Notre Dame Street East (Azilda) Active Transportation Improvements Update

Presented To:	Operations Committee
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Type:	Correspondence for Information Only
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Report Summary

This report provides information on different ways to include active transportation facilities for Notre Dame Street East in Azilda as part of a future capital project in response to a motion that was presented at the July 11, 2022, Operations Committee meeting.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

This report refers to Climate Change and Create a Healthier Community strategic initiatives as identified in the Strategic Plan and goal 8: Achieve 35% active mobility transportation mode share by 2050 in the Community Energy and Emissions Plan (CEEP).

Financial Implications

Funding for the construction of Notre Dame Street East from St Thomas Street to Municipal Road 35 (MR 35) will be reviewed as part of the capital budget prioritization process.

Background

At the November 15, 2021, Operations Committee meeting, a petition was submitted (Resolution Number OP2021-20) by the Azilda Community Action Network requesting that active transportation facilities be incorporated into the future renewal of Notre Dame Street East in Azilda.

Staff presented a report at the February 16, 2022, Operations Committee meeting outlining the recommended active transportation facilities on Notre Dame Street East from Thomas Street to MR 35. The addition of 2 metre paved shoulders with an edge line was the recommended facility for pedestrians and cyclists.

At the July 2022 Operations meeting a motion was presented as followed:

WHEREAS the residents of Azilda have presented a second petition to Greater Sudbury City Council calling for sidewalks along Notre Dame Street in Azilda;

AND WHEREAS the City's Complete Streets Policy adopted in 2018 reads "The City of Greater Sudbury shall plan, design, construct, operate, and maintain the transportation network to provide a comprehensive and integrated network of facilities that are safe and convenient for people of all ages and abilities travelling by foot, bicycle, public transit or vehicle";

AND WHEREAS an Active Transportation Town hall meeting in Azilda identified a need for physical separation between the people walking or biking and motorized vehicle traffic for residents to feel comfortable and safe;

THEREFORE BE IT RESOLVED that the City of Greater Sudbury directs staff to prepare a report that provides information on how active transportation facilities that include year-round physical separation from the roadway can be incorporated into future investments into Notre Dame Street in Azilda, to be presented to the Operations Committee in Q2 2023.

Notre Dame Street in Azilda is a collector road with a posted speed limit of 50 km/hr and an Average Annual Daily Traffic Volume (AADT) of approximately 7,000 vehicles. Active transportation through the town centre includes sidewalks on the north side of St. Agnes Street from Brabant Street to Marier Street, on the north side of Notre Dame Street from Champlain Street to St Thomas Street and on the south side of Notre Dame Street from Marier Street to Landry Street. Notre Dame Street east of St. Thomas Street is limited to gravel shoulders and ditches on both sides of the road.

This corridor, as well as the remainder of Notre Dame Street East to Municipal Road 35 (MR 35), is also serviced by GOVA transit via route 104. No designated cycling facilities are currently provided through this corridor.

