Region of Waterloo

Engineering and Environmental Services

Design and Construction

To:	**Planning and Works Committee**
Meeting Date:	**December 6, 2022**
Report Title:	Bleams Road (Regional Road #56) Improvements from Fischer-Hallman Road to Trussler Road

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1. Recommendation

That the Regional Municipality of Waterloo:

a) Approve the recommended design alternative for the Bleams Road (Regional Road #56) Improvements, from just west of Fischer-Hallman Road to Trussler Road, as outlined in Report EES-DCS-22-002 dated December 6, 2022; and

b) Direct staff to file the Notice of Completion for this Class Environmental Assessment Study by means of advertisements in local newspapers and mailings to adjacent property owners, tenants, and agencies, and place the Environmental Study Report on the public record for a period of 30 days.

2. Purpose / Issue:

Seek Council approval for the design alternative as prescribed by the Environmental Assessment Act and proceed to detailed design and construction, pending budget approval.

3. Strategic Plan:

This project supports Strategic Focus Area 2—Sustainable Transportation.
It will offer residents more choice in active transportation and improve road safety with a new multi-use trail and interconnections for pedestrians and cyclists.

4. Report Highlights:

The recommended design alternative for Bleams Road from Fischer-Hallman Road to Trussler Road meets the following Regional strategic priorities:.

- supports Active Transportation with multi-use trails on both sides of Bleams Road and interconnections for pedestrians and cyclists;
- provides access to new developments to support new homes;

- adds capacity for the travelling public;
- fulfills the asset management plan by addressing the poor road condition;
- improves storm water drainage and protects the groundwater aquifer by diverting run off to a controlled storm water facility;
- provides value for money by optimizing the life cycle cost of the asset;
- provides an opportunity during road construction to include redundancy for water pumped from the Grand River Hidden Valley Reservoir to the Mannheim Water Treatment Plant, which provides up to 25% of the Region's drinking water.

In addition to multi-use trails on both sides of Bleams Road, this project includes four roundabouts along Bleams Road within the project limits, widening to four lanes from Fischer-Hallman Road to Commonwealth Street, and raised centre medians for the section from Fischer-Hallman Road to Donnenwerth Drive/Amand Drive.

This project has approved budget for design in 2022, with forecasted funds in 2023, 2024 and 2025 to be refined through the budget process.

Please see Appendix A, B and C for more information.

5. Background:

Asset management data has shown that the pavement condition on Bleams Road is in fair to poor condition due to the age of the asphalt combined with poor drainage. This project will replace the deteriorated pavement and urbanize the roadway by removing the existing ditches and installing an underground storm sewer system.

Following the Region of Waterloo 2018 Transportation Master Plan, a multi-use trail is being recommended on both the north and south sides of Bleams Road from Fischer-Hallman Road to Trussler Road, with interconnections for pedestrians and cyclists between proposed and existing developments on both sides of the roadway.

A study of the current and projected traffic patterns along Bleams Road, between Fischer-Hallman Road and Trussler Road, determined the need to improve Bleams Road to accommodate the recent and future intensification of land use along both sides of Bleams road. This includes widening Bleams Road to four lanes from Fischer-Hallman Road to Commonwealth Street. After technical evaluation and public input, constructing four roundabouts along Bleams Road within the project limits was preferred over the traffic signal and hybrid (signals and roundabouts) alternatives. Raised centre medians for the section from Fischer-Hallman Road to Donnenwerth Drive/Amand Drive are included to improve safety by restricting left turns. Trees will be planted where there is sufficient space.

A noise review for the section from Fischer-Hallman Road to just west of Commonwealth Street/Abram Clemens Street was conducted due to the widening of the

road and concluded that additional noise attenuation will not be required in this section of Bleams Road.

A large portion of the Bleams Road project overlies the highly vulnerable drinking water protection areas for the Mannheim water supply wells and the project will need to include measures to protect the water quality from the application of road salts. The recommended design of this project includes the installation of a closed storm sewer to convey surface drainage out of the area of high vulnerability. Potential design concepts, such as clay lined boulevards and winter by-pass features in the adjacent storm water ponds will also be considered during detailed design.

This road project also provides an opportunity to construct a new raw watermain along this section of Bleams Road at the same time. Constructing the new watermain as part of the road construction project reduces overall costs due to construction efficiencies and reduces overall disruption due to construction. This new section of raw watermain is one part of a longer term plan to provide a second connection to ensure the security of the water supply between the Hidden Valley high lift pumping station and the Mannheim Water Treatment Plant by adding another watermain to convey water in the event that one of the watermains was out of service.

6. Area Municipality Communication and Public/Stakeholder Engagement:

Area Municipality Communication

The planning and design of this project included staff from the City of Kitchener.

Public/Stakeholder Engagement

Region staff met and consulted with the following stakeholder groups:

- First Nations
- Land developers.
- Property owners directly affected by land acquisitions.
- Region's Active Transportation Advisory Committee.

Region staff also consulted with the public in two Public Consultation Centres and communicated through EnageWR, newspaper ads, on-site signage boards, social media and mailed over 900 letters to area property owners, businesses, authorities and agencies.

The online survey during the first PCC received 181 responses:

- 50% supported roundabouts at all four intersections
- 30% supported the hybrid combination
- 20% supported traffic signals at all four intersections

The most common comments received from the first PCC included a desire for smooth vehicular traffic flow and good active transportation facilities.

The online survey during the second PCC received 10 responses, which were all generally in support of the Project Team Preferred Alternative of 4 roundabouts.

Public comments and project team responses are in Appendix D.

7. Financial Implications:

There are no direct financial impacts associated with this report. The conceptual design costs were included in 2022 Capital Budget. The current construction cost estimate for the road-related work is $16.6 million and will be included in the preliminary 2023-2032 Transportation Capital Program for consideration by Council. The estimated construction cost for the new raw watermain is $3.75 million and will be included in the preliminary 2023-2032 Water Services Capital Program. The timing of the construction is subject to receipt of all technical and financial approvals, completion of detailed design, relocation of utilities and land acquisition, and will be revised as necessary during the preparation of future Transportation Capital Programs.

8. Conclusion / Next Steps:

Subject to Regional Council approval of the Recommended Design Alternative, staff will file a Notice of Study Completion on the public record for a 30-day review period. Notice of filing will include newspaper advertisement, mailed and emailed notices, as well as posting notice on the Region and EngageWR websites. After the review period, detailed design and utility relocations are planned in 2023 followed by construction in 2024 and 2025.

9. Attachments:

Appendix A: Key Plan

Appendix B: Project Team Recommended Design Alternative (X-Sections)

Appendix C: Project Team Recommended Intersection Types and Median Location

Appendix D: Public Comments and Project Team Responses

Appendix E: Land Acquisition Requirements

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