



THE REGIONAL MUNICIPALITY OF NIAGARA  
PUBLIC WORKS COMMITTEE  
FINAL AGENDA

PWC 8-2020

Tuesday, September 8, 2020

9:30 a.m.

Meeting will be held by electronic participation only

All electronic meetings can be viewed on Niagara Region's Website at:

<https://www.niagararegion.ca/government/council/>

Due to efforts to contain the spread of COVID-19 and to protect all individuals, the Council Chamber at Regional Headquarters will not be open to the public to attend Committee meetings until further notice. To view live stream meeting proceedings, visit:  
[niagararegion.ca/government/council](https://www.niagararegion.ca/government/council/)

---

	Pages
1. <u>CALL TO ORDER</u>	
2. <u>DISCLOSURES OF PECUNIARY INTEREST</u>	
3. <u>PRESENTATIONS</u>	
3.1 <u>Waste Management Mobile Application</u> Jennifer Mazurek, Program Manager, Policy, Planning & Engagement and Ashley Northcotte, Engagement and Education Coordinator	4 - 13
3.2 <u>Niagara Recycling's Role in the Community and Partnership with Niagara Region</u> Norman Kraft, Chief Executive Officer, Niagara Recycling	
4. <u>DELEGATIONS</u>	
5. <u>ITEMS FOR CONSIDERATION</u>	
5.1 <u>PW 38-2020</u> Capital Variance Request and Status Update for Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant, Phase I	14 - 21

5.2	<u>PW 41-2020</u> Niagara Regional Transit OnDemand - Niagara-on-the-Lake Inclusion	22 - 48
5.3	<u>PW 35-2020</u> Reprioritization of Capital Project Funds for Recycling Centre Facility Improvements  <i>This report was referred to the Public Works Committee at the Regional Council meeting held on August 13, 2020.</i>	49 - 54
5.4	<u>PW 42-2020</u> Approval of Various Single Source Public Works New Purchase Orders and Purchase Order Change Request	55 - 79

## 6. CONSENT ITEMS FOR INFORMATION

6.1	<u>PWC-C 33-2020</u> COVID-19 Response and Business Continuity in Public Works	80 - 91
6.2	<u>PWC-C 25-2020</u> Councillor Information Request – Plan to Address Potential Public Health Concerns Related to Every-Other-Week Garbage Collection	92 - 95
6.3	<u>PWC-C 29-2020</u> Update on Public Education Campaign and Contract Implementation	96 - 105
6.4	<u>PWC-C 30-2020</u> Illegal Dumping Enforcement Plan	106 - 124
6.5	<u>PWC-C 34-2020</u> Material Recycling Facility Processing Contract Information and Material Recycling Facility Opportunity Review	125 - 134
6.6	<u>PWC-C 36-2020</u> Supplementary Information for Report PW 35-2020 – Reprioritization of Capital Project Funds for Recycling Centre Facility Improvements	135 - 141

## 7. OTHER BUSINESS

## 8. CLOSED SESSION

8.1	<u>Confidential Memorandum PWC-C 35-2020</u> A Matter of Commercial Information, 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 under s.239(2) of the <i>Municipal Act, 2001</i> – Phases 1 to 3 of the Material Recycling Facility Opportunity Review
-----	---

9. **BUSINESS ARISING FROM CLOSED SESSION ITEMS**

10. **NEXT MEETING**

The next meeting will be held on Tuesday, October 13, 2020 at 9:30 a.m. in the Council Chamber, Regional Headquarters.

11. **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).

# Web and Mobile Waste Application

Public Works Committee

September 8, 2020

Jennifer Mazurek

Program Manager, Policy, Planning & Engagement

Ashley Northcotte

Engagement and Education Coordinator

# Web and Mobile Waste Application

Public Works Committee

September 8, 2020

# Background

## Garbage, Recycling

[Collection](#)

[Schedule](#)

[Items Collected](#)

[Exemptions](#)

[Tags](#)

[Apartment Collection](#)

[Containers](#)

## Find Your Collection Day and Pick-up Details

Please type your home address:

187

Search

- 187 Wyldewood Beach, Port Colborne
- 187 Forest Grove, Port Colborne
- 1870 Third Concession Road, Port Colborne
- 1871 Seventh Street Louth, St. Catharines
- 1877 Seventh Street Louth, St. Catharines
- 187 Chaffey Street, Welland
- 187 Catherine Street, Fort Erie
- 187 King Street, Welland

[Privacy](#) | [Terms of Service](#) | [Cookie Policy](#)

Powered by **ReCollect**

Just



Apply for diaper, daycare, medical, group home or charities exemptions



### [Garbage Tags](#)

Prices and locations of garbage and refrigerant removal (CFC) stickers



### [Large Item Collection](#)

Book online or call at least two working days in advance of your regular collection day

### Put your Items out by 7 a.m.

Items can be placed out the night before after 5 p.m.

### Waste Info-line

Call the Waste Info-line

Monday - Friday

8:30 a.m. - 4:30 p.m.

905-356-4141

Toll-free: 1-800-594-5542

# Collection Calendar Tool

- Residents will search for an address from Niagara Region's website, and use the calendar display to see waste collection day, limits and other details

### Find Your Collection Day and Pick-up Details

Please type your home address:

× Search

128 Oakwood Street, Port Colborne


128 Oakdale Avenue, St. Catharines

128 Oakland Avenue, Welland

[Privacy](#) | [Terms of Service](#) | [Cookie Policy](#)

Powered by **ReCollect**

#### Just Moved In?

 [Garbage Bag Limit Exemptions](#)  
Apply for diaper, daycare, medical,

Put your Items out by 7 a.m.

Items can be placed out the night before after 5 p.m.

### Find Your Collection Day and Pick-up Details

128 Oakdale Avenue, St. Catharines  
Garbage: 1 bag/can limit; \$2.50 for additional bag/can

🔔 Get a reminder! 📅 Get a calendar 🔍 Search for another address

#### September 2020

today < >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
			Garbage Blue/Grey Box Green Bin Leaf and Yard Waste			
6	7	8	9	10	11	12
			Garbage Blue/Grey Box Green Bin Leaf and Yard Waste			


# Other calendar features


- Residents can sign up for reminders
- Educational information can be included as part of the reminders
- Service alerts will also be provided to residents who receive the automated notifications
- Metrics are available for Niagara Region


[< Back](#) **Get a reminder!**


How should we notify you?


Pick the reminder you'd like to receive. You can sign up for multiple reminders.

 Email >

 Phone Call >

 Embed in Outlook, Google Calendar, iCal >


 Print a Calendar >


 Service alerts only >


[< Back](#) **Add to Calendar**

Add to Calendar

Please choose the type of calendar application


 Add to Google Calendar

 Add to iCal

 Add to Microsoft Outlook

Print a Calendar

To print your calendar, please click the following

 Print a Calendar

**Collection Schedule** Garbage: 1 bag/can limit; \$2.50 for additional bag/can **Niagara Region**  
128 Oakdale Avenue, St. Catharines  
🗑️ : Garbage 🔄 : Blue/Grey Box 🌿 : Green Bin 🍁 : Leaf and Yard Waste

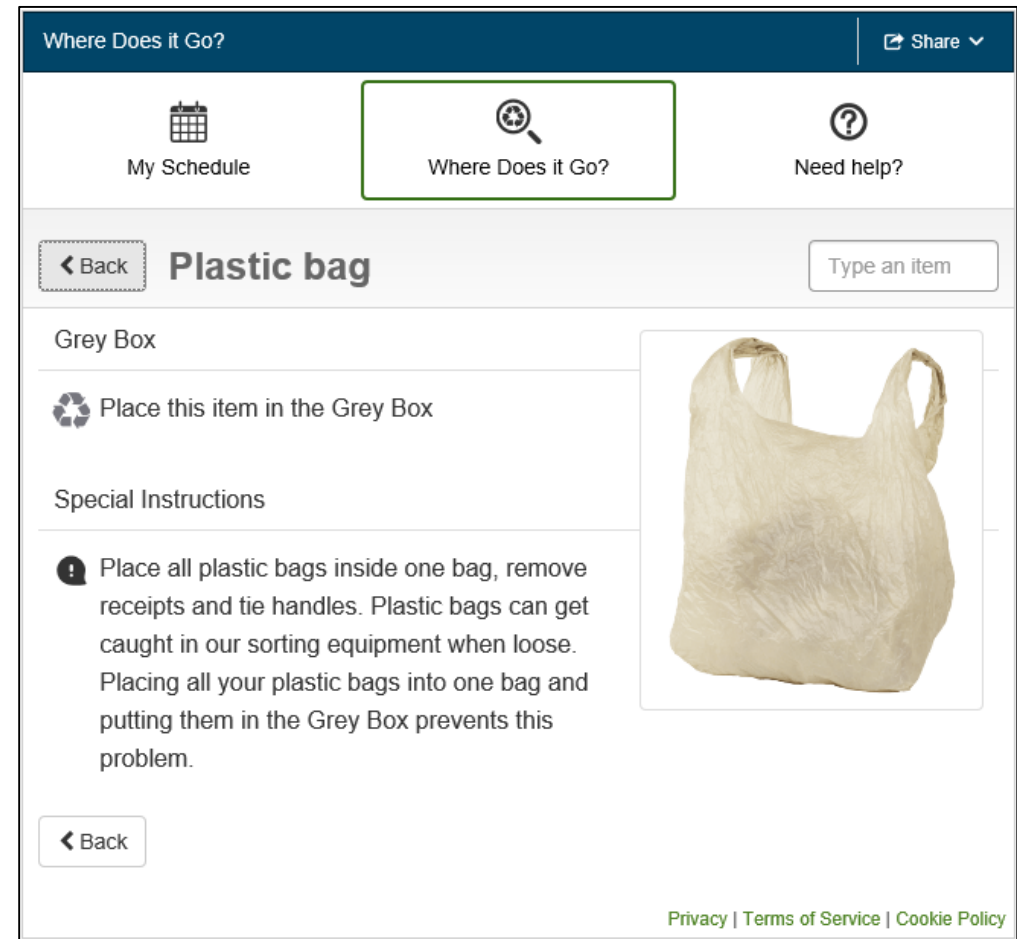
August 2020

S	M	T	W	T	F	S
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15



# Waste Wizard Search Tool

- Includes over 700 items
- Provides users with the appropriate disposal method (curbside, depot, donation etc.)
- Provides the closest drop-off depot based on address
- Staff can track search results and use this information to target communication




The screenshot displays the 'Where Does it Go?' search tool interface. At the top, a dark blue header contains the title 'Where Does it Go?' and a 'Share' button. Below the header, three navigation options are visible: 'My Schedule' (with a calendar icon), 'Where Does it Go?' (with a magnifying glass icon and highlighted by a green box), and 'Need help?' (with a question mark icon). The main content area shows the search results for 'Plastic bag'. On the left, there is a '< Back' button and a 'Type an item' input field. The results are organized into sections: 'Grey Box' with a recycling icon and the instruction 'Place this item in the Grey Box'; 'Special Instructions' with an information icon and text stating: 'Place all plastic bags inside one bag, remove receipts and tie handles. Plastic bags can get caught in our sorting equipment when loose. Placing all your plastic bags into one bag and putting them in the Grey Box prevents this problem.'; and a '< Back' button at the bottom left. On the right, there is a large image of a tan plastic bag. At the bottom right, there are links for 'Privacy | Terms of Service | Cookie Policy'.

# Additional Examples


[< Back](#) **Aerosol cans (empty)**

Blue Box

 Place this item in the Blue Box


Special Instructions

 Remove the plastic lids and place them separately in the Blue Box.




[< Back](#) **Printer**

Return - Printer

 Please return this item to the listed location.

- [Best Buy Canada >](#)
- [Goodwill Niagara >](#)
- [Integrated Municipal Services \(Walker Industries\) >](#)
- [J.W. Sheldrick Sanitation >](#)



[< Back](#) **Asbestos**

Drop-Off - Humberstone Landfill

● [Humberstone Landfill >](#)

Drop-Off - Bridge Street Landfill

● [Bridge Street Landfill >](#)


Drop-Off - Niagara Road 12 Landfill


● [Niagara Road 12 Landfill >](#)

Drop-Off - Walker Environmental Group

● [Walker Environmental Group >](#)

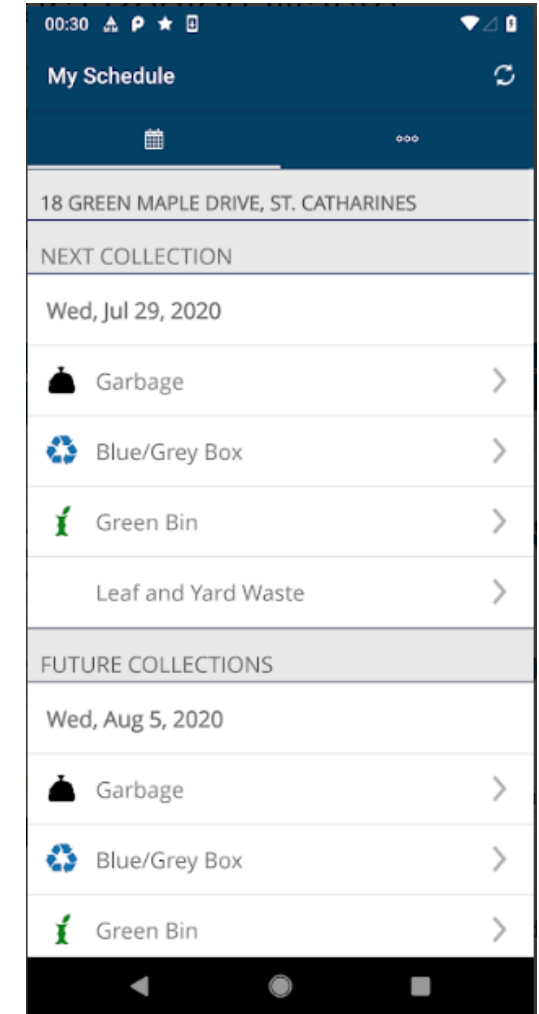
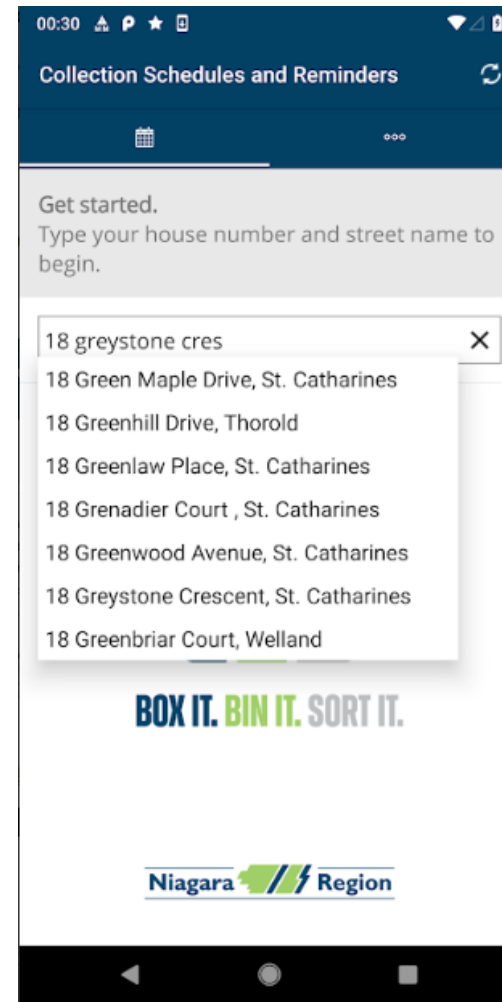
Special Instructions

 Place asbestos in either a 6mm thick plastic bag or double bag. Call the landfill before bringing the material for disposal. Disposal fees will apply. Asbestos is not collected at the curb. Asbestos is a hazardous material that was used in construction and heat proofing before the 1980s and may be found when renovating old buildings.



