



THE REGIONAL MUNICIPALITY OF NIAGARA  
PUBLIC WORKS COMMITTEE  
AGENDA

PWC 11-2024

Tuesday, December 3, 2024

9:30 a.m.

Council Chamber - In Person and Electronic Meeting

Niagara Region Headquarters, Campbell West

1815 Sir Isaac Brock Way, Thorold, ON

To view live stream meeting proceedings visit: [niagararegion.ca/government/council](https://niagararegion.ca/government/council)

---

|   | Pages  |
|---|--------|
| 1. <u>CALL TO ORDER</u>   |        |
| 2. <u>LAND ACKNOWLEDGEMENT STATEMENT</u>  |        |
| 3. <u>DISCLOSURES OF PECUNIARY INTEREST</u>   |        |
| 4. <u>PRESENTATIONS</u>   |        |
| 5. <u>DELEGATIONS</u>   |        |
| 5.1 <u>Hauled Sewage Rate Review (PW 38-2024, Agenda Item 7.1)</u>  |        |
| 5.1.1 Michelle Wasylyshen, Ontario Craft Wineries   | 3 - 4  |
| 5.1.2 Harald Thiel, Hidden Bench Estate Winery  | 5 - 6  |
| 5.1.3 Tom Richardson, Sullivan Mahoney LLP, on behalf of 1218691 Ontario Inc. (S.C. Watson)                     | 7 - 8  |
| 6. <u>ITEMS FOR CONSIDERATION</u>   |        |
| 6.1 <u>PW 36-2024</u>   | 9 - 14 |
| Extension of Curbside Collection/Haulage of Garbage, Recyclables and Organics Contracts (Contract 2019-RFP-156) |        |

|     |   |         |
|-----|---|---------|
| 6.2 | <u>PW 37-2024</u><br>Award of Contract 2024-T-195 Regional Road 81 King Street<br>Replacement of Twenty Mile Creek Arch Bridge (Structure 081210) in the<br>Town of Lincoln | 15 - 22 |
|-----|---|---------|

## 7. CONSENT ITEMS FOR INFORMATION

|     |   |         |
|-----|---|---------|
| 7.1 | <u>PW 38-2024</u><br>Hauled Sewage Rate Review - Comment Period Responses<br><br>To be distributed. |         |
| 7.2 | <u>PW 34-2024</u><br>Annual Water Quality Management System Update                                  | 23 - 32 |
| 7.3 | <u>PW 35-2024</u><br>Oswego Creek Bridge Replacement Project  | 33 - 37 |

## 8. OTHER BUSINESS

## 9. NEXT MEETING

The next meeting will be held on Tuesday, January 7, 2025, at 9:30 a.m.

## 10. ADJOURNMENT

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisor at 905-980-6000 ext. 3252 (office), 289-929-8376 (cellphone) or [accessibility@niagararegion.ca](mailto:accessibility@niagararegion.ca) (email).

**From:** [Niagara Region Website](#)  
**To:** [Clerks](#)  
**Subject:** Online Form - Request to Speak at a Standing Committee or Regional Council  
**Date:** November 8, 2024 10:54:09 AM

## Request to Speak at a Standing Committee or Regional Council

To reply, copy the email address from below and put into 'To'. (if resident entered their email address)

Name

Michelle Wasylyshen

Address

4890 Victoria Avenue North

City

Vineland

Postal

L0R 2E0

Phone

9055628070

Email

michelle@ontariocraftwineries.ca

Organization

Ontario Craft Wineries

standing committee

Public Works Committee

Presentation Topic

Hauled Sewage Rates Meeting

Presentation includes slides

No

Previously presented topic

No

Presentation Details

Michelle Wasylyshen will present on behalf of Ontario craft Wineries and our membership that is being affected by the proposed sewage haul rate changes.

Video Consent

Yes



**From:** [Niagara Region Website](#)  
**To:** [Clerks](#)  
**Subject:** Online Form - Request to Speak at a Standing Committee or Regional Council  
**Date:** November 16, 2024 12:45:32 PM

## Request to Speak at a Standing Committee or Regional Council

To reply, copy the email address from below and put into 'To'. (if resident entered their email address)

Name

Harald Thiel

Address

4152 Locust Lane

City

Lincoln

Postal

L0R 1B2

Phone

[REDACTED]

Email

hthiel@hiddenbench.com

Organization

Hidden Bench Estate Winery

standing committee

Public Works Committee

Presentation Topic

Hauled Sewage Rate Increase

Presentation includes slides

No

Previously presented topic

No

Presentation Details

Our presentation is in regard to PW-26-2024 the proposed increase in Hauled Sewage Waste rate increase. We do not believe that adequate analysis has been done in regard to this proposed increase, the impact on the wine industry and the flawed analysis used to arrive at the proposed increase. Please confirm receipt of this request.

Video Consent

Yes



**From:** [Niagara Region Website](#)  
**To:** [Clerks](#)  
**Subject:** Online Form - Request to Speak at a Standing Committee or Regional Council  
**Date:** November 19, 2024 9:03:50 AM

## Request to Speak at a Standing Committee or Regional Council

To reply, copy the email address from below and put into 'To'. (if resident entered their email address)

Name

Tom Richardson

Address

40 Queen Street, P.O. Box 1360

City

St Catharines

Postal

L2R 6Z2

Phone

9056886655

Email

tarichardson@sullivanmahoney.com

Organization

Sullivan Mahoney LLP

standing committee

Public Works Committee

Presentation Topic

Hauled Sewage Rate Update

Presentation includes slides

Yes

Previously presented topic

Yes

Presentation only new info

Yes

Presentation Details

We are acting on behalf of 1218691 Ontario Inc. and we wish to speak to new information which we have received from the Region at the Public Works Committee meeting on December 3, 2024.

