

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Engineering and Transportation Division

To: Mayor and Members of Council

From: Brendan Falkner, P.Eng.
Manager, Engineering

Date: April 3, 2023

Subject: Tender Award – Contract T23-105C – Cold in Place Pavement Recycling

Recommendations

It is recommended that:

1. The tender award in the amount of \$4,186,809.38 (including HST) for Cold in Place Pavement Recycling be awarded to Huron Construction Company, a division of Brennan Paving and Construction Ltd.
2. A contingency in the amount of \$226,000 (including HST) for additional costs associated with the projected increase in the monthly Ministry of Transportation (MTO) Performance Grade Asphalt Cement Index (PGAC) be included.
3. The Mayor and Clerk be authorized to sign the necessary agreement.

Background

Cold in Place Pavement Recycling is a process where the existing pavement is reclaimed, rejuvenated and replaced in one process. Once the new base layer has cured, an asphalt overlay is placed. Since the existing pavement is being reused, this process has significant environmental and cost benefits, while still providing a solution that is expected to add at least 15 years of service life to the pavement.

The environmental benefits result from the reduced greenhouse gases produced, compared to a conventional mill and pave or reconstruction. These benefits are attributed to the reduction in the volume of new asphalt required to rehabilitate the roadway and the subsequent reduction in transportation of material to and from the site. These benefits also reduce the cost of the pavement rehabilitation since new asphalt and granular material is not being supplied and transported to the site.

Cold in Place Pavement Recycling is a more robust rehabilitation of a roadway compared to a standard mill and pave, since the process allows for the correction of

deep asphalt defects such as rutting, cracking (fatigue, reflective, longitudinal & transverse) and potholes. This rehabilitation method has been utilized successfully in the Municipality for the last 15 years.

Comments

StreetScan rated the roads in Chatham-Kent in 2020 and provided a Pavement Condition Index (PCI) on a scale of 0-100 for each road segment. This data, in conjunction with site reviews, was used to determine the list of roads that were good candidates for recycling.

To confirm that the roads identified were appropriate candidates, further geotechnical investigations were required and completed. Geotechnical consultants were retained to complete the investigations and provide a technical report for these road sections. The investigations consisted of a visual inspection as well as core sampling of the existing asphalt pavement to determine the pavement and subbase structure.

The Engineering and Public Works Divisions were consulted during the draft stages of this list to ensure these rehabilitations did not conflict with planned bridge, culvert, underground infrastructure or utility projects.

The following road segments will be rehabilitated in the 2023 Cold in Place Pavement Recycling contract:

- Clachan Road – Longwoods to Thames River Bridge Crossing (0.9 km)
- Talbot Trail – Kent Bridge Road to Hill Road (4.7 km)
- Victoria Road – Highway 401 to 115 m west of Reeders Line (4.8 km)

In addition to the above list, 680 meters of the northbound lane on Hill Road, south of Talbot Trail, will be resurfaced. A location map for the 2023 Cold in Place Pavement Recycling contract has been included (Appendix A).

Clachan Road is a boundary road between the Municipality of Chatham-Kent and the County of Middlesex. The County of Middlesex will be paying for half of the costs associated to rehabilitate Clachan Road. This road was planned to be resurfaced with the Clachan Road Bridge Rehabilitation Project, however, it was determined that a more robust rehabilitation strategy was required to address its poor condition.

The Ministry of Transportation (MTO) publishes the Performance Grade Asphalt Cement Index (PGAC) on the last day of each month and is applied to items in the contract that contain asphalt cement. A contingency has been included as a recommendation to account for the projected increase of this index throughout the summer.

In accordance with Purchasing By-law #166-2020, the purchasing tender was advertised on March 9, 2023, and closed on March 23, 2023. A total of 7 potential bidding contractors (including contractors, sub-contractors, and suppliers) obtained a

copy of the contract document from the Chatham-Kent Bids and Tenders website and 2 tender bids were submitted. The bid results and ranking are outlined in Table 1.

Table 1: Bid Results for T23-105C – Cold in Place Pavement Recycling

Rank	Bidder	Location	Amount (incl. HST)
1	Huron Construction Company	Chatham, Ontario	\$4,186,809.38
2	GIP Paving Inc.	Tecumseh, Ontario	\$4,560,416.71

The Engineering and Transportation Division has reviewed the tenders and found them to be complete in all respects. It is the recommendation herein that the contract be awarded to Huron Construction Company, a division of Brennan Paving and Construction Ltd., who submitted the lowest tender bid.

Areas of Strategic Focus

This report supports the following areas of strategic focus:

			
Economic Prosperity	Healthy & Safe Community	People & Culture	Environmental Sustainability
1.1			

Consultation

The Public Works Division was consulted during the preparation of this contract. The tenders were opened by Purchasing and reviewed by the Engineering and Transportation Division.

Communication

The tender documents were posted on the Bids & Tenders website for prospective contractors to review. Unsuccessful bidders will be notified by the Purchasing Division through the Bids & Tenders website.

Road construction signage will be implemented in accordance with Ontario Traffic Manual Book 7 to inform residents of traffic impacts. Road closure notices will be issued for any roads required to be closed as a result of the work associated with this contract.

Diversity, Equity, Inclusion and Justice (DEIJ)

This report does not have implications related to diversity, equity, inclusion, or justice.

Financial Implications**Table 2: Recommended Costs and Funding Summary**

Description	Total
A) Recommended Costs	
Recommended Tender	\$3,705,141.04
Asphalt Escalation Payment Adjustment Contingency	\$200,000.00
Sub Total	\$3,905,141.04
Plus 13% HST	\$507,668.34
Total Cost (with HST)	\$4,412,809.38
Less 11.24% HST	(\$438,937.85)
Total Recommended Costs	\$3,973,871.53
B) Recommended Funding	
County of Middlesex Clachan Road Cost Sharing (3.8%)	\$151,818.70
19ENG2063 - Clachan Road Bridge Rehab (5.2%)	\$207,635.54
CCBF Funding (73.4%)	\$2,917,277.35
Road Lifecycle Reserve (17.6%)	\$697,139.94
Total Recommended Funding	\$3,973,871.53

The lowest tender bid, submitted by Huron Construction Company, a division of Brennan Paving and Construction Ltd. was within the budget estimate.

Funds from the Canada Community-Building Fund (CCBF) are distributed by the Association of Municipalities of Ontario (AMO) to support infrastructure projects that promote economic growth, strengthen communities, and improve the environment.

Prepared by:

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Reviewed by:

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Consulted and confirmed the content of the consultation section of the report by:

Jennifer Scherle, Manager, Purchasing and Accounts Payable

Ryan Brown, P.Eng., Director, Public Works

Attachment:

Appendix A: 2023 Cold in Place Pavement Recycling Location Map