



The Regional Municipality of Durham

Works Committee Revised Agenda

Wednesday, April 3, 2024, 9:30 a.m.

Regional Council Chambers

Regional Headquarters Building

605 Rossland Road East, Whitby

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

Note: This meeting will be held in a hybrid meeting format with electronic and in-person participation. Committee meetings may be [viewed via live streaming](#).

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Project

8. Works

8.1 Correspondence

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8.2 Reports

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| *f. | Report #2024-W-14
Beaver River Bridge Closure and Replacement, Regional Road 15, Township of Brock | 67 |

9. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

10. Confidential Matters

There are no confidential matters to be considered

11. Other Business

12. Date of Next Meeting

Wednesday, May 8, 2024 at 9:30 AM

13. Adjournment

Notice regarding collection, use and disclosure of personal information:

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The Regional Municipality of Durham

MINUTES

WORKS COMMITTEE

Wednesday, March 6, 2024

A regular meeting of the Works Committee was held on Wednesday, March 6, 2024 in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:30 AM. Electronic participation was offered for this meeting.

1. Roll Call

Present: Councillor Marimpietri, Vice-Chair
Councillor Cook*
Councillor Crawford
Councillor Mulcahy*
Councillor Nicholson*
Councillor Yamada
Regional Chair Henry

***denotes Councillors participating electronically**

Absent: Councillor Barton, Chair

Also

Present: Councillor Garrod*
Councillor McDougall
Councillor Pickles* attended the meeting at 10:17 AM
Councillor Schummer*
Councillor Wotten*

***denotes visiting Councillors participating electronically**

Staff

Present: E. Baxter-Trahair, Chief Administrative Officer
S. Ciani, Committee Clerk, Corporate Services – Legislative Services
S. Dessureault, Committee Clerk, Corporate Services – Legislative Services
C. Dunkley, Director of Corporate Infrastructure and Strategic Business Services, Works Department
K. Dykman*, Supervisor, Waste Services
A. Evans, Director of Waste Management Services
P. Gee, Manager of Transportation Infrastructure
C. Goodchild, Director of Planning
B. Holmes, General Manager of Transit
M. Hubble, Director of Environmental Services
J. Hunt, Regional Solicitor/Director of Legal Services, Corporate Services – Legal Services
R. Inacio, Systems Support Specialist, Corporate Services – IT

J. Kilgour*, Acting Deputy General Manager, Maintenance, Transit
R. McGregor, Manager of Transportation Design
J. Mosher, Senior Project Manager of Transportation Infrastructure
R. Jagannathan, Acting Commissioner of Works
N. Pincombe, Director of Business Planning & Budgeting
L. Saha, Manager, Waste Services
N. Taylor, Commissioner of Finance
P. Veiga, Manager of Waste Management Operations
D. Waechter, Acting Director of Transportation and Field Services
N. Williams*, Project Manager, Waste Services

*** denotes staff participating electronically**

In the absence of Chair Barton, Vice-Chair Marimpietri assumed the Chair.

2. Declarations of Pecuniary Interest

There were no declarations of pecuniary interest.

3. Adoption of Minutes

Moved by Councillor Crawford, Seconded by Regional Chair Henry,
(10) That the minutes of the regular Works Committee meeting held on
Wednesday, February 7, 2024, be adopted.

CARRIED

4. Statutory Public Meetings

There were no statutory public meetings.

5. Presentations

5.1 Ramesh Jagannathan, Acting Commissioner of Works, and Andrew Evans, Director of Waste Management Services, re: 2024 Works Department Business Plan and Budget (2024-W-6) [Item 8.2 B)]

Ramesh Jagannathan, Acting Commissioner of Works, and Andrew Evans,
Director of Waste Management Services, provided a PowerPoint presentation
with respect to the 2024 Works Department Business Plan and Budget.

Highlights from the presentation included:

- Overview
- Roads & Infrastructure
 - 2023 Accomplishments
 - Service Improvements
 - Customer Service
 - Vision Zero (Works Measures)

- Awards & Achievements
 - 2024 Proposed Expenditures and Financing
 - 2024 Base Pressures
 - 2024 Strategic Highlights
 - 2024 Roads Capital Planning Framework
 - 2024 Road Projects
 - Proposed 2024 Structures Replacement/Rehabilitation Projects
 - Proposed 2024 Traffic Programs
 - Proposed 2024 Vision Zero Program
 - Proposed 2024 Investing in Canada Infrastructure Program (ICIP) Bus Rapid Transit (BRT) Projects
 - Planned 2024 Road Tenders Funded from Previous Year Budgets
- Budget Overview – Solid Waste Management
 - 2023 Accomplishments
 - Service Improvements
 - Customer Service
 - 2024 Proposed Expenditures and Financing
 - 2024 Strategic Investments
 - 2024 Base Pressures
 - 2024 Strategic Highlights
 - 2024 Business Plan and Budget
- Staffing, Risks & Uncertainties and Future Budget Pressures
 - 2024 Strategic Highlights
 - Works Department Assessment
 - 2024 Business Plan & Budgets
 - Risks and Uncertainties
 - Beyond 2024 Business Plan and Budget
 - Forecasted Pressures – Impact on 2025 Budget
 - Growth
 - Asset Management and Infrastructure
 - Legislative and Regulatory Requirements

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(11) That the agenda be altered to consider Item 8.2 B) 2024 Works
Department Business Plan and Budget (2024-W-6), next.
CARRIED

8. Works

8.2 Reports

B) 2024 Works Department Business Plan and Budget (2024-W-6)

Report #2024-W-6 from R. Jagannathan, Acting Commissioner of Works, was received.

Staff responded to questions from the Committee regarding whether the signalization under the Bus Rapid Transit (BRT) project is covered under the Investing in Canada Infrastructure Program (ICIP) grant; whether there has been consideration made to implement the Automated Speed Enforcement (ASE) program on municipal roads; providing free green bins with the introduction of the enhanced green bin program; whether the Region of Durham is taking into consideration the ruling by the Supreme Court of Canada to define the City of Sudbury as an “employer” as defined under the Occupational Health and Safety Act (OHSA); including extended and weekend hours within construction contracts or RFP’s in order to complete projects quicker; whether staff have received any updates from the Ministry of Transportation of Ontario (MTO) with respect to when the bridge in Beaverton will be back in service, and the negative impacts that have occurred since the responsibility of the bridge passed from the Region to the MTO; whether every intersection is analyzed to see if a roundabout would be more efficient than a traffic signal; phased in budgeting versus budgeting for the entire project before it has been completed, and if there are any financial benefits of deferring payments over multiple years; and whether cameras could be placed in the pit of the Durham York Energy Centre (DYEC) so that residents could see the magnitude of waste that passes through it, from a waste diversion strategy perspective.

In response to a question from Regional Chair Henry with respect to whether the Brock and Oshawa landfill sites are still considered open landfill sites, A. Evans advised that he would look into that and follow-up with Regional Chair Henry directly.

Councillor Schummer questioned what was done to bring the budget in line with Regional Councils’ designated target, including any items deferred or removed and whether Committee could receive a summary of those items. Staff advised that a summary will be provided.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(12) That we recommend to the Finance and Administration Committee for subsequent recommendation to Council:

That the 2024 Business Plan and Budget for the Works Department’s General Tax and Solid Waste Management Operations be approved.

CARRIED UNANIMOUSLY ON THE
FOLLOWING RECORDED VOTE:

Yes

No

Councillor Crawford
Regional Chair Henry
Councillor Marimpietri
Councillor Mulcahy
Councillor Nicholson
Councillor Yamada

None

Members Absent: Councillor Barton, Chair
Councillor Cook

Declarations of Interest: None

This item will be considered by the Finance & Administration Committee at their meeting to be held on March 19, 2024.

6. Delegations

There were no delegations heard.

7. Waste

7.1 Correspondence

- A) Correspondence received from Linda Gasser, Whitby Residents, dated March 5, 2024, re: New Waste Management Services By-law (2024-WR-1)

Moved by Councillor Yamada, Seconded by Councillor Crawford,
(13) That correspondence received from Linda Gasser, Whitby resident, dated March 5, 2024, regarding Report #2024-WR-1: New Waste Management Services By-law, be referred to consideration of Item 7.2. A) New Waste Management Services By-law (2024-WR-1).
CARRIED

7.2 Reports

- A) New Waste Management Services By-law (2024-WR-1)

Report #2024-WR-1 from R. Jagannathan, Acting Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(14) That we recommend to Council:

- A) That By-law #46-2011, as amended, being a by-law to regulate the provision of Waste Management Services under the jurisdiction of the Regional Municipality of Durham, be repealed and replaced with a revised Waste

Management Services By-law generally in the form included as Attachment #1 to Report #2024-WR-1 of the Acting Commissioner of Works, as modified and approved by the Regional Solicitor; and

- B) That staff be directed to submit a short form wording and set fines application, in a form satisfactory to the Regional Solicitor, to the Provincial Regional Senior Justice for approval, and such court order be attached to the by-law once received for reference.

CARRIED

B) Update on Small Business Recycling Post Blue Box Transition (2024-WR-2)

Report #2024-WR-2 from R. Jagannathan, Acting Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(15) That we recommend to Council:

- A) That, effective January 1, 2026, the Regional Municipality of Durham cease to provide Blue Box recycling services to the small businesses currently receiving municipal waste collection services as listed in Attachments #1 and #2 of Report #2024-WR-2 of the Acting Commissioner of Works;
- B) That staff be directed to develop and implement a communication plan to advise these small businesses that, effective January 1, 2026, they will no longer receive municipal Blue Box recycling services;
- C) That staff be authorized to send a letter to the Premier of Ontario and the Minister of the Environment, Conservation and Parks strongly endorsing the creation of a Blue Box recycling regulation for Ontario's Industrial, Commercial and Institutional sector as it has done for Ontario's residential sector; and
- D) That a copy of Report #2024-WR-2 be shared with the Regional Local Area Municipalities, the Premier of Ontario and the Minister of the Environment, Conservation and Parks.

CARRIED

8. Works

8.1 Correspondence

There were no communication items considered.

8.2 Reports

A) The Regional Municipality of Durham's Drinking Water Systems 2023 Summary Report (2024-W-5)

Report #2024-W-5 from R. Jagannathan, Acting Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(16) That we recommend to Council:

- A) That the 2023 Summary Report for the Regional Municipality of Durham Drinking Water Systems be received for information;
- B) That receipt of Report #2024-W-5 of the Acting Commissioner of Works be confirmed by resolution of Regional Council; and
- C) That a copy of this resolution be forwarded to the Ontario Ministry of the Environment, Conservation and Parks' York-Durham District Office to indicate that the conditions of Schedule 22 of Ontario Regulation 170/03 have been fulfilled.

CARRIED

B) 2024 Works Department Business Plan and Budget (2024-W-6)

This item was considered earlier in the meeting. See pages 3 to 5 of these minutes.

C) Lease Agreement with 555 Hastings Avenue Inc. for space for use by Durham Regional Police Service (DRPS), located at 555 Hastings Avenue and 556 Hastings Avenue, City of Oshawa (2024-W-7)

Report #2024-W-7 from R. Jagannathan, Acting Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(17) That we recommend to Council:

- A) That the Lease Agreement with 555 Hastings Avenue Inc. for the premises in the City of Oshawa, consisting of 8,784 square feet of office and Industrial space located at 555 Hastings Avenue and 0.22 acres of storage yard space at 556 Hastings Avenue, in the City of Oshawa, be approved with the following terms and conditions:
 - i) The lease term is for a period of five (5) years commencing April 1, 2024, and ending on March 31, 2029;

- ii) The annual rent for the lease term will be \$228,384*, payable in equal monthly instalments of \$19,031*, based on a rate of \$26.00 per square foot per annum;
 - iii) The basic rent will be increased by 2.5 percent for each successive year of the lease term;
 - iv) Additional rent is estimated at \$1.92 per square foot or \$16,865.28 per annum, including maintenance costs, property taxes and insurance;
 - v) The Region will have exclusive use of the 0.22-acre storage yard space at 556 Hastings Avenue, City of Oshawa. There is no additional cost for the use of this space;
 - vi) The Region will have the option to renew the lease for two additional terms of five (5) years under the same terms and conditions, with rent to be negotiated at the time of renewal;
 - vii) The Region will be responsible for all maintenance and repair to the leased space, snow and ice removal and lawn cutting;
 - viii) The Landlord will be responsible for all improvements, repairs, renovations and alterations to the exterior of the building and property, as well as all systems servicing the leased space (e.g., HVAC); and
- B) That the Regional Chair and Clerk be authorized to execute all documents associated with the Lease.
- (*) exclusive of applicable taxes

CARRIED

D) Standardization and Sole Source Acquisition of Combination Plow/Dump/Salter Trucks (2024-W-8)

Report #2024-W-8 from R. Jagannathan, Acting Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Crawford,
(18) That we recommend to Council:

- A) That the Regional Municipality of Durham continue to standardize Viking Cives Ltd. International Truck combination cab, chassis, and truck mounted plows/dump/salter bodies;
- B) That staff negotiate and award a sole source agreement with Viking Cives Ltd. for the supply, customization, and delivery of Viking Cives Ltd. International Truck combination cab, chassis, and truck-mounted plows/dump/salter bodies, parts and servicing of the units from January 1,

2024, to December 31, 2028, at an estimated cost of \$18,457,640* for the term, including \$2,890,000* for 2024; and

- C) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source agreement.
(*) before applicable taxes

CARRIED

9. Advisory Committee Resolutions

There were no advisory committee resolutions to be considered.

10. Confidential Matters

There were no confidential matters to be considered.

11. Other Business

11.1 Water/Sewer Capacity Needs for Accessory Apartments

In response to a question from the Committee regarding whether the Region would have the appropriate water and sewer capacity for residential accessory units, staff advised that they are constantly monitoring water usage with the Finance Department and population densities with the Planning and Economic Development Department against available plant capacity, and at this time there are no concerns with plant capacity as it relates to residential accessory units.

12. Date of Next Meeting

The next regularly scheduled Works Committee meeting will be held on Wednesday, April 3, 2024 at 9:30 AM in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby.

13. Adjournment

Moved by Regional Chair Henry, Seconded by Councillor Yamada,
(19) That the meeting be adjourned.

CARRIED

The meeting adjourned at 11:25 AM

Respectfully submitted,

T-D. Marimpietri, Vice-Chair

S. Ciani, Committee Clerk

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-WR-3
Date: April 3, 2024

Subject:

Sole Source of Promotion and Education Services to be Provided by The Regional Municipality of Durham for Circular Materials Ontario for the Blue Box Program under Extended Producer Responsibility

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to negotiate a sole source agreement with Circular Materials Ontario, for the Regional Municipality of Durham to provide promotion and education services for the Blue Box program for an initial term of eighteen months, from July 1, 2024, to December 31, 2025, with the option to extend the agreement for three additional one-year periods, for an estimated revenue of \$159,000 for the initial contract term and \$480,000 over the full term; and
 - B) That the Commissioner of Finance be authorized to execute the necessary documents for the negotiated agreement.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain Regional Council authorization to negotiate a sole source contract with Circular Materials Ontario (CMO) for the Regional Municipality of Durham (Region) to provide promotion and education services for the Blue Box program which will be delivered by/on behalf of the producers under the Extended Producer Responsibility regime starting July 1, 2024.

