



Administrative Report

Office of the Director of Infrastructure Services

To: Warden McNamara and Members of Essex County Council

From: Jane Mustac, P. Eng.
Director of Infrastructure Services/County Engineer

Date: Wednesday, June 16, 2021

Subject: 2021-0616-ISD-R019-JM Tender Summary – Culvert on County Road 50 -West Townline Drain (C-50-060)

Report #: 2021-0616-ISD-R019-JM

Purpose

The purpose of this report is to provide County Council information and recommendation pertaining to tender results for an emergency culvert rehabilitation project.

Background

The 2021 rehabilitation program included the engineering design of the culvert on County Road 50 (C-50-060) at the West Townline Drain located in the Town of Essex. Engineering design is typically scheduled in a given year with replacement scheduled for the following year. Earlier this year a significant storm event caused the road base to wash out at the location of the culvert and County Road 50 was closed for a week to complete an emergency repair. The road is currently open with a temporary asphalt patch but is not expected to sustain a freeze thaw cycle so permanent repair is required.

Due to the advanced, unexpected deterioration, the consulting engineer expedited the design process to obtain tender ready documents to support construction in the same year. The workplan includes the immediate replacement of the corrugated steel culvert with a concrete box culvert.

The works are intended to occur during the Fall of 2021 with an anticipated start date in September.

County Road	Water Course	Anticipated Road Closure
50	West Townline Drain	4 weeks

The site location of the project is shown on the attached map (Appendix A).

Discussion

The tender process utilized electronic bidding and had five (5) submissions.

The following is a summary of the tenders received. All amounts do not include H.S.T.

County Road 50 – Culvert over West Townline Drain

Engineer's Estimate	\$700,000.00
South Shore Contracting of Essex County Inc.	\$558,850.00
Matassa Incorporated	\$612,076.97
Sterling Ridge Infrastructure Inc.	\$616,021.00
D'Amore Construction (2000) Ltd.	\$643,412.00
Neptune Security Services Inc.	\$1,469,501.00

The electronic submissions were evaluated for compliance with specifications and mathematical accuracy. The submissions were complete with no discrepancies identified.

CR 50 Road Rehabilitation

At a meeting of Council on May 19, 2021 concern over the condition of the pavement of the road along CR 50 was brought forward.

The annual State of Good Repair (SOGR) program considers underground structures that are planned for replacement prior to the surrounding road rehabilitation. With the replacement of the West Townline culvert in 2021, there is an opportunity to advance the road rehabilitation timeline by a year. The current 5-year road rehabilitation plan includes segments of County Road 50 with the final section to be rehabilitated in 2025. Pavement evaluations are conducted to determine the functional and structural conditions of a road section for the purpose of determining corrective action.

Efficient pavement performance quantification and prediction methodologies for pavement maintenance and rehabilitation treatment options are completed annually. The department is currently reviewing the pavement condition index (PCI) on all County roads but results won't be available until the fall of this year. This updated information will inform the 2022 Road Rehabilitation program that is ultimately approved by County Council.

At this time, the road base on County road 50 from County Road 13 to Collison Road, a total of 11.3km is identified as a road that needs repair within 1-3 years. The proposed road rehabilitation strategy is based on the condition of the road base as it relates to the road pavement and is divided into affordable sections. The treatment method differs and will consider a mix of mill & pave, cold in place recycling and hot mix surface asphalt. Further review of the County network rehabilitation priorities including County road 50 will be discussed during the upcoming budget deliberations with an effort to condense the rehabilitation program along CR 50 to support a final rehabilitation schedule along this section to be completed by 2024.

Financial Implications

The costs to perform culvert engineering was included and approved in the 2021 Budget. Projected capital and operational savings within ISD will be allocated to address the negative variance created by undertaking the unbudgeted construction of this culvert.

Recommendation

That the tender for Project Number 159-2021 County Road 50 Culvert over West Townline Drain be awarded to South Shore Contracting of Essex County Inc., for a total tender amount of \$558,850.00 plus H.S.T.

Respectfully Submitted

Jane Mustac

Jane Mustac, P.Eng, Director of Infrastructure Services/County Engineer

Concurred With,

Mike Galloway

Mike Galloway, Chief Administrative Officer

Appendix Number	Title
A	Location and Multi Year Rehabilitation Plan for County Road 50
B	Stantec Consulting Limited – Letter Regarding Emergency Culvert Replacement on County Road 50 (C-50-060)