Video Consent

Yes





---

**Subject:** Extension of Curbside Collection/Haulage of Garbage, Recyclables and Organics Contracts (Contract 2019-RFP-156)

**Report to:** Public Works Committee

**Report date:** Tuesday, December 3, 2024

---

## Recommendations

1. That the Region's one (1) year extension option in Contract 2019-RFP-156 for Curbside Collection/Haulage of Garbage, Recyclables and Organic Waste with Miller Waste Systems Inc. made November 19, 2019, as amended (the "**Miller Contract**") **BE EXERCISED** such that the Miller Contract **BE EXTENDED** on the same terms and conditions for an additional year at an estimated total cost of \$15,443,060 (including 13% HST) as further set out in this report;
2. That the Region's one (1) year extension option in Contract 2019-RFP-156 for Curbside Collection/Haulage of Garbage, Recyclables and Organic Waste with GFL Environmental Inc. made November 19, 2019, as amended (the "**GFL Contract**") **BE EXERCISED** such that the GFL Contract **BE EXTENDED** on the same terms and conditions for an additional year at an estimated total cost of \$9,042,844 (including 13% HST) as further set out in this report; and
3. That the Director of Waste Management **BE AUTHORIZED** to issue the necessary notices to each of Miller Waste and GFL in order to affect the extensions of the Miller Contract and GFL Contract, respectively.

## Key Facts

- This report seeks Council's approval to extend the term of the Region's collection Contracts with Miller Waste Systems Inc. ("**Miller Waste**") and GFL Environmental Inc. ("**GFL**") by one (1) year on the same terms and conditions.
- The contract extensions require Council approval in accordance with Schedule "B" (Purchasing and Execution Authority) of the Region's Procurement By-law 02-2016 as amended, whereby Council is required to approve any contract award that exceeds \$5,000,000 in total value.
- Under the Contracts, Niagara Region reserves the right to extend the term of the Contracts with Miller Waste and GFL for one (1) year using the same terms and conditions including pricing, by giving the Contractor(s) at least six (6) months written notice.

- Staff is recommending extending the Contracts now in order to benefit from the lower contract pricing for one (1) additional year in light of results in recent competitive procurement of waste collection contracts where municipalities have seen cost increases ranging from 50% to 150%.
- Preparing for a new collection contract requires approximately 38 months lead time, and therefore a decision on the Contract extension is required now.
- The Contracts are currently in year five (5) with both contractors continuing to deliver positive performance with no significant issues or concerns.

### **Financial Considerations**

With annual Contract Price Adjustments applied, the combined estimated cost of the one (1) year extension (March 2028 - March 2029) for both Contracts is \$22,050,359 (including non-recoverable HST).

The total annual value for both Contracts in the 2025 operating budget is \$20,669,504 (including non-recoverable HST). We estimate that the annual contract value for both Contracts will be \$22,050,359 (including non-recoverable HST) for the period of March 6, 2028 to March 4, 2029 by applying the annual Contract Price Adjustment<sup>1</sup> to the Contract values in the 2025 operating budget.

The estimated cost for the one-year extension of the contract with Miller Waste is \$13,906,981 and \$8,143,378 for GFL (both including non-recoverable HST). Further details provided in Appendix 1 to Report PW 36-2024.

---

<sup>1</sup> Contract Price Adjustment is calculated to account for the annual changes in cost of living, cost of fuel and household count. It is calculated using the base contract value with 80% of the value subject to CPI price adjustment, 10% of the value subject to fuel adjustment and a year over year net difference in low density residential units. The Contract is adjusted annually for the Contract Price Adjustment.

## Analysis

Preparing for a new collection contract requires approximately 38 months lead time, and therefore a decision on the Contract extension is required now.

The current end date of the Contract is March 5, 2028. The anticipated lead time to prepare, procure and complete the preparation for a new collection contract is currently estimated at 38 months. This means that staff would need to begin the procurement process for the new collection contract in January 2025 if the current contract end date of March 5, 2028 is maintained. Consequently, staff are coming forward now seeking Council's approval for the Contract extensions.

Extending the current Contracts will result in cost avoidance by capitalizing on existing contract pricing which is significantly lower than current market price.

Information shared by service providers, equipment suppliers, industry trade associations, Regional municipalities and the Region's collection contractors indicate that the waste management industry has experienced significant cost increases. The trend of higher collection contract cost has been reflected in recently awarded contracts in other Ontario Municipalities with increases ranging from 50% to 150% resulting in significant price increases in new contracts compared to previous.

Increases are due to inflation, cost of insurance and bonding, cost of labour and capital and overhead cost. Some municipalities also confirmed that, in addition to the causes of price increase identified by industry players, program changes such as the growing trend to switch to a fully automated cart-based collection system and green fleet have also contributed to the increased cost of new collection contracts.

Staff do not anticipate costs going down; therefore, the recommendation to extend the Contract will result in the avoidance of potential cost increases for one additional year.

The collection trucks are in good condition and expected to continue to be in a reasonable state of repair within the Contract extension period.

By the end of the initial term of the Contracts, on March 5, 2028, the collection trucks will be seven (7) years and four (4) months old.

The general industry practice is to amortize waste collection trucks over a 10-year period which assumes a useful life of at least 10 years. Both Miller Waste and GFL have indicated that no issues are anticipated with truck performance, if used over a one-year

extension period. The Contract extensions represent a reasonably low risk with respect to maintenance and operations.

Contractor performance continues to remain positive with no significant issues or concerns.

From the start of the Contracts, both Miller Waste and GFL continue to deliver good service and meet contract requirements with the following performance measures:

- Both contractors are completing waste collection by 5:30 p.m. at a rate of 96% (Miller Waste) and 100% (GFL) respectively.
- Compared to the baseline year of 2019 to 2020, there is a decrease of 51% (7,347) in service complaints.