# Mobile Application

- Residents will search 'Niagara Region Waste' to download the mobile app
- Collection calendar and search tool are both available on app
- Option to sign up for push notifications through the app as another reminder type



# Moving Forward

- Web/mobile application will be promoted as part of the education campaign for new waste collection contract and beyond
- Promotional pieces to include QR code for touchless download options for the app
- Waste Info-Line staff will have the ability to sign up residents for reminders



# Questions?

---

**Subject:** Capital Variance Request and Status Update for Contract 2015-T-109  
(RN 15-09) Welland WWTP, Phase 1

**Report to:** Public Works Committee

**Report date:** September 8, 2020

---

## Recommendations

1. That the gross budget for the Welland Wastewater Treatment Plant, Phase I Upgrades **BE INCREASED** by \$551,531 and that the increase **BE FUNDED** from the Capital Variance – Wastewater Project; and
2. That the Purchase Order 0000006182 for Cole Engineering Group to provide services for Contract and Administration and Inspection (CA&I) for the Welland WWTP Upgrades **BE INCREASED** by \$414,163 (including 1.76% non-recoverable HST).

## Key Facts

- The purpose of this report is to provide an update to the Committee on the project progress and to request approval to increase the project budget and the Purchase Order for Contract Administration and Inspection Services provided by Cole Engineering Group (Cole). As indicated in the previous report (July 14, 2020, PW 32-2020), the Region had agreed to a contract extension to August 17, 2018.
- The Region is now in litigation with the contractor, Varcon Construction Corporation (Varcon) and Region's internal legal counsel and external legal counsel (Gowling WLG) have been involved with the matter since October, 2019.
- Region staff put Varcon on Notice of Default on February 12, 2020. The period to correct default has been extended 4 times since then with a current deadline being September 1, 2020. Internal and external legal are in discussions with Varcon's legal counsel pressing for resolution of Varcon's default and advising PW staff.
- A revised construction schedule was submitted by Varcon on August 5, 2020, indicating a new completion date of January 21, 2021. This schedule is currently under review by Cole and the Region.
- Due to this further delay, Cole is required to spend additional time and effort to provide Contract Administration and Inspection Services. After discussions with internal and external Legal, PW staff recommends lengthening Cole's services contract to align with Varcon's latest revised construction schedule.

## **Financial Considerations**

As a result of delays and extensions with the construction contract, an additional \$551,531 (including 1.76% non-recoverable HST) has been forecasted for the Welland Wastewater Treatment Plant Phase I Upgrades construction project. Of the amount above, \$414,163 relates to contract administration and inspection services required in order to accommodate the schedule extension to February 28, 2021 (estimated final completion). In addition, \$137,368 is requested to cover increased internal staff costs for the remainder of the project and a contingency for any unforeseen expenditures that may be incurred.

The total project expenditures and revenues to date are shown in the Total Estimated Project Cost Summary in Appendix 2. As outlined in the chart, there is an overall approved budget of \$21,821,204. To date, the total cost including commitments of the project is \$21,676,135. Forecasted costs to complete the project total \$696,600 for a total revised project cost of \$22,372,735. This leaves a shortfall of \$551,531, therefore a budget increase in the amount of the shortfall is being requested. The amount of \$551,531 will be funded from the Wastewater Capital Variance Project. The balance of the Wastewater Capital Variance Project is \$5,448,844 as of August 13, 2020.

The Region has been assessing Liquidated Damages at approximately \$44,000 per month (\$2,000/working day). As of July 15, 2020, Varcon has been assessed \$958,000 in liquidated damages.

## **Analysis**

A construction progress update was provided in the previous report (PW 32-2020, July 14, 2020). Notwithstanding the many ongoing challenges with scheduling, construction sequencing, subcontractor liens and working with the contractor in an attempt to improve cooperation with their subcontractors, construction progress continues to move ahead at a slow rate.

Niagara Region's staff continue to be involved in the inspection and coordination of work and engaging with internal and external Legal regarding the ongoing litigation.

Region staff continue to provide Varcon a clear message that poor quality coordination, scheduling and workmanship will not be accepted.

A progress update is provided below.

Construction Progress to date:

1. Lift Station: Wet Well Side - 74% complete; Dry Well Side - 30% complete
2. Administration Building - 98% complete
3. Screen Building and Grit System - 94% complete
4. Primary tanks and Gallery - 75% complete
5. Secondary Building and Final Clarifier - 94% complete
6. Aeration Tanks - 95% complete
7. Chemical Storage Facility - 95% complete
8. Chlorine Building - 95% complete
9. Maintenance Building - 90% complete
10. Digester Building – 90% Complete
11. Electrical Substation - 98% complete
12. Civil Works - 90% complete

Even though the construction is progressing, Varcon have not met their schedule obligations of the August 17, 2018 completion date. Progress is currently being tracked against their most recently submitted schedule which is still being reviewed by Region and Cole staff for validity.

As previously indicated, Varcon has, and is being, assessed Liquidated Damages, as stipulated in the contract, for every working day since August 17, 2018.

Water and Wastewater Engineering staff have been providing a significantly higher than normal amount of resources throughout the project in order to manage the contract. Corporate Services is also providing a significant amount time on additional contract / project payments as well as lien claims. Legal Services are also fully engaged as a result of the construction liens and claims filed and are investing significant time, effort and resources on this project.



Cole have been providing Contract Administration and Inspection Services for the project since construction began and are integral to the Region's effort to move forward on the project.

Cole's familiarity with the project since commencement and the stakeholders involved to date will allow them to provide these services without having to expend additional time acquiring the knowledge of 4 years of construction progress. Cole is very familiar with the criticality and associated risks of this overall project. As the design engineer, Cole is also best suited to provide services during all of the start-up and commissioning tasks approaching on the project.

The extension of Cole's existing contract would be classified pursuant to the Procurement by-law as a single source addition, however the nature and complexity of Cole's continued CA&I services required on the ongoing capital project meet two of the requirements for single source purchases as defined in the Region's Procurement By-law, namely:

- (i) Compatibility of a Purchase with existing equipment, product standards, facilities or service is a paramount consideration;
- (ii) An absence of competition for technical reasons and the Goods and/or Services can only be supplied by a particular Supplier;

In order to maintain efficiency, reduce risks and possible costs, and given the existing delay to the project and active litigation, staff recommends proceeding with Cole to continue providing CA&I services for the remainder of construction and that Purchase Order 0000006182 be increased accordingly.

## **Alternatives Reviewed**

Do Nothing – this alternative does not address the need for continued and consistent contract administration and inspection services as well as the other related costs (internal and external) required to bring the upgrades of the plant to completion.

Procure further CA&I services competitively – this alternative would (if not awarded to Cole) result in a lack of continuity of project team which is necessary to support project completion and ongoing litigation. Another entity would not have the background knowledge to be able to effectively manage the remainder of the project, provide the needed information for the litigation process and make informed recommendations related to the work.

## **Relationship to Council Strategic Priorities**

This recommendation is related to the Fostering Growth strategic priority since the planned upgrades will ensure reliable infrastructure to support growth and economic development within the Niagara Region.

## **Other Pertinent Reports**

Confidential CSD 29-2020 Update regarding NOTL WWTP, NOTL SPS and Welland WWTP Upgrades

PW 32-2020, Welland WWTP Update

PW 11-2019, February 19, 2019, Budget Increase Request

PW 06-2018, February 20, 2018, Budget Increase Request

Confidential PW 17-2017, March 21, 2017, A Matter of Litigation or Potential Litigation, Including Matters Before Administrative Tribunals, Affecting the Municipality – Contract No. 2015-T-109 (RN 15-09) Welland WWTP Phase I Upgrades – Project Status Report  
PW 35-2017, September 5, 2017, Welland Wastewater Treatment Plant, Phase I Upgrades

PW 56-2015, October 13, 2015, Award of Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant Upgrades, in the City of Welland

---

**Prepared by:**

Richard Gabel, P.Eng.  
Senior Project Manager, Area 2  
Water and Wastewater Services

---

**Recommended by:**

Bruce Zvaniga, P.Eng.  
Commissioner of Public Works (Interim)  
Public Works Department

---

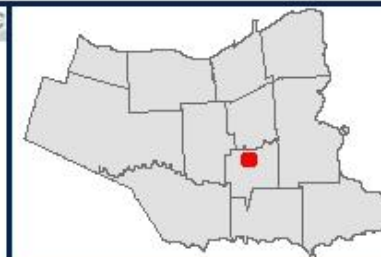
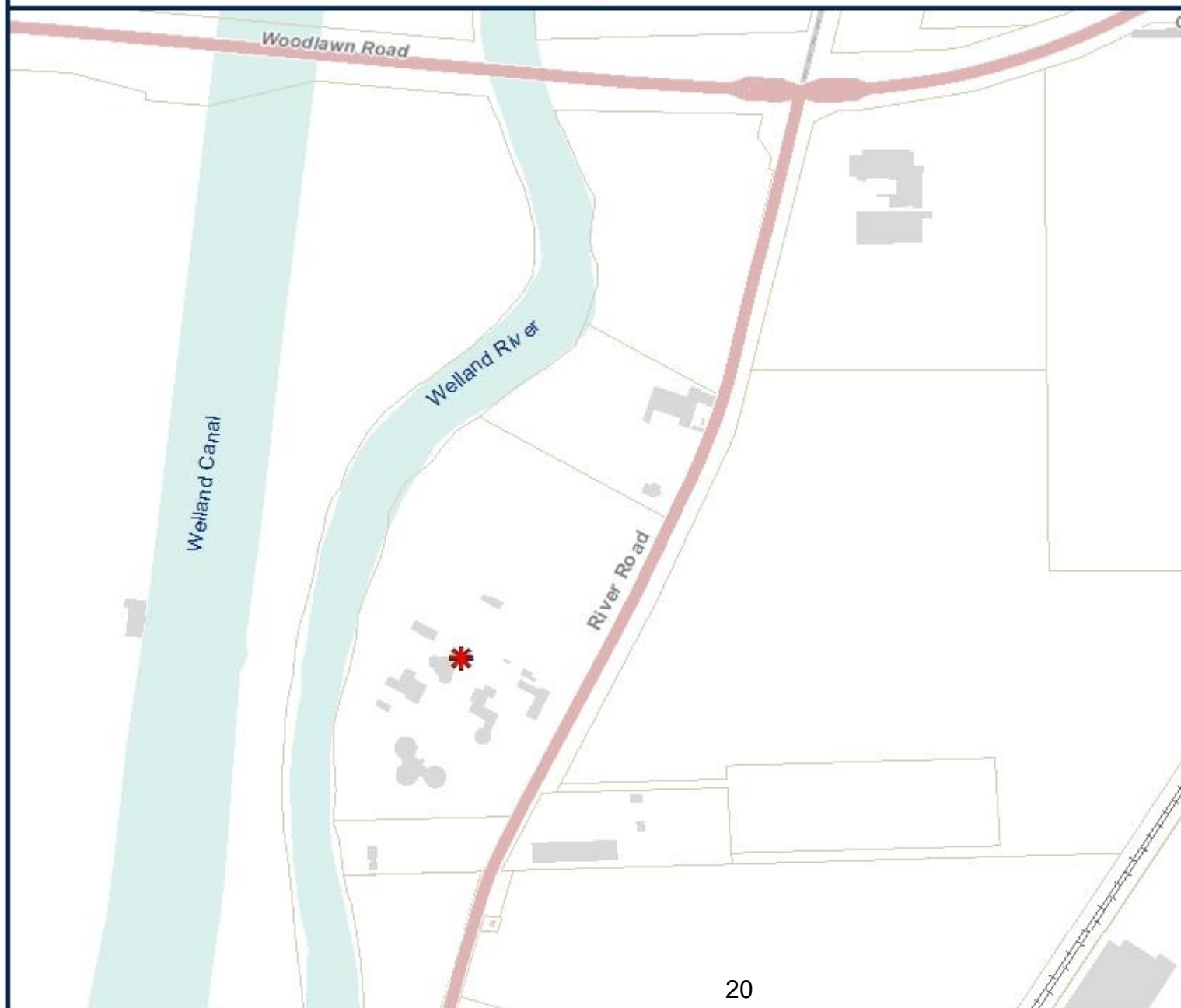
**Submitted by:**

Ron Tripp, P.Eng.  
Acting Chief Administrative Officer


*This report was prepared in consultation with Pamela Hamilton, Program Financial Specialist W-WW, and reviewed by Tony Cimino, Associate Director W-WW and Joseph Tonellato, P. Eng., Director W-WW.*

**Appendices**


Appendix 1	Key Map
Appendix 2	Total Estimated Project Cost



## Legend

 Project Extent

0 50 100 200m



© 2018 Niagara Region and its suppliers.  
Projection is UTM, NAD 83, Zone 17 (CSRS).

This map was compiled from various data sources and is current as of June, 2020.

Niagara Region makes no representations or warranties whatsoever, either expressed or implied, as to the accuracy, completeness, reliability, currency or otherwise of the information shown on this map.

**PW 38-2020 APPENDIX 2  
TOTAL ESTIMATED PROJECT COST  
Capital Variance Request**

**Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant Upgrade, Phase 1**

	<b>Total Council Approved Budget</b>	<b>Revisions per PW 38-2020</b>	<b>Revised Project Budget</b>	<b>Expended &amp; Committed as of August 13, 2020 **</b>	<b>Forecast</b>	<b>Budget Remaining</b>
	<b>(A)</b>	<b>(B)</b>	<b>(C) =(A)+(B)</b>	<b>(D)</b>	<b>(E)</b>	<b>(F) = (C)-(D)-(E)</b>
<b><u>Total Estimated Project Cost (10SW0902) *</u></b>						
(a) Construction (includes contract contingency)	17,839,581		17,839,581	17,839,581	-	-
(b) Project Contingency	230,124	50,139	280,264	192,799	87,465	-
(c) Consulting Engineering Services (Design, Contract Administration, & Inspection)	2,551,902	414,163	2,966,066	2,551,902	414,163	-
(d) Project Management & Internal Costs	338,713	87,229	425,942	348,047	77,895	-
(e) Other Project Costs	860,884		860,884	743,806	117,078	-
<b>Total Estimated Project Cost</b>	<b>21,821,204</b>	<b>551,531</b>	<b>22,372,735</b>	<b>21,676,135</b>	<b>696,600</b>	<b>-</b>
<b><u>Project Funding Sources</u></b>						
Regional Reserves & Debt	(20,321,204)	(551,531)	(20,872,735)	(20,321,204)	(551,531)	-
Gas Tax Funding	(1,500,000)		(1,500,000)	(1,500,000)		-
	<b>(21,821,204)</b>	<b>(551,531)</b>	<b>(22,372,735)</b>	<b>(21,821,204)</b>	<b>(551,531)</b>	<b>-</b>

\* All costs above include the non-refundable 1.76% portion of HST.

\*\* Includes holdbacks

---

**Subject:** NRT OnDemand - Niagara-on-the-Lake Inclusion

**Report to:** Public Works Committee

**Report date:** Tuesday, September 8, 2020

---

## **Recommendations**

1. That the report from the Town of Niagara-on-the-Lake titled, “OPS-20-023” (Appendix 1 to Report PW 41-2020) **BE RECEIVED** for information;
2. That the Chief Administrative Officer **BE AUTHORIZED** to execute any amendments to the Agreement and/or Service Order with River North Transit, LLC (a.k.a. Via Mobility, LLC) in the amount of \$564,791 to enable the inclusion of a turnkey, on-demand transit service pilot in Niagara-on-the-Lake to be branded and administered as part of the NRT OnDemand pilot; and
3. That the Chief Administrative Officer **BE AUTHORIZED** to execute a Memorandum of Understanding between Niagara Region and the Town of Niagara-on-the-Lake to allow for Niagara Region to facilitate and administer the deployment of on-demand transit services within the Town of Niagara-on-the-Lake as approved in the terms and value outlined in Town report “OPS-20-023”.

## **Key Facts**

- The purpose of this report is to seek Council’s approval to allow Niagara-on-the-Lake to integrate the Town’s on-demand transit pilot into the Region’s existing NRT OnDemand pilot program, in order to capitalize on the Region’s preferred pricing, reduce administrative overhead, and facilitate ease of use for riders traveling between municipalities.
- PW 60-2019 authorized the Chief Administrative Officer to execute an agreement with Via Mobility for the deployment of on-demand transit in West Niagara which successfully launched August 17, 2020.
- Niagara Region staff has continued to seek additional partnerships for delivering on-demand transit and as a result of COVID-19, the Town of Niagara-on-the-Lake has confirmed its interest in piloting a local on-demand transit service.
- On August 24, 2020, Niagara-on-the-Lake’s Council approved a pilot deployment for a \$564,791 on-demand service to operate within its municipal boundaries (Appendix 1). This pilot will be funded entirely by the Town but is only financially feasible if the

Town is able to leverage the bulk pricing procured by Niagara Region in its Agreement with Via Mobility.

