
REPORT TITLE: **Transtor System at Waste Management Community Recycling Centers**

FROM: Kealy Dedman, Commissioner of Public Works

RECOMMENDATION

- 1. That the contract (Document 2022-329N) for the supply, installation and annual maintenance of Transtor systems at various Community Recycling Centres be awarded to Nexgen Municipal Inc. for a 10-year contract term, in the estimated annual maximum amount of \$860,658.50 (excluding applicable taxes) for preventive maintenance and on-demand repairs, and in the amount of \$3,739,511 (excluding applicable taxes) for the Battleford 2023 Transtor system replacement, pursuant to Procurement By-law 30-2018, as amended; and**
- 2. That the Commissioner of Public Works and Commissioner of Corporate Services and Chief Financial Officer be authorized to approve additional purchases from Nexgen Municipal Inc. for any future capital Transtor and compaction transfer trailer replacements including but not limited to the future replacements at the Brampton, Fewster and Heart Lake Community Recycling Centres as contemplated in the contract in accordance with the contract terms, subject to satisfactory performance and approved budget, pursuant to Procurement By-law 30-2018, as amended; and**
- 3. That authority be granted to increase the quantities, where actual quantities exceed the initial estimates, and escalate prices of preventative maintenance and repairs in accordance with the contract terms, subject to the limits of the approved operating budget.**

REPORT HIGHLIGHTS

- The Haul-All Transtor system includes Transtors and compaction transfer trailers.
- Transtors are receiving receptacles for the recyclable and non-recyclable materials disposed of by residents and small businesses at four of the Community Recycling Centres (CRCs), and are integral to successful operations at these facilities, enabling visitors to safely dispose of materials.
- Regional Council approved the use of Transtors as a waste transfer system at the CRCs in 2003 (Resolution 2003-560) and any CRCs constructed after 2003 were designed and constructed for the Transtor system.
- Nexgen Municipal Inc. is the only authorized dealer for Haul-All Transtor systems in Eastern Canada and the United States of America.
- Within the next 10 years many of the Transtor system components will reach their end of service life.

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- Immediate replacement of Transtor units at the Battleford Community Recycling Centre is required. These units have exceeded their service life and will not meet annual certification requirements in 2023, preventing the Region from meeting the Council approved Level of Service at this location.
 - Document 2022-329N was issued to obtain pricing for Battleford Community Recycling Centre Transtor replacements and a long-term service agreement for preventative maintenance of all Regional Transtor system assets, and also included provisions for future replacement of Transtors and compaction transfer trailers (including price adjustments).
 - The cost to replace Transtor units at Battleford Community Recycling Centre will be \$3,739,511 (exclusive of applicable taxes). Funds are available in approved Capital Project 22-6393.
 - The cost for preventative maintenance and on-demand repairs of the Transtor systems is estimated up to an annual maximum of \$860,658.50 (excluding applicable taxes). Funds are available in applicable Waste Management CRC operating budgets.
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DISCUSSION

1. Background

Based on the business case and successful pilot project described in the report of the Commissioner of Public Works, listed on the May 29, 2003 Regional Council agenda titled “Transtor Container System for Community Recycling Centres, Capital Project 03-6501”, Regional Council approved the incorporation of the Transtor system at future Community Recycling Centres (CRCs) (Resolution 2003-560). Currently, the Regional Municipality of Peel owns 52 Transtors and 10 compaction transfer trailers, across four CRCs. The Brampton, Battleford, Fewster and Heart Lake CRCs have been designed and constructed for the Transtor system.

The Transtor system is the only known system of its kind in North America. Transtors are metal receptacles which provide enclosed storage for recyclable and non-recyclable materials and have a capacity of 40 cubic metres (53 cubic yards). The Transtor units hydraulically tip materials into compaction transfer trailers, which are outfitted with compaction rams to maximize payload. Together these components form a part of the Transtor system, creating an integrated and effective waste material transfer system. Compaction transfer trailers do not require modifications and are purchased outfitted to work in conjunction with the Transtor system.

Incorporation of the Transtor system at CRCs has provided multiple benefits, including but not limited to ensuring safe disposal of materials by residents, preventing windblown debris and accumulation of litter, providing compliance with municipal zoning requirements to collect waste material in enclosed containers, and numerous operational efficiencies.

Within the next 10 years, components of the Transtor systems across the CRC network will reach the end of their service life and have been identified for replacement in Waste Management’s Infrastructure State of Good Repair Capital Plan, created in accordance with the Region’s Asset Management Policy and Provincial Regulation (O.Reg. 588/17). There is an immediate need to replace all Transtor units at the Battleford Community Recycling Centre, as they have exceeded their service life. It has been identified that these units may

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not pass the annual assessment performed by Nexgen Municipal Inc. for the 2023 operating year, which will render the system unusable and prevent the Battleford CRC from achieving the required Level of Service approved by Council, as detailed in the Region's Asset Management Policy.

