



Committee Report

To:	Warden McQueen and Members of Grey County Council
Committee Date:	September 10, 2020
Subject / Report No:	TR-CW-18-20
Title:	Gradall Sole Source and Non-Budgeted Purchase
Prepared by:	Steve Dollmaier and Sharon Melville
Reviewed by:	Pat Hoy, Director of Transportation Services
Lower Tier(s) Affected:	
Status:	Recommendation adopted by Committee as presented per Resolution CW152-20; Endorsed by County Council September 24, 2020 per Resolution CC75-20;

Recommendation

- 1. That Report TR-CW-18-20 be received and that the purchase of a used XL4100V Gradall be sole sourced to Amaco equipment for the total of \$487,550 excluding HST; and**
- 2. That the funds for the 2020 non-budgeted purchase be transferred from the Transportation Services Equipment Reserve.**

Executive Summary

Transportation Services has scheduled the replacement of its 2012 Gradall in 2021, as part of the 2021-2030 Ten Year Capital Forecast. Research has led staff to look for an alternative to a new Gradall due to significant increases in cost for new equipment. Staff are requesting to move forward with the purchase of a good, used Gradall now, in order to capture significant savings.

The Grey County Purchasing Policy, 4.3 f) i states the following:

In order for a Department to sole or single source for goods or services exceeding \$75,000, an operating strategy must be presented with Purchasing input and approved by Committee of the Whole.

Background and Discussion

Gradall is a brand of hydraulic telescoping boom excavators made by JLG Inc., which is mounted on a tandem axle truck chassis.

Amaco Equipment Incorporated, the only dealer for Gradall in Ontario, has proven to be a reliable, supportive dealer.

The only competitive manufacturer of this type of equipment offers a brand called "Badger". The Badger unit has a much lighter design than a Gradall.

The Gradall weighs 13.2 ton or 26,386 pounds more than the Badger, making it more stable and safer to operate as it provides more ballast while loading trucks. The greater stability comes from the fact that the Gradall is built on a tandem axle, whereas the Badger is built on a single axle configuration which provides less stability. Additionally, the Gradall offers 248 horsepower as opposed to the Badger which offers 160 horsepower.

- Gradall is advanced when it comes to the boom design. The entire triangular shaped boom rotates. The rotation mechanism is located at the top of the boom away from the granular materials or soils being excavated or moved. This differs from the one other manufacturer of this type of wheeled hydraulic excavator which has the rotation mechanism located at the bucket end of the boom. This design exposes the mechanical parts to the mud and water which could result in premature failure due to wear and abrasion. With the triangular shaped boom, the cutting edge of the bucket is always in line with the lower side of the boom. As a result, the operator knows exactly where the cutting edge is located when not visible such as digging under water.
- Gradall's hydraulic system has kept up with the industry standard by utilizing a high-pressure axial piston load sensing pump.
- Gradall utilizes electronic joystick controls that are mounted in the arm rests of the operator's station. This improvement is superior from an ergonomic perspective for the operator, as well as from a safety point of view in that there is no live hydraulic pressure in the cab.
- Gradall utilizes one engine to power both the vehicle and the excavator. Having a one engine design equates to cost savings in maintenance and repair throughout the life cycle of the unit.
- Gradall axle capacities have a 14,000-pound rating on the front axle and a 46,000-pound rating on the rear axle. This equates to longer life, increased carrying capacity and a better lifting base.

Currently, Gradall truck mounted hydraulic excavators are utilized by our neighbouring municipalities such as Bruce County, Simcoe County and Dufferin County. Staff have confirmed they are pleased with their performance and the reliability of the equipment.

The Gradall truck mounted hydraulic excavator is utilized within the Maintenance Division for the installation of culverts, washout repairs, material handling, breaking up ice dams, tree removal in emergencies, roadside ditching, excavating in rural areas and erosion control.

Transportation Services has owned and operated a Gradall over the past twenty-five years and is satisfied with its ability. Staff have reviewed the maintenance costs related to the current gradall and are satisfied with the results. The justification threshold to replace a gradall is approximately eight years or 6,000 hours. The current Gradall the County owns and operates is eight years old with approx. 5,000 hours on it.

The demo-unit available for purchase, is a 2019 XL4100V Gradall that is in like new condition. The warranty provided is a 'new' purchase warranty, which is 3,000 hours or two years. The two attachments being purchased with the 2019 Gradall are a forestry head and 66-inch ditching bucket. The forestry head will ensure that an excavator with a mulching head will no longer be a necessary rental for tree trimming/removal, freeing up approximately \$36,000 annually. The ditching bucket will be used for entrance culverts and shallow center line culvert placement/removals, which again will save the excavator rental costs. The only restriction to Gradall use for culvert replacement is relating to the machine width/turning radius. Culvert replacement on Grey County's high-volume roads, which cannot accommodate full road closures, will be completed using a hy-hoe excavator acquired through the hourly rentals program.

Transportation Services has researched the different types and designs of hydraulic excavators. The three design types of hydraulic excavators are tracked crawler, wheeled and truck mounted units. The truck mounted excavator best suits municipal operations in that a crawler requires a float to move it from site to site, a typical wheeled unit has a road speed of 18 to 20 kilometers per hour and the truck mounted excavator has the capability of traveling at highway speeds, thus reducing travel time when moving from one location to the other.

In summary, based on our long-term proven experience we have had with this manufacturer and design model (hydraulic truck mounted excavator), as well as our investigations into similar makes and models of hydraulic excavators, staff are recommending approval to sole source the purchase of a Gradall truck mounted hydraulic excavator from Amaco Equipment Incorporated.

Legal and Legislated Requirements

Not applicable.

Financial and Resource Implications

Item	Excluding HST	Net HST
2021-2030 10 Year Capital Forecast	\$655,070.75	\$666,600.00
2021-2030 10 Year Capital Forecast Trade-In Value	(\$140,330.19)	(\$142,800.00)
2021-2030 10 Year Capital Forecast Cost from Reserve	\$514,740.57	\$523,800.00
Sole Source Quote (Including Attachments)	\$487,550.00	\$496,130.88
Trade-In Value	(\$150,000.00)	(\$152,640.00)
Cost from Reserve	\$337,550.00	\$343,490.88
Purchase Cost Savings from Reserve Compared to 2021-2030 10 Year Capital Forecast	\$177,190.57	\$180,309.12

The 2021-2030 Ten Year Capital Forecast includes \$666,600.00 net HST for a new Gradall with attachments in year 2021. After researching costs compared to original estimates in 2020, Gradall costs have risen by approximately 30 percent. Amaco Equipment have provided a quote for a used 2019 Gradall including a new brushing head attachment and ditching bucket for a total of \$496,130.88 net HST, with a \$152,640.00 net HST trade in for our 2012 Gradall. The remaining balance owed of \$343,490.88 net HST will be transferred from the Transportation Services Equipment Reserve to accommodate the purchase. The Transportation Services Equipment Reserve had a December 31, 2019 year-end balance of \$2,669,360 and has a projected 2020 year-end balance of \$1,431,134.

Relevant Consultation

- Internal
Clerks Department
- External
Bruce County, Simcoe County and Dufferin County