2. Background

- 2.1 The Region of Durham currently creates promotional messaging and maintains online tools for Durham residents to successfully participate in the Blue Box recycling program for all eight local area municipalities. These tools include waste guides and collection schedules, waste website widgets and a mobile waste app.
- 2.2 In June 2021, the Province of Ontario released Regulation 391/21 Blue Box under the Resource Recovery and Circular Economy Act, 2016, which shifts the financial and operational responsibility of recycling from municipalities to the organizations that produce packaging, paper, and packaging-like products, with the Regulation taking full effect provincewide on January 1, 2026.
- 2.3 The Region will transition its curbside Blue Box collection program to producers on July 1, 2024. During the transition period from July 1, 2024, to December 31, 2025, producers must maintain collection service at the same level currently offered by municipalities. They are also obligated to promote recycling and educate residents so they are equipped to participate in the Blue Box program.
- 2.4 CMO, the administrator of the new Common Collection System (CCS), is a Producer Responsibility Organization (PRO) contracted by producers to oversee Blue Box collection, management, and promotion and education services for eligible sources under the Regulation. CMO was founded by seventeen of Canada's leading food, beverage and consumer products manufacturers, restaurants, and retailers.

3. Previous Reports and Decisions

- 3.1 Report #2017-COW-178 "Update on the Regional Municipality of Durham's Participation and Opportunities to Influence the Implementation of the Waste Diversion Transition Act, 2016, the Resource Recovery and Circular Economy Act, 2016, and the Ministry of the Environment and Climate Change's Strategy for a Waste-Free Ontario: Building the Circular Economy" directed staff to work cooperatively with other Ontario municipalities and producers to establish Extended Producer Responsibility (EPR) programs beneficial to Durham residents.
- 3.2 Report #2020-COW-15, Council Resolution – Blue Box Resolution, established the Region's support for a successful transition to EPR.

4. Agreement with Circular Materials

- 4.1 CMO has requested that the Region continue to promote and provide education on the Blue Box program to single family dwelling residents. CMO will directly deliver promotion and education information for multi-residential properties. Under the proposed agreement, CMO will provide compensation based on household counts for the Region to continue promotion and education activities for blue box materials.
- 4.2 Under the proposed agreement, the Region would continue to populate the waste app and website with information for residents regarding acceptable Blue Box materials and recycling collection schedules. The Region's waste app currently has over 137,000 downloads, with approximately 24,000 new users added in 2023. The Region will include Blue Box information in the printed Waste Guide, which is currently distributed with new resident kits and available at waste events. The Region will also continue to incorporate Blue Box information in presentations to schools and community groups. These resources provide residents with easy access to program information and will supplement the Blue Box outreach provided by CMO across the province.
- 4.3 Households in the Town of Whitby are not included in the waste app revenue as the Town of Whitby maintains the waste app for Whitby residents. The Region provides waste app services for the City of Oshawa and City of Oshawa households are included in the waste app revenue to be received by the Region.
- 4.4 The Town of Whitby also produces and prints a few thousand waste collection calendars annually that include Blue Box information. These are distributed to residents through Town facilities and mailed out as requested. In recognition of the cost of this waste collection calendar, the Region and Town of Whitby will share the revenue equally for Town of Whitby households in the second year of the contract with CMO (January 1, 2025 – December 31, 2025) and any subsequent optional year.
- 4.5 The City of Oshawa will receive a co-branded printed waste guide tailored to Oshawa residents, developed and printed by the Region in lieu of revenue sharing under the agreement with CMO.
- 4.6 This revenue from the CMO agreement will offset the Region's costs for the waste app and the waste guides. As more residents transition to the waste app, the Region will continue to receive value, as the printed annual waste collection calendars are no longer distributed to households.

5. Financial Implications

- 5.1 In 2022, material costs for the Blue Box program were \$158,000, excluding staff costs, as reported to the Resource Productivity and Recovery Authority (RPRA) annual data call. These expenditures included printed waste calendar mailout, which was discontinued in 2023.
- 5.2 In 2024, the Region will continue to receive funding from RPRA for approximately 50 per cent of the Blue Box program operating costs incurred from January 1 to June 30, 2024, in addition to any revenue from marketed materials and Waste Management Facility user tipping fees.
- 5.3 Should the Region choose to execute an agreement with CMO in 2024, staff will streamline promotion and education activities for the Blue Box program to work within the annual contracted budget.
- 5.4 If the Region and CMO decide not to execute the agreement for promotion and education activities, CMO will be responsible for providing these activities to residents.
- 5.5 The revenues from the proposed agreement will offset the material costs associated with Blue Box program information.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
 - a. Goal 1.2 Increase waste diversion and resource recovery.

7. Conclusion

- 7.1 The Regional Municipality of Durham staff recommends entering into a sole source agreement with Circular Materials Ontario effective July 1, 2024, to December 31, 2025, to ensure service continuity for the Regional Municipality of Durham's residents and continued ease of access to information, and that the Commissioner of Finance be authorized to execute the agreement with Circular Materials Ontario.
- 7.2 Staff will continue to evaluate the program and work with CMO to determine whether to maintain promotion and education activities once the Regulation takes full effect on January 1, 2026.

7.3 For additional information, contact: Andrew Evans. Director, Waste Management Services, at 905-668-4113, extension 4102.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-WR-4
Date: April 3, 2024

Subject:

Proposed Automated Cart-Based Garbage Collection Pilot Project

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That Regional Council direct staff to implement a one-year pilot project to assess the impacts of an automated cart-based residential garbage collection pilot project;
 - B) That staff be authorized to procure the necessary carts that are compatible with the automated collection vehicle to be used in the proposed pilot project from Miller Waste at a cost not to exceed \$49,500;
 - C) That the estimated cost of \$50,000 for this pilot project be financed from within the 2024 Waste Management Business Plans and Budget; and,
 - D) That staff be required to report back to Regional Council on the results and recommended next steps for the project.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain the Regional Municipality of Durham's (Region) Council's approval to implement a one-year pilot project to assess the impacts of automated cart-based residential garbage collection.

2. Background

- 2.1 Waste collection is consistently ranked high as among the most hazardous jobs ([Canada's Most Dangerous Jobs of 2022 | W.B. White Insurance Ltd \(wbwhite.com\)](#), [Top 10 Most Dangerous Jobs According to OSHA | Invictus Law, P.C. \(invictuslawpc.com\)](#)) because of the significant risk of operators being struck by passing vehicles while collecting waste, trips, falls, joint injuries, risk of being cut, punctured or contracting disease from handling sharp items, and general injury to shoulders, hips and legs from this very demanding and heavy manual operation. These challenges make acquiring and retaining staff to sustain manual waste collection increasing difficult.
- 2.2 These issues are manifesting across the waste industry, posing significant challenges around staff recruitment and retention for manual waste collection operations. Specific challenges include:
- A diminishing labour pool willing to withstand the rigour of extensive physical labour.
 - Significant health and safety risks from slips, trips and falls, and ongoing lifting of heavy waste materials can lead to high absenteeism and shorter careers within the industry.
 - Adverse working conditions due to weather conditions, the nature of the work and negative perceptions of the industry.
- 2.3 The Region's waste collection contractors have experienced ongoing labour shortages since the beginning of the Covid pandemic. These shortages have impacted Regional residents through incomplete and deferred yard waste collections, and core garbage, recycling and green bin collection services ending later every evening. These labour shortages show no sign of subsiding.
- 2.4 The Region does not directly operate collection systems, however, it sets the standards required of contractors and, therefore indirectly experience the financial impact of issues impacting the industry. For example, the Region recently experienced costly increases in collection contract renewals after collection contractors significantly increased workers salaries to attract and retain workers.
- 2.5 The Region's waste collection contractors operate automated cart-based collections in other municipalities, and they report having almost no labour issues or service disruptions during the pandemic or on an ongoing basis.

- 2.6 Automated collection systems feature collection vehicles with mechanical arms that the driver operates using a joystick and camera in the cab. The arm picks up a wheeled cart, dumps it and places it back at the curb. Rarely are drivers required to exit the cab while conducting their work, and carts are returned to where they were placed for collection.
- 2.7 Industry research and local Ontario municipal experiences also demonstrate that it is becoming increasingly difficult for municipalities to obtain competitive bids from service providers for manual waste collection. Some Ontario municipalities report that service providers no longer bid on manual waste collection contracts. Monitoring of industry trends is ongoing, and several communities have already transitioned completely to automated collection systems.

3. Previous Reports and Decisions

- 3.1 There are no previous reports on Automated Cart Collection.

4. Benefits of Automated Waste Collection

- 4.1 Automated waste collection vehicles are typically single-operator systems instead of manual collection systems using rear-loading trucks, often requiring two operators. Also, because there is no need for heavy lifting or continuous getting in and out of vehicles with automated collection, operators can work an entire career operating an automated waste collection vehicle, with a reduced risk of physical injury. These factors contribute to reduced labour costs, from reduced need for labour and reduced injury-related costs and a more diversified workforce.
- 4.2 Also, manual waste collection relies on able-bodied, healthy operators willing to do this type of heavy, challenging work, as each household can set out four bags, each weighing up to 20 kg (44 lbs). Each household can set out up to four bags/cans for every collection, and up to 1,000 households on each collection route. Conversely, automated waste collection can be carried out by anyone who can drive a truck, as physical lifting is not required. The size, agility, physical ability, and age of the worker are not significant factors with automated collection, and operators do not encounter the waste they are collecting. This opens the available labour market extensively to every demographic, potentially including people with disabilities.

- 4.3 From a resident's perspective, rolling a single cart to the curb is more accessible than lifting and carrying multiple heavy bags/cans to the curb. Carts have a lid, which reduces litter, do not require bending down to pick them up and take up significantly less floor space than three or four garbage bags/cans. Also, since each cart can hold about four bags of garbage, residents only need one trip to the curb to set out their waste. Finally, carts are available with locking lid systems, which reduces illegal dumping and the ability of animals to interfere with the waste. Automated Waste Cart Collection Pilot.
- 4.4 Staff propose a pilot project from June 2024 to May 2025 of approximately 680 households to assess the impacts of an automated cart-based garbage collection on Durham's waste collection operations.
- 4.5 The following aspects will be explored in this pilot:
- a. Time efficiency - the number of households that can be collected in a day with each collection vehicle compared to manual collection.
 - b. Health and safety – the frequency and severity of health and safety incidents compared to manual collection.
 - c. Accessibility and ergonomics – residents' and operators' ease of maneuvering/handling carts compared to garbage cans and garbage bags.
 - d. Litter – the amount of litter generated from cart-based garbage collection compared to garbage bag/can collection.
 - e. Community Suitability – the challenges posed by using carts in areas with steep hills, smaller lots and on-street parking.
- 4.6 Regional staff has pre-selected two pilot study locations - rural residents in the Township of Scugog (Attachment #1) and urban residents in north Ajax (Attachment #2). The routes are included in Contract C003326 with Miller Waste Systems and were selected based on the following criteria:
- a. Friday collection day – allows for service continuity as the contractor can have a standby truck available from another municipality that does not operate on Fridays, if needed, for truck repairs or maintenance for the duration of the pilot, and;
 - b. A collection route not adjacent to another where the boundary streets may have carts on one side and manual collection on the other.

- 4.7 Staff propose purchasing the carts required for the pilot project directly from Miller Waste to ensure they are compatible with the collection equipment. The Region intends to have the carts cleaned and repurposed in other operations after the conclusion of the pilot rather than being disposed of.
- 4.8 Residents in the pilot project areas will be provided with a cart for garbage collection only, rather than a cart for garbage and a separate cart for organics. This is a cost-saving measure because providing automated carts for organics collection in the pilot project would also double the project costs due to the doubling of required bins and the need for a second automated collection vehicle. Also, the automated organics carts cannot be repurposed in other operations after the conclusion of the pilot project. The data gathered from this pilot using garbage carts can only be extrapolated to determine the impact of an automated organics collection system. Residents will continue using the regular green bins for the duration of the pilot project.
- 4.9 The pilot project residents will receive notice prior to the start of the pilot to inform them that their area has been selected and a complete instruction package about the pilot. The affected local and Regional Councillors will also receive a complete information package to be able to answer questions from residents.
- 4.10 At the start-up of the pilot, residents who are resistant to using a cart will be encouraged to participate for a trial duration prior to being allowed to opt out of the pilot. In other studies, it has been found that most residents who were initially resistant to this change continued to participate for the duration of the study.
- 4.11 During the pilot, staff will support residents with any unforeseen challenges and inquiries that may arise. Staff will also work with residents to seek feedback and identify and resolve issues.

5. Automated Garbage Cart Collection in Other Municipalities

- 5.1 Table 1 below shows a listing of the Ontario municipalities that have already implemented or are in the process of implementing an automated cart collection program:

Table 1 Ontario municipalities with cart collection programs

Municipality	Status	Year
City of Toronto	Complete	2008
Guelph	Complete	2014
Region of Peel	Complete	2016
Sault St Marie	Complete	2019
Municipality of Bluewater	Complete	2020
Simcoe County	Complete	2021
Halton Region	Pilot in progress	2023
Barrie	In Progress	2025
Kingston	In Progress	2025
Kitchener	In Progress	2026
Waterloo Region	In Progress	2026

6.2 The following are advantages that these municipalities listed for moving to an automated collection system:

- Reduced employee injuries, lost time, and WSIB claims.
- Decreased employee turnover while increasing productivity due to fewer lost-time incidents and reduced operator injuries.
- Cost savings associated with single-operator vehicles.
- Convenient and easy to use, wheeled containers improved maneuverability and a higher measure of safety for residents (no lifting or carrying).
- Cleaner and healthier neighbourhoods with less litter on the streets after pickup.
- Collection vehicles are being developed to include internal-facing cameras that can identify contamination in waste being deposited into the vehicle.
- Automated collection vehicles can be fitted with alternate fueling systems (CNG/electric).

- The sole sourcing of the bins for the pilot project will be submitted put forth for approval based on the sole source procedures, and with the understanding that, if the pilot is successful, staff may recommend adding automated waste and source-separated organics (SSO) curbside collection to the scope of work for future residential waste and SSO collection contracts in accordance with the Region's Purchasing By-Law.

6.3 The following are some disadvantages/challenges that these municipalities experienced from moving to automated collection systems:

- High initial/upfront costs associated with purchasing the carts.
- Residents complaints regarding cart storage and cart placement.
- Significant upfront public educational resources for the rollout of the program.
- New driver training requirement and initially slower collection times as drivers become familiar with the technologies.

6. Financial Implications

6.1 Table 1 details the total estimated cost of completing the one-year automated waste collection pilot, including carts, promotion and education costs.

Table 1: Estimated One-time Automated Waste Collection Pilot Costs

Automated Waste Collection Pilot Costs	Total
Purchase of carts	\$49,500
Promotion and Education Campaign- Information packages, door hangers	\$500
Total	\$50,000*

*Dollar amounts exclude applicable taxes.

6.2 The estimated cost of \$50,000 for this pilot project will be financed within the 2024 Waste Management Business Plans and Budget.

- 6.3 Miller Waste Systems is willing to participate in the pilot project under the existing provisions of contract C003008 and at no additional cost to the Region. The sole sourcing of the bins for the pilot project will be submitted for approval based on the Purchasing By-law, with the understanding that, if the pilot is successful, a public bidding process will be undertaken for future requirements.