As per Council Resolution 2003-560, the Region implemented the Transtor system and entered into a contract with Nexgen Municipal Inc., as the only authorized dealer of the Haul-All Transtor systems in Eastern Canada and the United States of America, for the supply of Transtor system components, and preventative maintenance and repairs. With identification of current and future replacement needs of Transtor units and system components, Waste Management is seeking authority for continued use of the Transtor system.

2. Findings

Through the Ontario Waste Management Association (OWMA) and the Municipal Waste Association (MWA), staff solicited information from municipalities that employ Transtors, on their current and planned future use of the system and evaluated alternative transfer system options, to inform a recommendation for a long-term material transfer system at Peel's CRCs.

Of the municipalities that own and operate Transtors, the Town of Drumheller, the City of Thunder Bay and the Township of Seguin responded to the Region's inquiry for information regarding their use of Transtors and potential plans for future waste material handling. These municipalities identified they will continue to use Transtors due to the benefits they provide, including but not limited to ease of operation and separation of material streams, small operating footprint, enclosed storage, and allowing safe usage and access by residents and other customers. These municipalities will proceed with replacement of Transtor units according to the schedule identified in their capital plans.

Secondly, staff researched alternative material transfer system technologies available that provide storage capabilities for recyclable and non-recyclable materials. Six alternative solutions were identified and evaluated for use at the CRCs utilizing the Transtor system. Evaluation of alternatives included but were not limited to site modifications and capital cost requirements, lifecycle costs, operational and staffing implications, storage capacity and system efficiencies, health and safety, and environmental impacts.

Staff determined that alternative waste storage and transfer technologies are not feasible options for CRCs currently operating with Transtor systems. The alternatives do not fit within the existing footprints of the CRCs and would require significant capital investment to make the necessary site modifications. In addition to one time modification costs, there are also greater estimated long-term maintenance and replacement costs, and additional staffing requirements than estimated for continued use of the Transtor systems. Some of the technologies available in the market were found to be operationally and environmentally inefficient compared to the existing Transtor system and are designed for industrial applications. Industrial applications were deemed not suitable for the CRCs as they could pose potentially significant safety hazards to the public utilizing the facilities. During staff investigations, it was also identified that the Transtor system was the only technology that was able to demonstrate the prevention of windblown litter, which is included in zoning requirements for the Battleford Community Recycling Centre.

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A further investigation determined that it was not feasible to modify the CRCs using the Transtor system to the open-air roll-off container system utilized at other CRCs. In addition to site modification costs and operational impacts noted for other technologies, the implementation of a roll-off container system would also have an estimated initial asset investment cost of \$2,500,000 and would require a minimum of four new FTEs to manage haulage demands due to smaller container capacity compared to Transtors. It would also carry an estimated additional asset state of good repair cost of \$1,100,000 over a 30-year planning horizon, when compared to the Transtor system currently in place.

3. Proposed Direction

Staff recommends that the Region enter into a contract with Nexgen Municipal Inc. (Document 2022-329N) for the annual maintenance and repair of Transtor systems at various CRCs for an estimated maximum annual cost of \$860,658.50 (excluding applicable taxes), and for the replacement of the Transtor units at the Battleford CRC for a capital cost of \$3,739,511 (excluding applicable taxes).

Staff also recommends that the Region continue use and purchase of Transtor systems (inclusive of compaction transfer trailers), and that Nexgen Municipal Inc. through Document 2022-329N, be the Region's provider of Transtor system assets, including but not limited to the future replacements at the Brampton, Fewster and Heart Lake CRCs, until such time as staff are able to identify other vendors in the market with systems that are suitable for the Region's use.

It is also recommended that staff be authorized to approve any future purchases as contemplated in the contract in accordance with the contract terms, and that authority be granted to increase the quantities of contracted preventative maintenance and repairs, in accordance with the contract terms, where actual quantities exceed the initial estimates, subject to the limits of the approved operating budget.

RISK CONSIDERATIONS

Having reliable Transtor systems is critical to the successful operations of the CRCs, and to providing the Regional Council approved Level of Service to residents. Should the Transtor units be taken out of service, it will result in service disruptions, loss of transfer capacity, and will require re-routing of residents with incoming materials to the nearest available CRC. Replacing the end-of-life units at the Battleford CRC and entering into a preventative maintenance and repair contract for the Transtor systems will avoid negative service impacts. As Transtor units are an overhead lifting device, failure of a unit carries potential safety risks for staff operating the equipment and regular maintenance, inspections and repairs are integral to ensuring the safety of all parties.

FINANCIAL IMPLICATIONS

The cost to replace 14 Transtor units at the Battleford Community Recycling Centre is \$3,739,511 plus applicable taxes. Funds are available in Waste Management approved Capital Project 22-6393.

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The preventative maintenance and on-demand repairs of the Transtor systems is estimated up to a maximum of \$860,658.50 plus applicable taxes annually. Sufficient funds are available in applicable Waste Management CRC operating budgets.

Future Transtor system purchases and annual preventative maintenance and repairs will be included in future capital and operating budget submissions.



Kealy Dedman, Commissioner of Public Works

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