## **Financial Considerations**

While there are no direct costs to Niagara Region, the Memorandum of Understanding between Niagara Region and the Town of Niagara-on-the-Lake should provide consideration for indirect costs to NRT staff relating to the Contract Administration of the project on the Town's behalf within the existing NRT OnDemand envelope. Items such as customer service inquiries, community engagement, paid advertising, signage, etc. will need to be accounted for in the MOU.

It should also be noted that this additional service pilot is only financially feasible for the Town of Niagara-on-the-Lake if the program is merged with the existing NRT OnDemand service. This is due to Via Mobility's willingness to offer similar pricing but only as an extension of Niagara Region's existing contract. The reason being that the small deployment requested by the Town of Niagara-on-the-Lake is not sufficient to offer the bulk pricing that Niagara Region obtained as much of the technology and administrative costs are spread across the 10 vehicles and substantial service hours offered by NRT OnDemand.

## **Analysis**

The Town of Niagara-on-the-Lake's report "OPS-20-023 - On-Demand Transit - Pilot Program Authorization" (Appendix 1) outlines multiple options with respect to service delivery including an option (Option 2) that would cover the entirety of the municipality. This option would have facilitated additional connectivity with the neighbouring municipalities of St. Catharines and Niagara Falls, at which point, it would have been prudent for Niagara Region to consider contributing financially as the main provider inter-municipal transit in Niagara.

Ultimately, Town staff recommended that their Council approve a limited coverage system (Option 1) that essentially facilitates trips along Regional Road 55 (Niagara Stone Road) while including the areas of Old Town, Virgil and Glendale. While this option does not provide enhanced connectivity to neighbouring municipalities, there is therefore no requirement for a Regional funding contribution.

While the Town's Council approved Option 1, an additional recommendation was amended to the report directing Town staff to "...review the possibility of moving to

Option 2 (four vehicles), subject to availability of funding from the Region and the Town (as part of the 2021 budget deliberations)". From the perspective of both Regional staff and the service provider, it is not desirable to expand the service so drastically mid-year as there are increased costs and logistical challenges to both NRT and Via. Regional staff can commit to reviewing the service for the first year giving consideration for expansion only after it is determined whether or not the pilot should be extended.

This ensures that the inclusion of service in the municipality of Niagara-on-the-Lake is entirely funded by the Town, while being administered by Niagara Region staff as part of NRT OnDemand.

### **Alternatives Reviewed**

The alternative to including the Town's deployment as part of the NRT OnDemand system is to require the Town to negotiate its own contract terms with Via Mobility. A number of factors make that alternative undesirable if not entirely unfeasible. The financial feasibility of the Town of Niagara-on-the-Lake's deployment with Via Mobility is subject to the Town's ability to leverage the existing pricing negotiated by Niagara Region for its existing NRT OnDemand service. This bulk pricing is only available as part of the NRT OnDemand pilot. Additionally, from a rider perspective, providing a single online app and transit brand makes the user experience much simpler and highly efficient. Moreover, combining multiple transit agencies into a single service also highlights the collaborative feasibility of the work being undertaken more broadly as part of the larger ongoing transit governance review.

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

The IMT Service Implementation Strategy directly aligns with the Council Strategic Priority: Responsible Growth and Infrastructure Planning (Objectives 3.1 & 3.4) through advancing regional transit and facilitating the movement of people and goods.

### **Other Pertinent Reports**

- PW 60-2019



---

**Prepared by:**

Robert Salewytch  
Program Manager, Transit Services  
Public Works Department

---

**Recommended by:**

Bruce Zvaniga, P. Eng.  
Commissioner of Public Works (Interim)  
Public Works Department

---

**Submitted by:**

Ron Tripp, P.Eng.  
Acting Chief Administrative Officer

*This report was prepared in consultation with Heather Talbot, Financial and Special Projects Consultant, and reviewed by Matt Robinson, Director, GO Implementation Office.*

**Appendices**

Appendix 1                      OPS-20-023 - On-Demand Transit - Pilot Program Authorization



Department of Corporate Services  
 1593 Four Mile Creek Road  
 P.O. Box 100, Virgil, ON L0S 1T0  
 905-468-3266 • Fax: 905-468-2959

[www.notl.org](http://www.notl.org)

August 25, 2020

**SENT ELECTRONICALLY**

Regional Municipality of Niagara  
 1815 Sir Issac Brock Way, PO Box 1042  
 Thorold ON L2V 4T7

Attention: Ann-Marie Norio, Regional Clerk

Dear Ms. Norio:

**RE: On-Demand Transit**

Please be advised the Council of The Corporation of the Town of Niagara-on-the Lake, at its regular meeting held on August 24, 2020 approved Staff Report OPS-20-023, as amended, which included the following recommendations (amendment in *italics*):

- 1.1 Council approve Option 1 (Two (2) vehicles) for consideration by the Region of Niagara to amend it's master terms agreement with Via Mobility LLC for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration and alignment of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application for a period of up to one (1) year with an option to extend for an additional one (1) year based on the Region of Niagara's agreement and preferred pricing at an estimated total cost of \$564,791.
- 1.2 That the Town of Niagara-on-the-Lake request the Region of Niagara to submit a service order to Via Mobility LLC to amend it's master terms agreement for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration and alignment of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application.
- 1.3 That the Lord Mayor and Town Clerk be authorized to execute an agreement and/or a memorandum of understanding with the Region of Niagara for the services of contract administration by the Region of Niagara to include Niagara-on-the-Lake as part of the Niagara Regional Transit (NRT) on-demand transit service.
- 1.4 *That staff be directed to review the possibility of moving to option 2 (four vehicles), subject to availability of funding from the Region and the Town (as part of the 2021 budget deliberations).*

If you have any questions or require further information please contact our office at 905-468-3266.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Peter Todd', with a stylized flourish extending to the right.

Peter Todd, Town Clerk



# The Town of Niagara-On-The-Lake

Operations  
Telephone (905) 468-3266  
Facsimile (905) 468-2959

1593 Four Mike Creek  
Road  
P.O. Box 190  
Virgil, Ontario  
L0S 1T0

**Report:** OPS-20-023

**Committee Date:**

**Due in Council:**

August 24, 2020

**Report To:** Lord Mayor & Council

**Subject:** On-Demand Transit - Pilot Program Authorization

## 1. RECOMMENDATION

It is respectfully recommended that:

- 1.1 Council approve Option 1 (Two (2) vehicles) for consideration by the Region of Niagara to amend it's master terms agreement with Via Mobility LLC for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration and alignment of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application for a period of up to one (1) year with an option to extend for an additional one (1) year based on the Region of Niagara's agreement and preferred pricing at an estimated total cost of \$564,791.
- 1.2 That the Town of Niagara-on-the-Lake request the Region of Niagara to submit a service order to Via Mobility LLC to amend it's master terms agreement for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration and alignment of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application.
- 1.3 That the Lord Mayor and Town Clerk be authorized to execute an agreement and/or a memorandum of understanding with the Region of Niagara for the services of contract administration by the Region of Niagara to include Niagara-on-the-Lake as part of the Niagara Regional Transit (NRT) on-demand transit service.

## 2. PURPOSE / PROPOSAL

The purpose of this report is to receive Council approval to formally request from the Region of Niagara to amend it's master terms of agreement with Via Mobility LLC for the deployment of a turnkey, on-demand transit service to also include the service area of Niagara-on-the-Lake that will replace the current conventional fixed route transit model that the Town currently employs.

### 3. BACKGROUND

Niagara-on-the-Lake is a small urban/rural community wedged between two larger urban centres. A Transit Needs Study conducted in 2010 determined that the mobility of those persons living and working in Niagara-on-the-Lake, especially seniors and students was not adequately being served.

Where there is an identified public need that is not being met or adequately served by private enterprise, it may be appropriate for government to step in and provide the service or gap in service. In the case of public transportation, the Province, by way of the Public Transportation and Highway Improvement Act, RSO 1990, has vested lower tier municipalities such as Niagara-on-the-Lake with the authority to create a public transit system within its boundaries.

As a result, Council instructed staff to engage a transportation consultant (IBI Group) to assist in the preparation and evaluation process for a request for proposal for Transit services. The Terms of Reference and request for proposal for Public Transportation Services was submitted to Council on November 21, 2011 and approved as contained in report PW-11-045.

Subsequently on January 16, 2012, Council accepted the bid proposal submission from Niagara-on-the-Lake Transit Ltd., dated December 19, 2011, for the provision of contracted public transportation services for the amounts as set out in staff Report PW-12-002, for a minimum of three years commencing on April, 1, 2012.

On February 13, 2012 the Town formally entered into an agreement for the provision of Public Transportation services with Niagara-on-the-Lake Transit Ltd. (subsequently known as Niagara Ground Transportation Ltd.). The initial agreement was a 3-year term commencing April 1, 2012 and terminating March 31, 2015 with two optional renewal periods; April 1, 2015 to December 31, 2018 and January 1, 2019 to December 31, 2020.

On September 16, 2013 the Public Transportation agreement was assigned to a new Operator, Niagara Patient Transfer Inc., with no change in the renewal provisions.

Prior to the expiration of the first term of the contract Town staff met with the Operator, Niagara Patient Transfer Inc., and negotiated new terms to the existing agreement providing conventional public transit and Heritage shuttle service to the Town in which amongst other items the length of the renewal periods was changed to address errors in the original agreement and better align with the Town's fiscal year.

In 2015 Town staff submitted report OPS-15-16 to authorize the Lord Mayor and Town Clerk to execute a renewal agreement with the existing operator from April 1, 2015 to December 31, 2017 and a further optional renewal from January 1, 2018 to December 31, 2020. At or about the time of the first renewal period ending discussions were beginning to take place at a Regional level about the possibility of amalgamation of

transit services throughout the Niagara Region. As a result of the uncertainty of which direction Regional Transit was headed and how that could impact the Town's transit system Town staff decided to not activate the final renewal of the agreement and proceeded under Clause 6.23.4 of the agreement which permitted the existing terms and conditions to remain applicable on a month to month basis until a new agreement is signed or until Service is terminated on thirty (30) days notice by either party.

Subsequently in 2018 Regional staff brought forward three related reports regarding an IMT Service Implementation Strategy which identified the need for inter-municipal transit services to be developed to connect various municipalities some of which already operated local transit services. As part of the initial strategy Regional staff developed fixed-route options for consideration but soon discovered the operational and financial limitations of providing this type of fixed-route service in large geographical areas with low population density. As a result further investigations began to find alternative deployment strategies to make transit more sustainable and accessible in these areas.

In early 2019 (May), Niagara Region retained Via Mobility to conduct a micro-transit feasibility study to consider the practicality and optimal service design of an on-demand micro-transit service for the Niagara West area. Similar to conventional transit, on-demand solutions include wheelchair accessible vehicles. Through further investigation and consideration it was concluded that a dynamic on-demand system could be deployed to operate in the Niagara West area with an average 30 minute wait time and a maximum wait time of an hour.

In the fall of 2019 (November) the Region of Niagara Council approved recommendations (Appendix C - PW 60-2019) for staff to engage the municipalities of Grimsby, Lincoln, West Lincoln, Pelham and Wainfleet regarding an on demand transit pilot program for Niagara West. Subsequently the councils of Lincoln, Pelham and Grimsby approved recommendations to deploy on-demand intra-municipal service in early 2020 but was subsequently impacted by the COVID-19 pandemic that pushed back the service launch date to August 2020.

Shortly after Regional Council approved recommendations for staff to engage the Niagara West municipalities Town staff engaged Regional staff to discuss the possibility of the Niagara West model being expanded to include Niagara-on-the-Lake and potentially other municipalities that had subsequently shown interest in the Niagara West Pilot.

With the sudden onset of the COVID-19 pandemic in early March 2020 the Town's fixed-route system began to see plummeting ridership as a result of the stay at home orders being issued throughout the Region and Province and with subsequent social distancing measures being put in place saw the Town make the decision to suspend transit services indefinitely as of April 9, 2020.

As such, during the pandemic and suspension of services it has been an opportune time for Town staff to review the existing transit system and work with the Region and

Via to discuss the possibility of a stand alone on-demand system to replace the existing conventional fixed-route system.

#### **4. DISCUSSION / ANALYSIS**

The Region of Niagara as part of their investigations into an on-demand transit system has completed an extensive analysis in which it has been determined that a full service "turn key" provider is required to operate such a system due to lack of staff, maintenance facilities and transit fleet. These are similar constraints that the Town must also contend with in regards to operating a transit system. A full turnkey solution is often referred to as a Transportation-as-a-Service (T-a-a-S) and is preferred alternative to companies who provide software capable of dynamically routing vehicles which in turn they lease to transit providers (often referred to as Software-as-a-Service, S-a-a-S) for an annual fee.

Via Mobility LLC. is the only company that the Region and IMTWG (Inter-Municipal Transit Working Group) that is known to offer a full turn-key deployment that includes the following -

- Custom Branded Vans (Eliminates capital acquisition costs)
- Professional, background checked drivers
- iOS and Android apps as well as dial-in capability for those without smartphones
- Customer service and training
- Marketing support prior to and after launch

Via has partners in over 20 countries to deliver transit solutions and in Canada has previously launched services in Sault Ste. Marie, Ontario and Longueuil, Quebec.

Initiating a pilot on-demand solution to coincide within the timeframe of the Regional Niagara West pilot will better position the Town going forward with the upcoming completion of the Transit Governance Study being completed by the Region and their consultants. Initiating a pilot program will avoid a long term service contract and will allow for any potential new transit entity that could be recommended from the Transit Governance Study to have the flexibility to pursue revised deployment strategies or engage with Via to formalize the pilot into a permanent service. As such, it was not recommended by the Region to procure any company which only offers S-a-a-S for deploying pilot services at this time.

Another benefit to be derived from initiating a pilot with Via Mobility would address the Town's need to provide specialized transit service cost effectively.

In the aforementioned discussions with Regional and Via staff, it was decided to provide various options to be presented to council for consideration including leveraging the master contract terms and conditions with Niagara Region for the Niagara West Pilot Program. Leveraging the Niagara Region's master contract, conditions and pricing is only possible if Niagara-on-the-Lake is also included in the Niagara Regional Transit (NRT) OnDemand application which will provide uniform branding, alignment of fare

structures and potential additional inter-municipal connections to users.

Option 1 (2 vehicles): Provides service to the same areas (Glendale, Virgil, Old Town) that the current transit system provides; (Attachment - Appendix A)

Option 1 (3 vehicles): Provides service to the same areas (Glendale, Virgil, Old Town) that the current transit system provides, but with the additional vehicle the service times will be greatly enhanced; (Attachment - Appendix A)

Option 2 (4 vehicles): Provides service to all areas of the Town and will include additional inter-connections with the Regional systems in Port Weller (St. Catharines) and NiagaraFalls (north end). (Attachment - Appendix B)

Benefits and/or improvements over the current conventional fixed-route transit style of system;

- expanded service area, coverage and availability
- improved service quality and reliability
- scalability flexibility
- vehicle utilization responds to demand in real time
- dynamic adjustable routing
- integration with the Niagara West Rider App while maintaining two distinct services
- end to end technology platform and operational management
- wheelchair accessible vehicles (WAVs)
- robust customer service centre
- significant data analytic potential
- environmentally friendly, no driving unless required, does not travel conventional route on an hourly basis;
- wider area of pick up and drop off points within the defined areas, not current fixed points;

## 5. STRATEGIC PLAN

The recommendation being presented falls under the Towns approved strategic plan within **"Strategy #1 - Deliver smart balanced growth"** as it touches on the following items within the eight strategic pillars of the community vision;

- 2) strong environmental stewardship;
- 3) an inclusive, integrated, healthy Town;
- 5) mobility choices;
- 8) well managed municipal finances.