### **Alternatives Reviewed**

Option 1: Do not extend the Contracts

Not exercising the one-year extension option of the Contracts means that the procurement process for the new collection contract must be initiated in early 2025. This option would not take advantage of the current pricing and could lead to higher costs based on recent market pricing.

Option 2: Extend the Contracts (recommended)

Staff recommend exercising the one-year Contract extensions. This will capitalize on existing and significantly lower contract pricing, resulting in cost avoidance for an additional year.

### **Relationship to Council Strategic Priorities**

The recommendation highlighted in this report strategically enforces Council's priority of an Effective Region by delivering fiscally responsible and sustainable core services as it relates to its waste management programs and services.

### **Other Pertinent Reports**

- Confidential PW 65-2019 - A Matter of Commercial and Financial Information, supplied in confidence to the municipality, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly

with the contractual or other negotiations of a person, group of persons, or organization - Financial Information Supporting Waste Management Collection Contract Procurement ProcessProcess.

---

**Prepared by:**

Mariano Singzon  
Manager, Waste Collection and  
Diversion  
Waste Management, Public Works  
Department

---

**Recommended by:**

Terry Ricketts, P.Eng.  
Commissioner of Public Works  
Public Works Department

---

**Submitted by:**

Ron Tripp, P.Eng.  
Chief Administrative Officer

This report was prepared in consultation with Catherine Habermebl, Director, Waste Management Services and reviewed by Renee Muzzell, Manager, Program Financial Support and Brian Wilson, Legal Counsel.

**Appendices**

Appendix 1 Pricing for one (1) year extension

**Appendix 1 Estimated Pricing for One (1) Year Contract Extension**

| Contract Price Adjustment <sup>1</sup>        | GFL                     | Miller Waste        | Total               |
|---|-------------------------|---------------------|---------------------|
| Timelines                                     | Adjusted Contract Value |                     |                     |
| March 6 – October 18, 2028 <sup>2</sup>       | \$4,894,304             | \$8,385,683         | \$13,279,987        |
| October 19, 2028 – February 2029 <sup>3</sup> | \$3,020,037             | \$5,130,934         | \$8,150,971         |
| March 1- 4 2029 <sup>3</sup>                  | \$88,176                | \$149,808           | \$237,984           |
| Subtotal                                      | \$8,002,517             | \$13,666,425        | \$21,668,942        |
| <b>Total (including non-recoverable HST)</b>  | <b>\$8,143,378</b>      | <b>\$13,906,981</b> | <b>\$22,050,359</b> |

Note:

- Contract Price Adjustment applied on the anniversary date of Contract commencement (October 19<sup>th</sup>) and is calculated using the base contract value with 80% of the value subject to CPI price adjustment, 10% of the contract value subject to fuel adjustment and the year over year net difference in low density residential unit count.
  - Assumed 2% annual CPI.
  - Assumed current average fuel price adjustment of about 3.6%.
- Projected Contract Price Adjustment calculated for the anniversary date of October 19, 2027 is applied to the first 7.5 months (March 6, 2028 to October 18, 2028) of the extension period.
- Projected Contract Price Adjustment calculated for the anniversary date of October 19, 2028 is applied to 4.5 months (October 19, 2028 to March 4, 2029).

**Subject:** Award of Contract 2024-T-195 Regional Road 81 King Street Replacement of Twenty Mile Creek Arch Bridge (Structure 081210) in the Town of Lincoln

**Report to:** Public Works Committee

**Report date:** Tuesday, December 3, 2024

---

## Recommendations

1. That Contract 2024-T-195 Regional Road 81 King Street Replacement of Twenty Mile Creek Arch Bridge (Structure 081210) in the Town of Lincoln, **BE AWARDED** to the lowest compliant bidder, Urban Link Civil Ltd., at their bid price of \$8,101,010.12 (including 13% HST); and
2. That the Regional Chair and the Regional Clerk **BE AUTHORIZED** to execute the contract documents, in a form satisfactory to the Director, Legal and Court Services.

## Key Facts

- This report seeks Council approval to award Contract 2024-T-195 Regional Road 81 King Street Replacement of Twenty Mile Creek Arch Bridge (Structure 081210), in the Town of Lincoln to the lowest compliant bidder, Urban Link Civil Ltd., at the submission price of \$8,101,010 (including 13% HST).
- A public tender process was issued through Procurement and Strategic Acquisitions, and six (6) bids were received with the lowest compliant bid being \$7,169,036 (excluding 13% HST) from Urban Link Civil Ltd.
- A Schedule “C” Municipal Class Environmental Assessment was completed in 2022 to address the bridge replacement.
- \$10,462,710 has been approved as the capital project budget for Transportation under Project 20000663 - Replacement of the Twenty Mile Creek Arch Bridge (Structure 081210).
- The Niagara Region Procurement By-law 02-2016, as amended February 28, 2019, in accordance with Schedule B, requires that Council approve tender awards greater than \$5,000,000.

## **Financial Considerations**

The total cost of this contract award is \$7,295,225 (including non-recoverable HST). There are sufficient funds in the capital budget for Project 20000663 to award this contract.

Council initially approved \$500,000 in 2018 for the detailed design, property acquisition and utility relocations for the bridge replacement project.

Council approved an additional \$4,520,000 in 2019 and \$5,000,000 in 2023 to meet the Region's project construction needs for a total project budget of \$10,020,000.

A gross budget adjustment of \$442,710 (including non-recoverable HST) was recently processed in November 2024 to rebuild the Sho'arishon Park which will be funded by the Town of Lincoln as a cost sharing partner in the project. The total revised budget for Project 20000663 is \$10,462,710.

