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Town of Aurora

## General Committee Report

No. OPS22-011

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**Subject:** Fleet Division Purchases

**Prepared by:** Sara Tienkamp, Manager of Parks and Fleet

**Department:** Operational Services

**Date:** June 7, 2022

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### Recommendation

1. That Report No. OPS22-011 be received; and
2. That the Capital Budget authority for Project No.34436 – six-ton Diesel Dump Plow/Sander Truck be increased by \$52,900 to a total of \$352,900, to be funded from the Fleet R & R reserve; and
3. That the planned 2023 capital budget authority of \$352,900 for Project No. 34564 – New Six-ton Diesel Dump Plow/Sander Truck, be advanced to 2022 and approved, to be funded from by \$317,800 from Roads & Related Development Charges and \$35,100 from the Growth & New Reserve; and
4. That staff be directed to implement an additional in-house winter maintenance route in 2024.

### Executive Summary

This report provides Council with information on a proposed Capital Budget authority increase relating to the award of a six-ton Roads Division truck, as part of the 2022 Repair and Replacement Capital program and the advancement of a new six-ton truck purchase from 2023 to manage significant ordering lead times:

- Market value indicates Fleet vehicles are averaging 15 percent over 2021 costs.
- Lead times for manufacturing to completion are more than double due to supply chain delays and computer chip availability.

- Backlog of vehicle availability for heavy trucks not expected to clear for a few years as there are limited manufacturers and outfitters to meet demand, anticipate affect on Operational budget and potential for service delivery impacts.
- Capital budget authority is now required to secure new plow truck for an additional winter maintenance route being added for 2024/2025 season.

## Background

Capital Project No. 34436 - Six-ton Diesel Dump Plow/Sander Truck Replacement was included in the 10-Year Capital Plan forecast. Capital Project No. 34436 was formally approved as part of the 2022 Capital Budget in the amount of \$300,000 to assist Operational staff in the continued delivery of winter road maintenance levels of service.

The Operational Services Department presented Report No. OPS21-007 on Winter Maintenance to General Committee on February 16, 2021. Part of the report identified the need for an additional winter road maintenance route and recommended:

That when one (1) additional winter roads maintenance route is implemented, that it be conducted in-house by the Operational Services Department.

The preceding clause was referred to staff to provide Council with a report on the details of an additional in-house winter maintenance route and timing of implementation.

Capital Project No. 35464 – New Six-ton Diesel Dump/Sander Truck was included in the 2023 ten-year capital plan with proposed Capital Budget authority of \$352,900 in preparation for the Town’s commencement of the proposed new route for the 2024/2025 winter season in support of established levels of service.

## Analysis

**Market value indicates Fleet vehicles are averaging 15 percent over 2021 costs.**

Inflation has been rampant over the last year and impacts can be felt in almost every sector of our economy, touching all Canadians daily lives.

In 2022, the Fleet industry has been experiencing similar trends with vehicle/equipment purchases averaging 15 percent increases over 2021 market value tender pricing. This is a result of the increases in steel, plastics, electrical, fuel and foreign exchange rates, as all contribute to the overall manufacturing and shipping costs.

**Lead times for manufacturing to completion are more than double due to supply chain delays and computer chip availability.**

The typical lead time pre-COVID-19 for manufacturing of the six-ton truck was 12-18 months from production line chassis build to outfitting and final delivery.

Supply chain impacts and computer chip availability are causing significant delays in manufacturing of all vehicles, passenger and commercial. The manufacturer has indicated in the bid document that anticipated build to delivery is approximately 52 weeks to get the vehicle in queue in the production line. The chassis would then be shipped from the USA manufacturer to the outfitter in Canada to be completed with hydraulics, harnessing assembly, electrical, dump box, plow, etc. adding an additional 8-12 months until delivery. As a result, complete build time from order date to delivery date is approximately two (2) years, therefore Fleet would be receiving a 2024 model truck sometime in fall of 2024.

