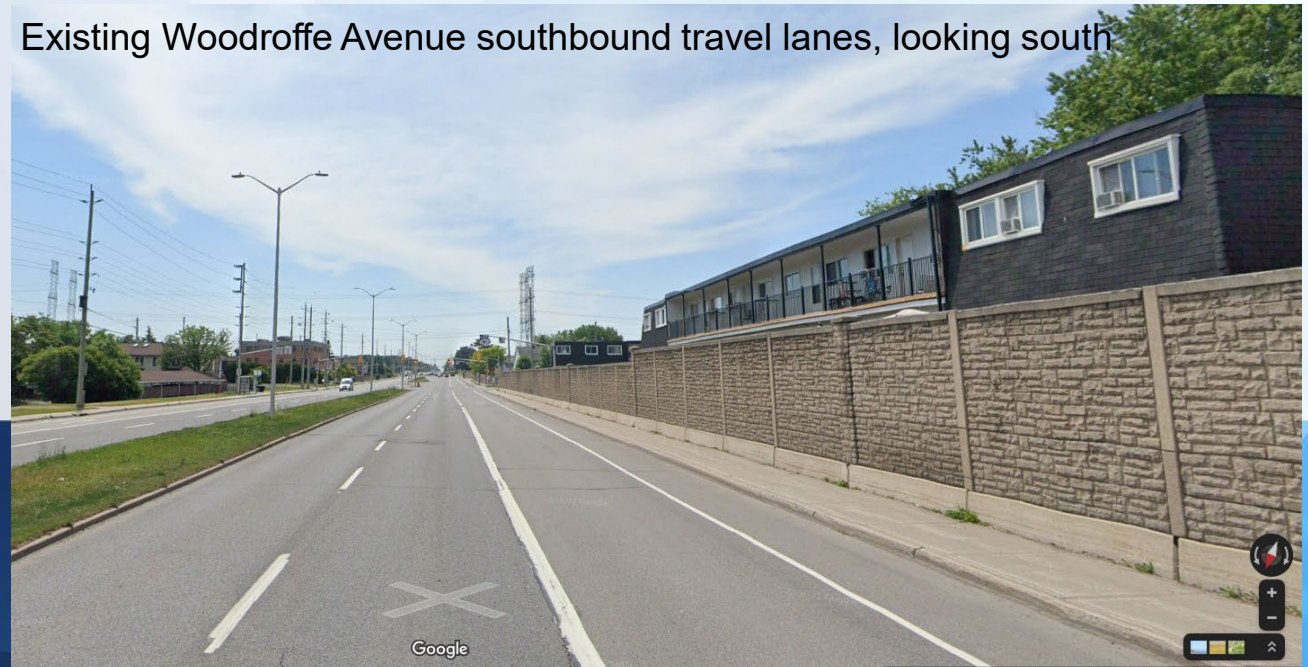
- Design includes larger curve radii to reduce noise
- Addendum to the air quality, noise and ground vibrations assessment including additional sensitive receivers added in proximity to the elevated LRT guideway
- Road traffic is dominant noise source
- Implementation will marginally increase noise levels above existing conditions
- Best Management Practices will be implemented to mitigate noise
- Ongoing discussion of lessons learned with Rail Construction Office to develop appropriate mitigation measures during detailed design

Social Environment

Landscaping Strategy

- Space for landscaping is challenging due to the constrained corridor width
- Opportunities to make minor enhancements where space permits
- Details and planting plans will be developed during design phase

Existing Woodroffe Avenue southbound travel lanes, looking south



Social Environment

Property Requirements

- Loss of housing no longer a project impact
- Small parcels of land required for roadway reconstruction

Privacy

- Parapet/barrier walls included
- Further analysis of screening opportunities and methods during detailed design



Woodroffe Avenue looking east

Planning

Land Use Designations

- The new Official Plan identified Woodroffe Avenue corridor for intensification “Evolving neighbourhood” designation

Development Applications

- The proposed redevelopment at 1545 Woodroffe Avenue (Esso gas Station) has been incorporated into the functional design of the Medhurst Drive/Knoxdale Road/Woodroffe Avenue intersection

Zoning

- Zoning amendments specific to the properties at Majestic Drive and Cheryl Road will be reviewed following the completion of this study and the Transit Project Assessment Process

Next Steps and Timelines

Scheduled Task	Timeline
Consultation Group Meetings	24 & 26 January 2023
Public Comment/Survey Period	8 February – 22 February
Report to Transportation Committee	23 March 2023
Transit Project Assessment Process (TPAP) Notice of Commencement	June 2023 (Tentative)
TPAP Notice of Completion	October 2023 (Tentative)
Minister's Approval	December 2023

Thank You!

Project website is: English: [Ottawa.ca/ barrhavenlrt](https://ottawa.ca/barrhavenlrt) French: [Ottawa.ca/Barrhaventlr](https://ottawa.ca/Barrhaventlr)

Contact:

Anna Valliant, P. Eng.

Senior Project Manager

Transportation Planning

Planning, Real Estate and Economic Development

City of Ottawa

Anna.Valliant@ottawa.ca | 613-282-3742

Roundtable Discussion

Discussion