## 6. OPTIONS

The following options are available for councils consideration;

- 1.1 Council approve Option 1 (Two (2) vehicles) for consideration by the Region of Niagara to amend it's master terms agreement with Via Mobility LLC for the



deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application for a period of up to one (1) year with an option to extend for an additional one (1) year based on the Region of Niagara's agreement and preferred pricing at an estimated total cost of \$564,791 **(as recommended above);**

**or alternatively;**

- 1.4 Council approve Option 1 (Three (3) vehicles) for consideration by the Region of Niagara to amend it's master terms agreement with Via Mobility LLC for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application for a period of up to one (1) year with an option to extend for an additional one (1) year based on the Region of Niagara's agreement and preferred pricing at an estimated total cost of \$678,869

**or alternatively;**

- 1.5 Council approve Option 2 (Four (4) vehicles) for consideration by the Region of Niagara to amend it's master terms agreement with Via Mobility LLC for the deployment of a turnkey, on-demand transit service to include the service area of Niagara-on-the-Lake and the integration of the Niagara-on-the-Lake service into the Niagara Regional Transit (NRT) OnDemand mobile application for a period of up to one (1) year with an option to extend for an additional one (1) year based on the Region of Niagara's agreement and preferred pricing at an estimated total cost of \$799,799 and formally request the Region to fund the difference between option 1 (3 vehicles) and option 2 (4 vehicles);

**or alternatively;**

- 1.6 Council defer any of the above noted recommendations and have Town staff continue with the current transit model and provider at the continued negotiated price;

**or alternatively;**

- 1.7 Council defer any of the above noted recommendations and have Town staff create a new RFP and go out for public tender.

## 7. FINANCIAL IMPLICATIONS

The financial impact of transitioning from the current fixed-route transit system to a turn-key on-demand transit service to be administered by the Region of Niagara under the master terms agreement with Via Mobility are shown in the comparison breakdown below.

### 2020 Transit Operating Budget (Approved)

Revenue	- Provincial Gas Tax	- \$130,000
	- Group Fares	- \$300,000
	- Bus Fares	- \$ 40,000
	- Transfer from Parking Revenue	- <u>\$295,650</u>
	Total	\$765,650

Expenditures - Contracts *	- \$675,000
- Misc. & Other	- \$ 47,000
- Legal & Memberships	- \$ 3,650
- Salaries, Grounds Services, Equip.	- \$ 40,000
Total	<u>\$765,650</u>

\* The contracts portion of the expenditures also includes the running of the Heritage Shuttle between April 1 - October 31 each year. The cost to operate the Heritage Shuttle in 2019 was \$178,000 approximately. It should be noted that due to the pandemic there are short falls in the areas of revenue shown above which may need to be funded from the operational levy moving forward.

#### Proposed On-Demand Transit System Administered by the Region of Niagara

Option #1 (Two (2) Vehicles)	- \$564,791
Option #1 (Three (3) Vehicles)	- \$678,869
Option #2 (Four (4) Vehicles)	- \$799,799

The proposed On-Demand options noted above are based on service being provided six (6) days a week (Monday-Saturday) with an average 12 hour service day (7:00 am - 7:00 pm). This is comparable to the Town's existing fixed route system which operates six (6) days a week with an average 11 hour service day. Included in the the total costs noted above is a installation fee and annual customer support fee.

The Niagara Region Transit (NRT) on-demand system deployed in the West Niagara pilot is based on service being provided six (6) days a week (Monday-Saturday) with an average 15 hour service day (7:00 am - 10:00 pm). A similar service day option is also available to the Town but an increased costs.

The current fare structure of \$3.00 one-way will continue to remain if an on-demand system is adopted and deployed in Niagara-on-the-Lake. The Town's fare structure is already aligned with the Regional fare structure.

Based on the above, the current transit operating budget can support Option 1 with two (2) vehicles with an average service hours per day of 12 hours with no expected additional expenditure or increase to the operating budget.

Choosing Option 1 with three (3) vehicles would require an increase of \$114,078 (approximately) for consideration as part of the 2021 operating budget deliberations. A three vehicle option would provide increased availability and reduced wait times.

In the event that Council prefers Option 2 (4 vehicles), it would be prudent to request that Niagara Region fund the difference between Option 1 (3 vehicles) and Option 2 (4 vehicles) as this would enable inter-municipal connections to neighbouring municipalities as is the purview of Niagara Region.

On August 12, 2020 the Ontario Provincial government in partnership with the Federal government announced it was providing Ontario's municipalities in urgently needed one-time assistance as part of the first round of emergency funding under the Safe Restart Agreement. The funding is intended to help municipalities continue to deliver critical public services such as public transit. The Phase 1 Transit Funding for the Town of Niagara-on-the-Lake is \$36,009 which can be put toward the re-start of transit operations.

## **8. COMMUNICATIONS**

If either of recommendation 1.1, 1.4 or 1.5 as outlined per section 6 - Options is approved by Town Council a formal request will be made by the Town of Niagara-on-the-Lake to the Region of Niagara to amend it's contract with Via Mobility LLC. to include the proposed Niagara-on-the-Lake service area into the Niagara Regional Transit (NRT) on demand service with a subsequent Memorandum of Understanding (MOU) established between the Town and the Region for services provided by the Region of Niagara to the Town of Niagara-on-the-Lake for those said services.

If recommendation 1.6 as outlined per section of 6 - Options is selected Town staff will engage our current Transit provider to discuss the resumption of Transit services in late 2020 under the current terms of the existing agreement.

If recommendation 1.7 as outlined per section of 6 - Options is selected Town staff will report back to Council with a separate report of engaging a consultant to assist with the preparation of a request for proposal (RFP) for Transit services.

## **9. CONCLUSION**

With the advent of the current pandemic, it has been an opportune time for the Town to explore an alternative solution to the existing conventional fixed route transit service with a view toward building upon and improving the existing service the Town offers. Expected immediate benefits would see an expanded service area reaching additional residents with the potential to attract more users when tourists visit the Town. In addition to expected improved service there will also be an environmental benefit in the way the service operates over the current fixed route transit system deployed by the Town.

It should be noted that implementing an on-demand transit service without the participation of the Region of Niagara would not likely be economically feasible from a Town only perspective.

If Council chooses to proceed with one of the recommendations noted above for implementing an on-demand transit service through the Region an anticipated start date would likely take place later this fall (November).

**Respectfully Submitted,**



**Michael Komljenovic**  
**Engineering Supervisor**



**Kevin Turcotte**  
**Director of Operations (A)**



**Jeffrey Vyse, C.S.T.**  
**Manager of Public Works**



**Sheldon Randall**  
**Chief Administrative Officer (I)**

**Attachments**

Appendix A - Option 1 Service Area  
Appendix B - Option 2 Service Area  
Appendix C - PW 60-2019 On-Demand Transit Pilot

# Option 1

## NOTL Old Town, Virgil, Outlet Mall, Niagara College

### Summary

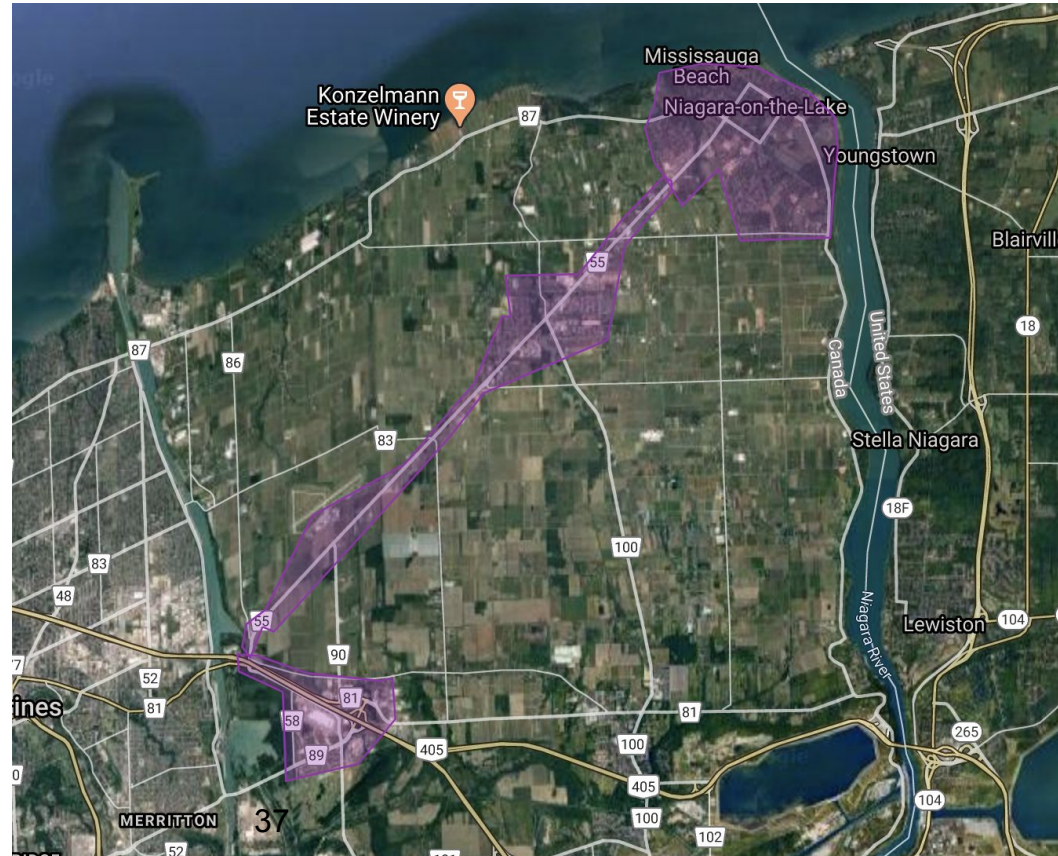
Option 1 somewhat replicates NOTL's existing service design

The areas shaded in **purple** are rough sketches of the on-demand zones where Riders' could request rides to/from

Main Service Areas include:

- NOTL Old Town
- Virgil Centre
- Outlet Mall
- Niagara College

Minimum 2 vehicles, 3 preferred



## Option 2

### All of Niagara-on-the-Lake

#### Summary

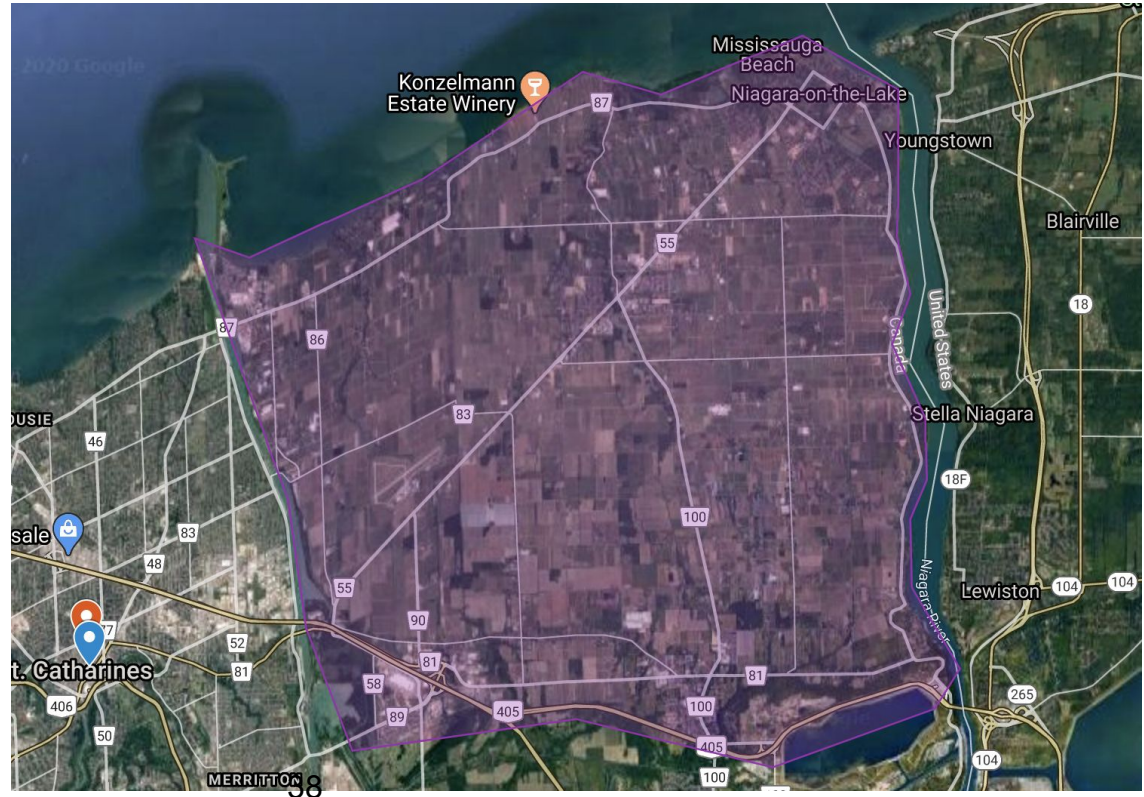
Option 2 provides service to NOTL's entire municipal area

Riders would be able to request rides to/from anyway within the **purple** area

Main Service Areas include:

- NOTL Old Town
- Virgil Centre
- Outlet Mall
- Niagara College
- Wineries
- Rural areas

Likely 4 vehicles minimum





---

**Subject:** On-Demand Transit – Pilot Authorization (Simulation Results)

**Report to:** Public Works Committee

**Report date:** Tuesday, November 5, 2019

---

## Recommendations

1. That Regional Council **APPROVE** the on-demand transit concept for NRT service expansion pilots outlined in this report, subject to 2020 budget approval.
2. That the Chief Administrative Officer **BE AUTHORIZED** to execute an Agreement with Via Mobility LLC. for the deployment of turnkey, on-demand transit service pilots such that the Agreement meets the approval of the Commissioner of Corporate Services, and subject to 2020 budget approval.
3. That all pilot periods **BE DEFINED** in the Agreement as 1 year with an option to extend for a period of up to an additional 12 months at the discretion of the Chief Administrative Officer.
4. That pending approval of recommendations 1, 2 and 3, that staff **BE DIRECTED** to engage with the local municipalities to confirm partnership and service parameters of the pilot services.
5. That this report **BE CIRCULATED** to area municipalities.

## Key Facts

- The purpose of this report is to seek authorization to deploy on-demand transit solutions for NRT pilot projects after confirming local participation.
- LNTC-C 21-22-23 2018 identified the need for inter-municipal transit services in Niagara West, as well as establishing connections for Lincoln and Pelham.
- CAO 8-2017 included recommendations for providing connectivity to the communities of Sherkston and Crystal Beach.
- The 2019 Operating Budget included provisions for the deployment of transit services in these aforementioned communities. Jurisdictional definitions combined with the desire for service integration and potential for partnership delayed the original deployment timeline, now tentatively set for April 2020.
- The 2019 approved transit operating budget included a one-time transfer from Reserve of \$3.0 million and therefore did not provide sufficient ongoing base level funding in 2020 to deploy the on-demand expansions into Niagara West, Crystal Beach and Pelham without the need for subsequent budget approval in 2020.

- 
- Via Mobility, LLC (Via) was retained to conduct modeling and microsimulation work to identify preferred on-demand transit models, coverage and deployment options to enable Niagara Region to fulfill its planned expansions. The final recommendation for Niagara West was an integrated service model with an initial fleet size of approximately 7 to 10 vehicles. Secondary deployment opportunities in Port Colborne and Fort Erie require additional consultation with the respective local municipalities to confirm service design parameters.

## **Financial Considerations**

The approved 2019 budget provided \$7.9 million towards a strategic two-year IMT investment strategy. The 2019 funding included a 1.4% separate transit levy of \$4.9 million plus a one-time transfer from Reserve of \$3.0 million (0.9% of the 2018 levy).

The proposed 2019 Budget strategy was to utilize \$2.2 million of the \$7.9 million as a one-time reserve transfer in 2019 to support the \$13.9 million of capital assets and reduce the annual debt over the next 10 years. According to the aforementioned strategy, \$2.2 million would be allocated to transit expansions connecting Niagara West, Crystal Beach and Pelham to existing transit services in 2020. The 2019 direction to use a one-time transfer from Reserve therefore did not include sufficient sustainable base funds to deploy the on-demand expansions into Niagara West, Crystal Beach and Pelham without subsequent base level budget approval in 2020.