7. Relationship to the Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 1.1 Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment.
 - b. Goal 1.2 Increase waste diversion and resource recovery.
 - c. Goal 1.4 Demonstrate leadership in sustainability and addressing climate change.
 - d. Goal 5.1 Optimize resources and partnerships to deliver exceptional quality services and value.
 - e. Goal 5.2 Collaborate for a seamless service experience.

8. Conclusion

- 8.1 The anticipated growth in the Region and the changing labour market make it imperative for the Region to keep up with the increasing demands of garbage collection. Assessing the benefits of an automated cart-based program for safe and timely collection of garbage is an effective way to ensure a sustainable future waste collection service.
- 8.2 Staff must fully understand the benefits and challenges of automated waste collection to better plan for upcoming waste collection contracts and the future of Durham Region's waste collection program. A pilot project will allow staff to evaluate public perception, cost implications and the logistics of an automated cart-based garbage collection program.
- 8.3 Other Ontario municipalities have implemented automated cart-based garbage collection with improvements in increased time efficiencies, lower rates of injury, significantly reduced service interruptions and delays, and improved accessibility for users.

- 8.4 Staff will use various tools to measure the performance indicators, including resident surveys, time-in-motion studies and a detailed comparison of health and safety incidents. Monitoring and feedback from the pilot will be used to assess the feasibility of inclusion in upcoming collection contracts.
- 8.5 This report has been reviewed by the Finance Department.
- 8.6 For additional information, contact: Andrew Evans, Director, Waste Management Services at 905-668-7711, extension 4102.

9. Attachments

Attachment #1: Pilot Area Map – Township of Scugog

Attachment #2: Pilot Area Map – Town of Ajax

Respectfully submitted,

Original signed by:

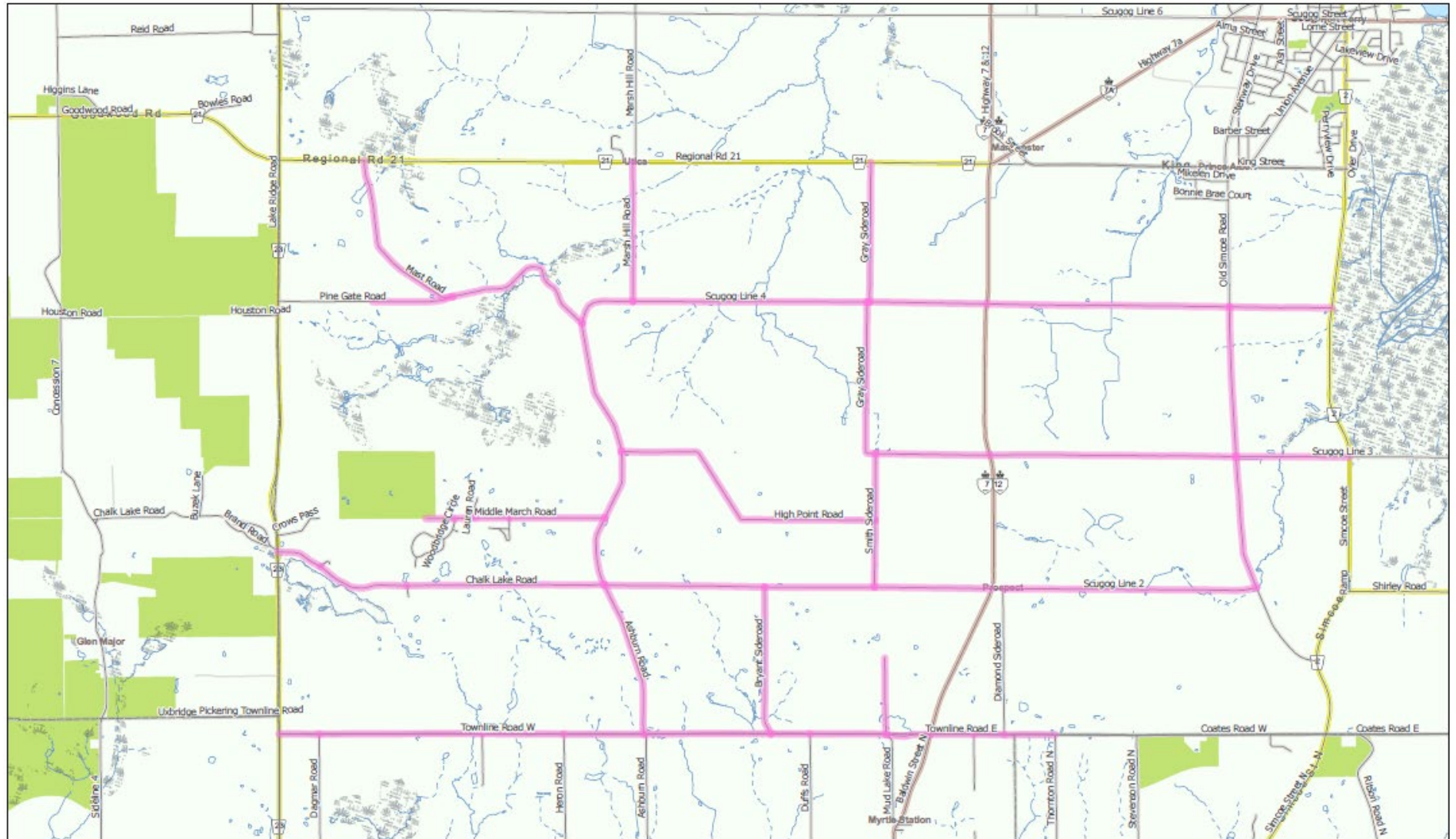
Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

Attachment #1: Pilot Area Map- Township of Scugog





File: 03-05

March 6, 2024

DELIVERED BY E-MAIL
clerks@clarington.net

Municipality of Clarington
40 Temperance Street
Bowmanville, ON L1C 3A6

Re: Item ED-24-24 - Interchange at Townline Road (Ward 5)

Oshawa City Council considered the above matter at its meeting of February 26, 2024 and adopted the following recommendation of the Economic and Development Services Committee:

1. "That staff investigate the feasibility of adding a 401 interchange at Townline Road; and,
2. That copies of this resolution be sent to the Region of Durham, the Municipality of Clarington and local MPPs and they be requested to investigate this proposed intersection from their individual perspectives."

If you need further assistance concerning the above matter, please contact Anthony Ambra, Commissioner, Economic and Development Services, at the address listed below or by telephone at 905-436-3311.

Kind Regards,



Mary Medeiros
Director, Legislative Services/City Clerk

/kc

Cc: Economic and Development Services Department
Region of Durham
MPP Jennifer French
MPP Todd McCarthy

The Corporation of the City of Oshawa, 50 Centre Street South, Oshawa, Ontario L1H 3Z7
Phone 905-436-3311 1-800-667-4292 Fax 905-436-5697
www.oshawa.ca

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-9
Date: April 3, 2024

Subject:

Declaration of Lands as Surplus and Approval to Transfer the Surplus Lands to the Hamilton-Oshawa Port Authority's wholly owned subsidiary Great Lakes Port Management Inc.

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That Part of Lot 5, Broken Front Concession, in the Geographic Township of East Whitby, now in the City of Oshawa, in the Regional Municipality of Durham, identified as part of the PIN 16378-0001 (LT) and described further as Part 1 on Reference Plan 40R-32006 (the Lands) be declared as surplus to Regional Municipality of Durham requirements;
- B) That sections 3 and 4 (1) of Regional By-law #52-95 be waived to facilitate the land transfer from the Regional Municipality of Durham to Great Lakes Port Management Inc.;
- C) That Regional staff be authorized to transfer the Lands to Great Lakes Port Management Inc., a wholly owned subsidiary of the Hamilton Oshawa Port Authority (HOPA), for a compensation amount of \$433,000;
- D) That the transfer authorized by Recommendation C) be subject to the following being registered on title to the Lands:
 - I. Easements for the landowner, McAsphalt Industries Limited, of the adjacent properties at 1221 Farewell Street and 1241 Farewell Street for access to the Lands; and

- II. Easements for municipal services and existing utilities/services provided by Bell Canada, Enbridge Gas, Oshawa Power and Utilities Commission, and the Regional Municipality of Durham for access, maintenance, and repairs;
- E) That authority be granted to the Commissioner of Works to execute all documents associated with this land transfer;
- F) That the Regional Road By-law #22-2018 be amended to remove the Lands from the by-law, and that Regional staff prepare the required amending bylaw and present it to Regional Council for passage to give effect thereto;
- G) That Regional Council pass a stop-up and close by-law with the consent of HOPA being obtained pursuant to Section 34(2) (b) of the Municipal Act, 2001, to permit the transfer of the Lands per the requirements under the Municipal Act. The draft bylaw is attached as Attachment #3 to this report; and
- H) That a copy of this report be provided to the City of Oshawa and Hamilton Oshawa Port Authority for information.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain approval to stop-up and close part of Regional Road 56 (commonly known as Farewell Street) (the Lands) (Attachment #1) and declare it surplus to the Regional Municipality of Durham's (Region) requirements, and to authorize staff to transfer the Lands, subject to certain easements for neighbouring property owners for access, to Great Lakes Port Management Inc., a wholly-owned subsidiary of the Hamilton-Oshawa Port Authority (HOPA).

2. Background

- 2.1 Regional Road 56 (Farewell Street) provides direct access to industrial businesses in south Oshawa, including Great Lakes Port Management Inc., a wholly owned HOPA subsidiary, and McAsphalt Industries Limited.
- 2.2 The Region included a proposed rehabilitation and reconstruction of Farewell Street in the 2022 Capital Budget and Nine-Year Forecast, traversing the subject Lands. During the detailed design and stakeholder engagement, HOPA's representatives requested that the Region provide a broader cross-section on the subject road segment to allow for inbound truck staging on the entrance to the port lands and to maintain a dedicated

lane for each of the northbound and southbound lanes through traffic. However, HOPA's request was beyond the Region's mandate and scope of the planned work.

- 2.3 HOPA requested that the Region transfer ownership of the Lands, totalling 4,269 square metres, to the Authority to allow for timely and strategic improvements to the main entrance to the port lands and to improve fluidity and safety within the port district.
- 2.4 HOPA would assume responsibility for all land improvement costs and ensure that the existing access for businesses adjoining the Lands is maintained upon the transfer of ownership of the Land.
- 2.5 HOPA would assume responsibility for all the asset management and maintenance (including winter maintenance) for the roadway infrastructure on the Lands.
- 2.6 The Region will avoid the costs of the proposed rehabilitation estimated at \$200,000, and ongoing maintenance for this section of Farewell Street.
- 2.7 McAsphalt Industries Limited, owner of 1221 and 1241 Farewell Street, provided the Region with a letter confirming their support of the Lands transfer to HOPA. McAsphalt will, however, require an easement for access to the lands.
- 2.8 Bell Canada and Enbridge advised that they require easements on the title of the property post-transfer. Oshawa Power and Utilities Commission (OPUC) advised that they have no concerns with the property being transferred to HOPA; however, they will need unobstructed access to the Lands through an easement.
- 2.9 The City of Oshawa indicated that they do not require an easement. However, HOPA will become responsible for the existing streetlighting luminaires and associated hydro costs within the Lands area.

3. Previous Reports

- 3.1 At its meeting on February 23, 2022, Regional Council endorsed, in principle, HOPA's request [Works Committee Report #2022-W-10](#).

4. Property Disposition

- 4.1 The subject property is a portion of Farewell Street situated south of Harbour Road in the City of Oshawa. The property is a dead-end road connecting to HOPA's lands within the vicinity of an industrial area.

- 4.2 Regional By-law #52-95 established the procedures governing the sale of real property. The initial step in the disposal process is to declare the real property as surplus to Regional requirements. There is no internal opposition to HOPA's request; therefore, the lands can be declared surplus and transferred to HOPA. Section 3 of the bylaw states that notice of the proposed sale must be given to the public and other persons, authorities, or bodies corporate. Section 4 (1) of the By-law states that any real property that has been declared surplus shall first be offered for sale to the area municipality in which the property is situated at a price to be negotiated based on (a) the manner in which the Region acquired the property; (b) the use to which the Region had put the property; (c) the monies that have been expended by the Region on the property; and (d) the fair market value of the property. However, sections 3 and 4 (1) of the By-law are being waived for this transaction.
- 4.3 HOPA is the adjacent landowner to the Region's subject surplus lands at Farewell Street, which consists of approximately 4,269 square metres and has an estimated fair market valuation of \$633,000. The property will be transferred to HOPA for \$433,000, representing the fair market value less the road rehabilitation cost avoided (\$633,000 - \$200,000).

5. Conclusion

- 5.1 Regional Municipality of Durham staff recommend that Part of Lot 5, Broken Front Concession, in the Geographic Township of East Whitby, now in the City of Oshawa, in the Regional Municipality of Durham, identified as part of the PIN 16378-0001 (LT) and described further as Part 1 on Reference Plan 40R-32006 (the Lands) be stopped up and closed and declared surplus to the Regional Municipality of Durham's needs and that the land be conveyed to the Great Lakes Port Management Inc. (a wholly-owned Hamilton Oshawa Port Authority subsidiary) for a compensation amount of \$433,000.
- 5.2 This report has been reviewed by Legal Services – Office of the CAO and Legislative Services – Corporate Services.
- 5.3 For additional information, contact: Christine Dunkley, Director, Corporate Infrastructure and Strategic Business Services extension 3475.

