Tender ISD 21-149 for All-In-One Automated Pothole Patching Machine

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Recommended by:	General Manager of Growth and Infrastucture

Report Summary

This report provides a recommendation regarding the Tender ISD21-149 for All-In-One Automated Pothole Patching Machine.

Resolution

THAT the City of Greater Sudbury approves additional funding of $154,898 from the Capital General-Holding Account Reserve in order to award Contract ISD 21-149 for the purchase of an all-in-one automated pothole patching machine, as outlined in the report entitled “Tender ISD 21-149 for All-In-One Automated Pothole Patching Machine”, from the General Manager of Growth and Infrastructure, presented at the City Council meeting on September 14, 2021.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

This report is consistent with Council’s Strategic Plan with respect to the goal of conducting research, benchmarking and experimentation to ensure road maintenance practices reflect appropriate best practices.

Financial Implications

If approved, the project budget will increase from $400,000 to $554,898 with the additional funding of $154,898 being sought from the Capital General Holding Account Reserve.

Background

Staff was directed to prepare a business case for the purchase of pothole patching equipment for inclusion in the 2021 municipal budget process as recommended in the report entitled “Pothole Patching Equipment Report”, from the General Manager of Infrastructure, presented at the Operations Committee (Resolution OP2020-18) meeting of August 10, 2020.

On March 11, 2021, the Finance and Administration Committee (Resolution FA2021-24-A21) approved the business case entitled “Purchase of All-in-One Automated Pothole Patching Machine (Python 5000 or Equivalent) as outlined on pages 304 to 306 of the 2021 budget document. The business case identified a required capital investment of $400,000 to be funded from the Tax Rate Stabilization Reserve - Committed (Alternative 3) and to be included in the 2021 Business Plan. Council ratified the 2021 Business Plan and Operating Budget on April 6, 2021.

Accordingly, staff prepared and advertised Tender ISD 21-149 for the procurement of an all-in-one automated pothole-patching machine in accordance with the Purchasing By-law. The Tender closed on July 12, 2021. The City received a single compliant bid from Python Manufacturing Ltd. to supply a Python 5000+ all-in-one pothole patching machine for $554,898.

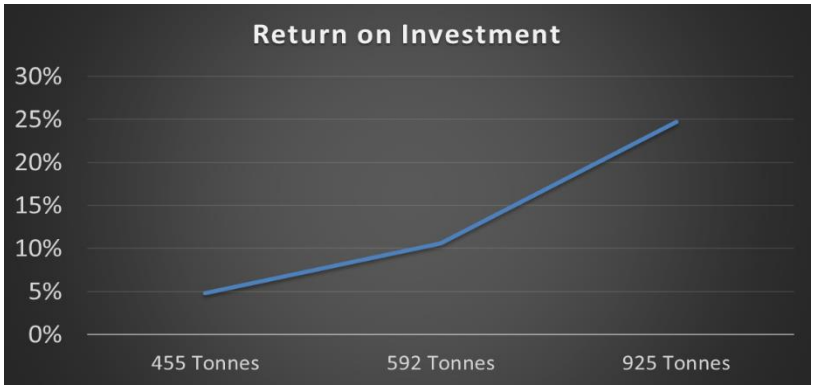
The City of Thunder Bay sole sourced the purchase of a Python 5000 to Nexgen Municipal in November of 2017 for an acquisition cost of approximately $343,321. Similarly, the City of Timmins sole sourced the purchase of a Python 5000+ to Superior Road Solutions in December of 2020 for an acquisition cost of approximately $563,673. Tender ISD 21-149 closed 38% higher than the purchase price for the City of Thunder Bay in 2017 but approximately equivalent to the purchase price for the City of Timmins in 2020. According to the manufacturer, the price difference between the Thunder Bay (2017) procurement and the Timmins (2020) / CGS (2021) procurements are largely attributable to engine upgrades made to the Python 5000+ in 2018 (driven by environmental regulations requiring lower emissions) along with the COVID-19 pandemic related cost increases.

Analysis

Assumptions in the business case for production rates and variable costs for the all-in-one automated pothole patching machine were based on comparable data received from the City of Thunder Bay. However, given the larger than estimated purchase price received, further analysis was completed in order to determine the reasonableness of the payback period and return on investment.

The City dispensed an average 1,560 MT (metric tonnes) of pothole patching material (i.e. recycled mix, cold mix and hot mix) over the past two (2) winter/spring seasons through traditional methods (i.e. 3 - 5 person pothole patching crews). At 592 MT applied annually, the Python 5000+ would realize a rate of return of 11% with the possibility of achieving a larger return should additional asphalt be placed.

Figure 1 – Return on Investment (Purchase Price of $554,898)



As noted in the business case entitled “Purchase of All-in-One Automated Pothole Patching Machine (Python 5000 or Equivalent), this return on investment would be realized in additional staff hours which would be redeployed to enhance other roadway servicing activities such as snow removal, culvert thawing and ditching as necessary.

Conclusion

It is recommended that Tender ISD 21-149 be awarded to Python Manufacturing Ltd. for a total acquisition price of $554,898 and that the additional funding required to complete the capital purchase be funded from the Capital General Holding Account Reserve, as outlined in the report entitled “Tender ISD 21-149 for All-In-One Automated Pothole Patching Machine”, from the General Manager of Growth and Infrastructure, presented at the City Council meeting on September 14, 2021.

Resources Cited

1. Operations Committee Resolution OP2020-18: https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=39314
2. City Council Ratification of OP2020-18: https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=39004
3. Finance Committee Resolution FA2021-24-A21: https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=40177
4. 2021 Approved Budget Business Case Summary: https://www.greatersudbury.ca/city-hall/budget-and-finance/2021-budget/2021-budget-final/
5. ISD 21-149 Tender Bid Summary: https://greatersudbury.bidsandtenders.ca/Module/Tenders/en/Tender/Detail/c8d3e35d-593f-46e5-88c4-ce115a6ae93d/#Submitted