

# CITY OF HAMILTON PUBLIC WORKS DEPARTMENT Transportation Operations & Maintenance Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	July 6, 2022
SUBJECT/REPORT NO:	Highway 52 at Powerline Road West - Roundabout Implementation Plan (PW22056) (Ward 12)
WARD(S) AFFECTED:	Ward 12
PREPARED BY:	Stephen Gagne (905) 546-2424 Ext. 4296
SUBMITTED BY:	Mike Field Acting Director, Transportation Operations & Maintenance Public Works Department
SIGNATURE:	Mari

#### RECOMMENDATION

That a Municipal Class Environmental Assessment (MCEA) be undertaken to review the implementation of a roundabout at the intersection of Highway 52 and Powerline Road West (Ward 12) at an estimated cost of \$400,000 and be submitted and considered as part of the 2023 capital budget process.

# **EXECUTIVE SUMMARY**

In the April 22, 2022 Public Works Committee Meeting Transportation Operations & Maintenance were asked to advise Council on the process to implement a roundabout at the intersection of Highway 52 Road and Powerline Road West in Ward 12. This report provides an outline of the process to study and implement a roundabout at the intersection.

The request is a result of roadway safety concerns dating back to the early 2000's. An advocacy group was formed and lobbied for an overall decrease in speed on Highway 52. Roundabouts were previously recommended on Jerseyville Road West and Powerline Road West, with only the former being implemented in 2011 due to budget constraints.

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The process for implementation of the roundabout at the intersection of Highway 52 and Powerline Road West will require a MCEA – Schedule C per the Ontario Environmental Assessment Act to assess potential environmental effects and impacts.

The MCEA study will involve the coordination and consultation of multiple stakeholders including review agencies and the public. The study will identify and review the most optimal and feasible options to improve the existing infrastructure approaching to/from Highway 52 North and Power Line Road West intersection including minimum number of lanes required on each approach, road widening, controlled signalized traffic intersection and/or roundabout, and traffic operation within the proposed study area on the basis per determined design parameters and operational characteristics.

Following the MCEA, a detailed implementation plan will be developed including any land acquisition, resident notification and construction staging.

This report recommends that staff be authorized to conduct the process for implementation of a roundabout, commencing with a Schedule C EA study that will take at estimated 24-30 months duration at an expected cost of \$400,000.

Upon completion of a Schedule C EA, planning, programming and budgeting for the implementation of a roundabout would follow and funding acquired through consideration at a future capital budget cycle.

# Alternatives for Consideration – See Page 5

# FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: The approximate cost of undertaking an MCEA for a roundabout at the intersection of Highway 52 and Powerline Road West is \$400,000 and proposed funding be considered through the 2023 capital budget process.

The approximate cost to install a roundabout at Highway 52 and Powerline Road West is between \$3,000,000 and \$5,000,000 not including land acquisition and will be determined by the outcome of the MCEA, and proposed funding be considered through a future capital budget cycle.

Staffing: N/A

Legal: N/A

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# HISTORICAL BACKGROUND

At the April 22, 2022 Public Works Committee, the committee received separate delegations from two residents (Mr. David Jones and Mr. Carl Loewith) who both live close to/regularly use the Highway 52 and Powerline Road West intersection. Both delegations requested consideration for the installation of a roundabout at the intersection of Highway 52 and Powerline Road West and outlined a variety of operational and safety concerns regarding the existing configuration of the intersection, including the proximity to the Hamilton-Brantford Rail Trail.

In the April 22, 2022 Public Works Committee meeting, a motion was approved for Transportation Operations & Maintenance staff to advise Council on the process for installing a roundabout at the intersection of Highway 52 at Powerline Road West.

As an output of the delegations, Public Works Committee passed a motion directing the Transportation Operations & Maintenance Division to report back to the Public Works Committee on the process for installing a roundabout at the intersection of Highway 52 and Powerline Road, at the parking entrance to the Hamilton Conservation Authority property.

# POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The Ontario Environmental Assessment Act requires Ontario municipalities to complete an MCEA when undertaking municipal road, water and wastewater projects. The MCEA is an approved process that municipalities must follow under the Ontario Environmental Assessment Act and projects are classified in terms of schedules (A, B or C) depending on the degree of impact to the environment.

