

Municipality of Lakeshore – Report to Council

Operations

Public Works



To: Mayor & Members of Council
From: Jeff Wilson, Division Leader – Public Works
Date: March 7, 2023
Subject: Tender Award – 2023 Gravel Conversion Program

Recommendation

Award the tender for the 2022 Gravel Conversion Program to Shepley Road Maintenance Ltd. in the amount of \$360,100.64 including applicable HST, as presented at the March 21, 2023 Council meeting.

Background

In Council's Strategic Planning Session in 2021, the 10-year Gravel Conversion plan was presented. In that presentation the plan included highlighted roadways that prior to conversion, would require additional work in advance, likely taking more than one year and additional budget to convert the roadway.

The plan identified Lakeshore Road 111 to be converted in 2022, however this roadway was identified as a road that required additional work to be undertaken including road widening, potential ditch enclosures and possible land acquisitions prior to the gravel conversion to be completed. Therefore, Lakeshore Road 243 was completed in 2022 (was planned for 2023) in lieu of Lakeshore Road 111 (was planned for 2022).

The preliminary assessment and design for Lakeshore Road 111 is 60% complete, awaiting the final design and scope of work. Lakeshore Road 111 will be tendered separately as a construction project due to the extent of work involved in the conversion of this roadway.

As such, the 2023 Gravel Conversion Program tender contained only two (2) road sections (as shown on the attached map):

1. Auction Sideroad from Rochester Townline to Knapp Road
2. Knapp Road from Rochester Townline to Auction Sideroad

The request for tender for the 2023 Gravel Conversion Program was publicly advertised on Bids & Tenders on Tuesday February 13, 2023.

The following one (1) tender submission was received prior to tender closing on Friday, March 3, 2023. The tender summary is included below:

Tenderer	Price (excluding HST)	Price (including applicable HST)
Shepley Road Maintenance Ltd.	\$ 353,872.48	\$360,100.64

The submitted tender was reviewed and found to be complete. Shepley Road Maintenance Ltd. has completed previous contracts for the Municipality and have the experience and resources to complete this project.

Comments

Council approved the budgeted amount of \$1,505,000.00 in 2023 for the Gravel Conversion Program. The approved budgeted amount does include Lakeshore Road 111 (to be tendered later this year).

Due the Hydro One Networks Inc. (HONI) - Chatham to Lakeshore Transmission Line Project, Knapp Road is at risk to be impacted from this project. Administration will work with Hydro One to mitigate the impact to our local roads.

Administration recommends the tender be awarded to Shepley Road Maintenance Ltd. in the tender amount of \$360,100.64 including applicable HST.

Financial Impacts

The financial breakdown for the 2023 for the Gravel Conversion Program is shown in the table below.

Road Section	Tendered Cost (excluding applicable HST)	Tendered Cost (including applicable HST)	Difference (over)/under
Auction Sideroad	\$168,548.80	\$171,515.26	
Knapp Road	\$185,323.68	\$188,585.38	
Total Tendered Cost	\$353,872.48	\$360,100.64	\$360,100.64
2023 Budget for Gravel Conversion			\$1,505,000.00
Remaining Budget for Lakeshore Road 111			\$1,144,899.36

As noted in the table above this portion of the 2023 Gravel Conversion program is within the overall total budget for the completion of Auction Sideroad and Knapp Road.

The difference (under budget amount) will be used for conversion of Lakeshore Road 111 (in the estimated amount of \$1,144,899.36).

Surface Treatment Tender – actual quantities: The final costs for 2023 will be based on the actual amounts of emulsion and aggregate required to be used in the surface treatment process. The quantities contained in the Surface Treatment Tender specifications were estimates only. Should the actual quantities required to complete the 2023 surface treatment work differ from the estimated quantities, the actual cost will vary from the amount contained in the tender. As a result, the estimated under-expenditure may be higher or lower than shown above.

The Gravel Road Conversion Program is not a service level that is not well defined in the current Asset Management Plan. As such the long-term financial commitment of the program and ongoing operating cost for this level of service are not well defined in current budgets and long-range forecasting.

The following is an extract from the Asset Management Plan 2022 and attempts to quantify the cost of the increase in service level:

To estimate the current replacement cost of 76km of gravel roads, a per kilometer replacement cost of \$392,200 is used. To estimate the replacement cost of the converted roads (surface treated), a per unit cost of \$738,892 is used.

Table 1 Impact of Converting Gravel Roads to Surface Treated Roads

Length Converted	Current Replacement Cost	New Replacement Cost	Previous Annual Reinvestment Required (at 2.5%)	New Annual Reinvestment Required (at 2.5%)	Annual Increase \$	Annual Increase %	Annual Increase per km
76km	\$29,807,069	\$56,079,757	\$745,176	\$1,401,994	\$656,817	88%	\$8,642

The analysis shows that converting 76km of gravel roads to surface treated roads will increase annual capital costs by approximately \$657,000, representing an 88% increase in annual capital needs. As with all other areas of this document, this analysis is highly sensitive to asset replacement costs and reinvestment rates. For example, increasing annual reinvestment rate to 3% would produce an annual increase of \$788,200, or a per km cost increase of \$10,370.

The additional annual funding required would need to be integrated with future financial analysis and will have a direct impact on annual revenue required, and potential tax increases needed to maintain higher-order asset in a state of good repair. These cost increases should be balanced with the benefits expected from the conversions. We also note that based on staff feedback, existing surface treated roads are deteriorating faster

than anticipated due to heavy industrial and commercial traffic load and volumes. For a growing community, these challenges can add additional wear and tear on roadways, requiring more frequent interventions.

Attachments

Attachment A - 2023 Gravel Road Conversion Map

Report Approval Details

Document Title:	Tender Award – 2023 Gravel Conversion Program.docx
Attachments:	- 2023 Gravel Conversion program.pdf
Final Approval Date:	Mar 14, 2023

This report and all of its attachments were approved and signed as outlined below:

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Submitted by Krystal Kalbol

Approved by Justin Rousseau