To secure funding for the on-demand Pilot project and all previously implemented service enhancements, a separate general levy of 1.3%, will be considered along with the following budget items:



	Council Report	Levy Amount (M\$)	Levy Increase %
Previously identified reports			
Suicide Prevention Initiative	PHD 8-2019	0.200	0.05%
Waterfront Investment Program – Base funding	CSD 40-2019	1.000	0.27%
Smarter Niagara Incentive Program – Base funding	CSD 40-2019	0.600	0.16%
Brock LINC request for funding	ED 9-2019	1.500	0.41%
Niagara Regional Transit - phase in cost	PW 56-2019	4.754	1.30%
NRPS 2019 position hiring deferral	BRC-C 7-2019	0.706	0.19%
Long-Term Care Home Redevelopment capital funding	CSD 53-2019	5.620	1.54%
GO Project - Station Operations	CSD 17-2019	1.410	0.39%
Canadian Coalition for Municipalities Against Racism and Discrimination	CAO 14-2019	0.142	0.04%
EMS Central Hub capital funding	CSD 40-2019	0.390	0.11%
<b>Potential request to-date</b>		<b>\$16.323</b>	<b>4.46%</b>

Unlike the ‘per-trip’ pricing models of Niagara Specialized Transit and Innisfil’s partnership with Uber, the on-demand model proposed in this report operates on a fixed hourly rate within a fixed budget. This pricing structure provides significantly more certainty in terms of budget containment. Should the demand increase to the point where it outpaces the capacity of the service, two options are available. The first would be to decrease the quality of the service by altering the parameters of the service, thus increasing its capacity. For example, increasing the maximum wait time from 1 hour to 1.5 hours. The second option would be to seek additional funding approval and deploy additional vehicles to maintain the existing level of service.

## Analysis

In September 2018, staff brought forward 3 related reports (LNTC-C 21-22-23-2018) jointly identified as the IMT Service Implementation Strategy. This strategy identified the need for inter-municipal transit services to be developed to connect the municipalities in Niagara West, including Pelham and Lincoln which already operated local transit services, to the NRT network. Thus for the purposes of this report, Niagara West refers to the geographic area of Grimsby, Lincoln, West Lincoln, Pelham and Wainfleet. In addition, CAO 8-2017 identified opportunities for IMT services to be piloted which would connect Crystal Beach and Sherkston with the larger transit network in Niagara.

After the initial IMT expansion Service Plan strategies were approved in late 2018, staff developed fixed-route options for consideration; however the operational and financial limitations of providing this type of fixed-route service in large geographical areas with low population density quickly became apparent. As such, staff began to research

---

alternative deployment strategies in an effort to make transit more sustainable and accessible in these areas.

In May 2019, Niagara Region retained Via to conduct a microtransit feasibility study to consider the practicality and optimal service design of an on-demand microtransit service covering the entire western area of Niagara. In addition to Niagara West, additional service areas were evaluated in Fort Erie and Port Colborne. The travel patterns defined in the simulation were modeled using data from the Niagara Specialized Transit (NST) database and the MTO's Transportation Tomorrow Survey. A presentation of the preliminary results of the microsimulation were shared with the IMTWG at its meeting on September 19, 2019. The final report was provided to the IMTWG for their reference in late October. Through the IMTWG, staff have completed preliminary engagements with the affected municipalities in order to gauge support from local staff. At the request its respective local staff, presentations were given to the Councils of Pelham and Lincoln which provided an overall update on the status of inter-municipal transit and a high level primer of on-demand transit.

Similar to conventional transit, on-demand solutions include wheelchair accessible vehicles (WAV's). It is worth noting that because trip planning software is capable of prioritizing and dynamically routing vehicles and when combined with unique user profiles, an entire fleet of WAVs is not required to ensure that all riders receive the same level of service.

### **Niagara West**

Two main operating systems were considered when developing the service parameters. The first was a pre-scheduled, on-demand system that would require riders to pre-book their trips a day in advance. The second was a dynamic, on-demand system that would operate with a 30 minute average wait time with a maximum wait time of 1 hour. Although both were feasible options, staff determined that pursuing the dynamic, on-demand service would provide a significant boost to the quality of service by allowing riders to request a ride when they require it as opposed to planning 24 hours in advance.

The dynamic, on-demand system allowed for three potential deployment models to be developed. However, further evaluation resulted in the dismissal of two of the models due to the potential for rider confusion stemming from the jurisdictional realities which resulted from the triple majority process in 2017 granting the Region non-exclusive authority to operate IMT routes only. While staff from Via and Niagara Region both agree that an integrated deployment model is preferred (integrated includes both local and IMT routes within and outside of a municipality), this model requires partnership from local municipalities from both a financial and jurisdictional perspective. One additional note is that when the graphic below was developed, a connection to Port

### Integrated Services Model (Preferred)

Niagara Region does not have the jurisdictional authority or adequate budget to independently operate the integrated services model and thus requires support from the local municipalities. That said, the benefits of this scenario are substantial from both a rider experience perspective and a cost-benefit perspective. Local municipalities would require significantly more funds to develop an independent localized on-demand service which would still require inter-municipal connections. More simply, by pooling resources, a higher level of service can be delivered for the riders without the need of coordinating travel across multiple systems. As previously stated, separate municipal transit services are not required under this integrated approach. This means that municipalities with small fixed route transit systems (i.e. Pelham and Lincoln), which only service a small portion of their geographical area, could feasibly choose to reallocate those transit

dollars into this integrated services model and significantly increase their ridership, coverage area, and level of service without an additional impact to their levy.

For those municipalities without existing transit dollars, full participation in the integrated model would require a net new impact on their levy. Should those municipalities not be able to commit new levy dollars to an integrated model, they would only be serviced by the on-demand system for inter-municipal trips. For example, residents in Grimsby, West Lincoln and Wainfleet would only be able to travel to a destination outside of their municipality.

For the various operating models, the trip demand was simulated at multiple levels to account for elements such as rider uptake, initiation of hourly GO rail service and continued population growth. Table 1 below provides some of the key indicators resulting from the microsimulation of the integrated services model where the maximum wait time was set at 1 hour.

Table 1 – Integrated Services Model Microsimulation Results

<b>Trip Demand</b>	<b>Maximum Hourly Ridership</b>	<b>Recommended Fleet Size</b>	<b>Passengers per Vehicle Hour</b>	<b>Average Wait Times (Minutes)</b>
Low	10 – 22	7 – 10	1.5 – 2.2	25 – 35
Medium	20 – 35	10 – 13	2.0 – 2.7	22 – 32
High	40 – 70	15 – 19	2.7 – 3.7	20 – 30

In an area where limited transit options exist such as Niagara West, a new deployment would expect to see a low initial trip demand. However, over the course of a 12 month pilot it is unlikely that a medium trip demand would be reached. That being said, factors such as initiation of hourly GO Train service would certainly affect that assessment.

## Implementation

In order to implement the Integrated Services Model, a full service ‘turn key’ provider is required due to Niagara Region’s lack of staff, maintenance facilities and transit fleet. Staff is seeking authorization to formally procure Via for the deployment of the preferred option for the following reasons:

- Via is the only company known to the IMTWG which offers a full turnkey deployment. This includes:
  - Custom branded Mercedes vans (eliminates capital acquisition costs for Niagara Region)
  - Professional, background checked drivers
  - iOS and Android apps as well as dial-in capability for those without smartphones
  - Customer service and training
  - Marketing support prior to and after launch

- 
- Via is willing to deploy a pilot for 1 year with an option to extend for up to an additional 12 months.
  - Via values shared data – deployment includes a custom built dashboard and reports. All data collected is shared possession and access with Niagara Region.
  - Via has over 80 deployments worldwide from North America to Europe and Asia
  - Via integrates with major fare payment systems
  - Via's software specializes in superior dynamic trip planning and dispatching which considers the following:
    - Combining trips by channeling ride requests to be accommodated by a nearby vehicle rather than dispatching a new car to the same area
    - Prioritizing the passenger per vehicle hour metric where feasible, allowing for a small fleet size relative to the service area
    - Encouraging 'corner-to-corner' service delivery, which means that the software directs the rider to a pickup location closer to a main intersection (roughly 100 – 200m average walk) except in cases where walking is unsafe like roads with a rural cross-section or where the rider requires wheelchair accessibility
    - Accessibility of service through user profiles to ensure that riders requiring a wheelchair can be serviced with the same average frequency as those who do not require one

### **Port Colborne and Fort Erie**

Due to the recommendation included in the *Niagara Region Transit Service Delivery and Governance Strategy* by Dillon Consulting (CAO 8-2017), combined with interest from members of the IMTWG, staff elected to request Via assist in the design of potential solutions to connect the communities of Crystal Beach and Sherkston with the existing NRT network as part of the demand simulation exercise. The opportunities for these communities were developed with the same considerations and criteria as that of Niagara West. In similar fashion, the element of jurisdictional authority plays a major factor and creates significant barriers to providing a seamless, convenient rider experience. Without local involvement, Niagara Region would only have jurisdiction to deliver trips from Sherkston to Fort Erie or from Crystal Beach to Port Colborne, albeit counterintuitively. Therefore, it is imperative that any on-demand solution for these communities must involve the local municipalities of Port Colborne and/or Fort Erie.

Another component of the IMT Service Implementation Strategy was the upload of the Port Colborne Link and Fort Erie Link IMT routes to Niagara Region with the intent that the local municipalities would reinvest those savings into their local transit systems. These uploads are now complete and both Port Colborne and Fort Erie have both been paid retroactively to January 1, 2019.

Staff is seeking authorization to formally engage with the municipalities referenced in this report in an effort to improve connectivity for those residents who would benefit from

an on-demand model in rural or underserved areas. If in discussion, not all of the municipalities are interested or capable in partnering with Niagara Region, a smaller solution may be pursued which relies on connections to existing NRT service in the respective municipality to deliver the inter-municipal portion of the trip.

## **Alternatives Reviewed**

Staff originally developed a fixed-route service plan for Niagara West that included routes which connected the municipalities of West Lincoln (Smithville), Grimsby (GO station and downtown), and Lincoln (Beamsville and Jordan) to the St. Catharines hospital. Completing this exercise helped to develop a scope and budget. However, this option is not recommended due to the high operating and capital costs and low level of service. This became especially evident when compared against on-demand solutions which found that for a similar budget commitment, a much higher level of service can be achieved through on-demand solutions. Two of the most prominent service parameters determining the level of service are coverage area (population served) and service frequency (average wait time).

Having no staff or transit vehicles of its own, Niagara Region sought to leverage its relationships with its local transit partners to determine if they could operate an on-demand system in Niagara West if provided with adequate software. Unfortunately, those partners also lacked the available staff, vehicles and training resources necessary to accommodate this request. As such, this option was deemed not viable.

Staff also considered utilizing its existing service provider of Niagara Specialized Transit to provide the service if Niagara Region provided the software. However, an operational review of the service provider conducted in 2019 concluded that significant elements of the contract and service were deficient (PW 39-2019 & PW 40-2019). These elements included inefficient trip scheduling software, poor on-time performance, not meeting the data reporting requirements, and vehicle branding. This lead senior staff to determine that expanding the service contract with the existing service provider was not a practical option at this time. In addition, PW 39-2019 recommended not restructuring the contract with service provider in light of the Specialized Transit Study recommendations coming in late 2019.

There are a number of companies with software capable of dynamically routing vehicles which they in turn lease to transit providers (often referred to as Software-as-a-Service, S-a-a-S) for an annual fee. Given the consideration of the two aforementioned options, Niagara Region requires a full service operator which can provide demand modeling, service design, as well as a fully turnkey solution by providing vehicles, drivers, and customer support – in addition to the dynamic routing technology. This full turnkey solution is often referred to as Transportation-as-a-Service (T-a-a-S). Via is the only company known to the IMTWG which offers this type of service. Having a T-a-a-S deployment model is an ideal solution for two additional reasons. One, Niagara Region

---

desires to pilot on-demand solutions for entirely new service expansions and this gives flexibility to test on-demand strategies without a corresponding capital commitment. Two, the LNTC and IMTWG have recently initiated the Transit Governance Study with recommendations due by the end of Q1 2020. By initiating services in the pilot areas while simultaneously avoiding a long-term service contract, any potential new future transit entity will have the flexibility to pursue revised deployment strategies or engage with Via to formalize the pilot into permanent service. Thus procurement of any company which only offers S-a-a-S is not recommended for deploying pilot services at this time.

While implementing a solution that solely delivers inter-municipal trips is possible, local transit services would still be required in each municipality to provide support and connectivity. This type of model also has a number of shortcomings which would be likely to limit demand and negatively impact rider experience. For example, when daily GO rail service becomes available in Grimsby (and potentially Lincoln), an 'inter-municipal trips only' model would require riders in these municipalities to counterintuitively travel to adjacent municipalities rather than traveling to their nearest station in order to meet the criteria of making an inter-municipal trip. By leveraging the relationships built through the IMTWG, an integrated deployment model allows for municipalities to benefit from the pooled resources and streamlines the rider experience by eliminating the confusion and challenges of coordinating travel between multiple systems in Niagara West. For this reason, staff supports pursuing partnerships with those interesting local municipalities to provide enhanced levels of service in an integrated model rather than an inter-municipal model built along municipal jurisdiction.

Staff also considered the option of integrating its existing specialized transit service with a dynamic, on-demand transit service. While simulation results indicate this option makes the most sense from both rider experience and financial efficiency perspectives, staff feels that it would be premature to make any substantive changes to its existing specialized transit service until the dynamic, on-demand model could be validated given the vulnerable segment of the population it serves.

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

The IMT Service Implementation Strategy directly aligns with the Council Strategic Priority: Responsible Growth and Infrastructure Planning (Objective 3.1) through advancing regional transit and GO rail services and facilitating the movement of people and goods.

## Other Pertinent Reports

- LNTC-C 21-2018 Inter-Municipal Transit (IMT) Service Implementation Strategy
- LNTC-C 22-2018 Inter-Municipal Transit Financial Impact Analysis
- LNTC-C 23-2018 Inter-Municipal Transit Capital Plan, 2019
- CAO 8-2017 Niagara Region's Transit Service Delivery and Governance Strategy

---

### Prepared by:

Robert Salewytch  
Program Manager, Transit Services  
Public Works Department

---

### Recommended and Submitted by:

Ron Tripp, P.Eng.  
Acting Chief Administrative Officer

*This report was prepared in consultation with Heather Talbot, Financial and Special Projects Consultant, and reviewed by Matt Robinson, Director, GO Implementation Office and Sterling Wood, Legal Counsel.*



---

**Subject:** Reprioritization of Capital Project Funds for Recycling Centre Facility Improvements

**Report to:** Public Works Committee

**Report date:** Tuesday, August 4, 2020

---

## Recommendations

1. That a new capital project for a container line drum feeder in the amount of \$450,000 **BE APPROVED** and **BE FUNDED** from the Waste Management Capital Variance Project.

## Key Facts

- The current Council approved capital budget for the 2020 Recycling Facility Improvement project (20001178) is \$834,900, which is funded 98% by Waste Management Capital Reserves (\$819,330) and 2% by Waste Management Development Charges (\$15,570). The project is an annual program for the replacement or upgrade of equipment at the Material Recycling Facility (MRF) to ensure the facility continues to operate efficiently and to improve the marketability of the recyclable products; it typically includes specific equipment requests. The 2020 approved capital budget included funds for the replacement of a baler horizontal feed conveyor, glass breaker screen and perforator and a commercial vehicle (Shred Truck).
- This report is asking for council approval to create a new project in 2020 to build, supply and install a container line drum feeder to improve the overall throughput of material through the MRF from reprioritized funds from project 20001178 in lieu of the glass breaker screen and perforator replacement not moving forward at this time.
- An amount of \$450,000 will be reduced from the capital budget of project 20001178 and returned to the Waste Management Capital Variance Project. This returned funding to the Waste Management Capital Variance Project will then be used to fund the new container line drum feeder capital project.
- The glass breaker screen and perforator replacement will not move forward this year as there has been an increase in the number of transparent bags (i.e. blue or clear bags) used by residents to contain recyclable material and this has further increased with the COVID-19 pandemic. In order for the glass breaker screen and perforator to

work efficiently and effectively, the recyclable material needs to be removed from the plastic bags.

