

COMMUNICATION 132018

Received From: Dave Young, Project Manager
Addressed To: Council
Date: February 2, 2021
Topic: Tender PW5-2020 – Central Bridge Replacement and Bridge Street Reconstruction and Various Projects.

SUMMARY

Tenders were received for the Central Bridge replacement, Bridge Street reconstruction, Bell Street reconstruction, Gillies Bridge rehabilitation, McArthur Island Watermain Crossing, and Mill Street Pedestrian Upgrades until Thursday, January 14th, 2021 at 2:00 p.m.

The following bids were received prior to tender closing:

RANK	CONTRACTOR	BID PRICE (INCL. TOWN'S NET SHARE OF HST)
1	Louis Bray Construction	\$ 14,342,046.30
2	Tomlinson Group	\$ 14,593,345.20
3	Aecon Construction and Materials Ltd.	\$ 17,291,059.20
4	Bonnechere Excavating Inc.	\$ 17,452,993.04
5	Thomas Cavanagh Construction Ltd.	\$ 18,009,609.97
6	Coco Paving Inc.	\$ 18,418,482.76

All bids received were complete and accurate, and the low bidder, Louis Bray Construction has demonstrated through examples of prior projects and industry references that were included in their bid submission that they are well qualified to undertake this major project.

BACKGROUND

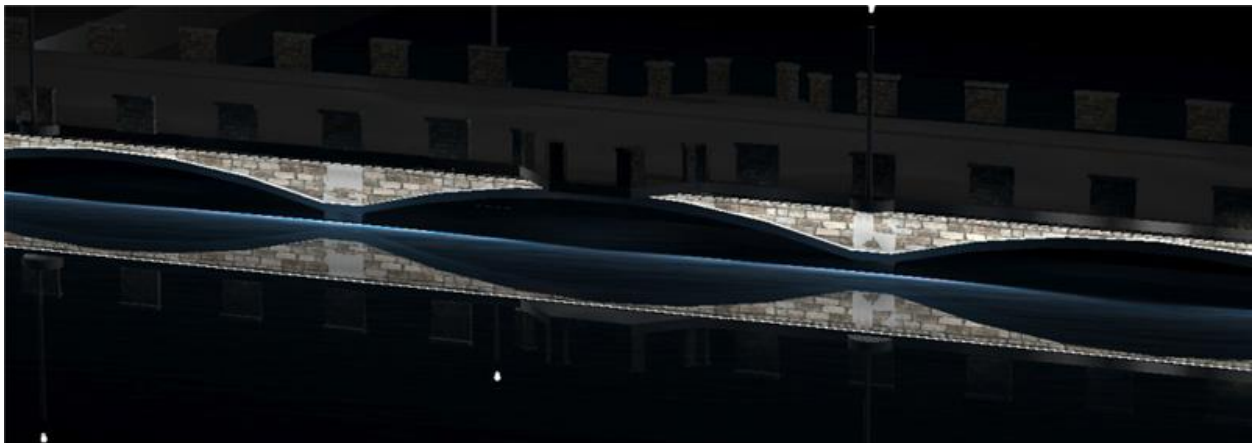
This tender process is the culmination of 18 months of detailed design development through the work of designers, with inputs from Council, Staff, various Stakeholders, residents, regulatory agencies, and utility companies. The tender package consisted of all projects relating to the Central Bridge replacement and the construction period will extend over two (2) years commencing in 2021. The following is a breakdown of the various components of the tender package:

- **Section A – General** – This section is comprised of all elements of a general nature such as the provision of bonding for the project, signage, traffic control, and construction layout. Most costs associated with this section are distributed to the Central Bridge Replacement.
Bid Price - \$715,683.17 (includes net HST)