The final cost sharing contribution from The Town of Lincoln will be based on actual construction values.

Funding sources for this project are as follows:

- Federal Gas Tax \$3,150,000
- Development Charges \$1,850,000
- Debt Funding \$5,020,000
- Town of Lincoln Cost Sharing \$ 442,710

The total cost of this contract award is \$7,295,225 (including non-recoverable HST). There are sufficient funds in the capital budget for Project 20000663 to award this contract.

A full budget breakdown can be found in Appendix 1 to Report PW 37-2024 - Total Estimated Project Cost.

## **Analysis**

Twenty Mile Arch Bridge was built in 1940 and is now past its useful life and requires replacement.

The Twenty Mile Arch Bridge is located in the Jordan Valley area and crosses the Sixteen Mile creek water course as shown in Appendix 2 to Report PW 37-2024. The



Region completed a Schedule “C” Municipal Class Environmental Assessment of the Twenty Mile Arch Bridge in June 2022. Through the Environmental Assessment process there were a number of alternatives reviewed to address the bridge condition, capacity, natural environment, property, costs, etc. The replacement of the existing structure in the same location was the most economical option, had the least impact on the sensitive natural environment and the least impact on existing properties.

Niagara Region has partnered with Town of Lincoln to leverage economy of scale.

The project includes full replacement of the Twenty Mile Arch Bridge structure, including a widened pedestrian platform along with plans to rebuild the Sho’arishon Park for the Town of Lincoln. The Town and the Region have collaborated on an inaugural inclusion of a unique First Nation themed pedestrian barrier over the bridge structure. The construction also includes the installation of a temporary one (1) lane bridge to allow traffic passage during the construction phase.

A public tender process was followed for this procurement.

A public tendering process was initiated to solicit bids. The tender was made public on October 4, 2024, and closed on November 7, 2024. Six (6) bids were received with Urban Link Civil Ltd. at the lowest bid price of \$7,169,036 (excluding 13% HST).

The Procurement By-law 02-2016, as amended February 28, 2019, in accordance with Schedule B, requires that Council approve tender awards greater than \$5,000,000.

The Region will prioritize communication throughout the project.

The Region will communicate to the public using various tactics throughout the project including, but not limited to, notices to directly affected residents and a Public Information centre.

### **Alternatives Reviewed**

Approve the tender award (Recommended). This will allow the timely replacement of the Twenty Mile Arch Bridge structure and ensuring traffic can be maintained through the valley.

Do nothing (Not recommended). If Council chooses not to move forward with this project, the bridge would need to be closed in the near future and the Region would eliminate the transportation corridor between Jordan and Vineland. This would also impact the ability of emergency services to respond in a timely manner, interrupt the Niagara wine route, and impede on the ability for businesses and residents to navigate through the Town of Lincoln.

### **Relationship to Council Strategic Priorities**

This recommendation relates to the Prosperous Region Strategic Priority. Investing in new infrastructure will have a short-term improvement in the skilled trades required to replace the bridge. The structure replacement will also enhance the active transportation and transportation network in the Niagara Region.

---

#### **Prepared by:**

Mike Wilson, A.Sc.T., PMP  
Manager of Capital Projects  
Transportation Engineering

---

#### **Recommended by:**

Terry Ricketts, P.Eng.  
Commissioner of Public Works  
Public Works Department

---

#### **Submitted by:**

Ron Tripp, P.Eng.  
Chief Administrative Officer

This report was prepared in consultation with Graeme Guthrie, Associate Director Transportation Services, Brian McMahon, Program Financial Specialist, Janet Rose, Communications Consultant, and reviewed by Frank Tassone, Director Transportation Services, Donna Gibbs, Director of Legal Court Services and Michelle Rasiulis, Procurement Manager

## **Appendices**

|            |                              |
|------------|------------------------------|
| Appendix 1 | Total Estimated Project Cost |
| Appendix 2 | Key Plan                     |

| <b>Total Estimated Project Cost (20000663)*<br/>and Project Funding Sources</b>        | <b>Council<br/>Approved<br/>Budget</b> | <b>Budget<br/>Increase/<br/>Reallocation</b> | <b>Revised Council<br/>Approved<br/>Budget</b> | <b>Expended &amp;<br/>Committed as<br/>of 10/31/24</b> | <b>Contract<br/>Award/<br/>Forecast</b> | <b>Budget<br/>Remaining</b>   |
|--|--|--|--|--|---|-------------------------------|
| <b>Project Element</b>   | <b>(A)</b>                             | <b>(B)</b>                                   | <b>(C) = (A) + (B)</b>                         | <b>(D)</b>   | <b>(E)</b>                              | <b>(F) = (C)-(D)-<br/>(E)</b> |
| (a) Planning   | 100,000                                | (91,362)                                     | 8,638  | 8,638  | -                                       | -                             |
| (b) Construction (including Construction<br>Contingency and 1.76% non-recoverable HST) |  |  |  |  |   |                               |
| i. Niagara Region  | 9,520,000                              | (2,224,775)                                  | 7,295,225                                      | -  | 7,295,225                               | -                             |
| ii. Cost Sharing - Town of Lincoln   | 442,710                                | -  | 442,710  | -  | 442,710                                 | -                             |
| (c) Project Contingency  | -                                      | 516,137                                      | 516,137  | -  | 516,137                                 | -                             |
| (d) Property Acquisition   | 150,000                                | 150,000                                      | 300,000  | 4,408  | 295,592                                 | -                             |
| (e) Consulting Engineering Services  |  |  |  |  |   |                               |
| i. Detailed Design   | 250,000                                | 400,000                                      | 650,000  | 482,852  | 167,148                                 | -                             |
| ii. Contract Administration & Inspection   | -                                      | 450,000                                      | 450,000  | -  | 450,000                                 | -                             |
| iii. Geotechnical Service-Quality Control  | -                                      | 50,000                                       | 50,000   | -  | 50,000                                  | -                             |
| (f) Project Management (In-House) and<br>Operations                                    | -                                      | 100,000                                      | 100,000  | 51,793   | 48,207                                  | -                             |
| (g) Utility Relocation   | -                                      | 350,000                                      | 350,000  | 85,892   | 264,108                                 | -                             |
| (h) Miscellaneous  | -                                      | 300,000                                      | 300,000  | -  | 300,000                                 | -                             |
| <b>Total Estimated Project Cost</b>  | <b>10,462,710</b>                      | <b>-</b>                                     | <b>10,462,710</b>                              | <b>633,583</b>   | <b>9,829,126</b>                        | <b>-</b>                      |