6. Attachments

Attachment #1: Location Map – Registered Plan 40R-32006

Attachment #2: By-law to Amend By-law #22-2018

Attachment #3: Stop up and Close By-law

Respectfully submitted,

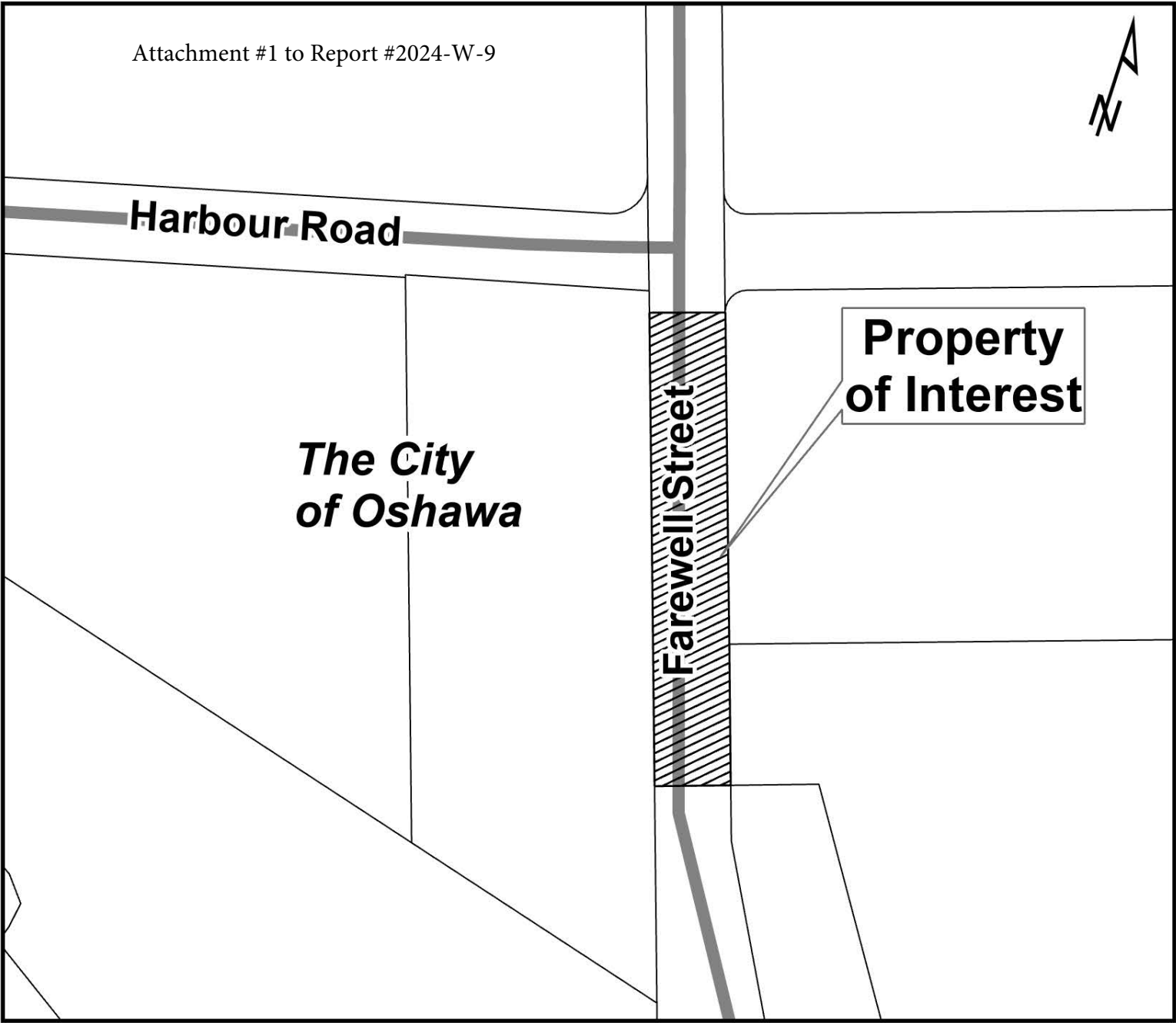
Original signed by:

Ramesh. Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner, Works

Recommended for Presentation to Committee

Original signed by:

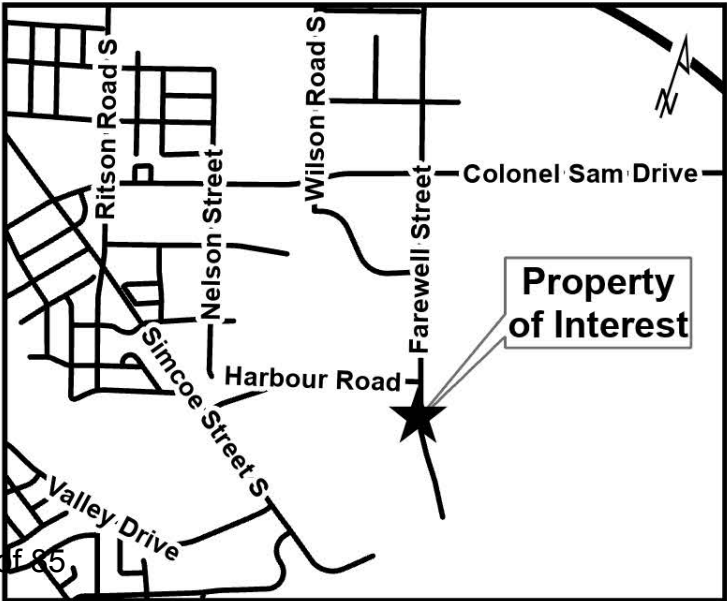
Elaine C. Baxter-Trahair
Chief Administrative Officer



- Ownership Parcel
- Property of Interest

Attachment #1 - Location Map

Farewell St
City of Oshawa



GIS Data: Produced by Durham Region, 2023.
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By-Law Number xx-2024**of****The Regional Municipality of Durham**

Being a by-law to amend By-law Number 22-2018 by which the linear limits of the several roads comprising the Regional Road system are defined.

Now therefore, the Council of The Regional Municipality of Durham hereby enacts as follows:

1. That Schedule "A" be amended by **deleting** therefrom the following:

BEING that portion of road or the deviations thereof in the City of Oshawa known as Farewell Street:

Regional Road Number	From:	To:	Length of Section (m)
56	COMMENCING in Broken Front Concession, on the road between Lots 5 and 6, known as Farewell Street, approximately 220 metres south of the southern limit of Harbour Road;	northerly on the road between Lots 5 and 6 to the southern limit of the road between Broken Front Concession and Concession I, being Regional Road 22 (Bloor Street), which is also the southern limit of the King's Highway 401.	1615.0

2. That Schedule "A" be amended by **adding** thereto the following:

BEING that portion of road or the deviations thereof in the City of Oshawa known as Farewell Street:

Regional Road Number	From:	To:	Length of Section (m)
56	COMMENCING in Broken Front Concession, on the road between Lots 5 and 6, known as Farewell	northerly on the road between Lots 5 and 6 to the southern limit of the road between Broken	1612.0

	Street, at the southern limit of Harbour Road;	Front Concession and Concession I, being Regional Road 22 (Bloor Street), which is also the southern limit of the King's Highway 401.	
--	--	---	--

3. This By-law shall come into force and effect _____, 2024.

This By-law Read and Passed on the ____ day of _____, 2024.

J. Henry, Regional Chair and CEO

A. Harras, Regional Clerk

By-law Number 2024-
of The Regional Municipality of Durham

Being a by-law to stop up and close as a public highway and to convey, that portion of Farewell Street (Regional Road 56) legally described as Part of Lot 5, Broken Front Concession, in the Geographic Township of East Whitby, now in the City of Oshawa, in the Regional Municipality of Durham, identified as part of PIN 16378-0001 (LT) and described further as Part 1 on Reference Plan 40R-32006 (the Lands).

Whereas the Lands were formerly part of Farewell Street (Regional Road 56).

Whereas it is desirable to stop up and close the Lands and Regional staff register this by-law at the land registry office pursuant to Section 34(1) of the Municipal Act, R.S.O., 2001.

And whereas the consent of the Government of Canada through the Hamilton-Oshawa Port Authority’s wholly owned subsidiary Great Lakes Port Management Inc. has been obtained as required by Section 34(2)(b) of the Municipal Act, 2001, in order for the Region to pass this by-law as was authorized and passed by Regional Council at its meeting on XXXXXX, 2024.

Now therefore, the Council of The Regional Municipality of Durham hereby enacts as follows:

1. That portion of Farewell Street (Regional Road 56) being Part of Lot 5, Broken Front Concession, in the Geographic Township of East Whitby, now in the City of Oshawa, in the Regional Municipality of Durham, identified as part of PIN 16378-0001 (LT) and described further as Part 1 on Reference Plan 40R-32006, is hereby stopped up and closed.
2. The Lands are authorized to be conveyed to the Hamilton-Oshawa Port Authority’s wholly owned subsidiary Great Lakes Port Management Inc., subject to the title registration of any required easements for access and public utilities as may be required.
3. The Regional Chair and Clerk are hereby authorized to execute all documents associated with this closure and conveyance which has been approved by the Regional Solicitor for the Lands provided for in Sections 1 and 2 of this by-law.

This By-law Read and Passed on the ____ day of _____, 2024.

John Henry, Regional Chair and CEO

Alexander Harras, Regional Clerk

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham

Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-10
Date: April 3, 2024

Subject:

Expropriation of Lands Required for the Oshawa/Whitby Works Depot Construction Project at 951 Winchester Road East, in the City of Oshawa

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That authority be granted to Regional Municipality of Durham (Region) staff to initiate expropriation proceedings where necessary for the property requirements at 951 Winchester Road East, in the City of Oshawa, as depicted in Attachment #1 and such other property requirements as may be determined and identified by Regional staff for the Oshawa/Whitby Works Depot construction project;
- B) That authority be granted to the Regional Clerk and Regional Chair to execute any notices and forms as may be statutorily mandated by the *Expropriations Act*, R.S.O. 1990, C. E.26 to give effect to Recommendation C) in this report, including the notices of Application of Approval to Expropriate;
- C) That authority be granted to Regional staff to serve and publish Notices of Application for Approval to Expropriate the property requirements as described in Recommendation A) of this report and to forward to the Ontario Land Tribunal any requests for hearing received, to attend the hearings to present the Region's position, and to present the Ontario Land Tribunal's recommendations to Regional Council for consideration; and

- D) That all agreements successfully negotiated and reports required for amicable property acquisitions and all agreements and reports required for settlements pursuant to the *Expropriations Act*, R.S.O. 1990, C. E.26 related to the Oshawa/Whitby Works Depot Construction Project approved in accordance with the Delegation of Authority By-law 04-2023 or by Regional Council, be deemed confidential for any reporting requirements to Regional Council pursuant to Section 239 (2)(C) of the *Municipal Act*, 2001, S.O. 2001, C. 25, as it relates to a proposed or pending acquisition or disposition of land for Regional Corporate purposes, and only be released publicly by the Commissioner of Works once all claims for compensation have been resolved on a full and final basis.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain approval to expropriate property requirements for the Oshawa/Whitby Works Depot Construction Project, in the City of Oshawa (Oshawa) if the Regional Municipality of Durham (Region) is unable to obtain amicable agreements through negotiations with property owners.

2. Background

- 2.1 The Region identified 951 Winchester Road East at the south side of Winchester Road East and east of Wilson Road North in the City of Oshawa, as the preferred site to acquire and build the infrastructure required for the Oshawa/Whitby Works Depot Construction Project (the Project).
- 2.2 The Region is proposing to construct the new Oshawa/Whitby Works depot at this preferred site as it is within a future employment node, close to Highway 407 and major arterial roads and will facilitate growth in the City of Oshawa and the Town of Whitby. The Oshawa/Whitby Depot maintains Regional roads, water, sewer, and fleet asset infrastructure.
- 2.3 The Region's existing Oshawa/Whitby Depot is one of and the largest of the five Regional maintenance depots. The depot comprises an administrative building, indoor vehicle storage, ancillary buildings, employee amenities, fleet maintenance garage, a fueling station, a salt storage facility, materials testing laboratory, vehicle and equipment storage and parts and tools storage. The depot operations accommodate staff and equipment to service and maintain Regional roads, linear water distribution and sanitary sewer infrastructure, and fleet assets.

- 2.4 A comprehensive depot rationalization study conducted in 2021 concluded that the depot services and operational needs have outgrown the available space at the existing Oshawa/Whitby depot site. The buildings are at the end of their expected useful life and more interior space is needed for administrative staff to function efficiently and effectively. There is also a lack of adequate yard space for the maneuvering of vehicles and equipment and for storing materials required to provide and maintain the Regional services.
- 2.5 Future growth and resultant demand for services will further constrain the ability to operate on the existing site and maintain service level requirements. A new location with sufficient land is required to provide a more effective and efficient layout and adequate indoor vehicle storage, maintenance bays, and an administrative building that will provide better staff collaboration, achieves best practices, and promote operational productivity.

3. Property Acquisitions

- 3.1 Regional staff have identified land requirements from the property at 951 Winchester Road East, City of Oshawa. The Region will require the entire parcel of 68.87 acres to facilitate the works. The requirements are over the lands legally described as Part of Lot 6, Concession 5 East Whitby being Parts 1 on Plan 40R-30238 in the City of Oshawa, identified with PIN 16261-0115 (LT) (see Attachment #1).
- 3.2 Regional staff conducted an internal valuation analysis for 951 Winchester Road East, Oshawa, to determine the fair market value and compensation for the lands. Negotiations with the property owners are ongoing.
- 3.3 While the Region attempts to obtain land requirements through amicable negotiations, there are situations where negotiations become lengthy, or an agreement cannot be reached with the property owners. Where lengthy negotiations are not an option due to project timelines or an agreement cannot be reached with the landowners, Regional staff may need to consider the option to commence the expropriation process.

4. Conclusion

- 4.1 Regional Municipality of Durham staff will continue to negotiate with the property owners to acquire the necessary lands. Should these negotiations fail, this approval will permit staff to commence expropriation proceedings to ensure that design and construction can occur in a timely manner.
- 4.2 Should staff exercise the option to commence expropriation pursuant to the authority being sought through this report, staff will seek further authority from Regional Municipality of Durham Council to expropriate the property requirements and proceed to serve notices on affected property owners as mandated by the Expropriations Act, R.S.O. 1990, c. E.26.
- 4.3 This report has been reviewed by Legal Services – Office of the CAO.
- 4.4 For additional information, contact Christine Dunkley, Director, Corporate Infrastructure and Strategic Business Services, at 905-668-7711 extension 3475.

5. Attachments

Attachment #1: Location Map

Respectfully submitted,

Original signed by:

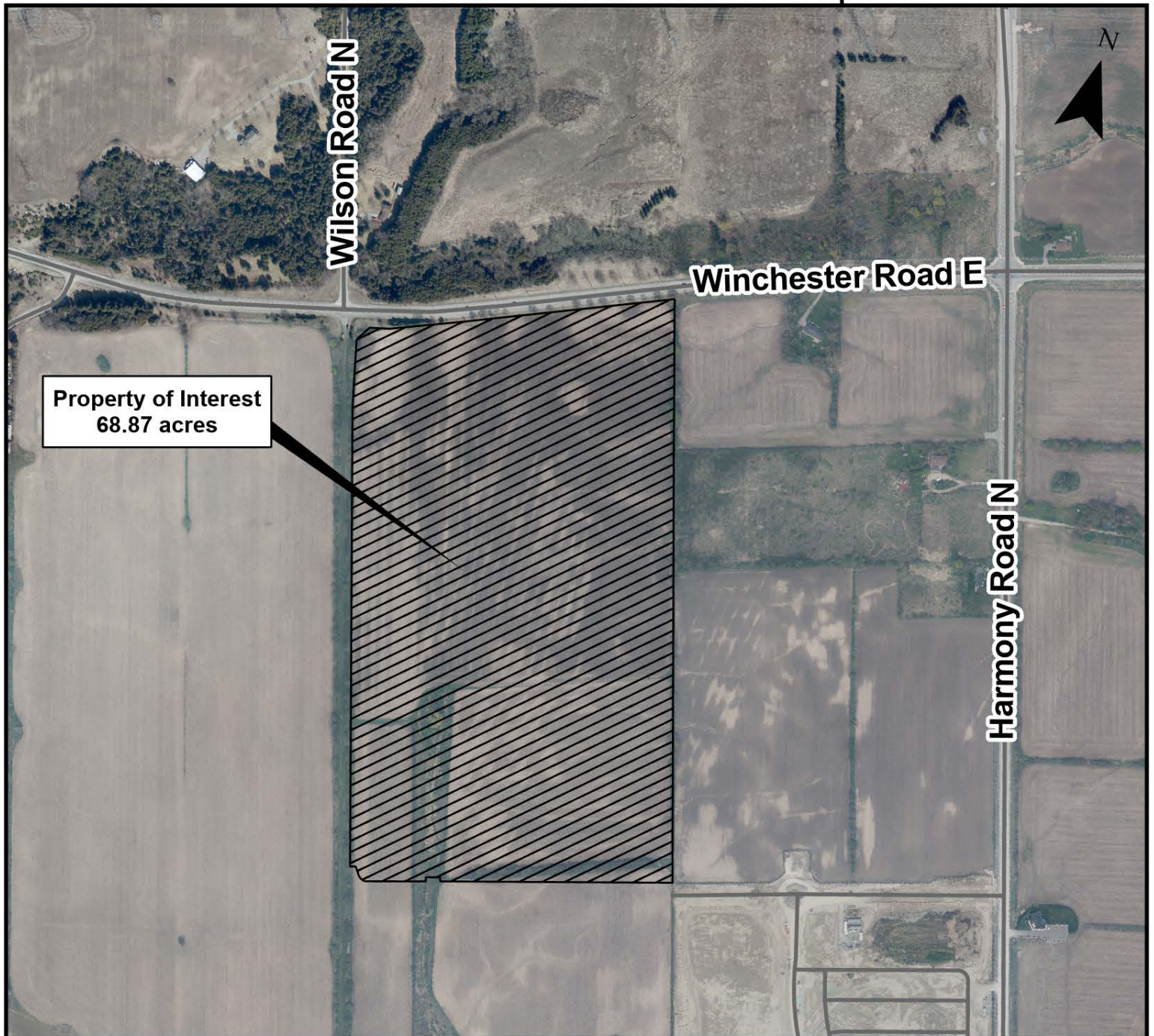
Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee



Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

Attachment # 1: Location Map

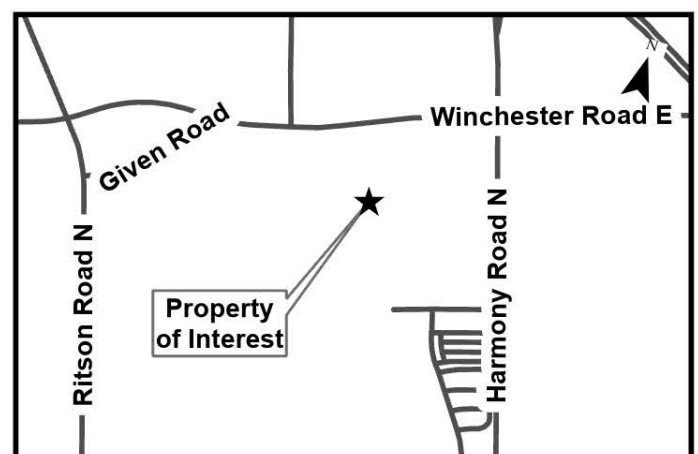


951 Winchester Road East, City of Oshawa

-  Property of Interest
68.87 acres
-  Assessment Parcel



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 in relation to the Information. For other uses, including spatial analysis, the
 respective
 Conservation Authority must be contacted.





The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-11
Date: April 3, 2024

Subject:

Tender Award and Additional Financing for Regional Municipality of Durham Contract #D2023-24 for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek Water Pollution Control Plant in the City of Pickering

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That the lowest compliant bid of Kenaidan Contracting Ltd., in the amount of \$45,388,258*, be awarded for Regional Municipality of Durham Contract #D2023-24 for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek Water Pollution Control Plant in the City of Pickering, for a total project cost of \$68,557,350;
- B) That the previously approved project budget of \$55,000,000 for Regional Municipality of Durham Contract #D2023-24 be increased by \$13,557,350 to a revised total project budget of \$68,557,350;
- c) That the additional financing of \$2,711,470, representing Durham Region's 20 per cent share, be provided from the following sources:

Previously Approved Financing

Sanitary Sewer Capital Budget - Duffin Creek Water Pollution Control Plant

(Project ID: Y2001):

User Rate	\$11,000,000
York Region Financing	30,800,000

York Capital Asset Share	<u>\$13,200,000</u>
--------------------------	---------------------

Total Approved Financing	\$55,000,000
---------------------------------	---------------------

Additional Financing

2024 Sanitary Sewerage Budget
Item No.24, Sanitary Sewerage Works To Rectify
Identified System Deficiencies (Project ID: M2499)

User Rate	\$425,623
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2024 Sanitary Sewerage Budget

Item #35 Replacement of sanitary sewer on
Mary Street from Rossland Rd to Robert Street., Oshawa
(Project ID: O2202)

User Rate	\$321,400
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Item #46 Replacement of sanitary sewer on Roselawn Avenue and
Bickle Drive., Oshawa (Project ID: O2305)

User Rate	\$1,700,000
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Corbett Creek Water Pollution Control Plant Emergency Digester
(Project ID: D1932)

User Rate	<u>264,447</u>
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Durham Region Additional Financing	\$2,711,470
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York Region Additional Financing	<u>\$10,845,880</u>
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Total Additional Financing	<u>\$13,557,350</u>
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Total Revised Project Financing	<u>\$68,557,350</u>
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D) That a copy of this report be provided to York Region.

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain approval for additional financing to award Regional Municipality of Durham (Durham) Contract #D2023-24 for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek Water Pollution Control Plant (WPCP) in the City of Pickering (Pickering).
- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Project Background

- 2.1 The York Durham Sewage System (YDSS) was built in the 1970s by the Province of Ontario to service residents in the York and Durham Regions. In 1997, the Province of Ontario transferred ownership of the YDSS to the Regional Municipality of York and the Regional Municipality of Durham (Regions).
- 2.2 The Duffin Creek Stage 3 Liquid facilities were initially placed into service in 2009. After 15 years of operation, remedial works and asset refurbishment are now required and must be completed to maintain compliance with effluent treatment requirements.
- 2.3 The Duffin Creek WPCP has a current estimated asset value of \$2 billion and is managed by the two Regions through a Co-Owners' Agreement and an Operating Agreement, with costs shared proportionately by the Regions.
- 2.4 The required work includes installation of equipment and process, mechanical, electrical, structural, and SCADA work to facilitate asset refurbishment.

3. Tender Information

- 3.1 Tenders were received for Durham Contract #D2023-24 for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek WPCP in Pickering on February 15, 2024, with two compliant bids. The tenders received are as follows:

Bidder	Total Tender Amount (excluding applicable taxes)
Kenaidan Contracting Ltd.	\$ 45,388,258
Maple Reinders Ltd.	\$ 55,798,500

- 3.2 The total approved budget for the project is \$55,000,000. The lowest compliant bid amount for the project plus engineering and contract administration services, Regional internal costs, and contingencies total \$68,557,350. Therefore, the project will require additional total funding of \$13,557,350. The difference between the tendered and budgeted amounts is due to the continued market uncertainty caused by supply chain issues, the volume of capital works projects being tendered by municipalities and cost increases for labour, equipment and materials.
- 3.3 The Regions share project costs in accordance with the cost allocation approved by the YDSS Management Committee. For this project, the costs allocation are 20 per cent Durham Region and 80 per cent York Region.
- 3.4 It is recommended that the lowest compliant bidder, Kenaidan Contracting Ltd., be awarded Durham Contract #D2023-24.

4. Financial Implications

- 4.1 Section 15.3 of Durham Region's Budget Management Policy states that the approval of the applicable Standing Committee and Regional Council for additional project financing requirements exceeding \$250,000 prior to the award of the applicable contract is required.
- 4.2 The proposed changes to the project budget with Regional cost-sharing are as follows:

Project Component	Approved Project Budget Project ID Y2001	Proposed Change	Revised Project Budget	Durham's Share (20%)	York's Share (80%)
Tender (excluding taxes)	\$ 33,727,000	\$11,661,258	\$45,388,258	\$9,077,652	\$36,310,606
Net HST	\$593,663	\$205,261	\$798,924	\$159,785	\$639,139
Engineering/Contract Admin/Sundry/Permits	\$5,433,856	\$906,991	\$6,340,847	\$1,268,169	\$5,072,677
Pre-Purchase Equipment Costs	\$9,796,826	\$0	\$9,796,826	\$1,959,365	\$7,837,461
Contingency	\$5,448,655	\$783,840	\$6,232,495	\$1,246,499	\$4,985,996
Total Costs	\$55,000,000	\$13,557,350	\$68,557,350	\$13,711,470	\$54,845,880

- 4.3 Financing for the award of Regional contract #D2023-24 for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek WPCP in Pickering will be provided from the following sources:

Previously Approved Financing

Sanitary Sewer Capital Budget - Duffin Creek Water Pollution Control Plant

(Project ID: Y2001):

User Rate	\$11,000,000
York Region Financing	30,800,000
York Capital Asset Share	<u>13,200,000</u>
Total Approved Financing	\$55,000,000

Additional Financing

2024 Sanitary Sewerage Budget

Item No.32, Sanitary Sewerage Works To Rectify Identified System Deficiencies (Project ID: M2499)

User Rate	\$425,623
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Item #46 Replacement of sanitary sewer on Roselawn Avenue and Bickle Drive., Oshawa (Project ID: O2305)

User Rate	\$1,700,000
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2024 Sanitary Sewerage Budget

Item #35 Replacement of sanitary sewer on Mary Street from Rossland Rd to Robert Street., Oshawa (Project ID: O2202)

User Rate	\$321,400
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Corbett Creek Water Pollution Control Plant Emergency Digester (Project ID: D1932)

User Rate	<u>\$264,447</u>
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Durham Region Additional Financing	<u>\$2,711,470</u>
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York Region Additional Financing	<u>\$10,845,880</u>
Total Additional Financing	<u>\$13,557,350</u>
Total Revised Project Financing	<u>\$68,557,350</u>

5. Conclusion

- 5.1 It is recommended that Regional Council grant approval to award the Regional Municipality of Durham Contract #D2023-24 to the lowest compliant bidder, Kenadian Contracting Ltd., for the Stage 3 Liquids and Miscellaneous Remedial Works at the Duffin Creek Water Pollution Control Plant in the City of Pickering.
- 5.2 It is also recommended that additional financing of \$2,711,470 be approved.
- 5.3 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 5.4 For additional information, please contact Dan Waechter, P.Eng., Acting Director, Transportation and Field Services at 905-668-4113, extension 3550.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-12
Date: April 3, 2024

Subject:

Sole Source Procurement of Equipment, Maintenance Service and Parts for Equipment Installed at Various Water and Wastewater Facilities throughout the Regional Municipality of Durham

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to negotiate and award sole source agreements in 2024 for the unanticipated or end of life replacement of existing equipment installed at various Water and Wastewater Facilities throughout the Regional Municipality of Durham, but not for new construction or new installations, where using a different manufacturer would require significant structural, electrical, mechanical, communication, instrumentation and other modifications;
- B) That financing for the sole source agreements be provided from the approved annual Water Supply Operating Budget;
- C) That staff be authorized to negotiate and award sole source agreements for maintenance service and parts supply for the existing equipment installed as components of various water facilities throughout the Regional Municipality of Durham, with terms not to exceed five years;
- D) That financing for the sole source maintenance service and/or parts supply agreements be provided from the approved annual Water Supply Operating Budget at an estimated annual cost of \$2,550,000;

E) That the negotiated sole source agreements be awarded as follows:

Authorized Supplier	Manufacturer	Estimated Annual Costs (excluding HST)
Syntec	Fontaine; Tideflex; Netzsch; Trueline; Val-Matic; Red Valve; Singer	\$250,000
Westburne	Allen Bradley	\$100,000
Benshaw	Benshaw	\$100,000
Cutler-Hammer / Eaton	Cutler-Hammer / Eaton	\$250,000
SCG Process	ProMinent; De Nora	\$125,000
Bisan	Watson-Marlow	\$100,000
Visser's Sales	Pulsafeeder	\$100,000
Evoqua	Wallace & Tiernan	\$250,000
SPD Sales	MSA	\$100,000
Lakeside Process Controls	Emerson; Fisher Control; Rosemount	\$100,000
Endress+Hauser	Endress+Hauser	\$100,000
ACG-Envirocan	KROHNE	\$100,000
Franklin Empire	Siemens	\$100,000
Rotork	Rotork	\$150,000
Troy-Ontor	AUMA	\$150,000
H2Flow	Trojan Technologies	\$275,000
Hach Canada Sales and Service	Hach Canada Sales and Service	\$100,000
Flowpoint Systems	Flowpoint	\$100,000
-	TOTAL	\$2,550,000*

F) That the Commissioner of Finance be authorized to execute the necessary maintenance service and parts supply agreements.

Report:**1. Purpose**

- 1.1 The purpose of this report is to seek Regional Municipality of Durham (Region) Council approval to negotiate and award sole source equipment, maintenance service and parts supply agreements for existing major equipment installed as components of various Water and Wastewater facilities operated by the Region.
- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 Existing equipment at various water and wastewater facilities was initially installed through a capital contract secured through a competitive procurement process.
- 2.2 When replacing equipment at its end of life, consideration must be given to what modifications would also be required, including structural, electrical, mechanical, communication and instrumentation.
- 2.3 Regularly scheduled maintenance must be conducted as specified by the manufacturer to maintain equipment warranties. In most cases, this specialized maintenance must be done by qualified and trained personnel. Often, consumable spare parts, replacement components, and other maintenance items can only be obtained through the original vendor or their authorized Ontario representative.
- 2.4 Additionally, specialized testing of some components is required to comply with the Municipal Drinking Water Licence (MDWL) issued by the Ministry of the Environment, Conservation and Parks (MECP), or the Region will be at risk of non-compliance.
- 2.5 Where the Ontario-based representatives for authorized equipment suppliers have changed from previous reports, this report specifies the new representative.

3. Previous Related Reports and Decisions

- 3.1 In September 2021, Regional Council approved Works Committee Report #2021-W-30, authorizing the negotiation of a sole source maintenance and parts supply agreement with Flowpoint Systems for bulk water filling station hardware installed at the Zone 4 Reservoir in Seaton, with terms not to exceed five (5) years.

- 3.2 In March 2023, Regional Council approved Works Committee Report #2023-W-09, authorizing staff to enter into a sole source maintenance service and parts supply agreement with Trojan Technologies for ultraviolet (UV) light disinfection equipment installed at various water supply facilities throughout the Region, with terms not to exceed five (5) years.
- 3.3 In September 2023, Regional Council approved Works Committee Report #2023-W-36, authorizing staff to enter into a sole source maintenance service and Parts Supply Agreements with various suppliers for equipment installed at various Water Pollution Control Plants (WPCP) and Sanitary Sewage Pumping Stations (SSPS) throughout the Region, with terms not to exceed five (5) years.
- 4. Rationale for Sole Source Approval of Maintenance Service and/or Parts Supply Agreements**
- 4.1 Major equipment components at the Region's various water and wastewater facilities have been in service for periods ranging from five (5) to over 35 years. As such, wearable parts are due for replacement now and in the immediate future.
- 4.2 Some original spare parts inventories provided as components of capital contracts have been or will soon be consumed. Onsite inventories need to be restocked to enable efficient maintenance planning and execution. Spare parts and agreements must also be in place to plan preventative maintenance and react to unplanned activities.
- 4.3 Specialized maintenance and inspection services need to be procured and scheduled.
- 4.4 Scheduled interventions to proactively replace assets prior to failure are increasing in frequency as the asset base continues to mature from its original installation dates.
- 4.5 The major equipment components listed in Table #1 below will require ongoing maintenance service and parts supply agreements and standing agreements with the manufacturer or sole authorized supplier for a proposed terms not to exceed five (5) years.