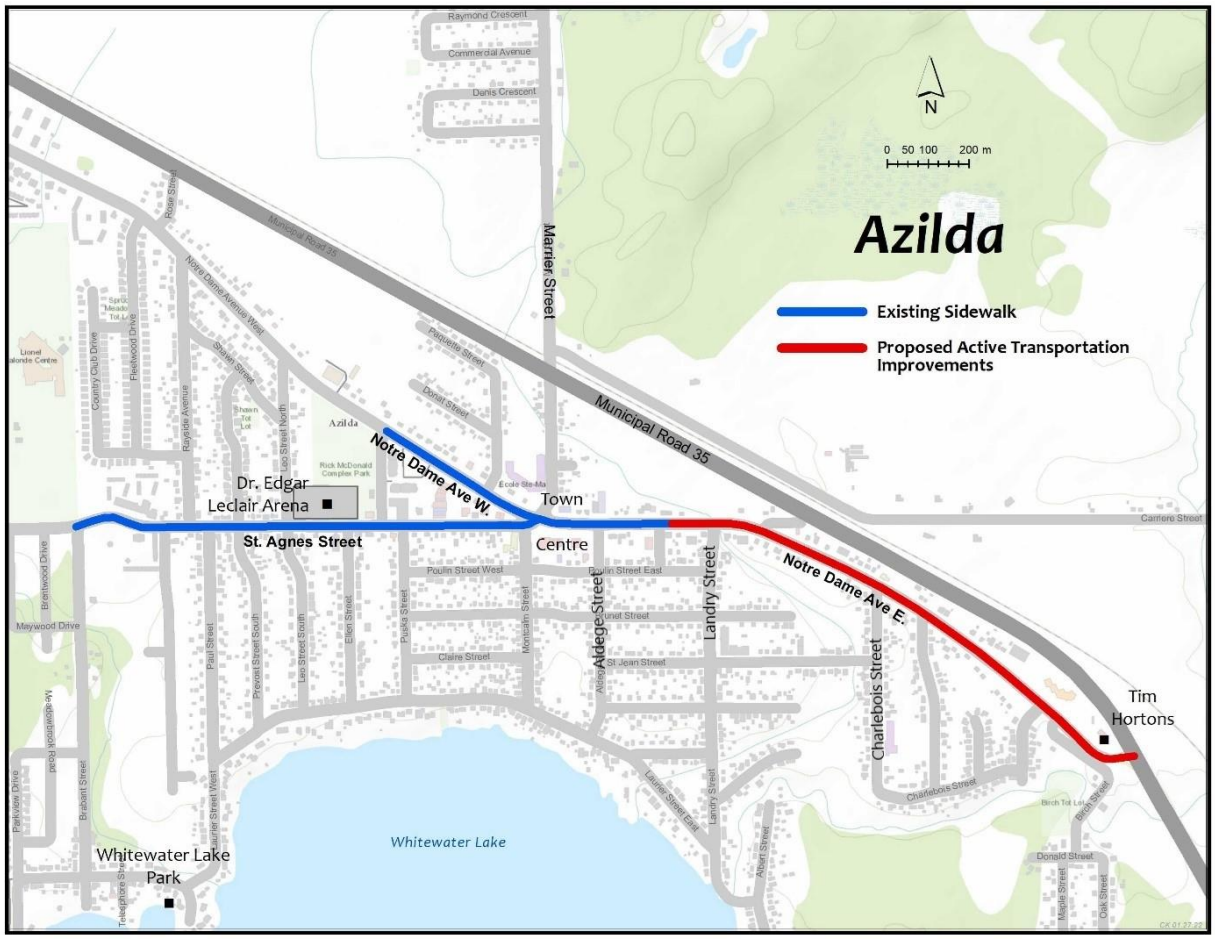

Figure 1 - Community of Azilda

Complete Streets Design Considerations

In June 2018, the City officially adopted a Complete Streets Policy. As noted in the policy, “This approach shall also be applied to all infrastructure capital projects, where the entirety of the roadway is planned to be reconstructed or rehabilitated with substantial infrastructure improvements within the existing road allowance, to provide new or improved facilities for people who walk, bike and use public transit.”

A Complete Streets approach integrates the mobility needs of people in the planning, design, construction, operation, and maintenance of transportation networks. This approach breaks down the traditional separation in planning for different modes of travel, and emphasizes context-sensitive, multimodal capital project planning, design, and implementation. Complete streets are streets that are designed with all users in mind, people who walk, bike, take transit or drive, and people of varying ages and abilities. While not every type of use or user may be accommodated on every street, the goal is to build a city with a well-functioning street network that supports and sustains our quality of life.

Active Transportation Design Options

Design scenarios with alternative active transportation facilities have been considered for the 1.3 km stretch of Notre Dame Street East from St Thomas Street to MR 35. This segment of Notre Dame Street East does not currently have Council approved capital budget to carry out road improvements. Construction cost estimates (in 2023 dollar value) for each scenario are described below. For all design scenarios noted below, there are no Water or Wastewater infrastructure improvement work identified on Notre Dame Street East between St Thomas Street and MR 35.

Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities, is a set of guidelines developed by research and international best practices. It provides a framework for practitioners to determine a suitable facility type for a specific roadway corridor.

OTM Book 18 outlines a process for identifying the minimum class of facility (shared, designated or separated). The pre-selection process uses a nomograph based on road land use typologies, urban/suburban or rural, to identify the preferred level of separation (“facility class”) along the corridor. Traffic volumes and speed data are plotted on the nomograph to identify preliminary preferred bicycle facility.