| <b><u>Total Estimated Project Cost (20000663)*<br/>and Project Funding Sources</u></b> | <b>Council<br/>Approved<br/>Budget</b> | <b>Budget<br/>Increase/<br/>Reallocation</b> | <b>Revised Council<br/>Approved<br/>Budget</b> | <b>Expended &amp;<br/>Committed as<br/>of 10/31/24</b> | <b>Contract<br/>Award/<br/>Forecast</b> | <b>Budget<br/>Remaining</b> |
|--|--|--|--|--|---|-----------------------------|
| <b><u>Project Funding Sources</u></b>  |  |  |  |  |   |                             |
| Regional Debt  | 5,020,000                              | -  | 5,020,000                                      | -  | 5,020,000                               | -                           |
| Development Charges  | 1,850,000                              | -  | 1,850,000                                      | 88,690   | 1,761,310                               | -                           |
| CWWF/Gas Tax   | 3,150,000                              | -  | 3,150,000                                      | 338,059  | 2,811,941                               | -                           |
| Municipal Cost Sharing - Town of Lincoln   | 442,710                                | -  | 442,710  | -  | 442,710                                 | -                           |
| <b>Total Project Funding Sources</b>   | <b>10,462,710</b>                      | <b>-</b>                                     | <b>10,462,710</b>                              | <b>426,749</b>   | <b>10,035,961</b>                       | <b>-</b>                    |

\*All costs include 1.76% non-recoverable HST

\*\*Total Contract Award is equal to i) \$7,169,035.50 before tax; ii) \$7,295,224.86 including 1.7602% non-recoverable HST; iii) \$8,101,010.12 including 13% HST



---

**Subject:** Annual Water Quality Management System Update

**Report to:** Public Works Committee

**Report date:** Tuesday, December 3, 2024

---

## Recommendations

1. That Report PW 34-2024 **BE RECEIVED** for information as the Annual Water Quality Management System Update.

## Purpose

The Annual Water Quality Management System (QMS) Update is being submitted to Regional Council to provide an annual update regarding the ongoing performance of the Water QMS which includes key QMS milestones achieved throughout 2024. These milestones support the Water-Wastewater Division's Water QMS as required by the *Drinking Water Quality Management Standard* and our own internal procedures. This Annual Water QMS Update is a key communication tool from Top Management to the Owner (Council) as referenced in Element 12 Communications of the *Drinking Water Quality Management Standard*.

## Key Facts

- The *Drinking Water Quality Management Standard* was created under the *Safe Drinking Water Act, 2002* and requires Drinking Water System Owners to implement and maintain an accredited Water Quality Management System (QMS).
- The Region's Water QMS is a structured system designed to ensure compliance with consumer and regulatory standards, emphasizing best practices, continual improvement, and corrective actions to enhance drinking water quality and operational performance.
- The Annual Water QMS Update is submitted to Regional Council to report on the performance of the Water QMS and key milestones achieved in 2024, as required by the *Drinking Water Quality Management Standard* and internal procedures.
- As Owners of Niagara Region's drinking water systems, Regional Council must act in good faith, make informed decisions, and provide necessary financial resources to ensure the systems' sustainable future, as outlined in the *Safe Drinking Water Act, 2002*.

## Financial Considerations

No new direct financial implications result from this report; approximately \$32,000 has been expended to date in 2024 to manage the quality management system.

There are no new direct financial implications as a result of this report. All related costs were included in the 2024 operating budget for Water and Wastewater Operations. In total, approximately \$32,000 (including non-recoverable HST) has been expended to manage the quality management system program in 2024 to-date; this includes annual maintenance and support fees for EtQ Reliance, the software used in support of the QMS, as well as fees for a third-party accreditation audit of the Water QMS. EtQ Reliance software manages elements of the Water QMS, including document management, corrective action reporting and resolution, records management, and capital project management. This ensures that the Water QMS continues to meet the requirements of the *Drinking Water Quality Management Standard*.

## Analysis

### Background

Niagara Region has implemented an accredited Water Quality Management System as per the *Safe Drinking Water Act, 2002*.

The *Safe Drinking Water Act, 2002* mandates the development, implementation, and accreditation of a Water QMS that conforms to the *Drinking Water Quality Management Standard (DWQMS)*.

A Water QMS is a business process that outlines a structured approach to managing and improving how we operate our water system to ensure we meet consumer and regulatory requirements. It emphasizes best management practices, continual improvement, and implementing corrective actions to enhance operational performance and produce high quality drinking water.

An accredited Water QMS is also a condition of issuance of a municipal drinking water licence. Niagara Region holds five municipal drinking water licences, one for each of its drinking water systems.



The Water QMS looks to Top Management and the Owner (Regional Council) to provide guidance and endorsement.

