

To: Warden and Members of County Council

From: Director of Public Works

Contract Award – Norwich Water Tower Rehabilitation

RECOMMENDATIONS

1. That County Council award a contract to Landmark Municipal Services ULC in the amount of \$2,492,900 (excluding HST) for the rehabilitation of the Norwich Water Tower in the Township of Norwich;
2. And further, that County Council authorize the Chief Administrative Officer and Director of Public Works to sign all documents related hereto.

REPORT HIGHLIGHTS

- The purpose of this report is to seek County Council approval to award a contract for the Norwich Water Tower Rehabilitation project in accordance with the County's Purchasing Policy.
- The Norwich Water Tower has reached the point in its service life where the rehabilitation of the exterior coating and interior systems is required, along with upgrades to the accesses, process piping and electrical systems to ensure ongoing operational reliability and compliance with current safety standards.
- The project is expected to commence in April 2023 and is targeted for completion in November 2023.

Implementation Points

Upon County Council approval, a contract will be executed with the low bidder, Landmark Municipal Services ULC, prior to proceeding with the work.

Staff will continue to liaise with the Township of Norwich, including the Township's Fire Service as well as other local stakeholders regarding the project schedule and progress in order to ensure that water service is maintained, and a safe working environment is provided for the contractor while adequately maintaining the communication networks that use the tower.

Financial Impact

The approved 2023 budget for this project is \$4,025,000 to fund all proposed improvements including contract administration and project management, and the low bid amount is within budget. Contract amounts and funding sources for this project are summarized in Table 1.

Table 1 – Funding Summary for Norwich Water Tower Rehabilitation Project

2023 Budget Summary Account / Description	Available 2023 Budget	Bid Amount (excluding HST)
960441 - Construction Contract (Landmark Municipal Services ULC)	\$4,025,000	\$2,492,900
Consultant Contract – CIMA+ (Engineering, Testing & Inspection, Excluding HST)		100,000
Contract Administration & Project Management		50,000
Non-Refundable HST (1.76%)		45,635
TOTAL ESTIMATED CONSTRUCTION EXPENDITURES		\$2,688,535

Communications







The communication strategy for this project will be similar to other County construction projects. The Contractor’s project manager and the County’s project manager will form an open channel of communication and will include other members of the project team as needed. These communications will commence upon approval of this report and will continue for the duration of the project.

Oxford County staff have had communication with Township of Norwich staff with respect to the scope of work and planned schedule, and further communication is planned prior to and throughout construction. A Notice of Construction letter will be delivered to nearby property owners and construction signage will be posted at the project location to alert the general public in advance.

As construction begins, Norwich residents will be informed about construction progress through a dedicated webpage focusing on the several projects throughout the County starting in 2023.

Staff will continue to work with key internal stakeholders (County Management staff, Water/Wastewater staff) and external stakeholders during the execution of this project as required to ensure the appropriate level of communication and outreach is maintained, and further ensuring all parties involved are updated on project status and outcomes as needed.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.ii.		3.iii.			

DISCUSSION

Background

The Norwich water tower is an elevated storage tank, generally consisting of a concrete support pedestal and a welded-steel storage cell which was constructed in 1991. The steel tank has a maximum diameter of 18.9 m (~ 62 ft), height of 47 m (~154 ft) and storage capacity of approximately 1,900 m³. The tank is supported on a 36.5 m (~120 ft) high steel pedestal. The tower is also utilized by the County as a telecommunications hub. The location of this tower is shown in Attachment 1.

In July 2020, a site investigation and inspection was conducted, which identified that the exterior and interior coating systems were in poor condition and were nearing the end of their service lives. The inspection also identified that the landing platforms were showing signs of corrosion and the accesses and fall-arrest systems were not up to current health and safety standards. In addition, process piping upgrades within the tower valve room were proposed as part of this overall rehabilitation and upgrade.

Water storage facilities are required to maintain adequate flows and pressures to consumers during peak demands, and to meet critical demands during fire flow and emergency conditions. It is anticipated that the Water Tower will be offline from May 2023 to October 2023. County Public Works staff and Township of Norwich staff (Including Fire & Protective Services) have had discussions regarding operational measures that will be implemented to provide adequate fire protection while the tower is offline. Throughout the duration of the tower being offline, fire protection will be provided to properties within Norwich by using rural firefighting water supply techniques, in addition to maintaining adequate flows and pressures to consumers. In this regard further discussion and planning will be maintained with Township of Norwich Staff, prior to, during and upon completion of the construction project.

The primary purpose of this project is to ensure that this vital asset is maintained in a state of good repair. Water storage structures, such as the Norwich water tower, have a typical service life of 75 years. A critical part to ensuring this service life is achieved is the periodic replacement of the protective interior and exterior coating systems. Such systems require replacement every 20 to 30 years. The current coatings have been in place for approximately 30 years and a re-coating at this time is a major maintenance activity that is considered standard practice.

Comments

The approved 2023 capital budget of \$4,025,000 for the Norwich Water Tower Rehabilitation project was based on life-cycle, cost-benefit analysis and asset management best practices. This estimate also considered the volatile construction market with respect to labour and supply chain issues, which have recently influenced price fluctuations and instability in the construction industry. Tendering early in the new year did help position the County to receive competitive pricing from a Contractor who is able to plan ahead and is looking to firm up work for the construction season.

The primary scope of work includes the following:

- Site mobilization / demobilization;
- Complete replacement of existing interior tank linings;
- Full exterior scaffolding / hoarding for tower debris containment;
- Complete removal and replacement of existing exterior coating system;
- Miscellaneous upgrades as required to ensure compliance with current health and safety standards, and/or to improve operation and maintenance;
- Process piping upgrades including recoating/replacing of valves and piping within the Valve Room; and
- Water tower refilling and operational commissioning.

Three contractors were pre-qualified to bid on the Norwich Water Tower Rehabilitation project. The following two submissions were received at tender close on Friday, February 17, 2023, as shown in Table 2.

Table 2: Tender Submissions Received for the *Norwich Water Tower Rehabilitation Project*

Contractor	Bid Amount (HST Excluded)
1. Landmark Municipal Services	\$2,492,900
2. BGL Contractors Corp	\$3,142,280

Staff have reviewed the submissions and confirmed that the low bid received from Landmark Municipal Services (\$2,492,900 excluding HST) represents good value for the work.

As this project has the possible risks that would be associated with any construction project of this scale and scope, the successful Contractor is required to secure construction bonds and insurance to mitigate risks related to the exposure of financial loss.

Should the contract not be awarded and the rehabilitation work does not proceed, the condition of the water tower (specifically, the interior storage tank) will continue to deteriorate to the point where the water tower is considered structurally deficient and/or unsafe to use. This work is considered critical to extend the service life of the tower, maintain adequate flows and pressures to consumers during peak demands and to meet critical demands during fire flow and emergency conditions.

Conclusions

Review of the bid submissions confirms that it is appropriate to award the proposed rehabilitation of the Norwich water tower to the low bidder, Landmark Municipal Services.

SIGNATURES

Report Author:

Original Signed By

Reuben Davis, P.Eng.
Supervisor of Engineering Services

Departmental Approval:

Original Signed By

David Simpson, P.Eng., PMP
Director of Public Works

Approved for submission:

Original Signed By

Benjamin R. Addley
Chief Administrative Officer

ATTACHMENT

Attachment 1: Project Site Location