After the facility class review has determined the preferred level of separation, a facility type is chosen based on variables such as vehicle operating speeds, volumes, lane designs, and environment. To determine important factors of feasibility for each corridor, including the approximate pavement width, boulevard space and limits, and the context of the corridor, a desk review of the corridor is done.

Road Rehabilitation

Asphalt pavement rehabilitation typically involves milling and resurfacing of the existing asphalt pavement to mitigate the effects of per ride rutting, cracking, and other distresses. Resurfacing thickness may depend on the condition of the existing pavement, anticipated future truck traffic, and available funding.

As noted in the February 2022 report, using the recommendations outlined in OTM Book 18 as well as provincial best practices, staff’s recommended active transportation facility for this section of Notre Dame Street East is a 2 m wide paved should with edge line. The preliminary estimated cost for this scenario is $3.5M.

A design scenario which would incorporate a physically separated facility as part of a road rehabilitation project for Notre Dame Street East between St Thomas Street and MR 35 is a 3.0 m multi-use path installed behind the ditch on the south side. Significant property acquisition as well as utility relocations are required for this option. The preliminary estimated cost for this scenario is $7.8M.

Road Reconstruction

Road reconstruction consists of the removal of all existing pavement structure (asphalt, granular road base) to facilitate installation of new storm sewer under the road and urbanize the road by filling existing ditches to add curb and gutter, cycle track and sidewalks.

As noted above, there is no underground infrastructure improvement work identified on Notre Dame Street East between St Thomas Street and MR 35. Should this segment be identified for major road reconstruction the following two scenarios could be considered in order to provide a physically separated facility.

Urbanization with sidewalk and cycle track on both sides. This scenario is a reconstruction project with full urbanization and the addition of 3.5 m driving lanes with barrier curb, new storm sewer, 1.5 m sidewalk, and 1.5 m cycle track on both sides. The preliminary estimated cost for this scenario is $10.8M.

An additional option that could be included in a road reconstruction project is constructing a semi-urban road which includes 3.5 m driving lanes with barrier curb with the addition of a 3.0 m multi-use path behind the curb on one side and ditch on other side. The preliminary estimated cost for this scenario is $8.8M.

Storm Sewer and Drainage Considerations

In order to consider urbanizing Notre Dame Street East with a new storm sewer to fill in ditches on one or both sides, the City's *Environmental Compliance Approval for Stormwater* does not authorize the City to convert a rural cross section to an urban cross section without improving stormwater control. The stormwater control would need to be integrated into the design and would be one of or a combination of the following: retention on site (infiltration, reuse, or evapotranspiration), Low Impact Development (LID) filtration, and/or other conventional Stormwater management controls (pond, oil and grit separator). The appropriate stormwater control would be determined through the detailed design process. Amounts for storm sewer and drainage considerations have been included in the estimates above.

Conclusion

This report provides scenarios on how active transportation facilities that include physical separation from the roadway can be incorporated into future investments into Notre Dame Street between St Thomas Street and MR 35.

The analysis conducted in this report is the same method staff would take when Notre Dame Street is identified for capital improvements that would include facilities for active transportation. The scenarios presented in this report are based on current best practices which over time have evolved to reflect changing conditions. As noted in the report, current best practices indicate that a paved shoulder is an appropriate active transportation facility for a road like Notre Dame Street East. However, as with all capital projects, City Council ultimately has the final decision on the scope of approved projects and may direct staff to change the scope as it sees fit.

Resources Cited

1. Environmental Protection Act, O.Reg. 208/19, Amendments to the Environmental Compliance Approval in respect of Sewage Works Regulation https://www.ontariocanada.com/registry/view.do?postingId=37667

2. City of Greater Sudbury, Operations Committee Meeting, February 16, 2022 https://pub-greatersudbury.escribemeetings.com/Meeting.aspx?Id=2058f85d-dade-4ada-a396-62df56aafc02&Agenda=Agenda&lang=English

3. City of Greater Sudbury, Operations Committee Meeting, July 11, 2022, Resolution number OP2022-22

https://pub-greatersudbury.escribemeetings.com/Meeting.aspx?Id=b9591c59-790f-44d4-bdd8-e58328b1d8a2&Agenda=Agenda&lang=English