Top Management, including the Commissioner of Public Works, Director of Water and Wastewater, and related Associate Directors, are designated as the Top Management level within our operating authority. They are accountable for day-to-day operating decisions respecting the QMS and make recommendations to the owner (Council), as necessary, regarding Niagara Region's drinking water systems.

Owner (Regional Council) endorsement of the Water QMS is required to keeping the accreditation of the QMS. Niagara's Water QMS was endorsed by Regional Council on March 23, 2023 under PW 5-2023, Drinking Water Compliance and Water Wastewater Quality Management System Endorsement. Re-endorsement of the Water QMS Operational Plan is required upon each new term of Council or if significant modifications are made to its content.

Niagara Region Councillors are responsible for ensuring the safety and integrity of municipal drinking water systems, adhering to the "Standard of Care" requirement in section 19 of the *Safe Drinking Water Act, 2002*

As Owners of the Niagara Region's drinking water systems, Regional Councillors have specific responsibilities as defined within the *Safe Drinking Water Act, 2002*. One such responsibility is the "Standard of Care" clause (section 19); that requires Councillors to "exercise the level of care, diligence and skill in respect of a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation" and to "act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the municipal drinking water system."

In summary, Council's duty is to act in good faith and with a commitment to making informed decisions to ensure the sustainable future of our drinking water systems in Niagara Region. CWCD 2024-172, dated October 18, 2024, provided further information to Council in this regard.

The Water QMS supports Regional Council with meeting Standard of Care, providing confidence that water services are delivered in accordance with Regional policies and procedures.

The Water QMS accreditation process involves annual internal and third-party audits to assess compliance with the DWQMS and identify opportunities for improvement.

The Water QMS accreditation process requires both third party accreditation audits and annual internal audits. Audits serve critical functions in Niagara Region's Water QMS, they confirm the effectiveness of the Water QMS by assessing conformance with Ontario's *Drinking Water Quality Management Standard* (DWQMS) and strengthen system performance through identification of continual improvement opportunities. Facilities and programs are audited annually via internal and external audits and each year audit findings identify internal process improvements and system enhancements.

An External Audit was conducted in early 2024 and confirmed that the Water QMS documents satisfy all requirements of the Standard.

As a means to achieve and maintain accreditation to the Standard, Niagara Region utilizes the services of QMI-SAI Global as the accreditation body for the Water QMS. Accreditation of the Water QMS is a condition of the Region's Municipal Drinking Water Licences; without continued accreditation, these licences would be revoked. QMI-SAI Global conducted a thorough off-site document review in March 2024 to confirm that Water QMS documents satisfy all requirements of the Standard.

Audit findings are included in Table 1 and indicate the maturity of the Water QMS and diligent operational practices.

**Table 1: External Audit Results**

| Finding Type                 | Number of Findings |
|------------------------------|--------------------|
| Non-Conformance              | 0                  |
| Potential Non-Conformance    | 0                  |
| Best Practice for Evaluation | 1                  |

QMI-SAI Global confirmed that the Water QMS is effectively implemented and maintained and meets the requirements of Ontario's *Drinking Water Quality Management Standard*.

The 2024 Internal Audit identified 10 non-conformances and additional ongoing improvements.

Internal audits are completed by qualified water and wastewater personnel to confirm conformance of the division's Water QMS with Ontario's *Drinking Water Quality Management Standard* and with divisional policies and procedures.

The division's internal audits are typically more rigorous and thorough than external accreditation audits, and the number and detail of audit findings demonstrates this. The internal audit findings are included in Table 2. Corrective actions are put in place to address each audit finding and opportunities to improve continue to be identified to ensure that the system is relevant and appropriate.

**Table 2: Internal Audit Results**

| Finding Type                 | Number of Findings |
|------------------------------|--------------------|
| Non-Conformance              | 10                 |
| Potential Non-Conformance    | 2                  |
| Best Practice for Evaluation | 19                 |

The 2024 Risk Assessment, required by Ontario's DWQMS, identified improvement opportunities and resulted in action plans.

The *Drinking Water Quality Management Standard* requires that a Risk Assessment be conducted every three years and reviewed on an annual basis. A full Risk Assessment was completed between February and April 2024. The risk assessment process draws the experience from a cross-functional group of staff to identify potential service delivery challenges, practical preventative measures, and improvement opportunities. The outcome of each assessment results in action plans that help to support delivery of reliable water services. The risks identified during the 2024 risk assessment can be found in Appendix 1. While new risks were added during 2024, existing control measures and/or risk action plans adequately address these risks and minimize their potential effect on service delivery. Further condition assessments are planned considering the current state of assets which will help inform future risk assessments and capital budget recommendations.

Top Management meeting occurred in May 2024 to review and evaluate the Water QMS for compliance, performance, and improvement opportunities.

Members of Water QMS Top Management and the QMS Representative meet twice per year to formally review the complete management system including regulatory compliance, water quality, risk assessment, audit results, emergency response, operational performance, and action items to ensure effective quality management as required by the *Drinking Water Quality Management Standard*. During these meetings, Top Management evaluate the continuing suitability, adequacy, and effectiveness of the Water QMS and identifies corrective actions and continual improvement opportunities to enhance the QMS and associated operations.

Minor administrative changes to the Water QMS Operational Plan were approved in 2022 and re-endorsed by Regional Council in 2023.

Minor administrative changes were made to the Water QMS Operational Plan in June 2022 and these revisions were submitted to the Commissioner of Public Works for approval on behalf of Council as per the delegated authority granted to the Commissioner under Report PW 109-2008. Since that time, there have been no additional updates, the Water QMS Operational Plan was re-endorsed by the new term of Regional Council on March 23, 2023 under PW 5-2023, Drinking Water Compliance and Water Wastewater Quality Management System Endorsement.

