Staff Report

Report To: City Council

Report From: Bradey Carbert, Manager of Corporate Services

Lara Widdifield, Director of Public Works & Engineering

Meeting Date: March 24, 2025

Report Code: CR-25-034

Subject: Approval of Non-Standard Procurement – Tandem Axle Plow Replacements

Recommendations:

THAT in consideration of Staff Report CR-25-034 respecting Approval of Non-Standard Procurement – Tandem Axle Plow Replacements, City Council:

1. Approves the recommended lifespan replacement schedule of 10 years for Tandem Axle Plows until a comprehensive fleet replacement schedule is adopted through the implementation of the Corporate Fleet Strategy;
2. Approves the non-standard procurement for the supply and delivery of two (2) 2025 International Tandem Axle Plows from Viking-Cives, Ltd., for $834,840, including the City's non-refundable allocation of HST; and
3. Authorizes the Director of Corporate Services to issue a Purchase Order for the supply and delivery of the necessary equipment.

Highlights:

- Staff are requesting the replacement of two 2016 tandem axle snow plows ahead of the previously identified estimated lifespan of 12 years.

- The Fleet Management Strategy document did not confirm service lives for vehicle classes. The adoption of a fleet replacement schedule is an action item from the strategy.
- Under traditional procurement practices, the delivery time for such vehicles is estimated at approximately 18-24 months before accounting for potential international political or economic impacts that may affect the supply chain. The use of a collaborative procurement program allows for the purchase of trucks to be completed in less than 12 months.
- No functional or financial benefit would be gained by delaying the order of these units so that the estimated delivery date coincides with the “normal” replacement date.
- Staff propose that the subject units be replaced, considering their individual condition, regardless of the calculated straight-line depreciation established at the time of their purchase.

Strategic Plan Alignment:

This report supports the delivery of Core Service.

Climate and Environmental Implications:

This supports the City’s Climate Mitigation Plan objective to reduce community greenhouse gas emissions.

The new International A26 engine is purported to be 10% more fuel-efficient than older models. As the engines being replaced are 2017 models, increased fuel economy is anticipated.

Previous Report/Authority:

N/A

Background:

Purchasing Information

Section 33 of By-law 2020-022 (Purchasing By-law) permits non-standard procurement processed under a series of options, including the procurement of goods, services, construction, or consulting services through a Vendor of Record (VoR) program, where analysis supports best value.

The City utilizes the Local Authority Services (LAS) Canoe Procurement to leverage pricing received under the competitive procurement programs available.

Section 34 of the Purchasing By-law requires that non-competitive purchases greater than $100,000 be approved by Council.

Fleet Information

The City's Public Works division includes four tandem axle plow trucks that are used for roadway maintenance and winter control. Staff are proposing to replace units 338021 and 338024. These trucks are model year 2017 but were placed into service in the fall of 2016. At the time of their purchase, a useful life of 12 years was assigned for this class of vehicle. Throughout the development of the City's Fleet Strategy, the 12-year lifespan does not result in the lowest total cost of ownership projection for the City and is recommended to be reduced to 10 years to support the current operational needs. When subjected to the type of usage the City's fleet of tandem axle plows experiences, 12 years is not reasonably attainable and results in excessive maintenance and operational costs as the vehicle ages. In anticipation of an updated fleet replacement schedule, a revised lifespan of 10 years was incorporated into the City's current Fleet Reserve Replacement Schedule for the 2025 operating budget but has not yet been approved by Council formally.

In addition to this, the manufacturing delivery time for heavy trucks has been increasing in recent years from 12-18 months to approximately 18-24 months, requiring the City to commence the procurement process sooner than in the past. This is prior to accounting for potential future international political or economic impacts that may affect the supply chain.

At the time of writing this report, unit 338021 had approximately 158,000 km on the odometer and 10,400 hours of run time. Its repair expenses have been just over $95,000 in the last four years.

Unit 338024 has approximately 143,000 km and 9,300 hours of running time at the time of writing this report. Expenses for unit 338024 for the last four years have amounted to $88,000.