# RELEVANT CONSULTATION

The following internal and external stakeholders were consulted in drafting this report:

- Engineering Services Division Infrastructure Renewal Section;
- Chief Road Official: and
- Hamilton Conservation Authority.

#### ANALYSIS AND RATIONALE FOR RECOMMENDATION

The intersection of Highway 52 and Powerline Road West is located Ward 12. This intersection is controlled by a one-way stop, on Powerline Road West and during AM/PM peak periods motorists can experience delays due to the volume of traffic on Highway 52.

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In 2022, Transportation Operations & Maintenance completed a warrant for consideration of implementing a left-hand turn lane on Highway 52, northbound. It was determined that a left-hand turn lane is warranted based upon traffic volumes. The warrant study was undertaken in response to requests received by the Ward 12 Councillor's office and forwarded to Transportation Operations & Maintenance.

Implementing, or consideration to implement, a roundabout at the Highway 52 and Powerline Road West intersection requires the completion of a Schedule C MCEA per the requirements of the Environment Assessment Act. A Schedule C MCEA examines a range of alternatives and identifies a preferred strategy for addressing project needs. Generally, the undertaking includes the following activities:

- 1. Prepare a detailed description of the problem or opportunity
- 2. Establish alternatives solutions to address the problem
- 3. Identify and evaluate alternative design concepts for preferred solution
- 4. Prepare and file an Environmental Study Report (ESR) for a minimum 30-day public review period
- 5. File the Notice of Study Completion for MECA Schedule C project
- 6. Develop next steps

Some key considerations during the initial planning stage to specify a preliminary configuration that balance the transportation improvement include:

- Design vehicle (emergency vehicles, moving trucks);
- Physical and geometric complications that significantly influence and make preferred improvements infeasible or uneconomical;
- Right-of-way needs and limitations;
- Designated routes or proximity of generators of significant types of traffic that may result in vehicles with difficulty negotiating the intersection improvements;
- Access to adjacent properties into or near the study vicinity;
- Landscaping and illumination;
- Sight distance and intersection visibility under high speed conditions:
- Other nearby traffic control measures requiring, such as at-grade crossings "Hamilton-Brantford Rail Trail" that could create conflicting interactions; and
- Signing and wayfinding, and so on.

The proposed Schedule C MCEA study largely involves the coordination and consultation with multiple stakeholders including review agencies and the public. Typically, the study takes 24 – 30 months, depending on complexity.

This MCEA Schedule C study will identify and review the most optimal and feasible options to improve the existing infrastructure approaching to/from Highway 52 North and Power Line Road West intersection including minimum number of lanes required on each

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approach, road widening, controlled signalized traffic intersection and/or roundabout, and traffic operation within the proposed study area on the basis per determined design parameters and operational characteristics. The extent of the road modifications will attempt to strike a balance between meeting future traffic capacity objectives, adhering to Complete Streets guidelines (in terms of keeping road cross sections to a minimum), and minimizing costs and impacts to adjacent properties and creek crossings.

Upon the completion of a Schedule C MCEA, additional details will be understood including any land acquisition requirements, design and construction elements, cost and implementation timing. Further, planning, programming and budgeting for the implementation of a roundabout would follow and funding acquired through consideration at a future capital budget cycle.

# **ALTERNATIVES FOR CONSIDERATION**

Public Works Committee could consider the implementation of a left-hand turn lane, as warranted in place of a Schedule C MCEA/future roundabout. This alternative could be implemented in 2023, pending capital funding approval and completion of detailed design.

Financial: The approximate cost of implementing a left-hand turn lane is approximately

\$300,000, including road widening and pavement markings.

Staffing: N/A

Legal: N/A

# ALIGNMENT TO THE 2016 - 2025 STRATEGIC PLAN

# **Healthy and Safe Communities**

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

#### **Built Environment and Infrastructure**

Hamilton is supported by state-of-the-art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

# APPENDICES AND SCHEDULES ATTACHED

N/A