Staff meet quarterly with municipal counterparts to share best practices and improve service delivery.

Water Operating Authority Staff meet quarterly with Area Municipal counterparts to address challenges, share best practices, evaluate operating procedures, and develop common approaches for efficient and effective service delivery.

#### Public and/or Service Users

The Water QMS Policy and Water QMS accreditation information, are available to the public and service users via the Niagara Region's external website.

The most current approved version of the Operational Plan or any Water QMS supplementary documents are available upon request to Water-Wastewater Quality Management Specialist, [holly.philbrick@niagararegion.ca](mailto:holly.philbrick@niagararegion.ca).

## **Alternatives Reviewed**

The implementation of the DWQMS is required under the *Safe Drinking Water Act, 2002*, therefore the Operating Authority must develop and sustain a QMS that meets the minimum standards outlined in the DWQMS. Accreditation is conducted by a third-party body, QMI-SAI Global. The alternative of not undergoing accreditation has not been explored as a viable alternative for the Niagara Region, as accreditation is a legal requirement for water system owners.

## **Relationship to Council Strategic Priorities**

Effective Region - Niagara Region's Water Quality Management System and its associated audit processes supports Effective Region by delivering fiscally responsible and sustainable core service while implementing continuous improvement and modernized processes in regional services and programs. The Water QMS drives continual improvement within the Water Services Division by defining clear roles and responsibilities, increasing accountability, and improving data accessibility through documented standard operating procedures and robust record-keeping practices.

## **Other Pertinent Reports**

[CWCD 2024-172 Councillor Information Request Related to Legal Obligations of Council regarding the Safe Drinking Water Act \(October 18, 2024\)](https://www.niagararegion.ca/council/Council%20Documents/2024/council-correspondence-oct-18-2024.pdf)

(<https://www.niagararegion.ca/council/Council%20Documents/2024/council-correspondence-oct-18-2024.pdf>) - see page 5-7.

[PW 5-2023 Drinking Water Compliance and Water Wastewater Quality Management System Endorsement](https://pub-niagararegion.escibemeetings.com/Meeting.aspx?Id=4ba16d6b-1c45-4514-8372-f02f6bd2e6c5&Agenda=Merged&lang=English&Item=15&Tab=attachments)

(<https://pub-niagararegion.escibemeetings.com/Meeting.aspx?Id=4ba16d6b-1c45-4514-8372-f02f6bd2e6c5&Agenda=Merged&lang=English&Item=15&Tab=attachments>)

PWA 109-2008      DWQMS Update (October 29, 2008)

---

**Prepared by:**

Holly Philbrick, B.Sc., MPH  
W-WW Quality Management Specialist  
Public Works Department

---

**Recommended by:**

Terry Ricketts, P.Eng.  
Commissioner of Public Works  
Public Works Department

---

**Submitted by:**

Ron Tripp, P.Eng.  
Chief Administrative Officer

This report was reviewed by John Brunet, Associate Director, Water Operations, Maintenance and Phill Lambert, P.Eng., Director of Water & Wastewater Services, and Donna Gibbs, Director of Legal and Court Services.

**Appendices**

Appendix 1              Water QMS Risk Assessment

## Appendix 1 - Water QMS Risk Assessment

There were fourteen new risks and 8 newly high scoring risks identified during the 2024 Water QMS risk assessment. Risks added in 2024 are listed below in Table 1. Risks that have been newly classified as high scoring in 2024 are listed below in Table 2.

**Table 1: Risks added to Water QMS Risk Assessment**

| Hazardous Event   | Plant Location               |
|---|------------------------------|
| Public trespassing on Niagara Region property.  | Decew Falls<br>Port Colborne |
| Catastrophic failure of intake structure.   | Welland                      |
| Failure of aluminum sulfate pump.   | All                          |
| Catastrophic failure of sedimentation area structure or settling tank.  | Welland                      |
| PLC (Programmable Logic Controller) breakdown with no parts left to repair.   | Welland                      |
| Catastrophic failure of Clearwell 3.  | Welland                      |
| Failure to revise documents following upgrades/changes i.e. drawings, Operations and Maintenance Manuals etc.               | All                          |
| Inaccurate or outdated general maintenance and asset management information or drawings used for general internal purposes. | All                          |
| Inaccurate or outdated general maintenance and asset management information or drawings used for design purposes.           | All                          |
| Insufficient standardization of preventative asset maintenance, reporting, and communication.                               | All                          |
| Insufficient funding to maintain asset sustainability.  | All                          |
| Failure of 24" watermain running under lake Moodie.   | Decew Falls                  |
| Failure of 54" watermain running under lake Moodie.   | Decew Falls                  |
| Break of two cast irons (42") crossing the Welland Canal.   | Welland                      |

**Table 2: Risks newly classified as high scoring in Water QMS Risk Assessment**

| <b>Hazardous Event</b>  | <b>Plant Location</b> |
|---|-----------------------|
| Accidental chemical spill impacting source water. Region notified.  | Decew Falls           |
| Accidental chemical spill impacting source water. Region notified.  | Port Colborne         |
| Public trespassing on Niagara Region property.  | Port Colborne         |
| Failure of all low lift pumps due to electrical issue, mechanical issue, fire, etc..                              | Welland               |
| Inaccurate or outdated general maintenance and asset management information or drawings used for design purposes. | All                   |
| Insufficient standardization of preventative asset maintenance, reporting, and communication.                     | All                   |
| Insufficient funding to maintain asset sustainability.  | All                   |
| Failure of 24" watermain running under lake Moodie.   | Decew Falls           |



---

**Subject:** Oswego Creek Bridge Replacement Project

**Report to:** Public Works Committee

**Report date:** Tuesday, December 3, 2024

---

## **Recommendations**

1. That Report PW 35-2024 **BE RECEIVED** for information.

## **Key Facts**

- The purpose of this report is to update Council on the progress of the Oswego Creek Bridge (structure No. 045205) Replacement Project.
- On March 21, 2024, Council approved the report to award the tender 2023-T-222, Regional Road 45 Oswego Creek Bridge (Structure No. 045205) over Oswego Creek, in the Township of Wainfleet, to Anthony's Excavating Central Inc.
- A Stage 3 Archaeological Investigation was completed and recommended that a Stage 4 investigation be undertaken, which is now being coordinated and will extend the duration of the bridge closure.
- Construction will commence following the site clearing of Archaeological significance, which is anticipated to be fall 2025.

