



Infrastructure Services Staff Report

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Report Title: George Street, High Street and Charles Street Reconstruction Project - Design Approval Report
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Reviewed By: Jared Puppe, Director of Infrastructure Services
Final Review: Senior Management Team

Recommendation:

That the Council of the Township of Woolwich, considering Report IS22-2023 respecting George Street, High Street and Charles Street Reconstruction Project - Design Approval Report, endorse the preferred cross-section for George Street, High Street and Charles Street in Elmira.

Background:

The subject sections of George Street, High Street and Charles Street totals approximately 890 metres in length with an average of 8.4 metre pavement width within a 15+/- metre wide right-of-way. The roadways currently have curb and gutter along the entire length, except for High Street from George Street to the west end of High Street. No sidewalk is present on either side of the roadways.

The existing underground infrastructure consists of cast iron, ductile iron, and PVC watermain and a storm sewer system that covers portions of the roadways. The public entrance for Bolender Park is located on the west side of George Street, just south of Charles Street. There is no sanitary sewer within the project scope (George Street, High Street, or Charles Street), all homes are on individual private septic systems.

Hydro (mix of above and below ground), telecommunications, and gas servicing all are located within the municipal road allowance. Utility relocations of Bell infrastructure is anticipated, as this infrastructure is located beneath the roadway of George Street.

There are active sump pumps throughout the project limits that discharge to grade and sufficient outlets will be provided for these properties and accounted for as part of the upgraded storm sewer system.

George Street, High Street and Charles Street are comprised of Settlement Residential (R-1) and Open Space (O-1) land-use zoning. A location map, which depicts the study area, is included as Appendix A.

The intent of the project is to fully reconstruct the underground and surface infrastructure on George Street, High Street and Charles Street. Underground improvements are anticipated to include: a 300mm diameter watermain along George Street and a portion of High Street to improve supply to the Elmira North-East Industrial lands, a new 150mm diameter PVC watermain along the remaining streets and an appropriately sized storm sewer system. The existing storm sewer outlet to Canagagigue Creek has been reviewed and assessed to ensure appropriate sizing. Individual water and storm laterals are to be reconstructed to property line. Surface improvements are to include road alignment improvements, full depth granular road base, asphalt pavement, with new curb and gutter as well as curb-face sidewalk along one side of all roadways within the project limits.

Public consultation has been an important focus throughout the project. All affected residents were notified of the planned reconstruction work and have had an opportunity to voice their questions and any concerns they had through a Public Consultation Centre (PCC), held on September 13th, which was well attended by the George Street, High Street, Charles Street and Spruce Lane community. Design drawings and a project overview were available beginning September 6th to September 20th. A comment sheet was attached to the information package mailout, and residents were encouraged to provide comments, concerns, or questions by September 22nd. All feedback received from the area residents was compiled into a comment log and reviewed by Staff. In summary, there were three main concerns the community raised to Staff:

1. Residents were opposed to the implementation of sidewalks along George Street, High Street and Charles Street. There was some support for sidewalk along George Street from Church Street East to the Bolender Park parking lot;
2. Residents raised concerns regarding the narrowing the roadways and prefer the roads to stay at the current widths; and,
3. Residents raised concerns over the parking restrictions proposed that would limit parking to one side of the roadway. Most preferred to not implement any parking restrictions.

In addition to concerns mentioned above, there were a few inquiries regarding the introduction of municipal wastewater servicing being brought to the George Street, High Street, Charles Street and Spruce Lane community.

The subject neighbourhood does not have a wastewater system because when the neighbourhood was developed, a wastewater system was not installed as part of the

development. At the time of development, it was not and still is not possible to provide a wastewater system within the municipal right-of-way which would allow for a gravity system to be installed due to the lack of public space availability, elevation challenges and that the community is separated from the existing municipal wastewater servicing due to the Canagagigue Creek watercourse.