4.6

Table #1

Item	Authorized Supplier	Manufacturer	Comments	Estimated Annual Costs (excluding HST)
Gate Valves Ball Valves Butterfly Valves Pressure Reducing Valves Duckbill Check Valves	Syntec	Fontaine; Tideflex; Netzsch; Trueline; Val-Matic; Red Valve; Singer	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$250,000
Variable Frequency Drives	Westburne	Allen Bradley	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Variable Frequency Drives	Benshaw	Benshaw	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
5 Motor Control Centres	Cutler-Hammer / Eaton	Cutler-Hammer / Eaton	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$250,000
Chemical Feed Pumps Chlorinators Analyzers	SCG Process	ProMinent; De Nora	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$125,000

Item	Authorized Supplier	Manufacturer	Comments	Estimated Annual Costs (excluding HST)
Chemical Feed Pumps Chlorinators Analyzers	Bisan	Watson-Marlow	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Chemical Feed Pumps Chlorinators Analyzers	Vissers Sales	Pulsafeeder	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Chemical Feed Pumps Chlorinators Analyzers	Evoqua	Wallace and Tiernan	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$250,000
Hazardous Gas Detectors	SPD Sales	MSA	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Various Instrumentation Control Valves System Software	Lakeside Process Controls	Emerson; Rosemount; Fisher Control	Installed at various water supply facilities throughout the Region Spare parts and service as required Annual software license renewals	\$100,000

Item	Authorized Supplier	Manufacturer	Comments	Estimated Annual Costs (excluding HST)
Various Instrumentation Control Valves	Endress+Hauser	Endress+Hauser	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Magnetic Flowmeters	ACG-Envirocan	KROHNE	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Level Transmitters	Franklin Empire	Seimens	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$100,000
Actuators	Troy-Ontor	AUMA	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$150,000
Actuators	Rotork	Rotork	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$150,000

Item	Authorized Supplier	Manufacturer	Comments	Estimated Annual Costs (excluding HST)
Ultraviolet (UV) Light Disinfection Equipment	H2Flow	Trojan Technologies	Installed at various water supply facilities throughout the Region Spare parts and service as required	\$275,000
Water quality sampling equipment	Hach Canada Sales and Service	Hach Canada Sales and Service	Annual calibration and verification of pocket colourimeters, portable and stationary turbidimeters, etc. including replacement of necessary parts/components.	\$100,000
Bulk Water Filling Station Hardware	Flowpoint Systems	Flowpoint	Installed at Zone 4 Reservoir in Seaton Spare parts and service as required	\$100,000
Total Estimated Annual Cost	-	-	-	\$2,550,000*

- 4.7 The above Table #1 provides the manufacturers' Ontario-based authorized representative for service and parts.
- 4.8 The Agreements cost, scope and duration will be finalized with the suppliers of the service and parts upon Regional Council's approval of this report.
- 4.9 The pricing in Table #1 above has been estimated based on a review of the procurement of representative services and parts to date.
- 4.10 The maintenance services and parts supply agreements will ensure that the Region obtains preferential pricing and streamline the volume of procurement activities.

5. Financial Implications

- 5.1 Section 7.2 of the Region's Purchasing By-law #16-2020 permits the acquisition of goods and services through sole source negotiations under specific circumstances outlined in Appendix "C" of the by-law. Section 1.1 of Appendix "C" permits negotiations for goods or services that can be supplied only by a particular supplier where no reasonable alternative or substitute goods or services exist to ensure compatibility with existing goods or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative. The by-law also requires approval by the appropriate standing committee and Council for the award of sole source contracts that exceed \$100,000 in value.
- 5.2 Financing for the sole source maintenance service and parts supply agreements, estimated at an annual cost not to exceed \$2,550,000, will be provided from the approved annual Water Supply Operating Budget.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Optimize resources and partnerships to deliver exceptional quality services and value.
 - b. Collaborate for a seamless service experience.
- 6.2 Standardization of supplies and services for specialized equipment will promote asset longevity and reduce unplanned facility maintenance events.

7. Conclusion

- 7.1 It is recommended that Regional Council approve the award of sole source for equipment, maintenance service and parts supply agreements, subject to negotiations of contracts satisfactory to the Commissioner of Finance, for equipment installed as components of various Water and Wastewater Facilities operated by the Regional Municipality of Durham.
- 7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendations.

7.3 For additional information, contact: Rich Tindall, Manager of Plant Operations, at 905-668-7711 extension 3547.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-13
Date: April 3, 2024

Subject:

Additional Financing for the Award of Request for Proposal # 1088-2023 for Engineering Services for Ajax Zone 1 Water Storage Facility, Harwood Avenue Water Pumping Station - modifications to maximize water supply availability from Whitby-Oshawa-Courtice System and the potential for additional onsite storage for the pumping station to manage transient pressures in the Town of Ajax

Recommendations:

That the Works Committee recommends to Regional Council that financing for Engineering Services for the Ajax Zone 1 Water Storage Facility, Harwood Avenue Water Pumping Station modification project, in the Town of Ajax be provided from the approved project budget and the reallocation of funds as follows:

Previously Approved Funding Zone 1 Water Storage Facility
(Project ID: D1911)

Residential Development Charges	\$1,812,000
Commercial Development Charges	\$52,400
Industrial Development Charges	\$45,600
User Revenue	\$90,000
Total Approved Financing	\$2,000,000

Reallocation of funding from the following source:

Zone 3 feedermain on Garrard Rd. from north of the Mid-Block Arterial to Winchester Rd., Whitby (Region's Share) (Project ID: D2409)

Residential Development Charges	\$2,870,600
Commercial Development Charges	\$89,900
Industrial Development Charges	\$117,800
User Revenue	<u>\$21,700</u>

Total Additional Financing	<u>\$3,100,000</u>
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Total Revised Project Financing	<u>\$5,100,000</u>
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Report:

1. Purpose

1.1 The purpose of this report is to provide details and seek approval for the reallocation of additional financing to award Regional Municipality of Durham RFP-1088-2023 to Jacobs Consultancy Canada Inc. to provide engineering services for Ajax Zone 1 Water storage facility, Harwood Avenue Water Pumping Station in the Town of Ajax.

1.2 Dollar amounts followed by an asterisk (*) include disbursements and are before applicable taxes.

2. Background

2.1 The Harwood Avenue Water Pumping Station (WPS) is located at 144 Rossland Road East in the Town of Ajax. The Harwood Avenue WPS has operated for over 42 years to service the Pickering/Ajax water distribution system pressure zones 1 and 2 and facilitates the treated water transfer to the Whitby/Oshawa/Courtice distribution system.

2.2 This project intends to modify the Harwood Avenue WPS to maximize the water supply availability from the Whitby-Oshawa-Courtice System and review the need for additional water storage on the current site to control dynamic fluctuations due to disruptions within the pressurized system. The proposed project will also improve operational efficiency and overall reliability and serviceability at the water pumping station.

- 2.3 As part of consistent efforts to achieve service excellence in treated water supply in the Pickering/Ajax and Whitby/Oshawa/Courtice system, the modifications to maximize water supply and manage transient pressure will be assessed by reviewing conditions for safe water supply, operational needs, and maintenance needs.

3. Request for Proposal #1088-2023

- 3.1 RFP-1088-2023: Engineering Consulting Services for the Harwood Avenue Water Pumping Station - modifications to maximize water supply availability from the Whitby-Oshawa-Courtice System and potential addition of onsite storage at the pumping station to manage transient pressures in the Town of Ajax was issued and advertised publicly on December 15, 2023, through the Region's website.
- 3.2 The RFP closed on February 15, 2024, with one proposal received from Jacobs Consultancy Canada Inc.
- 3.3 The evaluation committee evaluated the proposals using the evaluation criteria specified in the RFP. The Purchasing Section of the Finance Department oversaw the evaluation process.
- 3.4 The proposal was evaluated against the following evaluation criteria:
- Project Team (20%)
 - Project Management (25%)
 - Project Workplan (45%); and
 - Financing Pricing (10%).
- 3.5 Based on an overall technical and financial evaluation of the proposals by the evaluation committee, it is recommended that the highest scoring and only proponent, Jacobs, be awarded the contract for engineering services for the Ajax WSP Expansion and Upgrades to the Harwood Avenue Water Pumping Station modifications to maximize water supply availability from the Whitby-Oshawa-Courtice System and to support the potential addition of on-site water storage at the pumping station with the aim of managing potential transient pressure variations in the Town of Ajax for an upset limit not to exceed \$22,184,710*.

- 3.6 The project is comprised of 2 components, the Ajax WSP Expansion, and the Harwood Pumping Station Improvements. The Ajax component of the assignment, \$17,263,363*, can be funded from the approved 2024 Water Supply System Capital Budget. The Harwood Pumping Station component of the assignment, \$4,921,347*, requires supplementary funding as the amount required exceeds the approved 2024 Water Supply System Capital Budget.
- 3.7 A detailed scope of work for the transient analysis and investigation component of the assignment was provided within the Request for Proposal. This effort is substantial, as numerous flow scenarios must be modelled and analyzed to identify potential design solutions for implementation. Several water infrastructure projects have required advancement because of housing targets, and as such, this effort was not contemplated at the time of budget development. The ongoing repair efforts at the Oshawa Water Supply Plant and the expansion of the Whitby Water Supply Plant have created additional operational scenarios that must be analyzed. Environmental Assessment activities for the Harwood Pumping Station have allowed for a high level of potential public interaction. These efforts, along with current market rates for engineering services consummate with the requested experience requirements within the Request for Proposal, have resulted in the need for funding that exceeds the approved budget.
- 3.8 Other Regional Municipalities in the Greater Toronto Area (GTA) have advised that they are experiencing a significant reduction in the number of consultants and contractors submitting bids for water and wastewater projects, which is because of industry capacity due to the significant growth pressures in the GTA and the compressed implementation timelines.

4. Financial Implications

- 4.1 Section 15.3 of the Region of Durham's Budget Management Policy requires approval of the applicable Standing Committee and Regional Council for additional project financing requirements exceeding \$250,000 prior to the award of the applicable contract.

- 4.2 The recommended revised project budget of \$5,100,000 can be financed as follows:

Approved 2024 Water Supply Capital Budget

Item No. 178 Zone 1 Water Storage Facility (Project ID: D1911)

Residential Development Charges	\$1,812,000
Commercial Development Charges	\$52,400
Industrial Development Charges	\$45,600
User Revenue	<u>\$90,000</u>
Total Approved Financing	\$2,000,000

Additional Financing:

2024 Water Supply System Capital Budget

Item No. 129 Garrard Rd. from north of the Mid-Block Arterial to Winchester Rd., Whitby (Region's Share) (Project id: D2409)

Residential Development Charges	\$2,870,600
Commercial Development Charges	\$89,900
Industrial Development Charges	\$117,800
User Revenue	<u>\$21,700</u>
Total additional Financing	<u>\$3,100,000</u>
Total Revised Project Financing	<u>\$5,100,000</u>

- 4.3 The Zone 32 Feedermain – Garrard to Winchester project (Item 129 Garrard Rd. from north of the Mid-Block Arterial to Winchester Road, Whitby) has been deferred as the development will not be proceeding this year. Financing for the deferred project will be requested as part of the 2025 Business Plans and budget process.

5. Relationship to Strategic Plan

- 5.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:
- Service Excellence Goal 5.1: Optimize resources and partnerships to deliver exceptional quality services and value.

- Service Excellence Goal #5.4: Drive organizational success through innovation, a skilled workforce, and modernized services.

6. Conclusion

- 6.1 It is recommended that Regional Council approve the award of Request for Proposal # 1088-223 for Engineering Services for the Ajax Zone 1 Water Storage Facility, Harwood Avenue Water Pumping Station modification project to the lowest compliant bidder, Jacobs Consultancy Canada Inc.
- 6.2 It is also recommended that additional financing of \$3,100,000, be approved as detailed in this report.
- 6.3 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendations.
- 6.4 For additional information, contact: Michael Harris, Manager, Design Contracts Environmental Services, at 905-668-7711 extension 3458.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Acting Commissioner of Works
Report: #2024-W-14
Date: April 3, 2024

Subject:

Beaver River Bridge Closure and Replacement, Regional Road 15, Township of Brock

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the Ministry of Transportation be advised that the Regional Municipality of Durham strongly disagrees with their recently stated position and decision to transfer ownership of the closed Beaver River Bridge, located on Regional Road 15 over Beaver River immediately west of Highway 12, prior to the design and construction of the replacement bridge by the Ministry;
- B) That the Ministry of Transportation be requested to provide an immediate commitment to seek Treasury Board approval to provide the Regional Municipality of Durham the necessary funding for all project costs related to the replacement of the Beaver River Bridge, including a temporary bridge for a period of up to three years. This includes design, tendering, construction, temporary bridge rental, staff time, consultant costs, and associated expenditures;
- C) That Regional staff be authorized to continue the assignment with the current consultant, WSP, to advance the design of the permanent bridge replacement, upon receipt of the commitment in Recommendation B;
- D) That Regional staff be authorized to tender and construct a temporary and permanent bridge replacement, upon receipt of notification by the Ministry of Transportation that they have received Treasury Board approval for the funding;

- E) That authority be granted to the Commissioner of Works to execute all documents, including management of liabilities, associated with the potential transfer and the works described above; and,
 - F) That a copy of this report be provided to Laurie Scott, MPP-Haliburton-Kawartha Lakes-Brock, and Prabmeet Sarkaria, Minister of Transportation, the Ministry of Transportation, and the Township of Brock.
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Report:**1. Purpose**

- 1.1 The Beaver River Bridge is a three-span post-tensioned concrete continuous solid slab bridge located in the Township of Brock. The structure carries Regional Road 15 over the Beaver River, approximately 100 metres west of Highway 12 near Beaverton (Attachment #1). On November 16, 2023, the Ministry of Transportation (MTO) closed the bridge. The purpose of this report is to provide background on what led to this, outline discussions to date with the MTO and their position, explain the option of a temporary bridge and provide recommendations on the next steps for the permanent replacement.

2. Background

- 2.1 The Beaver River bridge was built in 1965 by MTO as part of the Highway 12 and Regional Road 15 intersection reconstruction. Since the Regional Municipality of Durham (Region) was formed in 1974, the Region has been operating on the understanding that this bridge was under the ownership of the Region. To determine the structural integrity, safety and condition of every bridge within the Region, at least one inspection in every second calendar year is carried out under the direction of a Professional Engineer in accordance with the Ontario Structure Inspection Manual (O. Reg. 472/10). Due to the level of visible deterioration evident on this bridge, structural inspections have been carried out annually since 2016 by consultants with the most recent being July 2023. The recommendation from that inspection was to replace the bridge with a priority of “1-5 years” and no immediate action needed.
- 2.2 As a result of the significant visual deterioration observed in inspections prior to 2020, and in support of the planned rehabilitation work, more intrusive and intensive investigations were carried out including: a Deck Condition Survey; completion of a Structural Evaluation Report; and a Post-Tension investigation. These investigations identified the need for the following gross vehicle weight

restrictions: Single unit vehicle - 9 tonnes; Truck/trailer or truck/semitrailer combination vehicles - 10 tonnes; Tractor and more than one trailer - 13 tonnes. These weight restrictions were implemented in March 2020.

