Report: EES-DCS-23-005

Region of Waterloo

Engineering and Environmental Services

Design and Construction

To: Planning and Works Committee

Meeting Date: August 15, 2023

Report Title: Project Approval Report for a Roundabout at Roseville Road

(Regional Road No. 46) and Edworthy Side Road (Regional Road

No. 71), North Dumfries Township

1. Recommendation

That the Regional Municipality of Waterloo approve the recommended design alternative for a proposed single lane roundabout at Roseville Road (Regional Road 46) and Edworthy Side Road (Regional Road 71) in the Township of North Dumfries, as described in Report EES-DCS-23-005, dated August 15, 2023. Upon completion of construction, that The Regional Municipality of Waterloo amend Traffic and Parking Bylaw 16-023, as amended to:

- a) Remove from Schedule 17, Rates of Speed, 80 km/h on Edworthy Side Road (Regional Road 71) from Roseville Road (Regional Road 46) to 300 metres north of Cedar Creek Road (Regional Road 97);
- Add to Schedule 17, Rates of Speed, 80 km/h on Edworthy Side Road (Regional Road 71) from 400 metres south of Roseville Road (Regional Road 46) to 300 metres north of Cedar Creek Road (Regional Road 97);
- Add to Schedule 17, Rates of Speed, 60 km/h on Edworthy Side Road (Regional Road 71) from Roseville Road (Regional Road 46) to 400 metres south of Roseville Road (Regional Road 46);
- d) Add to Schedule 10, Level 2 Pedestrian Crossover, Roseville Road (Regional Road 46) at Edworthy Side Road (Regional Road 71), On All Entry and Exits.

2. Purpose / Issue:

A single lane roundabout is recommended at Roseville Road and Edworthy Side Road to improve safety and reduce delays to motorists.

3. Strategic Plan:

Approval of the Recommended Design Alternative meets the 2019-2023 Corporate Strategic Plan objectives under Strategic Focus Area 2, Sustainable Transportation to improve road safety for all users – drivers, cyclists, pedestrians.

4. Report Highlights:

The recommended roundabout will replace temporary traffic signals that were installed as an interim measure while the study took place to determine the best solution to improve safety at this intersection.

Feedback from the public included concerns as well as support for the roundabout. The main themes raised by the public and adjacent property owners are below:

- Benefit from reduced speeds approaching and entering the roundabout;
- Benefit from improved traffic flow through the intersection;
- Concerns for cost and impact from roundabout construction; and
- Concerns for the safe passage of large commercial trucks and agricultural equipment.

The roundabout, including the entrance and exit to the roundabout, will be designed geometrically to accommodate all users. The proposed roundabout will have lower lifecycle costs and reduce idling times, which will result in fuel savings and reduced vehicle emissions and will support the Region's climate goals.

5. Background:

The original intersection included astop sign for Edworthy Side Road and through traffic on Roseville Road. Temporary traffic signals were subsequently installed as an interim measure while a study was undertaken to consider permanent installation of traffic signals or construction of a roundabout. In the 5 year period between 2014 to 2018 there were a total of 4 collisions recorded: none were fatal, however, all 4 collisions had property damage. This criteria triggered a need for a study of this intersection and based on consideration of safety performance, traffic capacity and total life cycle costing, staff are recommending a roundabout as the preferred control at this intersection.

A roundabout will reduce the potential for injury collisions and reduce delays to

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motorists when compared to the existing temporary traffic signals.

6. Communication and Engagement with Area Municipalities and the Public:

Area Municipalities: A meeting was held with North Dumfries Township staff, and the Region of Waterloo Project Manager to review the scope and timing of the project. North Dumfries Township staff are in favour of the roundabout.

Public: Letters were delivered to property owners within the immediate vicinity of the intersection. Phone discussions and email correspondence took place with all property owners who responded to the letters. Signs within the project limits were installed to direct the public to the Region of Waterloo's Engage WR website. The Engage website recorded 94 responses to the survey of which 50 responses were in favour of implementing a roundabout at this location.

Further information regarding the public consultation and responses is provided in Attachments C.

Financial Implications:

The Region's approved 2023-2032 Transportation Capital Program includes a budget of \$1,884,000 in 2023-2026 for the Roseville Road/ Edworthy Sideroad Roundabout (project #07609) to be funded from the Regional Roads Development Charges Reserve Fund.

7. Conclusion / Next Steps:

Subject to Council approval, Regional staff will initiate the property acquisition process, finalize detailed design and coordinate required utility relocations, with construction planned for 2025.

8. Attachments:

Appendix A Key Plan

Appendix B Preliminary Design Drawing

Appendix C Survey Responses Report

Appendix D Public Consultation and Responses

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