**Backlog of vehicle availability for heavy trucks not expected to clear for a few years as there are limited manufactures and outfitters to meet demand; anticipate affect on Operational budget and potential for service delivery impacts.**

Heavy truck backlog is anticipated to perpetuate for three (3) to four (4) years before it returns to normal, pre-COVID-19 lead times. While supply chain delays and parts play a role, a large contributing factor is the limited suppliers of truck chassis, body manufacturers and outfitters. They have been dramatically impacted to date and with increased demand post COVID-19, it will take time for the manufacturers to be able to meet the needs of the commercial consumers.

This will most certainly influence the replacement of six-ton trucks in the Town fleet. Over 2023-2026 there are four (4) capital projects, one (1) per year for the replacement of six-ton plow trucks in the 10-Year Capital plan. In addition, a six-ton is forecast in the 2023 Growth and New Capital Budget as a new plow route is to be implemented as per the Report OPS21-007 Winter Maintenance Standards to support growth in Town and to ensure service levels are maintained. The truck was to be ordered in 2023 with service for the 2024/2025 winter season to meet the needs of the community and service levels; however, this will not be feasible with manufacturing industry lead times.

The delays in manufacturing will have a significant impact not just on the purchasing of vehicles over the next few years, but also on the operational budget as vehicle repair costs are expected to increase. Staff will be required to extend the life expectancy of fleet vehicles to ensure they are functional to meet the minimum service levels, while waiting for replacement vehicles to be delivered. This will affect all fleet vehicle

purchases not only the heavy trucks. Increased down times of these vehicles also have the potential to impact service levels, as well.

**Capital budget authority is needed to secure new plow truck for an additional winter maintenance route being added for 2024/2025 season.**

In consideration of the extensive manufacturing lead times for heavy trucks of this nature, staff are recommending that its presently proposed 2023 project No. 34564 - New Six-ton Plow Truck be advanced to 2022 and approved with total capital budget authority of \$352,900. This will ensure the delivery of this truck in time for the 2024/25 winter season when the new route is anticipated to commence.

Another option would be to contract out the winter maintenance for the new proposed route. Based on winter maintenance contract costs for 2024/25, the base costs for a new route would be \$70,000, this cost is variable depending on frequency of active snow events in a season. If alternatively contracted out, this new route would result in a total incremental cost of \$350,000 to the Town from 2024-2028.

All other planned replacement Six-ton Plow Trucks between 2023-2026 will remain unchanged in the 10-year Capital Plan and follow the regular approval process. Fleet Division staff will bring forward vehicles nearing the end of their useful lifecycle, based on condition assessments.

## **Advisory Committee Review**

None.

## **Legal Considerations**

The procurement process with respect to this project yielded bids that were all above the approved budget. Consequently, Council approval is required to increase the project budget for staff to be able to award the project to a compliant bidder.

If Council does not increase the Capital Budget amount, the tender will be cancelled, and the contract will not be awarded to any of the bidders. It is in Council's discretion to not award the contract where there are insufficient funds available.

## Financial Implications

It is recommended that total capital budget authority of \$352,900 be approved for Capital Project No. 34436 – Six-ton Diesel Dump Plow/Sander Truck, representing an increase of \$52,900 to be funded from the Fleet R & R Reserve.

The below table presents a summary of the total revised requirements to purchase this replacement six-ton dump truck:

Six-ton Dump Truck (Project No. 34436)	
<b>Approved Budget</b>	
Capital Project 34436	\$300,000
<b>Total Approved Budget</b>	<b>\$300,000</b>
Less previous commitments	\$0
<b>Funding available for subject Contract</b>	<b>\$300,000</b>
Contract Award excluding HST	\$346,800
Non-refundable taxes (1.76%)	\$6,100
<b>Total Funding Required</b>	<b>\$352,900</b>
<b>Variance</b>	<b>\$52,900</b>

Because of the noted required longer ordering lead times, this report also recommends the advancement of the proposed new six-ton truck (Project No. 34564) in the 2023 draft Capital Budget and the inclusion of this truck with its current 2022 order. This will ensure this truck's delivery by the 2024/25 winter season as required.