- 2.3 Given their minimum unladen gross vehicle weight of 16.5 tonnes, the Region's winter maintenance vehicles would have been restricted from crossing the bridge. It is also important to note that weight restrictions are challenging to enforce, without constant Police presence, and can severely impact local businesses. Therefore, it was necessary to complete interim accelerated repairs of the bridge to eliminate the weight restrictions and keep the structure in service until replacement. This strengthening consisted of a structural concrete deck overlay which was completed by the Region in December of 2020. The weight restriction was removed upon completion of the work. Prior to this, there was only minor repair work completed and no history of rehabilitation.
- 2.4 The 2023 Regional Road Budget and Nine Year Forecast included funding in 2024 for the replacement with an 'in-kind' bridge at an estimated construction cost of \$7 million, with the plan to tender in late 2024 for construction in 2025. This is a pre-engineering estimate and would now be higher due to a larger planned width and span, along with inflation increases. The design commenced in August 2022 (with previously approved funding in 2021), and has progressed to approximately 20% completion, primarily with pre-engineering activities completed including geotechnical investigations, environmental field work, archaeological assessment, and hydraulic analysis. A proposed span arrangement has been developed and is subject to further review by the Lake Simcoe Region Conservation Authority (LSRCA) before the bridge structural design can commence.
- 2.5 On March 6, 2023, as part of the bridge replacement design by the Region there was a meeting with MTO related to the need for any improvements at the Regional Road 15 and Highway 12 intersection which may impact the bridge geometry. Preliminary drawings were subsequently provided in April for their review and comment. On August 22, 2023, MTO first informed the Region that the bridge may be owned by MTO. It was discovered that the bridge was within the Highway 12 MTO Controlled Access Highway (CAH) limits and located on MTO property.
- 2.6 At the time of the bridge construction in 1965, the Highway 12 and Regional Road 15 intersection had a right turn channelization for vehicles travelling from the west to the south. The taper for this channelization extended across the bridge which is presumed to be the reason that the CAH limits set by MTO included the bridge.

- In 2006/2007 this channelization was changed to a standard right turn lane. However, MTO has stated that it was an “administrative error” that the bridge was not transferred to the County of Ontario, who they said understood the intent to assume care and control of the new bridge upon completion. As a result and similar to other provincial highway intersections, MTO advised they plan to redefine the CAH limits closer to Highway 12, excluding the bridge, and transfer the additional Regional Road 15 right-of-way, including the bridge, to the Region.
- 2.7 Discussions between MTO and the Region continued throughout the Fall to discuss the responsibility for the bridge and the replacement. Despite MTO not having it in their inventory listing and therefore not regularly inspecting it, it was agreed that this bridge is an MTO asset.
- 2.8 In late October 2023, MTO’s consultant completed an inspection and it was subsequently determined that until further testing and evaluation could be completed to independently confirm the capacity of the structure it was determined that bridge should be closed. On November 16, 2023, the MTO closed the bridge.
- 2.9 Regional staff worked with MTO to provide support for the closure. With the Region’s closure of Simcoe Street/Regional Road 15 between Osbourne Street (Regional Road 23) and Thorah Concession Road 5 for watermain construction, the Region placed Portable Variable Message Signs (PVMS) at the approaches to Concession Road 5 on Osbourne Street (Regional Road 23) noting there is no access to Highway 12 via Concession Road 5. The Region also changed messaging on the PVMS signs that were in place at Highway 12 and Regional Road 15. MTO implemented a detour utilizing Highway 12 to Regional Road 23, north of the closure.
- 2.10 After a meeting with MTO, on November 27, 2023, Regional staff wrote a letter (Attachment #2) to MTO advising that given the MTO bridge ownership and closure, the Region is expecting MTO to take over and complete the design and construction of the replacement.
- 2.11 In December 2023, MTO completed load testing which indicated that the bridge’s load carrying capacity was reduced by 70 per cent and that only loads up to seven tonnes maximum would be permitted to use the bridge if it were to open to traffic again.
- 2.12 In January 2024, discussions among MTO, the Region and Brock Township continued to see if there was an opportunity to complete winter maintenance with

equipment in compliance with the load restriction. Although there was a potential opportunity, enforcement of the load restriction remained the outstanding challenge.

- 2.13 MTO determined that enforcing compliance of a seven-tonne load restriction is not feasible. As a result, on March 9, 2024, for public safety reasons, MTO advised Regional staff that it is not possible or practical to re-open the bridge and therefore the bridge must remain closed until it can be replaced.

3. Impacts of the Closure

- 3.1 Regional Road 15 is part of the main traffic route from Highway 12 into and out of the downtown area of Beaverton. The Average Annual Daily Traffic (AADT) across the bridge was 5,049 vehicles in 2023 prior to the closure. The signed detour for the closure results in an additional 6 kilometres (km) of travel over using Regional Road 15 to get between the Highway 12 and Regional Road 15 intersection and downtown Beaverton. Many drivers are using Main Street which reduces the extra travel distance to 1 km, but it is a busy collector road, has several speed humps and a lower speed limit compared to Regional Road 15 outside of the Town of Beaverton. It is also noted that as we approach the Spring/Summer months, Highway 12 will become very busy with increased traffic flow of travelers making their trips north and south to and from cottage country. The impacts of the closure will result in a significant inconvenience, along with an economic impact, to the residents and businesses of Beaverton and surrounding areas.
- 3.2 The Brock Township Fire Department advised that the closure has a large negative impact on their response times to the area surrounding the location of the bridge. Response times to the area south, east, a portion north of the bridge have increased as they now must travel to these areas via Main Street. In addition to being a busy street, and more so with the closure of the bridge, the speed humps add to the increased response times. To compensate for the increase in response times due to the closure of the bridge, consideration is being given to changing their response protocol to include a two-station response to certain calls. The two-station response will have a financial impact on the fire department budget, but the Fire Chief advises they must consider this to ensure the fire department is doing their due diligence to ensure public safety.
- 3.3 Region of Durham Paramedic Services generally shared the concerns expressed by the Brock Township Fire Department as their emergency services would also

experience delays for any calls they need to respond to immediately east of the bridge.

4. Bridge Replacement Design and Construction

- 4.1 Since the November 27, 2023, letter to MTO, Regional staff have maintained that as an MTO asset the bridge replacement should be completed by MTO on a priority and operational emergency basis. However, in a letter provided on March 26, 2024 (Attachment #3), MTO has taken the position that they feel the Region is in the best position to replace the bridge in a timely manner by continuing design work under the current engineering consultant assignment. In addition, they plan to begin the process to immediately transfer ownership of the bridge to the Region and seek approvals to provide funding to the Region for the completion of the design and construction of the new bridge. They noted that the situation does not meet the criteria for an Emergency Procurement approval by the province to expedite the work.
- 4.2 The MTO position is disappointing. The Region and Brock Township view this closure as an operational emergency. Without knowing the full details of their processes and timelines, it is difficult to confirm if the Region could complete the work in a more expedited manner.
- 4.3 The Region completing the design and construction would require a reallocation of resources, with the expectation that other bridge project schedules would be impacted. The details of these impacts are difficult to quantify at this time, but it is not anticipated that it would result in any critical situations or load postings of other bridges.
- 4.4 If the transfer of the bridge to the Region did not occur prior to construction, there would be a requirement to manage liabilities between the parties.

5. Temporary Bridge

Temporary Bridge Concept

- 5.1 A temporary bridge concept has been reviewed for the site, which would consist of a pre-engineered modular bridge system. These portable, prefabricated, truss bridges are commonly used for permanent or temporary applications such as staging during bridge replacements, or as emergency rental bridges. Various types of prefabricated abutments are also available to support these temporary

structures, such as wire mat Mechanically Stabilized Earth (MSE), metal bin, or bank seat foundations.

Removal of Existing Bridge Components

- 5.2 The existing bridge deck, as well as the tops of the piers and abutments, would be removed to accommodate the temporary bridge. These components are not salvageable and must eventually be removed for replacement of the bridge. Temporary protection or hoarding systems would be required to prevent the entry of debris into the watercourse during removal of the existing bridge components, as is typical for bridge removal or replacement projects over sensitive watercourses. If the temporary bridge was installed during the restricted activity timing windows for the protection of fish and fish habitat (March 15-July 15 of any year at the Beaver River Bridge site), removal of the remaining sections of the piers and foundations would be carried out later, through the bridge replacement contract. Consultation with the Lake Simcoe Region Conservation Authority (LSRCA) would be required, for expedited permit approvals.

Installation of Temporary Bridge

- 5.3 The existing structure is on a skewed alignment in relation to the roadway, however the temporary bridge and abutments will be constructed perpendicular to the roadway due to the use of modular components. The temporary bridge would be a longer single-span structure, supported on temporary prefabricated abutments beyond the existing bridge abutments. After the modular components are assembled, the assembled bridge can be cantilever launched from one side or crane lifted into place.

Procurement

- 5.4 Regional staff have contacted local prefabricated modular bridge suppliers to confirm the feasibility of a temporary bridge installation at the Beaver River Bridge site. There are two local suppliers, however only one supplier (Algonquin Bridge, part of the Atlantic Industries Limited group of companies) fabricates both temporary bridge and abutment components. Furthermore, Regional staff were unable to reach the Emergency Contacts at the second supplier, after multiple attempts. Due to the urgency of procuring the temporary bridge, the design services for the prefabricated bridge and abutments could be procured through Algonquin Bridge (Algonquin), considering this company to be a sole provider of the combined services. Atlantic Industries Limited is one of the prominent Canadian manufacturers of corrugated structural plate bridges, tunnels, corrugated steel pipes, MSE walls, prefabricated bridges & noise barriers. They

have delivered these products across Canada for the past 50 years, including within the Region. Working closely with the supplier may also provide the option to design the modular bridge to be coordinated with staged construction of the new permanent Beaver River Bridge, to maintain traffic during construction. As the modular bridge will be easy to assemble on site and is readily available from Algonquin, a public tender could be advertised for the construction contract. Although the design would be specific to Algonquin's pre-engineered bridge, contractors could source the modular bridge and foundation components from equivalent suppliers, however no additional design fees would be paid for a substitution.

Timing and Cost

- 5.5 Algonquin has provided the Region with a letter (Attachment #4) outlining that a temporary bridge is feasible at this site, along with a sample project. If commenced immediately, it is anticipated that a temporary bridge could be installed this summer or latest before the start of the fall/winter season. Based on the input from Algonquin and excluding the existing bridge removals, the cost is estimated to be in the order of \$1.4 M for supply and installation, plus a monthly rental cost of \$40,000 (\$480,000 annually) beyond the first year. The existing bridge removals would be required even if there is no temporary bridge, but if only part of the removals were completed before a temporary bridge was installed then there would be a premium to completely remove the existing bridge.

6. Next Steps

- 6.1 Although Regional staff disagree with the position the MTO are taking, to avoid further delay work will begin on the design of a temporary bridge. Algonquin will be retained to complete the design, which is anticipated to be less than \$40,000. The Region would assume the risk for the design cost as a result of proceeding without confirmation from MTO that a temporary bridge would be funded. If needed due to the complexity, our current consultant for the permanent bridge replacement, WSP, could design the foundations for the temporary bridge.
- 6.2 Simultaneous with the temporary bridge design, work could advance on the permanent bridge replacement with WSP.
- 6.3 Our goal would be to design the temporary bridge and staging of the new bridge to keep a crossing open to traffic through construction. However, there is a high possibility that this may not be technically and economically feasible. If this was feasible, it is anticipated that construction would take up to 18 months and be

completed by the Summer of 2027. If this was not feasible and the temporary bridge had to be removed during construction, the construction is anticipated to be 9-12 months and be completed by the end of 2026.

- 6.4 Although the MTO advised they would seek approvals to provide funding to the Region for the completion of the design and construction of the new bridge, it is Regional staff's position that MTO should cover all the project costs. This would include the temporary bridge design, construction, rental for up to three years, and removal. In addition, staff time and consultant costs for managing the designs, tendering and construction contract administration and supervision, along with associated expenditures.
- 6.5 The MTO has advised that the earliest they could get Treasury Board approval for the funding is this Summer. As a result, proceeding without Board approval would be at the Region's financial risk. Agreement in principle from MTO staff to cover all projects costs and a commitment to request the funding from the Treasury Board should be obtained from MTO.

7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 2: Community Vitality
 - 2.2 Enhance community safety and well-being.
 - b. Goal 3: Economic Prosperity
 - 3.3 Enhance communication and transportation networks to better connect people and move goods more effectively.
 - c. Goal 5: Service Excellence
 - 5.1 Optimize resources and partnerships to deliver exceptional quality services and value.

8. Conclusion

- 8.1 It is recommended that the Ministry of Transportation be advised that the Regional Municipality of Durham strongly disagrees with their decision to transfer the closed Beaver River Bridge, located on Regional Road 15 over Beaver River immediately west of Highway 12, prior to the design and construction of the

replacement bridge. However, to avoid further delays it is recommended that the Regional Municipality of Durham proceed with the design and construction of a temporary and permanent bridge replacement, subject to appropriate commitments from the Ministry of Transportation to fund all project costs.

- 8.2 This report has been reviewed by the Finance Department and Legal Services – Office of the CAO.
- 8.3 For additional information, contact: Paul Gee, Manager, Transportation Infrastructure, at 905-668-7711, extension 3441, or Megan Duhig, Project Manager, Transportation Infrastructure, at 905-668-7711, extension 3276.