- **Section B – Mill St. Pedestrian Improvements** – This section includes the construction of a new concrete sidewalk on the south side of Mill St. from Judson St. to the OVRT. This will provide a continuous pedestrian link during the replacement of the Central Bridge. Bid Price - \$49,946.86 (includes net HST)
- **Section C- McArthur Island Watermain Crossing** – This section contains the work required to install a new watermain crossing from Rosamond St to Princess St. This work is required to be completed prior to the existing watermain on the Central Bridge being taken out of service.
Bid Price - \$782,722.66 (includes net HST)
- **Section D – Gillies Bridge Rehabilitation** – This work consists of rehabilitating the substructure and deck surface of the Gillies Bridge. Again, this work will be carried out prior to the Central Bridge replacement as the structure is part of the local detour route.
Bid Price - \$1,299,617.66 (includes net HST)
- **Section E – Bell St. Reconstruction** – This work will consist of the reconstruction of Bell St. from Bridge St. to Mullet St., including the replacement of sewer and water infrastructure from Bridge St. to Edmond St. and storm sewer throughout the length of the project. Work is planned to take place in the first phase of the project as this will be an alternate traffic route during the Central Bridge replacement.
Bid Price – \$1,235,307.38 (includes net HST)
- **Section F – Bridge St. Reconstruction** – This work incorporates the reconstruction of Bridge St. from Lake Ave to the Central Bridge. Elements in this section include new concrete sidewalks with colored concrete spillway, new asphalt, three (3) new pedestrian crosswalks, new decorative streetlights, replacement of trees, new street furniture, several new landscape areas primarily contained within raised planters, upgrades to landscape areas at the intersection of Lake Ave., including a gateway feature and flagpoles. During the design process, efforts were made to address accessibility constraints on both public and private property. As a result of this effort, 42 entrances that currently do not meet accessibility guidelines will have existing steps eliminated following completion of the work. This project is planned to commence in 2022 in conjunction with the Central Bridge replacement.
Bid Price - \$3,337,142.88 (includes net HST)
- **Section G - Central Bridge Replacement** – The Central Bridge will be completely replaced, other than the existing piers and abutments which will require rehabilitation. This work is planned to occur in 2022.
Bid Price - \$5,383,940.47 (includes net HST)
- **Section H – Provisional Items and Contingency** – This section contains a predetermined amount for contingencies and items that have been identified as discretionary and based on pricing can be removed from the scope of work. The contingency amount that has been allocated for this project is \$1,000,000.00. This

is not to say that this total amount will be required but it does provide for unforeseen costs that arise over the course of the project and provides a mechanism to ensure work continues to progress in a timely manner. This approach has been incorporated on large scale projects in the past such as the South East Pumping Station. The following provides a description of three (3) design elements included in the provisional items in this section:

Uplighting for the Central Bridge – This was a feature that was identified from input received through Public engagement with the intent being to enhance the bridge's design elements. Our consultant had some experience from prior projects that utilized this technology. The specified product would have programmable capabilities with a wide range of color spectrum. (see rendering below)
Bid Price - \$152,640.00 (includes net HST)



Irrigation System – The proposed irrigation system was incorporated into the design through Stakeholder involvement and as a recommendation based on the type of tree grates that were recommended in the initial design stage. Although this approach would minimize future ongoing maintenance costs, the existing approach of manual watering of trees and plant material can continue to be implemented. This was the reasoning behind selecting this item to be incorporated into the Provisional items.

Bid Price -\$136,358.40 (includes net HST)

Oil and Grit Separator – During the Environmental Assessment process, the issue of the existing storm sewer outfall on the north side of the River was raised and an investigation of treatment options was incorporated into R.V. Anderson's scope of work. The consultant has recommended the installation of a treatment unit to be installed in-line on the existing storm sewer outfall approximately 50m north of the River. Although one unit, placed in a strategic location will not achieve treatment levels that would be imposed on new development, this approach will still have a significant impact on the level of suspended solids discharging into the Mississippi River. There is currently no legal obligation for the Town to move forward with this installation as the Province has not imposed a requirement for treatment of existing systems. This is the reasoning behind the inclusion of this item as a provisional item.

Bid Price - \$116,840.83 (includes net HST)

FINANCIAL IMPLICATIONS

The following table provides a breakdown of the Town's budget in comparison to the low bid received. The section containing General costs have been distributed to the various projects.

Project	Budget	Estimated Cost to Complete	Difference
Central Bridge	\$6,190,000	\$6,511,330	(\$321,330)
Gillies Bridge	\$900,000	\$1,722,386	(\$822,386)
Bell St - Road	\$700,000	\$996,071	(\$296,071)
Pedestrian Connection at Mill St	\$53,000	\$49,947	\$3,053
McArthur Island Water Main	\$1,066,240	\$947,899	\$118,341
Bell St -Water/Sewer	\$460,000	\$279,585	\$180,415
Bridge St	\$2,400,000	\$3,337,143	(\$937,143)
Subtotal	\$11,769,240	\$13,844,361	(\$2,075,121)
Contingency & Provisional	\$0	\$1,537,685	(\$1,537,685)
Total	\$11,769,240	\$15,382,046	(\$3,612,806)

It should be noted that the Mill Street, McArthur Island Watermain and Gillies Bridge projects were tendered earlier in 2020 with only one bid received from Louis Bray Construction in the amount of \$3,256,075.78. The same scope of work that is part of this current tender process came in at \$2,400,231.44. Staff has confirmed that timing and an increase in the total scope of work lead to a cost savings on these components of the overall project.

TOTAL FINANCIAL IMPACT

In addition to construction costs, there have been planning and design costs and tender administration costs that have been incurred for these projects already and there will be construction administration costs applied as the projects proceed. The following table provides the complete breakdown of all costs associated with these projects.

