

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 Dickie Settlement Road (Regional Road No. 71) and Roseville Road (Regional Road No. 46), North Dumfries Township

1. Recommendation

That the Regional Municipality of Waterloo approve the Recommended Design Alternative for a proposed single lane roundabout at Dickie Settlement Road (Regional Road No. 71) and Roseville Road (Regional Road No. 46), North Dumfries Township, as described in Report EES-DCS-23-007, dated August 15, 2023.

Upon completion of construction, that The Regional Municipality of Waterloo amend Traffic and Parking By-law 16-023 and the Controlled Access By-law #58-87 as amended to:

- a) Remove from Schedule 17, Rates of Speed, 80 km/h on Dickie Settlement Road (Regional Road 71) to Roseville Road (Regional Road 46);
- b) Add to Schedule 17, Rates of Speed, 60 km/h on Dickie Settlement Road (Regional Road 71) from 400 m north of Roseville Road (Regional Road 46) to Roseville Road (Regional Road 46);
- c) Remove from Schedule 17, Rates of Speed, 80 km/h on Roseville Road (Regional Road 46) from 500 m east of Fischer Hallman Road (Regional Road 58) to 400 m west of Edworthy Side Road (Regional Road 71);
- d) Add to Schedule 17, Rates of Speed, 80 km/h on Roseville Road from 500 m east of Fischer Hallman Road to 400 m west of Dickie Settlement Road (Regional Road 71);
- e) Add to Schedule 17, Rates of Speed, 60 km/h on Roseville Road (Regional Road 46) from 400 m west of Dickie Settlement Road (Regional Road 71) to Cambridge Boundary (1200 m East of Brown Avenue); and
- f) Add to Schedule 10, Level 2 Pedestrian Crossover, on Dickie Settlement Road (Regional Road 71) at Roseville Road (Regional Road 46), On All Entry and Exits.
- g) Two permanent right-in/right-out residential accesses. One existing access on the north side of Regional Road #46 (Roseville Road) and one new access on the east side

of Regional Road 71 (Dickie Settlement Road) for the property known municipally as 1746 Roseville Road, North Dumfries Township.

2. Purpose / Issue:

A single lane roundabout is recommended at Dickie Settlement Road and Roseville 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 proposed single lane roundabout, including the entrance and exit to the roundabout, will be designed geometrically to accommodate all users. The proposed roundabout will have lower life-cycle 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 intersection included a stop sign for Dickie Settlement Road with through traffic on Roseville Road. In the 5-year period between 2009 and 2013 there were a total of 18 collisions recorded, where 10 were expected: none were fatal; however 8 collisions had non-fatal injuries and 8 collisions had property damage. These results triggered a study of additional traffic controls for this intersection. Temporary traffic signals were installed as an interim measure while the study was undertaken to consider permanent installation of traffic signals or construction of a roundabout.

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 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 the Township of North Dumfries staff and the Region of Waterloo Project Manager to review the scope and timing of the project. There were no objections to the construction of a roundabout at this location. The Township did express concern for potential impacts to the property at 1746 Roseville Road, which has been taken into account with the Recommended Design Alternative.

Public: Letters were delivered to property owners within the immediate vicinity of the intersection. In-person meetings or phone conversations were coordinated with the four potentially affected landowners at the intersection, 1751-1775 Whistle Bare Road, 1746 Roseville Road, 1831 Roseville Road and 1755 Roseville Road. Signs within the project limits were installed to direct the public to the Region of Waterloo's Engage WR website. The survey on the EngageWR website recorded 127 responses to the survey of which 66 responses liked a roundabout at this location.

Further information regarding the public consultation, discussions and responses is provided in Attachment C.

7. Financial Implications:

The Region's approved 2023-2032 Transportation Capital Program includes a budget of \$1,856,000 for the Dickie Settlement Road/Roseville Road roundabout (Project #07441) to be funded from the Regional Roads Development Charges Reserve Fund.

8. 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.

9. Attachments:

Appendix A - Key Plan

Appendix B - Preliminary Design Drawing

Appendix C - Responses to Public Consultation Comments

Prepared By: Steve Yonemitsu, Engineer, Design and Construction

Skylar Van Kruistum, Head, Design and Construction

Reviewed By: Phil Bauer, Director, Design and Construction

Approved By: Jennifer Rose, Commissioner, Engineering and Environmental Services