- It is anticipated that a drum feeder on the container line will result in approximately \$100,000 more in revenue per year based on current market pricing, primarily due to higher recovery rates for plastics and aluminum beverage cans. The decrease in overtime (\$30,000) and residue (\$15,000) will result in a cost avoidance of approximately \$45,000 per year.
- Staff recognize that we are also going through a process to identify a potential new ownership structure for the Recycling Centre facility, however, in order to operate efficiently and ensure continued marketability of our recyclables, investments such as the one being recommended in this report are needed.
- The Budget Control by-law Section 6.3(b) permits an approval of an individual Capital Project if it is deemed a priority by Council in advance of the general Capital Budget by-law.

## **Financial Considerations**

This report seeks approval of the creation of a new capital project for the design, build and install of a container line drum feeder at the MRF at an estimated cost of \$450,000.

The funding for this project will be returned from project 20001178 – 2020 Recycling Facility Improvements to the Waste Management Capital Variance Project in the amount of \$450,000. In turn, this \$450,000 returned to the Capital Variance Project will be used to fund this new container line drum feeder project. Project 20001178 was approved in the 2020 capital budget for a total gross cost of \$834,900 funded by Waste Management Capital Reserves (\$819,330) and Waste Management Development Charges (\$15,570). It is anticipated that a drum feeder on the container line will result in approximately \$100,000 more in revenue per year based on current market pricing, primarily due to higher recovery rates for plastics and aluminum beverage cans. The decrease in overtime (\$30,000) and residue (\$15,000) will result in a cost avoidance of approximately \$45,000 per year. By minimizing air space utilization at the landfill that would be attributed to MRF residue, there is potential to generate an additional \$34,500 in revenue through tip fee recovery. Payback is approximately 2.1 years. In the event that the MRF is sold as part of the MRF Opportunity Review which in the best case scenario would be in Fall 2021, the drum feeder would be sold as part of the MRF.

The impact of not making the facility improvements to the MRF would result in an anticipated budget shortfall in end market revenues for containers for the 2020 operating budget year of approximately \$473,000 as a result of higher residue rates and lower revenues due to the loss of marketable material. Provided that the container line drum feeder is installed by November 2020, it is estimated that the budget shortfall for 2020 can be reduced by approximately \$30,000.

## **Analysis**

### **Background**

The glass breaker screen and perforator replacement will not move forward this year as there has been an increase in the number of transparent bags (i.e. blue or clear bags) used by residents to contain recyclable material and this has further increased with the COVID-19 pandemic. Based on visual observations, it is estimated that the use of transparent bags has doubled since the start of the COVID-19 pandemic. In order for these to work efficiently and effectively, the recyclable material needs to be removed from the plastic bags. Niagara Region does not currently promote the use of clear plastic bags although does accept them if placed curbside. Currently plastic bags are being manually opened; however, due to the increased volume of bagged material, not all plastic bags can be opened.

The project funds requested to be reprioritized will be utilized to design, build and install a drum feeder at the front end of the MRF operations on the container side at a cost of approximately \$275,000 US excluding net HST.

If approved, staff will single source the procurement of the container line drum feeder to Van Dyk Recycling Solutions (VDRS) in accordance with the Procurement By-Law. Niagara Region issued two separate Request for Proposals (RFP) in December 2019 and March 2020 to install a drum feeder on the fibre line at the Recycling Centre. The first RFP was cancelled without award due to non-compliant bid submissions and the second closed without any bid submissions. As a result, the fibre line drum feeder was single sourced, in accordance with the Procurement By-Law, to VDRS as they were able to meet the required specifications and were also able to manufacture and install the equipment within the timeframe to meet operational needs. VDRS is a supplier of equipment to many MRF's across Canada and is familiar with all applicable Canadian rules and regulations such as ESA approvals. They will also be able to manufacture and supply the container line drum feeder by November 2020. The container line drum

feeder will have similar specifications as the fibre line drum feeder. By single sourcing this piece of equipment to the same manufacturer of the fibre line drum feeder, any third party maintenance required can be done at the same time, staff will be familiar with the software and operating specifications, the equipment can be integrated into the PLC (programmable logistics control) program, installation will be simplified as Van Dyk will have completed installation on one side already and they are very familiar with our MRF.

### **Facility Improvements – Container Line Drum Feeder**

The installation of a drum feeder on the fibre line was approved in 2019 via PW 48-2019, (August 6, 2019) and at the time that this report was written was being procured. Similar to the rationale provided in PW 48-2019 for the fibre line drum feeder, a drum feeder on the container line will improve the metering of the container stream materials onto the processing line to allow for a more consistent flow of materials. In addition, the drum feeder is equipped with teeth that rip open bags. This will reduce the amount of operational downtime that is a direct result of material jamming due to material fluctuations on the container line and will increase the number of bags being opened. The drum feeder can eliminate “black belts” (where no material is on the processing line) as the loader can load more material into the drum feeder, than it can, by pushing material directly onto a conveyor.

Drum feeders have been successful in increasing throughput of material at MRFs by up to 20%. Higher throughput will reduce the amount of overtime hours worked per year to process material, improve the quality and volume of material being marketed.

With the new collection contract commencing in October 2020, the Region is anticipating an increase in recycling container volume of approximately 5-10% based on experience from Waterloo after switching to every other week collection. In order to minimize unloading delays for curbside collection vehicles at the MRF and to ensure vehicles can return to their routes in a timely fashion to complete their daily collection routes, the purchase of this drum feeder will assist in providing vehicles with more frequent access at both service doors to unload at the MRF. It is not uncommon for the MRF to have only one access door open for unloading due to material backlogs on the tipping floor. By having both access doors open, two vehicles can offload at once or one vehicle can offload during periods when third party material is being offloaded. In addition, at least one vehicle will be able to offload while the loader operator is loading material into the drum feeder instead of having to wait for the loader to finish loading material onto the line. This drum feeder will provide up to 20% higher throughput. The

end result will be more time spent by collection vehicles at the curb, resulting in better service delivery to the residents of Niagara.

## **Alternatives Reviewed**

Alternatives reviewed were to add to the staff complement at the MRF to open the increased volume of plastic bags. Space within the pre-sort room to add more staff to open bags is limited due to the degree of sorting already taking place in this area. Adding two (2) more staff would cost approximately \$80,000 per year. However, this would not provide the key benefit of higher throughput. It takes each sorter 5 to 10 seconds to open one bag of containers. The drum feeder will open more than 50% of the bags prior to the pre-sort room. By eliminating the bag opening function performed by staff, it will reduce handling time by 50% as staff will only have to shake the contents of the open bags onto the line.

The other option reviewed is a policy change to no longer permit the use of clear plastic bags for the placement of material curbside by residents and businesses who utilize the Niagara Region's recycling collection services. Some residents prefer the use of clear plastic bags to contain material, in particular those in rural areas with longer driveways or in high wind areas. If bags were completely eliminated, the Region would see a financial benefit of well over \$179,500 due to other benefits such as labour savings, reduced equipment downtime and maintenance costs. It should be noted that a policy change, such as no longer permitting the use of clear plastic bags, would take time to properly implement and therefore the benefits would not be recognized immediately.

If the Region were to do nothing, there is the potential that the Region will be unable to process all of the container stream volumes during peak periods (I.e. January, May, June, July and August) and have to pay significant processing and freight fees to transport unprocessed material to other recycling facilities (MRF's) in Ontario. In order to prevent unloading delays for collection vehicles, the Region would have no alternative but to transfer material to other Ontario MRF's during peak periods on a regular basis or landfill if the Region is unable to find other MRF's to transport unprocessed material to due to limited capacity. Most recently in July, due to the increase of the container stream volume, the Region has had to transport unprocessed material to another MRF in Ontario in order to free up space on the tipping floor and continue to receive curbside collected material. Estimated costs for transporting and processing our surplus material can range from \$150/MT to \$180/MT and does not include the loss of revenue from marketable material. For those reasons, the aforementioned alternative reviewed is not being recommended.

## **Relationship to Council Strategic Priorities**

This recommendation aligns with Council's strategic priority of Responsible Growth and Infrastructure Planning, specifically around Environmental Sustainability and Stewardship. By investing in the MRF, the Region will reduce downtime, increase throughput of recycling material, and allow the Region to improve quality of recyclable material, making it more desirable for the end markets.

## **Other Pertinent Reports**

- WMPSC-C 15-2019
- WMPSC-C 23-2019
- PW 48-2019

---

### **Prepared by:**

Jennifer Wilson  
Supervisor  
Waste Management Services

---

### **Recommended by:**

Bruce Zvaniga, P.Eng.  
Commissioner of Public Works (Interim)

---

### **Submitted by:**

Ron Tripp, P.Eng.  
Acting Chief Administrative Officer

*This report was prepared in consultation with Sherri Tait, Acting Manager, Waste Management, Norm Kraft, CEO, Niagara Recycling, Tracie Byrne, Procurement Manager and reviewed by Catherine Habermehl, Director, Waste Management.*

---

**Subject:** Approval of Various Single Source Public Works New Purchase Orders and Purchase Order Change Request

**Report to:** Public Works Committee

**Report date:** Tuesday, September 8, 2020

---

## **Recommendations**

1. That the Purchase Order (PO) Change Requests identified in Appendix 1 of this report **BE APPROVED**.

## **Key Facts**

- The purpose of this report is to seek Public Works Committee's approval to proceed with the Purchase Order Change Requests identified in Appendix 1.
- At the Special Council meeting on July 30, 2020, Regional Council instructed staff that, "If any single source [Public Works] procurement [over \$5000] is deemed essential there must be approval first received by the Public Works Committee."
- On August 18, 2020, the CAO provided Confidential Memorandum CONF-C 6-2020 providing key information in response to the July 30, 2020 staff direction.
- The memo identified that pursuant to a formal competitive procurement process, a change to the resulting contract (via the Change PO process) is required for any additional goods and/or services, which were not part of that formal process (consider Single Source additions). This includes most (if not all) instances where the "work" is underway when a Change PO request initiates.

## **Financial Considerations**

All of the Change PO requests identified in Appendix 1 have approved funding in place from either Capital or Operating budgets in the respective divisions in Public Works.

## **Analysis**

Staff within the Public Works Department are currently managing in excess of 140 essential infrastructure projects valued at more than \$160 million dollars. These include planning, design, preventative maintenance and construction.

Niagara Region's Procurement By-law 02-2016 as amended February 28, 2018 provides controls and methods that ensure, among other things, that the procurement

process achieves, “best value for the Corporation when procuring Goods and/or Services”.

Pursuant to the formal procurement process, which culminates in contract award, there are occasions, when new information identified after award, requires further consideration of how these unforeseen additional requirements will impact the final project deliverable.

When this happens, staff consider the following alternative approaches to addressing the scope change:

1. Is the original project objective still achievable or should it be abandoned?
2. Can the project proceed as originally planned and this new information be deferred to a later time without reducing the integrity of the design, construction, etc.?
3. Is the current work at a point where it can be terminated, and a new competitive procurement for the additional scope items be initiated without excessive costs or negative impacts to the community from the delays?
4. Does the addition of this new work to the current assignment still achieve best value if Staff can validate that it represents fair value?

Staff note, that where a construction project is underway, the Ontario Occupational Health and Safety Act dictates that, “When an owner undertakes a project by contracting with more than one employer (contractor), the owner is undertaking the project and is the constructor.” As a result, if Niagara Region were to initiate additional work on a project site at the same time by two contractors, Niagara Region would assume significant additional liability risk for the safety of all workers on the site. Ideally, the work of first contractor must be completed prior second contractor commencing.

### **Alternatives Reviewed**

Staff have considered the following alternatives for each of the change order requests appended as Schedule 1:

- Closing out the current work. Abandoning the previous approach and re-considering strategy;
- Proceeding as originally planned and addressing the new information/change in scope at a later time through a competitive process; and,



- Terminating the current contract where possible and conducting a competitive procurement process to complete the work with the additional scope items added.

Staff conclude that none of the aforementioned options achieves the desired best value outcome without significant risk to the Region in terms of cost, delay and unavailability of critical infrastructure. Staff have assessed the financial impact of these additionally scoped items, deemed them fair and reasonable hence, the recommendation contained herein is presented for approval as it offers the best value for the Corporation given in the specific circumstances.

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

- Responsible Growth and Infrastructure Planning

### **Other Pertinent Reports**

- CONF-C 6-2020 Update from Special Council Meeting July 30, 2020 Closed Session

---

#### **Prepared and Recommended by:**

Bruce Zvaniga, P.Eng.  
Commissioner of Public Works (Interim)  
Public Works Department

---

#### **Submitted by:**

Ron Tripp, P.Eng.  
Acting Chief Administrative Officer

*This report was prepared in consultation with Dan Ane, Manager Program Financial Support and Bart Menage, Director Procurement and Strategic Acquisitions*

### **Appendices**

Appendix 1                      Purchase Order Change Requests to Existing Contract

## **Appendix 1: Purchase Order Change Requests to Existing Contracts**

1. PO 65745 Niagara Transit Governance Study (NTGS) (2019-RFP-194)  
Optimus SBR Inc  
**Increase original contract amount of \$322,826.20 by \$40,284.00 for a new total of \$363,110.20 (excl. HST)**

### **Rationale for Increase**

The request is for an extension to an existing contract.

The CAO Working Group, responsible for providing strategy direction and oversight of the NTGS, has recommended that a supplementary round of stakeholder engagement be undertaken in advance of the introduction of the study to Council. This engagement will focus on the presentation of the draft NTGS, include discussion of how stakeholder input from earlier engagement has been reflected in the study, and provide an opportunity for additional feedback to be presented to the project team for inclusion in the final report. Engagement activities are planned with all stakeholders included in earlier rounds of consultation, including post-secondary institutions, transit unions, regional transit working groups, and key municipal representatives.

In addition, the envisioned approval framework for the NTGS recommends that support in principle be sought from each of the 12 local area municipalities prior to a second subsequent triple-majority approval process. This “two-phased” approval process will ensure that each of the local area municipalities have a formal opportunity for review and input prior to ultimate approval.

This contract change notice will expand the existing consultant scope (Optimus SBR/LTRT) for the NTGS, facilitating their undertaking of the additional stakeholder engagement as well as their participation in the additional local area municipality Council meetings required by the recommended approvals process. This amendment is required as pre-LNTC and Council consultation with stakeholders and the additional engagement with the LAMS was not included as part of the original project scope, but has been identified as critical to the overall success of the NTGS by the project team and CAO Working Group based on the development of the project, previous stakeholder input received, and recommended approvals process.

2. 2019-RFP-238 Design of the J. R. Stork Bridge (Str. 038205) Replacement  
Request: Additional Geotechnical Investigation for Detailed Design Assignment  
Consultant: Ellis Engineering  
Purchase Order Number: 0000066065  
**Increase original contract amount of \$221,990 (excl. HST) by \$25,635 for a new total of \$247,625.**

### **Rationale for Increase**

The request is for an extension to an existing contract.

As part of the J. R. Stork Bridge Replacement project, a 300mm trunk watermain is being relocated as it is hung from the underside of the bridge currently. The watermain replacement is being installed via Horizontal Directional Drilling (HDD) methods into the bedrock. HDD is a minimal impact trenchless method of installing underground pipe which offers significant environmental advantages over traditional open cut methods, and is routinely used when conventional open cut excavating is not practical. Boreholes were completed as part of the initial geotechnical investigation into the rock and included as part of the detailed design tendering process. Since the award and advancement of the detailed design assignment, further discussions with expert HDD contractors have indicated that the watermain will need to be installed between 2m and 3m deeper than anticipated. The increased watermain depth resulted from discussions with Niagara Peninsula Conservation Authority and an expert HDD contractor with the aim to reduce environmental impacts of Frac-outs (the unintentional return of drilling fluids to the surface during HDD). In order to obtain accurate information on the bedrock at the final required depth, advancing additional boreholes is being recommended. This work is being done on behalf of W&WW as this is being led by Transportation, and is being carried out by the sub-consultant included in Ellis Engineering's original proposal.