9. Attachments

Attachment #1: Location Map – Showing the Beaver River Bridge location and the MTO Controlled Access Highway Limits

Attachment #2: Letter to Rina Kulathinal, Manager, Engineering Program Delivery, MTO, from Ramesh Jagannathan, Acting Commissioner of Works, Durham Region, regarding the Beaver River Bridge Ownership and Replacement, dated November 27, 2023

Attachment #3: Letter to Ramesh Jagannathan, Acting Commissioner of Works, Durham Region, from Alain Beaulieu, Chief Engineer, MTO regarding the next steps for the replacement of the Beaver River Bridge, dated March 26, 2024

Attachment #4: Letter to Megan Duhig, Project Manager, Durham Region, from Algonquin Bridge, confirming the feasibility of a temporary bridge to replace the Beaver River Bridge, dated March 28, 2024

Respectfully submitted,

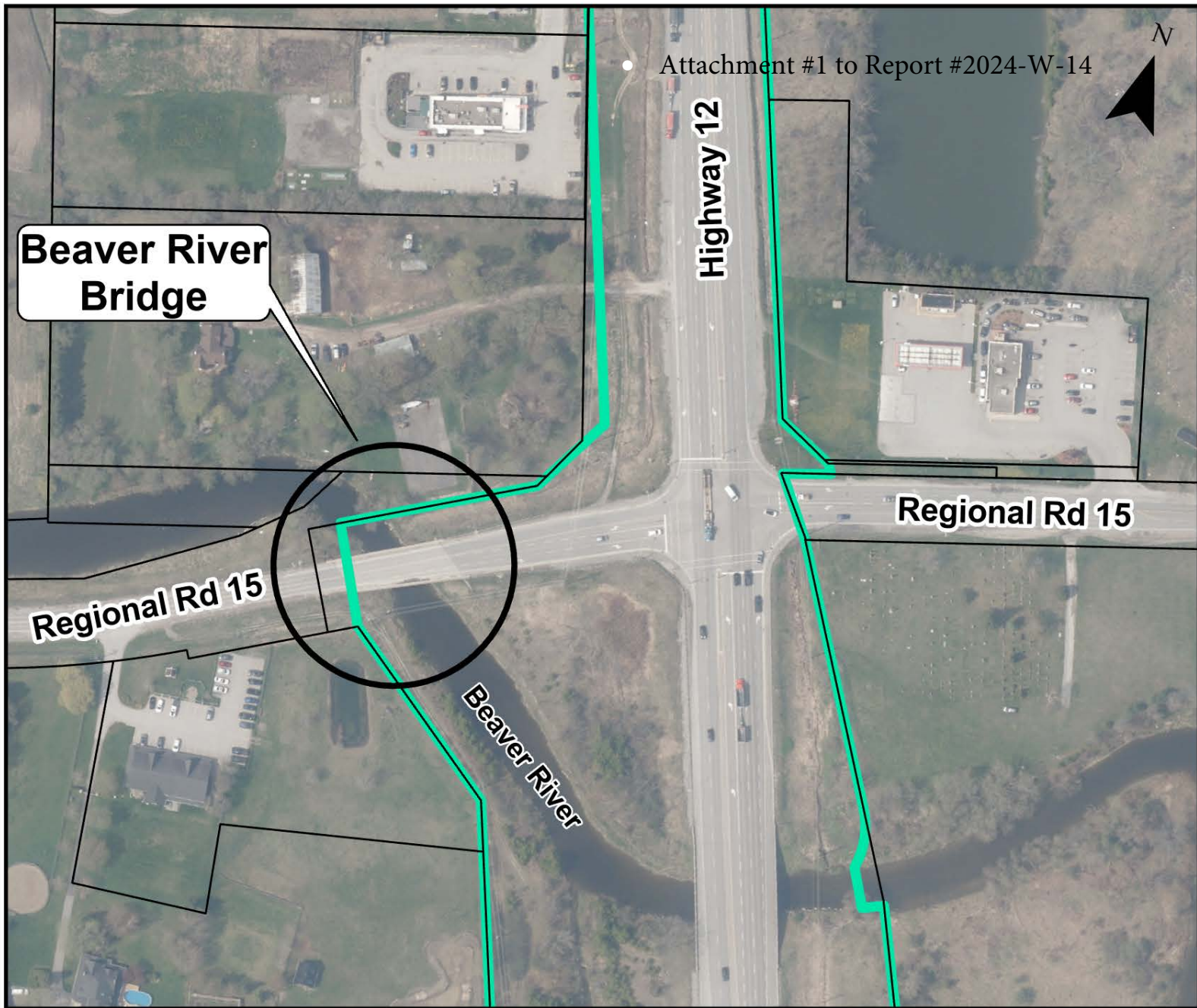
Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



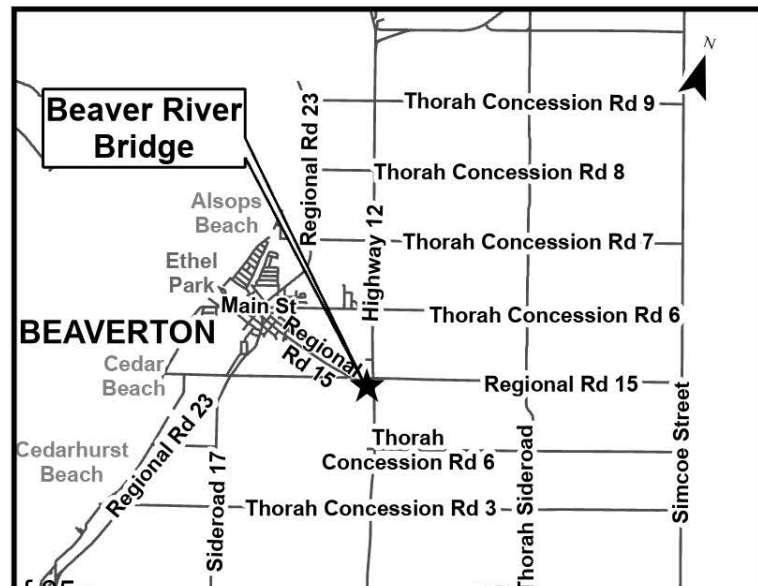
Location Map Beaver River Bridge Township of Brock

 Ministry of Transportation
Controlled Access Highway

 Ownership Parcel



GIS Data: Produced by Durham Region, 2024.
2023 Orthophotography provided by © First Base Solutions Inc.
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Sent via email (rina.kulathinal@ontario.ca)

November 27, 2023

**The Regional
Municipality of
Durham**

Works Department

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Ramesh Jagannathan
MBA, M.Eng., P.Eng.,
PTOE
Acting Commissioner
of Works

Rina Kulathinal
Manager, Engineering Program Delivery
Ministry of Transportation
159 Sir William Hearst Avenue
Toronto, ON
M3M 0B7

Dear Rina Kulathinal:

Re: Beaver River Bridge Ownership and Replacement

Further to recent discussions between the Ministry of Transportation (MTO) and Regional Municipality of Durham (Region) staff regarding the ownership and replacement of the Beaver River Bridge, located 100 m west of Highway 12 on Simcoe Street (Regional Road 15), the Region is hereby seeking confirmation of our understanding and expectations as outlined below.

It is our understanding that the Beaver River bridge was built in 1965 by MTO as part of the Highway 12 and Simcoe Street intersection reconstruction. Since the Region was formed in 1974, the Region has been operating on the understanding that this bridge was under the ownership of the Region. This understanding resulted in the Region completing regular structural inspections, minor repairs, and due to the deterioration evident on this bridge more intrusive and intensive investigations that resulted in a weight restriction being implemented in March 2020. In December 2020, interim accelerated repairs of the bridge were completed in order to eliminate the weight restrictions and keep the structure in service until replacement. The weight restriction was removed upon completion of the repairs. The current recommendation from our most recent July 2023 inspection is to replace the bridge in 1-5 years with no immediate action needed.

Rina Kulathinal, MTO
Beaver River Bridge Ownership and Replacement
November 27, 2023
Page 2

In March of this year, as part of the bridge replacement design being completed by the Region there was consultation with MTO related to the need for any improvements at the Simcoe Street and Highway 12 intersection which may impact the bridge geometry. In August, MTO advised that the bridge may be owned by MTO, having discovered that the bridge was within the Highway 12 MTO Controlled Access Highway (CAH) limits and located on MTO property. Despite MTO not having it in their inventory listing and therefore not regularly inspecting it, it has since been agreed that this bridge is an MTO asset.

As a result of this revelation, in late October MTO's consultant completed an inspection. Based on this inspection, MTO concluded that until further testing and evaluation can be completed to independently confirm the capacity of the structure, the prior weight restriction had to be reinstated. MTO installed the weight restriction signs on November 15. A day later, MTO decided to close the bridge on November 16 due to concerns with enforcement of the weight restriction. As of the date of this letter, the bridge remains closed.

We understand MTO's evaluation could determine that the weight restriction can be removed or that the weight restriction or closure needs to remain in place until the bridge is replaced. With the ownership revelation, the replacement will be subject to completion of design and availability of MTO funding, which MTO advised is expected in 2025.

The Region's ongoing bridge replacement design project by WSP (consultant) is estimated to be approximately 20 per cent complete, primarily with pre-engineering activities completed including geotechnical investigations, environmental field work, archaeological assessment, and hydraulic analysis. A proposed span arrangement has been developed and is subject to further review by the Lake Simcoe Region Conservation Authority (LSRCA) before the bridge structural design can commence. To streamline (e.g. communications, approvals, etc.) the design completion, we expect that MTO will now take over and complete the design and construction of the replacement.

We fully respect MTO's decision to close the bridge and undertake necessary evaluations and due diligence activities based on their inspection findings. We however wish to reiterate to MTO the importance of providing clear and frequent communications to the Region and Brock Township staff, given the impacts of any restrictions on this bridge to the Beaverton residents and beyond. It is also important that MTO update the detour and other signage plans in a timely manner as the status of bridge operations evolve.

Given our knowledge history with the bridge, the Region is committed to supporting MTO during this transition of responsibilities. Please acknowledge and confirm next steps as outlined above by December 1 so that we can keep Regional and Brock Township Councils informed on the matter.

Rina Kulathinal, MTO
Beaver River Bridge Ownership and Replacement
November 27, 2023
Page 3

Please feel free to contact myself or Paul Gee, Manager of Transportation Infrastructure, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ramesh', with a stylized flourish extending to the right.

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Acting Commissioner of Works

Copy: Lukasz Grobel, Head, Project Delivery, MTO

Miao Zhou, Area Manager, Transportation, MTO

Paul Gee, Manager, Transportation Infrastructure, Works, Region of Durham

Ministry of Transportation
Office of the Chief Engineer
 Transportation Infrastructure
 Management Division

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 301 St. Paul Street
 St. Catharines, Ontario L2R 7R4
 Tel Number: 613 484-0485

Ministère des Transports
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 l'infrastructure de transport

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March 26, 2024

Ramesh Jagannathan, Commissioner of Works
 Regional Municipality of Durham
 605 Rossland Road East
 Whitby, Ontario L1N 6A3

Dear Ramesh,

This letter is to confirm discussions that took place on March 20, 2024, regarding next steps associated with the Beaver River Bridge, located on Regional Road 15/Simcoe Street (RR15) west of Highway 12, in the Township of Brock, east of Beaverton.

On November 16, 2023 at 4:00 pm, following a structural assessment, the Beaver River Bridge, which carries Durham Region's Regional Road 15 over the Beaver River was closed to traffic by the Ministry of Transportation (MTO). Further testing indicated that the bridge's load carrying capacity was reduced by 70% and that only loads up to 7 tonnes maximum would be permitted to use the bridge if it were to open to traffic again. After consultation with experts, it was determined that enforcing compliance of a 7-tonne load restriction is not feasible. For public safety reasons, MTO recommends that the bridge remain closed until it can be replaced.

As background, the Beaver River Bridge was constructed by MTO in the 1960s, when the Beaverton Bypass was constructed. Based on historical documentation, there was an intent for the section of road containing the bridge to be assumed by the Ministry for construction purposes and reverted again to the County of Ontario (prior to the existence of Durham Region) once the new bridge was constructed. The County understood the intent and assumed care and control of the new bridge once construction was complete, and the bridge opened to the public in 1966. Durham Region has been managing the Beaver River Bridge as a municipal asset since 1974 and the bridge is not included in MTO's existing structural inventory. Although no formal transfer of ownership was completed, both the Region and MTO operated under the assumption that Durham Region, which has been performing maintenance and conducting bi-annual inspections and minor rehabilitations on the structure, owned the bridge.

.../2

-2-

The ministry understands that the Region was planning to replace the bridge in 2025. Detail design work was underway by the Region and was approaching the 30% design milestone when it was discovered that the transfer of ownership did not occur as originally intended and that the Ministry still owned the structure.

While detours are available while the bridge is closed, both the Region and MTO have received correspondence from Beaverton community members, the Fire Chief and local politicians requesting bridge be open to traffic as soon as possible due to impacts to the community and local businesses.

Given the community's interest in having the bridge reopened as soon as possible, the Region is in the best position to replace the bridge in a timely manner by continuing design work under the current engineering consultant assignment. As discussed, the ministry intends to transfer ownership of the bridge to Durham Region, so that the Region can continue the design using an established engineering assignment, and ultimately construct and reopen a new bridge.

While MTO understands there is significant pressure from the community to re-open the bridge as soon as possible, the situation does not meet the criteria for an Emergency Procurement approval by the province to expedite the work. As a result, we encourage you to complete the bridge design using the established design assignment as quickly as you can to ensure that the bridge replacement is completed and the bridge open to traffic as soon as possible.

The ministry will immediately begin the process to transfer the bridge to the Region and seek approvals to provide funding to Durham Region for the completion of the design and construction of the new bridge. Discussion between the Region and the province about roles and responsibilities during the period of ownership transition will continue.

I appreciate the frank and open discussion we shared and trust you are in agreement that resuming an already started design project is the most expeditious strategy to complete this work and reinstate this vital link for your community.

Thank you again for your time and for your efforts to work with the province to resolve this matter in a timely way.

Sincerely,

Alain Beaulieu, P.Eng.

Chief Engineer



121 Gerald Parkway
Thorndale, Ontario
Canada N0M 2P0
T 226 213 4707

algonquinbridge.com

Alexi Menjivar

Amenjivar@Algonquinbridge.com

(905)870-7067

March 28th, 2024

Megan Duhig

Project Manager Works Department – Transportation Infrastructure

The Regional Municipality of Durham

Dear, Megan Duhig

Having reviewed the documents for the Beaver River Bridge project, Algonquin Bridge believes a 2-lane (180' TDHR2H++ 7.35m) Modular Panel Bridge with 1- 1.5m Pedestrian walkway is a feasible solution. Our extensive experience, including successful completion of projects like the (*skewed*) Scott Street Detour in Ottawa as part of the OLRT Phase 2 (see attached story), reinforces our confidence in this recommendation. We are keen to collaborate further and offer any necessary assistance to advance the project. Upon receipt of additional geotechnical information, we can proceed with the design and supply of two Bolt-A-Bin Abutments as part of a comprehensive packaged solution.

Thank you for your consideration.

Sincerely,

Technical Sales Representative

Algonquin Bridge



Project Profile



February 4, 2022

Algonquin Temporary Modular Bridge maintains bus route during Ottawa's Stage 2 Light Rail Transit Project

Algonquin Bridge is pleased to have been selected to design and supply a 67 m Temporary Modular Bridge as part of the multi-billion-dollar Stage 2 Light Rail Transit (LRT) Project for the City of Ottawa. The bridge will maintain the Scott Street dedicated bus route while the LRT system is being constructed in the corridor below.



Project at a glance:

Project Name: OLRT - Scott Street Temporary Bridge

Location: Ottawa, Ontario

Contractor: Kiewit Eurovia Vinci, Ottawa Partnership

Sector: Public Works, Urban

Application: Detour Bridges

Product: Algonquin Modular Bridge

Dimensions: Span 67 m, width 10.5 m

Installation Time: Three weeks



Project Profile

Installation is a challenge when working in a tight urban area with restricted access. We worked closely with the contractor (Kiewit Eurovia Vinci, Ottawa Partnership) on installation plans, assembly details and crane positioning. The bridge went in very successfully with support from our on-site representative, Pierre-Charles Marceau. Everyone at Kiewit was pleased.

Algonquin also providing seven pedestrian bridges for this project

Algonquin Bridge appreciates having a strong relationship with Kiewit on this overall LRT project. We are also designing and supplying seven pedestrian bridges for the Woodroffe Avenue, Roosevelt, Green's Creek, Place d'Orleans, Queensview, Trim Road and Baseline stations.

Economical Algonquin Modular Bridges are easy to install

The Algonquin Modular Bridge System uses 3 m pinned panels to achieve clear spans of more than 82 m. They are easy to assemble with local crews and equipment. Designs can be configured for a wide range of roadway widths up to three lanes. Driving surfaces can be either steel decks with asphalt pavement or anti-skid, epoxy-aggregate coating. Timber decking is also available.

See all Project Profiles on algonquinbridge.com



Take a 360° video tour of
this project

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