Due to these challenges, a gravity system is not possible and wastewater servicing could only be accomplished through mechanical means, which would be in the form of a pump or lift station. This would be an exorbitant cost for the area residents as wastewater servicing is a user-pay system and expansions of such have historically been funded solely by the benefitting properties through a Special Service Levy (SSL).

If a SSL were to be enacted by Woolwich Council, all the benefitting properties within the service area would be required to pay actual construction costs and associated soft costs, which would include an Environmental Assessment process for the pump/lift station, engineering, contract administration and inspections. Benefitting properties are those that can connect to municipal services and a SSL only covers costs associated with design and construction within the public road allowance. Residents would then be responsible connect to the service lateral at the street line.

A high level cost estimate, per benefitting property, would likely exceed \$140,000. Of note, Township staff have only expanded gravity wastewater systems through the Special Service Levy process.

Elmira Pet Products is connected to the wastewater system on Martin's Lane. The outlet invert of the sanitary sewer on Martin's Lane is essentially the same elevation as the road elevation on the west end of High Street, therefore, this is not a feasible servicing path for a gravity wastewater system.

Through the PCC, Staff did receive a Petition to not install sidewalks along Charles Street and High Street. The Petition is included as Appendix B.

Comments:

Cross-Sections

The existing road cross-sections of George Street, High Street and Charles Street are similar and have an average pavement width of 8.4 metres and no sidewalks. At the time of the PCC, Staff proposed a 6.7 metre pavement width for the subject roadways, with a 0.6 metre wide boulevard, between the curb and front face of sidewalk as well as a 1.8 metre wide sidewalk. During the PCC, Staff heard from many of the community members that the wider roadway width was preferred over the narrow roadway being proposed. Staff also presented the community with a proposed parking restriction that would limit parking to one side of the road only, which would allow for through traffic. The feedback from the residents provided insight into the parking challenges that community experiences during peak summer activity around the Bolender Park splash pad as the

parking lot often exceeds capacity and overflow parking utilizes the surrounding roadways.

The cross-sections presented at the PCC are included as Appendix C.

The Accessibility for Ontarians with Disabilities Act (AODA) is an Ontario Law which includes accessibility standards to address barriers for people with disabilities. The goal of the AODA is to make Ontario accessible by 2025 and help the one in seven people with disabilities in Ontario, a number that will grow over the next 20 years with an aging population. The Ontario Government upholds the AODA, which benefits all Ontarians by developing, implementing and enforcing accessibility standards to achieve a barrier free environment.

Woolwich Township is part of the Grand River Accessibility Advisory Committee (GRAAC), which works with area municipalities in the Region of Waterloo to create barrier-free communities. They help ensure requirements and standards of the Ontarians with Disabilities Act (ODA) and AODA are met. GRAAC is comprised of seven area municipalities, the Region of Waterloo, the Cities of Kitchener and Waterloo, and the Townships of North Dumfries, Wellesley, Wilmot, and Woolwich.

The Government of Ontario designated public sector organizations to establish, implement, maintain, and document a multi-year accessibility plan, which outlines the organization's strategy to prevent and remove barriers and meet its requirements under the AODA.

In keeping with Ontario's accessibility law, staff always review reconstruction candidates and assess the feasibility of introducing sidewalk where none exists.

The goal of the accessibility standards for the design of public spaces and the built environment is to remove barriers in public spaces and buildings. The Design of Public Spaces standards have been incorporated under the Ontario Building Code and will only apply to new construction and renovation in buildings. The design of public spaces addresses outdoor public spaces such as accessible parking, paths of travel such as sidewalks, ramps, stairs, playground equipment and picnics areas. Additionally, the Transportation Association of Canada (TAC) manual specifies sidewalks normally on one or both sides of the roadway to accommodate pedestrians.