## **Financial Considerations**

The total Capital Project budget for this project is \$8,425,000 with Capital Levy Reserves of \$4,212,500 and Development Charges of \$4,212,500.

Council approved a total budget of \$8,425,000 in 2023 for the Oswego Creek Bridge Replacement under capital project 20001772. \$4,212,500 of the funding is from the Capital Levy Reserve and the remaining \$4,212,500 is funded by Development Charges – Roads.

Contract 2023-T-222 was awarded to Anthony's Excavating Central Inc., in the amount of \$5,255,812 (including non-recoverable HST).

Contract 2022-T-222 was awarded to Anthony's Excavating Inc. (PO 133674) in the amount of \$5,255,812 (including non-recoverable HST). The Contract scope included construction costs for the existing bridge demolition, new structure build, new road

approaches and the Stage 3 Archeological investigation. The Stage 4 investigation is planned to be coordinated under the contract 2022-T-222. Please refer to the Analysis section of this report for further details.

There are sufficient funds in the capital budget to address the additional fees associated with our consultants work for the Stage 3 and Stage 4 Archeological investigations.

The cost of a Stage 3 investigation, including costs associated with the participation of the First Nations, was included in the budgeting process; however, the Stage 4 archeological investigation and related First Nations participation was not initially contemplated. Therefore, a further report will be brought to Council, if required, to address any increase to the budget for the Stage 4 investigation and related costs. The final costs are not currently known.

## **Analysis**

The Oswego Creek bridge is past its useful life and is scheduled for replacement. The bridge has been closed to vehicle and pedestrian traffic due to the deterioration of the structural elements of the bridge since 2022.

The replacement of the Oswego Creek bridge was recommended through the Municipal Class Schedule C Environmental Assessment completed in 2021.

The Oswego Creek bridge was closed to vehicle and pedestrian traffic in 2022 due to the deterioration of the structural elements of the bridge. A detour has been in place since this time and will remain until the bridge structure is replaced. The steps required for the bridge replacement such as design, property acquisitions, archaeological investigations and utility relocations have been progressing since the bridge closure.

A Stage 3 Archaeological Investigation was included in the overall scope of work for the bridge demolition and reconstruction (contract 2022-T-222).

The required Stage 3 Archaeological investigation work was included in the contract scope of work because it was anticipated that, at a minimum, the clearance of the Stage 3 Archaeological investigation would be required.

The need to complete a Stage 4 Archaeological investigation has been identified.

The Stage 3 Archaeological investigation concluded the need to undertake a Stage 4 Archaeological investigation. The Stage 4 investigation will be added to contract 2022-T-222 to achieve efficiencies and allow the contractor to assist the Archaeological consultant as required.

The Stage 4 Archaeological Investigation will have a significant impact on the timing to replace the bridge structure and reopen Regional Road 45 to traffic.

The detailed workplan to complete the Stage 4 Archaeological investigation is currently underway. The work is anticipated to start in 2024 or early 2025 and will take approximately one (1) year to complete. This work is also weather-sensitive and can only be completed during dry weather. The Stage 4 Archaeological works will have a significant impact on the timing to replace the bridge. Although every effort will be made to expedite the work to the greatest extent possible, with the unknown elements associated with this degree of archaeological investigation, it is not possible to accurately predict when the work will conclude. As the investigation progresses further, information will be provided to the public.

### **Relationship to Council Strategic Priorities**

The information contained in this report serves to support the following strategic priorities of Council:

- Effective Region
- Prosperous Region

Effective Region, the Regional road network serves to provide critical links for the movement of goods throughout the Region. Many transport services rely upon the Regional Road network to assist in the movement of goods to businesses across the Region. Businesses count on the continuity of the Regional Road system to effectively plan routing to minimize travel times and maximize efficiencies. The recommendations in this report are intended to restore the current link that is not available in the timeliest manner.

*Prosperous Region*, the current recommendation invests and enhances vehicular and pedestrian access in the Township of Wainfleet.

## Other Pertinent Reports

[PW 6-2024 – Award of Contract 2023-T-222 Regional Road 45 Oswego Creek Bridge \(Structure No. 045205\) Over Oswego Creek, in the Township of Wainfleet.](#)

(<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=eb802bff-5601-4420-83b8-113d139b10fe&Agenda=Merged&lang=English&Item=14&Tab=attachments>)

---

### Prepared by:

Mike Wilson, A.Sc.T., PMP  
Manager of Capital Project  
Transportation Engineering

---

### Recommended by:

Terry Ricketts, P.Eng.  
Commissioner of Public Works  
Public Works Department

---

### Submitted by:

Ron Tripp, P.Eng.  
Chief Administrative Officer

This report was prepared in consultation with Graeme Guthrie, Associated Director Transportation Engineering, Brian McMahon, Program Financial Specialist, Janet Rose, Communications Consultant and reviewed by Frank Tassone, Director Transportation Services, Donna Gibbs, Director of Legal Court Services.

## Appendices

Appendix 1              Key Map