Analysis:

Depsite the City's crews following good stewardship with the assets (corrosion protection, rinses, mats and covers, proactive maintenance, etc.), due to the number of kilometres and hours these pieces of equipment accumulate in highly adverse working conditions (hills, salt, mud, blizzards, boulders, gravel, sand, logs, etc.) they simply cannot achieve the 12 year lifespan that may be common with other organizations that do business slightly differently (i.e. flatter terrain, contracted routes, more units, more rural vs urban – less stops and starts). These factors make a difference in the wear and tear on a piece of equipment and results in significant maintenance and operational costs. The City does not have a spare tandem axle plow in its fleet and cannot support prolonged breakdowns as it would negatively impact the City's approved levels of service.

Staff suggest, in the absence of a detailed study or any operational changes (i.e. increasing the fleet to spread the mileage thinner), 10 years would be reasonable considering the City's limited fleet results in more usage per year compared to similar municipalities with larger fleets. However, it should be expected that with maintaining an ambitious service life, there will be several years of relatively high repair bills near the end to sustain that lifespan.

The City has been made aware of two tandem axle plow trucks that meet the City's required specifications and that are scheduled to be delivered to Viking-Cives Ltd., a turn-key snow plow equipment manufacturer, this spring. If the City were to take advantage of the opportunity to purchase trucks already scheduled for manufacturing, one would be delivered in December 2025, and the other one would be available in the first quarter of 2026.

Although, strictly speaking, this report requests a commitment to purchase the two trucks "ahead of schedule," assuming the typical recent 18-month minimum lead time for delivery, even if the trucks were ordered today, the earliest expected delivery would be in Q3 2026. With the end of life date in November of 2026, no practical advantage would be gained by delaying the purchase to wait until the delivery would be the exact end of life established in the asset management plan for fleet of this type.

If these trucks are not ordered until 2026 (the "scheduled" replacement year), units 338021 and 338024 will be 12 or 13 years old by the time their replacements are delivered, ensuring significantly increased repair expenses.

For context, one transmission can cost upwards of $35,000, and a hydraulic system replacement can be $80,000.

Financial Implications:

The City's fleet reserve schedule includes the replacement value of each tandem axle plow truck at a value of $500,000, or $1 million for both units. This value is determined by the user department based on their industry knowledge.

The average annual capital investment required for a 12 year lifespan replacement is $41,667 per unit, while the average annual investment required for a 10-year replacement is $50,000 per unit, resulting in an annual average annual increase of $8,333 per year for each unit by switching from the 12-year to 10-year replacement schedule. Staff are confident that annual contribution increases to the fleet reserve can be offset by reduced maintenance and operational costs and improved resale values.

With respect to the replacement of the above-mentioned units, Viking-Cives, Ltd. has provided a quotation to the City for $834,840 for the supply and delivery of two tandem axle plow trucks. The combined savings of $165,000 associated with purchasing both of these units at this time will reduce the annual contribution to the fleet reserve by $6,600 per year.

The City's tangible capital asset software indicates that each unit's residual value will be approximately $44,000 in 2026. Historically, when the City disposes of similar plow trucks on the public auction site Gov Deals and the units sell for between $50,000 and $80,000, depending on how they are equipped and their specific condition. As such, it is anticipated that they would be able to sell each unit at a value that exceeds the residual value without difficulty, thereby avoiding any write-off concerns due to the disposal.

The revenue received through the sale of the units will be returned to the Fleet Reserve and may also reduce the annual contribution to the fleet reserve required for the Public Works Division.

Communication Strategy:

The Request for Proposal, issued by Sourcewell, was posted in accordance with the requirements of the City's purchasing policies and procedures.

Consultation:

Jeff Follis, Public Works Superintendent
Greg Nicol, Owen Sound Fire and Emergency Services (Fleet Strategy Project Coordinator)

Attachments:

None.

Recommended by:
Bradey Carbert, Manager of Corporate Services
Kate Allan, Director of Corporate Services
Lara Widdifield, Director of Public Works & Engineering

Submission approved by:
Tim Simmonds, City Manager

For more information on this report, please contact Bradey Carbert, Manager of Corporate Services at bcarbert@owensound.ca or 519-376-4440 ext. 1240.