Project	Expenses to Dec 31/2020	Estimated Cost to Complete	Previously Funded	Funding Available	Fund from Water/Sewer Reserve	Debt Requirement
Central Bridge	\$1,191,188	\$6,511,330	(\$357,836)	(\$4,166,500)		\$3,178,182
Gillies Bridge	\$135,465	\$1,722,386	(\$104,275)	(\$795,725)		\$957,852
Bell St - Road	\$32,086	\$996,071	(\$26,031)	(\$473,969)		\$528,157
Mill St Pedestrian Connection	\$0	\$49,947	\$0	(\$53,000)		(\$3,053)
McArthur Island Water Main	\$91,433	\$947,899	\$0	(\$690,447)	(\$348,885)	(\$0)
Bell St -Water/Sewer	\$0	\$279,585	\$0	(\$460,000)	\$180,415	\$0
Bridge St	\$341,748	\$3,337,143	\$0	(\$383,340)		\$3,295,551
Subtotal	\$1,791,920	\$13,844,361	(\$488,141)	(\$7,022,981)	(\$168,470)	\$7,956,689
Contingency & Provisional	\$0	\$1,537,685	\$0	\$0		\$1,537,685
Total	\$1,791,920	\$15,382,046	(\$488,141)	(\$7,022,981)	(\$168,470)	\$9,494,374

Total costs to date go back to the initiation of the Central Bridge Project and include the Environmental Assessment Process and the design and consultation for all projects. Approximately \$500,000 has already been funded from previous budgets. There are several funding sources for the various projects that comprise this tender. Sources of funding are identified in the following table.

FUNDING SOURCES

Project	Funding Budgeted	Source of Funding
Central Bridge	\$4,166,500	OCIP Grant
Central Bridge	\$77,132	2016 Reserves
Central Bridge	\$44,099	2017 Reserves
Central Bridge	\$100,000	2018 Reserves
Central Bridge	\$23,412	2017 Taxes
Central Bridge	\$113,194	2019 Taxes
Gillies Bridge	\$564,643	2020 OCIF Formula Grant
Gillies Bridge	\$335,357	2020 Taxes
Bell St - Road	\$460,000	2020 Taxes
Bell St - Road	\$40,000	2021 Taxes
Pedestrian Connection at Mill St	\$13,000	2020 Taxes
Pedestrian Connection at Mill St	\$40,000	2021 Taxes
McArthur Island Water Main	\$250,000	Developer Contribution
McArthur Island Water Main	\$408,103	Development Charges
McArthur Island Water Main	\$32,344	Reserve-2021 Budget
Bell St -Water/Sewer	\$460,000	Reserve-2021 Budget
Bridge St	\$300,000	Development Charges
Bridge St	\$83,340	RED Grant
Total Funding	\$7,511,123	

The remaining balance of unfunded costs will need to be financed over a term to be determined. The following table provides a projection of the annual debt obligation based not only on the total unfinanced amount of \$9,494,374, but also lesser amounts based on the potential of identifying and implementing cost saving initiatives.

DEBT OPTIONS- 20-YEAR AMORTIZATION	ANNUAL PAYMENT
Full Amount (\$9,494,374)	\$ 690,412
Reduce by \$500,000	\$ 654,053
Reduce by \$1,000,000	\$ 617,694
Reduce by \$2,000,000	\$ 544,976

DISCUSSION

Staff has been reviewing the tender results with both our consultant and Louis Bray Construction to determine areas where cost savings can be realized through alternatives or elimination. It has been determined that there is little opportunity in the Year 1 works (Gillies Bridge, McArthur Island Watermain, Bell St., Mill St.) for cost savings as the design elements are necessary and cannot be substituted or eliminated. The total construction costs of the Year 1 works are \$4,131,733 (net HST including no contingency or provisional items).

Staff are exploring several opportunities within the Year 2 works (Central Bridge and Bridge St.) to reduce costs. In discussions with Louis Bray Construction, they have indicated that the Town could award them the Year 1 works in isolation while they undertake a value engineering exercise on the Year 2 works. Staff would then return to Council to discuss cost saving options stemming from the value engineering exercise and discussions with our consultant. Council could then decide on which cost savings measures to implement in awarding the Year 2 works.

STAFF RECOMMENDATION

THAT Council award the low bidder, Louis Bray Construction all works planned to occur in 2021 from Tender PW5-2020 including Gillies Bridge Rehabilitation, McArthur Island Watermain Crossing, Bell St. Reconstruction, and Mill St. Pedestrian Upgrades; and

THAT staff work with Louis Bray Construction and R.V. Anderson through a value engineering exercise regarding the Year 2 works (Central Bridge Replacement, and Bridge St. Reconstruction) and report back to Council at the completion of this exercise.