The total required capital budget authority for project No. 34564 is \$352,900 is to be funded by \$317,800 in Roads & Related Development Charges and \$35,100 from the Growth & New Reserve. The early approval of this project's capital budget authority should not impact the Town's planned cash flows as the truck's delivery is not expected until 2024 upon such time payment will be required.

## Communications Considerations

Not applicable.

## Climate Change Considerations

The key opportunity in developing the Green Fleet Plan in 2021 was to achieve long-term GHG emissions targets, in conjunction with fundamental goals developed and the associated action items.

The following action from GFP all play a role in climate change mitigation:

- Replace vehicles with best in-class fuel efficient vehicles. New models are more fuel efficient, produce lower emissions and are good options while the manufacturers develop viable hybrid/electric vehicles required to provide service. Overall, GHG reduction, by upgrading alone, through capital renewal can produce 4-5 percent decrease.
- Utilize telematic information provided through GPS system to identify quick acceleration of staff and ongoing coaching.
- Awareness of reducing idling toward goal of GHG reduction.
- Driver behaviour, including idling accounts for 5-33 percent of fuel use, smart drivers can help reduce fuel use.
- Replace vehicles with best-in-class fuel efficient vehicles. New models are more fuel efficient, produce lower emissions and are good options while the manufactures develop viable hybrid/electric vehicles required to provide service. Overall GHG reduction, by upgrading alone, through capital renewal can produce 4-5 per cent decrease.
- Utilize telematic information provided through GPS system to identify quick acceleration, hard braking, idle time to assist in education of staff and ongoing coaching.
- Awareness of reducing idling toward goal of GHG reduction
- Driver behavior, including idling accounts for 5-33 percent of fuel use, smart drivers can help reduce fuel use.

## Link to Strategic Plan

This project supports the Strategic Plan Goal of Supporting an Exceptional Quality of Life for all by improving transportation, mobility, and connectivity. This project maintains a well-managed and fiscally responsible Municipality.

## **Alternative(s) to the Recommendation**

1. Council may choose to not award additional funding to this project. The Tender evaluation process meets all requirements of the Procurement By-law and awarding this contract is the next step in fulfilling the requirements of the Tendering process. If Council chooses to not award this contract, service levels will not be met and public road safety would be compromised, without the plow truck acquisition.
2. Council may choose to not approve funding for the purchase of the new six-ton truck with plow and sander ahead of the 2023 Capital Budget review for the Growth and New Project #34564.
3. Council may choose to recommend the new route be contracted out and not undertaken in-house, therefore a new additional six-ton truck would not be required. However, this would require approval to increase the operational budget for snow winter maintenance by \$70,000/per year for a total \$350,000, over the remainder of the contract till expired in 2028.
4. Council to provide further direction.

## **Conclusions**

Staff recommend that Project No. 34436 capital budget authority be increased to \$352,900 and the replacement six-ton truck with plow and sander order proceed. The proposed additional capital budget authority is to be funded from the Fleet R & R Reserve.

In addition, staff recommend that the proposed 2023 Capital Project No. 34564 for the purchase of a new six-ton truck with plow and sander with a total capital budget authority of \$352,900 be advanced to 2022. This proposed new budget authority is to be funded from the Roads & Related Development Charges and Growth & New Reserve.

Delivery of both vehicles are not expected until 2024 when payment will be due.

## **Attachments**

Attachment #1 – Capital Project No. 34436 – Six-ton Diesel Dump Truck

Attachment #2 – Capital Project No. 34564 – New Six-ton Diesel Dump Plow/Sander Truck

## **Previous Reports**

Report No. OPS21-007 Winter Roads Maintenance, February 16, 2021

## **Pre-submission Review**

Agenda Management Team review on May 19, 2022.

## **Approvals**

Approved by Allan D. Downey, Director, Operational Services

Approved by Doug Nadorozny, Chief Administrative Officer