### **Alternatives Reviewed**

- (i) Do nothing
- Unknown cost exposures likely to occur during construction.
  - Preference to complete additional due diligence as part of the detailed design to have this incorporated in construction specifications for tendering.

## (ii) New procurement

- Increased risk exposure to the Region as a result of possible conflicting information between new investigation and the original investigation completed for the project.
- Increase in timeline (three to four months) will likely result in additional fees due to project delay

## (iii) Advance additional boreholes under current contract:

- Work will be completed by the sub-consultant retained by Ellis Engineering as part of the base assignment.
- The additional information will assist with detailed design specifications to be included as part of tender process for construction and
- Work will limit cost exposures to the Region during the construction.
- Consistent professional and technical knowledge with the current professional services contract.
- Keep detailed design process and larger project timelines on track as procurement process for a new professional service will add three to four months to project.

## 3. 2020 Strengthening and Resurfacing Program - Part 2

Request: Looking for approval to increase the contract award amount to the lowest compliant bidder (\$3,883,357, exclusive of HST) with the remaining 2020 approved capital funds (\$550,000) to complete additional contingency roads as part of the 2020 Strengthening and Resurfacing Program –Part 2.

Contractor: Brennan Paving - Niagara, a division of Brennan Paving & Construction Ltd.

Purchase Order Number:

- Tender Closed August 18, 2020.
- As of August 21, 2020, still in Requisition status.
- A PO has not yet been formalized through procurement.

**Rationale for Increase**

As part of the annual capital budget process, the 2020 Strengthening and Resurfacing Program –Parts 1 and 2 received an approved budget number to complete a series of road improvements throughout Niagara Region. Also identified are a series of contingent roads to be advanced if the tenders for Parts 1 and 2 were to close lower than the approved budget number.

Tender 2020-T-104 (2020 Strengthening and Resurfacing Program – Part 2) closed with favourable competitive pricing. Based on the bid results received during the procurement process, the PO for the 2020 Strengthening and Resurfacing Program – Part 2 will be \$3,883,357 (exclusive of HST). In order to take advantage of favourable competitive pricing, and to maximize the lane kilometers that can be resurfaced within the approved budget for the Strengthening and Resurfacing Program, it is recommended that an additional \$550,000 (exclusive of HST) contingency line be added to the PO for 2020 Strengthening and Resurfacing Program - Part 2.

The additional \$550,000 contingency will be utilized to complete additional resurfacing of candidate road sections. The following road is recommended as a candidate to be completed utilizing the \$550,000 contingency for the 2020 Road Resurfacing Program:

- RR3 (Lakeshore Rd) From Daley Ditch to Sideroad #32, Wainfleet (approximately 5.7 lane kilometers). This road section currently has a Low PCI and is deteriorating at a faster rate than other road sections with similar conditions and if not resurfaced, it will be a reconstruct at a later date costing more dollars to repair.

### **Alternatives Reviewed**

#### **(i) Do Nothing**

- Additional roads will not be resurfaced which decreases their overall longevity with increases to future capital requests for full reconstruction which are significantly more expensive.

#### **(ii) Increase the contract award**

- Allows the program to capitalize on the full 2020 Strengthening and Resurfacing Program approved capital budget amount as a result of favourable pricing.

#### **4. Road Weather Information System (RWIS) Station Sensor Replacements**

Single Source Request: Special Circumstance for Maintenance and Repair

Consultant: Complete System Installations (CSI)

Purchase Order Number: PO #79630

**Increase the current PO amount of \$134,135 by \$34,500 (excl. HST) to an overall amount of \$168,635 (excl. HST).**

### **Rationale for Increase**

The request is to increase the current purchase order in order to complete the maintenance and repair for the upcoming winter maintenance season.

The Regional Road Weather Information System (RWIS) is inspected bi-annually; spring and fall and is a vital part of the Division's weather tracking and forecasting. The scientific weather equipment is used to actively monitor current weather and road conditions with the data being pulled daily for the preparation of the 5 day weather forecasts used by the Region and all local area municipalities in road operations planning and operational activities associated with winter road maintenance. The information is shared currently at no cost with the 12 Local Area Municipalities.

Due to the pandemic, the 2020 spring inspection was delayed on the seven (7) RWIS stations due to COVID-19 restrictions forcing the work to be completed in early August. During the inspection and testing of the metrological sensor hardware, CSI identified several non-reporting/defective units. Under non-COVID restrictions, the equipment deficiencies would have been identified in the spring thus providing sufficient time to issue a formal quotation as per the Region's Procurement By-Law.

With the late inspection, issuing a formal quotation for the acquisition of replacement sensors (there is a minimum six (6) week manufacturer order fulfilment from purchase date) and a contractor to perform the service will take this beyond the required start date of winter maintenance activities of October 15th. October 15 represents the date the Region is required to have 50% of its winter maintenance vehicle compliment ready in order to meet service levels for weather and road condition monitoring for winter road operations. Unless the approval to replace the inoperative equipment is provided, the Region will not have the required data to effectively monitor the most up-to-date weather and road conditions to pro-actively plan and manage the winter road maintenance response.

CSI was the successful bidder who won the initial installation of the weather stations and network for Niagara Region. Subsequently, the Region has worked with CSI on an annual basis related to maintenance of the seven (7) RWIS sites for more than five (5) years due to the limited number of vendors. Only two vendors are known in the Province who provide this type of technical maintenance and replacement service. In the past, the other vendor was not able to meet the required timelines for service.

Therefore, the Region has single sourced the annual maintenance on an as needed basis and average annual costs have been approx. \$7,700 for years 2016 - 2019.

2020 has been an anomaly year in that repairs to multiple components have been identified. An existing contract with CSI for the 2020 annual station inspection and upgrading communication hardware and replacement of damaged in-road sensors is in place and requires an additional \$34,500 to be added to the \$134,135.

In addition, the Region has been collaborating with the MTO on their new maintenance contract model for metrological services who also currently use CSI as the vendor for the maintenance of their RWIS sites; including the MTO owned sites in Niagara. The Region and MTO each have signed data licence agreements with one another to share weather data.

An RFP will be issued later this year to publicly procure a multi-year metrological maintenance and repair services contract using a competitive process allowing for active monitoring of system components and short replacement timelines; similar to MTO's newer contract model.

### **Alternatives Reviewed**

#### **(i) Do Nothing**

- Will result in failure to comply with Ontario Regulation 239/02. Regulatory Non-Compliance; failure for Winter Road Maintenance Operations - Weather station repair is critical to Regions' winter road maintenance (salting, sanding and/or plowing) operations for compliance with the Regulatory requirements set out in Ontario Regulation 239/02 – Minimum Maintenance Standards. The information is used to plan and react to winter weather and significant weather events.
- Limits Transportation's ability to forecast and observe daily weather and road conditions which will impact the delivery and service for winter maintenance operations. If the equipment is not replaced, contracted localized meteorological forecasts will be inaccurate and will have a high negative impact on the planning and proactive road operational activities and subsequent road safety. The lack of data will result in a more reactionary response to weather conditions, thus greatly increasing the risk to Regional motorists with increased costs.

#### **(ii) Future Procurement Plan**

- Issue RFP in Q4 of 2020 for RWIS Maintenance and Meteorological Services for next 3 years plus optional 1 + 1 years. Duration of contract based on the current rate of technological changes and ability to adapt to changing weather and business climates.

#### **(iii) Increase Current PO**

- Work will be completed in time for Winter Operations and planning.

5. Interim Supply of Custom Electrical Cabling/Wire

Single Source Request: Interim Supply - Custom Electrical Cabling/Wire

Vendor: Impulse Technologies Ltd.

Purchase Order Number: PO #78427

**Increase the current PO amount of \$62,790.90 by \$8,598.10 (excl. HST) to an overall amount of \$71,389.00 (excl. HST).**

**Rationale for Increase**

The request is to increase the current purchase order in order to account for additional quantities that were realized through the manufacturing process.

The Region requires approximately \$165,000 worth of electrical cabling each year to support the installation and maintenance of traffic signals and streetlights. \$135,000 is considered customer or proprietary and has been single sourced from one (1) supplier and manufacturer. These custom specifications were developed over 10 -20 years ago and have been purchased since that time from specialty suppliers and manufacturers who consider their products proprietary. This is a relatively standard practice for larger government agencies for this type of application.

When electrical cabling/wiring companies manufacture custom products like this, they are not able to manufacture the product to within tight tolerances (for meterage) so when an order is placed, staff estimate requirements understanding that there may be a variation in the actual quantities that are manufactured. Three (3) of the five (5) cabling/wire products that staff procured did have variations in the quantities; resulting in the need to adjust the quantities of custom wire that need to be procured.

Staff are actively reviewing the current specifications to determine if we need to continue to procure "custom" cabling/wire going forward. There are more standard cabling/wire products on the market that staff might be able to use and obtain more quickly and less expensively. In addition, we are also considering if the "custom" cabling/wire could be procured elsewhere.

**Alternatives Reviewed**

(i) Do Nothing:



- The custom cabling/wire has been manufactured and this change PO request is simply to adjust quantity variations through the manufacturing process.

(ii) Future Procurement Plan:

- Issue RFT to competitively procure cabling/wire products in Q3 of 2020 with a contract duration of one year plus optional 1 + 1 years, or;
- Request authority to procure custom cabling/wire products on a go forward basis through a single source procurement if alternate products are not sufficient.

6. PO 43271 Associated Engineering (2017-RFP-49)

Welland WTP Upgrades Phase 2 – Design

**Increase original pre-tax amount of \$1,358,970 by \$402,594.50 for a new total of \$1,761,664**

**Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- a) Additional design for the relocation of the existing municipal parking lot and features in Merritt Island Park to increase the additional space required to accommodate the construction of the second phase to new Water Treatment Plant (note: this scope of work has already been added to the consultants scope through an amending agreement). This cost is included in this request in order to move this portion of budget to Line 1 on the PO, restoring the contingency amount on Line 2 to its original value of \$159,000)
- b) An amendment to the original Municipal Class EA to include the new raw water Intake; and,
- c) Redesign work associated with reducing the overall plant capacity and provide design services to incorporate the addition of treatment trains features and other appearances to allow for future Plant expansion

The extra scope of work is to address:

- a) Requests from City of Welland for replacement of infrastructure necessitated by the acquisition of land to the north of the WTP reservoir required for construction of Phase 2 of the WTP upgrade.
- b) The need for a new raw water intake was confirmed during preliminary design which showed that it was not feasible to extend the existing intake to the new Low Lift pumping location.
- c) The need to reduce the overall capital costs for the upgrade. Initial estimates projected the cost of the full capacity upgrade to be in excess of \$81 million. W&WW Engineering staff reviewed the existing and projected demands in the system and, in conjunction with Regional Planning staff, have determined that a staged approach to constructing the capacity of the plant would reduce the capital cost of this upgrade by over \$26 million. Future expansion would not be required until the customer population exceeds full buildout of current municipal limits.

• Design for work at Merritt Island Park requested by City of Welland:	\$85,166.00
• Amendment to Class EA for Raw Water Intake:	\$37,000.00
• Design for reduced Plant Capacity with Future Expansion capability:	\$280,528.50
<b>Total Additional Fee Request (w/o tax):</b>	<b>\$402,594.50</b>

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- This will not address the increased costs and complications of incorporating designs from two consultants in one tender package;

- 7. PO 66644 Environmental Infrastructure Services (EIS) (2019-RFP-239)  
Niagara Falls WWTP (NFWWTP) Secondary Upgrade  
**Increase original pre-tax amount of \$678,106.82 by \$181,986 for a new total of \$860,092.82**

### **Rationale for Increase**

This work is critical and needs to be completed as soon as possible as the MECP has issued a compliance order on the NFWWTP site. The order has a deadline of January 15th, 2021 for the Region to submit its 90% finalized design, with construction planned for 2021.

The request is to increase the current purchase order in order to account for additional work for:

a) NFWWTP Grit System Redesign

Additional design funds are required to ensure that the newly selected Moving Bed Bio-Reactor Tanks (MBBR) treatment system will function as intended. Through extensive consultation with other municipalities who have implemented a MBBR system, it was found that proper grit removal is crucial as the MBBR is not designed to handle foreign matter that should be separated and removed by the grit tanks.

The grit separation system at the NFWWTP has currently been suffering repeated mechanical failures, and therefore this process system will need to be addressed to ensure proper MBBR performance going forward. In light of this additional design engineering services is needed to redesign and increase the robustness of the NFWWTP Grit system to ensure proper influent will be sent to the MBBR once installed and operational. This work can be done in parallel to the current detailed design being completed by EIS. The cost of this added scope is \$145,698.

b) Secondary Influent Bypass Disinfection Conceptual Design

The Ministry of Environment, Conservation and Parks (MECP) instructed that a conceptual design for the disinfection of the bypass system must be submitted with the ECA application. This was not part of the original scope for EIS as the site does not currently provide bypass disinfection at this time. The MECP has agreed that only the conceptual design and logic will be required at this stage. The final secondary influent bypass disinfection design can be submitted as part of the Phase 2 design, commencing in 2021 (Digester and Solids Treatment Phase). The total cost of this assignment is \$36,288.

**Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk to operation of the new system as well as inadequate information in the ECA application.
- (ii) Proceed with competitive RFP process:
- A competitive process will take more time than is available as there is immediate need for these services;
  - A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Tender process with 2 design consultants and one tender package and one ECA submission.
  - Having another consultant complete this work would also cause inefficiency in design cohesion and difficulty with construction and commissioning coordination.

8. PO 76050 Palmer Environmental Consulting Group (2020-RFP-20)  
 Niagara Falls WWTP Secondary Upgrade Geotechnical and Hydrogeological  
**Increase original pre-tax amount of \$145,065 by \$146,720 for a new total of \$291,785.**

#### **Rationale for Increase**

This work is critical and needs to be completed as soon as possible as the MECP has issued a compliance order related to the NFWWTP site. The order has a deadline of January 15th, 2021 for the Region to submit its 90% finalized design, with construction planned for 2021. This additional geotechnical work will help mitigate risk to understand the technical requirements for the main design, to identify the magnitude of contamination for more accurate construction costing and to manage potential human health impacts during construction and post-construction. It needs to be completed in a timely manner to support the design.

The request is to increase the current purchase order in order to account for additional work for:

- a) Further Geotechnical and Hydrogeological Investigations  
 Needed as the initial study conducted in April 2020 by Palmer revealed contaminant concentrations in exceedance of the applicable Table 3 Site Condition Standards in both soil (Metals and Inorganics) and groundwater (Metals and Inorganics, and Petroleum Hydrocarbons [PHCs]) inside the future construction boundaries. The horizontal and vertical extents of this impacted area are currently unknown. Items included in this are additional boreholes, monitoring wells, and soil stockpiling sampling.

b) A Due Diligence Risk Assessment (DDRA)

To assess the potential human and ecological risks. The completion of the DDRA will evaluate the health risk of impacted soil and groundwater remaining in place, as is, without conducting site remediation. In addition, the DDRA will assess the suitability of excavated soil for reuse as backfill material and identify any potential risks and/or mitigation measures that should be implemented at the site. Current design and budget had assumed that the excavated soil would be able to be used as backfill material. If this material were found not to be suitable, it could have significant capital budget implications.

The information provided from the above will be collected and summarized in the form of a Phase II Environmental Site Assessment Report.

**Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk during construction with inadequate information gathered for the design and specifications. This could result in significant extras during construction if not captured properly during design.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services (this information is required to support the design, which has compliance order deadlines);
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements

9. PO 00927 CIMA+ Canada (2019-RFP-288)

Lake Street Sewage Pump Station (SPS) Upgrade Design

**Increase original pre-tax amount of \$210,878 by \$145,155 for a new total of \$355,033**

**Rationale for Increase**

Following completion of hydraulic modelling including transient analysis it was determined that the existing forcemain is at risk of failure with the increase in SPS capacity associated with the upgrades project. Replacement of the 1974 forcemain is recommended to mitigate the risk of failure

The request is to increase the current purchase order in order to complete the:

- a) Design a sanitary forcemain replacement for the existing 500mm Series 45 HDPE forcemain while maintaining the Lake Street SPS operational and restricting shutdowns to the forcemain switchover only. The forcemain replacement design will be incorporated into the Lake Street Sewage Pumping Station Upgrades contract documents.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk of forcemain failure.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Tender process with 2 design consultants and one tender package.