For the reconstruction of George Street, High Street and Charles Street it was determined early on during the design process that sidewalk on both sides of the roadway within the constrained 15.2 metre wide road allowance was not feasible. Staff then looked at the most appropriate location to have sidewalk installed along only one side of the subject roadways. It was determined that a new 1.8 metre wide sidewalk could be installed along one side of the subject roadways with little impact to the boulevard area and this would meet the intent of the AODA. Sidewalk along George Street and the west end of High Street will create a safe pedestrian connection from residential properties west of the Canagagigue Creek to the Bolender Splash Pad and the Kissing

Bridge Trail. The proposed sidewalk along High Street and Charles Street will also provide safe pedestrian conductivity to these facilities and to downtown Elmira. Given the scope that a full reconstruction project affords, staff do not consider it appropriate to have people walk on a roadway when a sidewalk can easily be accommodated in the neighbourhood.

Roadway Width and Parking Restrictions

The Transportation Association of Canada (TAC) is a national association with a mission to promote the provision of safe, secure, efficient, effective, environmentally and financially sustainable transportation services in support of Canada's social and economic goals. In urban areas, TAC's primary focus is on the movement of people, goods and services.

The TAC manual for Geometric Design Guide for Canadian Roads specifies the design dimension width for passenger cars as 2.0 metres, buses at 2.4 metres and semi-trailers at 2.6 metres. The TAC manual outlines on-road parking on local streets, should be given a width of 2.4 metres and no parking restrictions or parking restrictions on one side only. In addition, for a local roadway, the lane widths for a two-lane roadway should be between 3.0 and 3.7 metres. At the PCC staff proposed to restrict parking to one side and implement a lane width of 3.35 metres. However, based on feedback received from area residents regarding their concerns on the proposed road width and parking restrictions, Staff have revisited the road cross-section and are able to accommodate a wider roadway and avoid any parking restrictions while still being able to implement a 1.8 metre wide sidewalk. Staff are proposing a lane width of 3.65 metres, which will allow for parking both sides of the road (2.4 metres both sides) and a 3.0 metre drive lane for a total required road width of 7.8 metres in keeping with the TAC manual. The new cross-section being proposed will be 7.9 metres wide, with curb and gutter and a 1.8 metre wide sidewalk along one side of each roadway. This will address the majority of feedback received from the community during the PCC.

It should be noted that the current road widths are quite large and should be reduced to align with local roadway widths. The reduction in the roadway width will result in minor changes to the grassed area behind the existing curb to facilitate the installation of sidewalk. With the current design, a maximum of 0.7 metres is required to facilitate the installation of sidewalk. This is a unique situation, as generally the entire boulevard and sidewalk width replaces the same grassed area behind the existing curb.

The proposed cross-sections that Staff are seeking endorsement for is included as Appendix D.

Interdepartmental Impacts:

None

Financial Impacts:

Staff will include the anticipated reconstruction costs in the 2024 capital budget, which will also include some utility relocations, construction oversight and material testing. The cost of installing a new sidewalk is considered minimal in the context of the overall reconstruction cost, which is typically between 1.5 to 2.5%. Installing sidewalk outside of a reconstruction project typically costs 4 to 5 times more. Unit rates under a large project are approximately \$60/m² and \$250/m² when installing sidewalk outside of a reconstruction project.

Strategic Plan Impacts:

The George Street, High Street and Charles Street Reconstruction Project in Elmira supports the Township of Woolwich's strategic direction to *"Manage and maintain all municipal infrastructures with an emphasis on continuous improvement and greater efficiencies"*, with a goal to *"Optimize the Use of Municipal Infrastructure"*.

Conclusion:

Through the George Street, High Street and Charles Street Reconstruction Project, the project team has provided a cross-section for these roadways which utilizes slightly narrower roads, then the existing cross-section which is compliant with the TAC manual and implements a 1.8 metre sidewalk to accommodate pedestrians which meets AODA standards.

Attachments:

1. Appendix A – Location Map
2. Appendix B – Petition
3. Appendix C – Public Consultation Centre Cross-Section
4. Appendix D – Recommended Cross-Section