#### **10. PO CNV0000156 RV Anderson (RVA) (2013-RFP-57)**

Rosehill Water Treatment Plant Upgrades – Contract Administration

**Increase original pre-tax amount of \$1,391,797.40 by \$236,180.00 for a new total of \$1,627,977.40**

### **Rationale for Increase**

The request is to increase the current purchase order in order to complete the following additional engineering services:

- a) Additional contract administration and inspection services required to bring the construction project to completion in early 2021 due to unforeseen time extensions to address filter pH adjustment, faulty pump motors, and extended monitoring for operational assurance. This Change PO is for the extension of an existing approved scope of work.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project and can result in further claims due to construction delays
- (ii) Proceed with competitive RFP process:
- A competitive process will take more time than is available as there is immediate need for these services;
  - A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process
  - A competitive RFP process will also hold up construction resulting in delay claims from the Contractor

#### 11. PO 72318 RV Anderson (RVA) (2019-RFP-315)

DeCew Water Treatment Plant (WTP) UV Disinfection System Upgrades – Design

**Increase original pre-tax amount of \$50,970.00 by \$81,120.00 for a new total of \$132,090.00**

#### Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) UV Advanced Oxidation – UV Advanced Oxidation Process (AOP) is a treatment option that improves water quality and reduces taste and odour issues. This technology is capable of removing additional parameters compared to our current disinfection practice that will be vital as we encounter new parameters of concern. Recently, DeCew WTP has been seasonally experiencing taste and odour issues. AOP technology will be greatly improved the water taste and odour. AOP uses UV as primary disinfection with chlorination only required for secondary disinfection reducing the operating costs at DeCew WTP.
- b) The new disinfection facility would be built underground based on plant hydraulics. Addition of an aboveground building was recommended to be included as part of this project. Inclusion of an aboveground structure would provide access to the disinfection facility and connect the existing buildings (Plant 1 current administration area, existing chlorine storage area and existing gate house/training room). The new structure would provide DeCew WTP with a new administration area relocating the operations and maintenance managers and clerk to the new structure. This will provide managers and the clerk oversight of all visitors entering the plant. Currently the managers are located on the second

floor, disconnected from the plant entrance, visitor arrivals and the operators control room.

Staff recommend that RV Anderson be awarded this PO increase in accordance with Purchasing By-law 02-2016, Section 18(a)(i) as RV Anderson is familiar with this immediate area and the proposed work above directly relates to their assignment. If RV Anderson continues their assignment based on their approved scope of work, the Region will not be able to use the conceptual design work as a basis of scope for the detailed design RFP. An additional assignment would be required to re-design the UVDS incorporating AOP and an aboveground structure. This would be an inefficient use of Region's resources.

### **Alternatives Reviewed**

#### **(i) Do Nothing:**

- This alternative does not address the needs of the project.

#### **(ii) Proceed with competitive RFP process:**

- The deliverables provided by RV Anderson based on their current scope of work will not be able to be used as a basis for detailed design.
- A competitive process will delay the project schedule;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.

### **12. PO 76219 Jacques Daoust Coatings Management Inc (2019-T-332)**

Grimsby WWTP Baker Road Primary Digester - Refurbishment

**Increase original pre-tax amount of \$761,800.00 by \$88,000.00 for a new total of \$849,800.00**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- a) The Baker Road Digester in Grimsby is currently out of service and under construction for the replacement of the interior recoating of the digester tank. As part of the construction scope of work a metal inspection was completed on the roof of the digester. This inspection revealed the thickness of the steel skirt has eroded past the allowable limits and in certain sections created holes in the skirt.



The steel skirt must now be repaired prior to completion of the interior coating work.

Delaying the approval of this change order will result in further delaying the amount of time that this digester is out of service. This results in an overall lower sludge capacity of the WWTP and increases the cost of additional haulage experienced by the site. In addition to this delay, claims may also be brought forth by the contractor as this work must proceed before the coating can be completed.

### **Alternatives Reviewed**

#### **(i) Do Nothing:**

- This alternative does not address the needs of the project and increases the risk of not being able to get the digester back into service once construction is completed (i.e., the roof may not seal properly, in turn not passing TSSA inspection).

#### **(ii) Proceed with competitive RFP process:**

- A competitive process will take more time than is available as there is immediate need for these services;

### **13. PO CNV0000160 RV Anderson (RVA) (2013-RFP-66)**

Master Meter Replacement Program – Decew, Niagara Falls, and Port Weller Water Treatment Plants – Contract Administration

**Increase original pre-tax amount of \$326,477.00 by \$42,606.00 for a new total of \$369.083.00**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- a) Niagara Region is currently undertaking the replacement of billing meters within the DeCew Falls and Niagara Falls drinking water distribution systems. New magnetic flowmeters, valves, piping, control panels and other associated appurtenance have been installed and placed into service at eight (8) different locations within the Decew and Niagara Falls drinking water distribution system. This project is currently in the warranty phase.

Shortly after the completion of these sites, Niagara Region's water and

wastewater operations and maintenance staff requested the replacement of another water meter and associated piping at Port Weller Wastewater Treatment Plant. This site was not in the original scope of work. For the contractor (Procon), this additional construction scope of work will be paid from the contingency amount on the existing purchase order, but the contract administration and inspection services by the engineering consultant (R.V Anderson) will require a scope change. This Change PO is for the extension of an existing approved scope of work.

### **Alternatives Reviewed**

#### (i) Do Nothing:

- This alternative does not address the needs of the project.

#### (ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;

#### 14. PO 65140 Exp (Informal Quote during Emergency Design Work)

Dain City Emergency Forcemain Replacement – Geotechnical Testing

**Increase original pre-tax amount of \$97,048.70 by \$32,495.00 for a new total of \$129,543.70**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- (a) To extend Exp construction monitoring services for materials testing during construction. Exp Services Inc. completed Geotechnical Engineering and Hydrogeological Services for the design for Phases 3, 4 and 5 of the Dain City Forcemain replacement project. Due to the urgent nature of this project, as described in council report PW-42-2019, there is immediate need to progress the design of Phases 3 through 5 of the forcemain replacement project. These investigations and the subsequent reports are needed to complete the design for the proposed forcemain route.

### **Alternatives Reviewed**

#### (i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.

15. PO 49672 CIMA (2018-RFP-5)

Bridgeport Sewage Pump Station (SPS) Upgrades – EA Study

**Increase original pre-tax amount of \$466,035.00 by \$24,925.00 for a new total of \$490,960.00**

**Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

(a) The Stage 1 & 2 Archaeological Assessments resulted in the discovery of a portion of a mid-19th century Euro-Canadian archaeological site. The assessment found 45 Euro-Canadian artifacts. Based on the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) Standards and Guidelines, a Stage 3 assessment is now required. CIMA is obligated to register the site with the MHSTCI because of the findings from the Stage 2 assessment; therefore, a Stage 3 Archaeological Assessment must be undertaken.

**Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the MHSTCI Standards and Guidelines.

16. PO 74188 Environmental Infrastructure Services (EIS) (2018-RFP-17)

Port Colborne Water Treatment Plant Upgrades - Design

**Increase original pre-tax amount of \$223,600.00 by \$24,748.50 for a new total of \$248,348.50**

**Rationale for Increase**

The request is to increase the current purchase order in order to account for:

(a) Additional engineering design work to add filter control panels to the design-tender package. These panels were not included in original design package

provided by Cole Engineering Group. The filter control panels will provide additional operational and maintenance efficiencies.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project.

#### **17. PO 11929 Parsons (2016-RFP-34)**

Tupper Drive Sewer Relining - Design

**Increase original pre-tax amount of \$98,235.00 by \$15,508.00 for a new total of \$113,643.00.**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for:

- (a) Additional engineering services to change the current Request for Tender documentation to a Request for Proposal Document (RFP). Through discussions with procurement, contracting strategies have changed and the project is moving forward with a RFP for this type of specialty construction work. This contract strategy will require further effort to develop a new for procurement document. Project on hold until approval.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project.

#### **18. PO CNV0000224 Associate Engineering (2015-RFP-22)**

Niagara Falls Water Treatment Plant Dechlorination and Waste System – Contract Administration

**Increase original pre-tax amount of \$195,784.84 by \$207,281.00 for a new total of \$403,065.84.**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- a) Extension of Contract to include provisional CA & I during construction. Original provisional was \$158,865 (competitively bid through 2015-RFP-22). The single source amount to be awarded is \$48,416.00. This change is due to an increase in contract duration than what was originally estimated in the RFP.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project as Contract Administration and Inspection is required for the duration of the Contract.

(ii) Proceed with competitive RFP process:

- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process.
- Standard practice for Niagara Region WWW is to have the design consultant complete the Contract Administration and Inspection services as this makes shop drawing reviews, field inspection, requests for information and design changes more straightforward.

### **19. PO 64477 Wood**

Garner Road Biosolids Laneways Upgrades - Geotechnical Testing

**Increase original pre-tax amount of \$32,655.0 by \$25,000.00 for a new total of \$57,655.30**

### **Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

- a) To extend Wood for materials testing and inspection for Phase 2 construction. Wood completed materials testing and inspection for Phase 1 construction that was recently completed in July 2020. Wood was originally retained through informal quotes.

### **Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project as materials testing and inspection (QA/QC) is required for the duration of the Contract.

(ii) Proceed with competitive RFQ process:

- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.
- Standard practice for Niagara Region WWW is to have the consultant that completed the geotechnical investigations during design also complete the materials testing and inspection as they are intimately familiar with the site conditions and constraints.

20. PO CNV0000122 Hatch (2014-RFP-15)

Welland WTP WTM Extension – Canal Crossing Design

**Increase original pre-tax amount of \$278,728.00 by \$27,636.00 for a new total of \$306,364.00**

**Rationale for Increase**

The request is to increase the current purchase order in order to account for additional work for:

Hatch was awarded the assignment of the Region's Trunk Watermain design task through 2014-RFP-15. Following the award of this assignment the City approached the Region in 2018 to coordinate a cost sharing strategy for complete road reconstruction within the project limits as a Consultant was already designing works in the area and combining the projects together in a single tender (Contract) would minimize service disruption to local residents and would reduce construction costs from duplicate effort.

- a) Additional Engineering effort required for Region Watermain Design and Investigation of existing conditions. These changes are to modify the current design to ensure redundancy and operational flexibility with the water transmission system.
- b) Additional Engineering effort required for City Sewer Design and Tendering Services. These changes are needed to obtain the required MECP permits and additional effort during the Tender phase which was not accounted for in the original proposal as the City's works were added after the RFP process.

**Alternatives Reviewed**

(i) Do Nothing:

- This alternative does not address the needs of the project for the Region or the City.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time and would delay the tender process. Some construction activities have seasonal time constraints, specifically the Canal works and an RFP process would delay construction of these works.
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process

---

**MEMORANDUM**

**PWC-C 33-2020**

**Subject:** COVID-19 Response and Business Continuity in Public Works  
**Date:** September 8, 2020  
**To:** Public Works Committee  
**From:** Bruce Zvaniga, P.Eng., Commissioner of Public Works (Interim)

---

As reported previously, Public Works has remained focused on keeping the critical public infrastructure operational while responding to the COVID19 pandemic. Departmental staff continue to ensure that the community has: safe drinking water, reliable wastewater systems, recycling and waste collection/disposal, regional specialized and regular transit and a well-maintained regional road system. Public Works staff recognize and are dedicated to the essential role they play ensuring that healthcare, social services, emergency responders and the community-at-large can depend upon the reliable availability of these core municipal services.

Public Works leadership is actively participating in the Operations Section of the Municipal Emergency Control Group. Working with all other departments, the Business Continuity Plan and staff redeployment strategy is monitored and adjusted to respond to changing conditions. As of June 26, 44.5 Public Works staff are actively re-deployed outside of the department delivering essential services. Over the next few weeks some of these staff will need to be recalled to address the increased needs in Public Works from the Provincial Stage 2 re-opening and major contracts underway.

The Department Leadership team are actively participating in virtual meetings with their counterparts in the Local Area Municipalities, and provincial committees to share our successes and learn how others have overcome challenges.

The following provides a brief highlight from each of the four (4) divisions on their respective status, service changes, actions taken and future outlook.



## **Water & Wastewater Services**

### **Current Status of Operations**

High quality, safe and reliable water and wastewater services in accordance with health regulations and standards continue to be provided.

Both the Drinking Water and Wastewater Quality Management Systems (QMS) remain active. A Water QMS external audit was completed July 6 to 10 where the Division retained its long standing QMS accreditation. Capital infrastructure projects are deemed essential and continue to be delivered.

Memorandums have been distributed to all W-WW staff and contractors regarding compliance with the new Niagara Region mask by-law.

### **Service/Operational Changes**

- Cancellation of the Niagara Children's Water Festival; supplementary virtual water festival developed and launched on June 9
- Cancellation of the Water Wagon service
- Recreational Vehicle wastewater holding tank disposal service extended to seven (7) days a week at the Niagara Falls Wastewater Treatment Plant and Baker Rd Wastewater Treatment Plant. Both facilities will be open Monday through Saturday 5– 7 p.m. and all day on Sunday 7 a.m.– 7 p.m.

### **Significant Initiatives or Actions undertaken**

- Developed a full divisional staffing mitigation strategy to deal with any staff shortages that may occur due to COVID-19.
- Developed a W-WW Division Pandemic Re-opening Framework to supplement the Region Re-opening Phase of the Pandemic Response Plan.
- Received license from Health Canada to produce disinfectant spray and hand sanitizer for Regional workplace use during the COVID-19 emergency response to alleviate supply chain shortages when required. Currently able to produce 40 litres per week.
- Cancellation of all non-essential meetings, plant tours, training activities, visitor access.
- Implemented COVID-19 protocols for consultants, contractors and project managers at plant facilities.

- Enhanced focus on the health and well-being of staff operating the essential systems including limiting access to the plant and deferring all non-essential contracted services.
- W-WW training activities are scheduled to resume in September.
- Assigned maintenance staff to dedicated areas and implemented flexible start and end work locations to avoid both unnecessary travel and exposure.
- One employee per vehicle where possible; If employees need to travel together they are required to wear a mask.
- Setup static sanitation stations in all staffed W-WW facilities and deployed mobile sanitation kits for all fleet vehicles.
- Implemented W-WW tailored weekly COVID-19 spot check reports including regular reporting of facility sanitation supply inventories.
- Adopted changes to ensure no physical interaction on deliveries, courier and lab samples.
- Changes to pickup and handling of uniform laundry.
- Portable washrooms have been setup at Wastewater and Water facilities to accommodate contractors, couriers and sewage haulers.
- Face shields, half mask respirators and surgical masks are being used as a form of source protection for staff where certain activities do not allow for proper physical distancing or as required per Niagara Region face covering by-law (By-law 2020-46).
- Meeting room max occupancy signage, screening signage, screening protocol and limited door access have been implemented at all Water-Wastewater buildings. Daily reports of staff well-being and screening are being provided to management for recording and documentation purposes.
- Screening protocol for all vendors and contractors also implemented at all worksites.
- Constructors at various worksites have put into place proper distancing, working measures and PPE for the well-being of all staff.
- Accepting digital signatures for MECP form approvals.
- Capital project delivery through all phases continuing with proper protocols for consultants, contractors as well as for internal staff in place.
- Collaborating with Corporate Communications to develop strategies for Public outreach/engagement to satisfy the requirements of the MECP.

## **Operational Outlook**

### **1 month**

- Implementing phased W-WW Pandemic Re-Opening Plan in accordance with Public Health advisement and direction from the Region's Emergency Operations Centre.

### **3 months**

- Implementing phased W-WW Pandemic Re-Opening Plan in accordance with Public Health advisement and direction from the Region's Emergency Operations Centre.

### **6 months**

- The focus continues to be on the maintenance of all key components, the sustainable supply of key chemicals and materials and most importantly on the well-being of the staff managing these essential systems.

## **Transportation Services**

### **Current Status of Operations**

Essential bridge, culvert and roadway works, forestry, traffic control, pavement markings and signage are critical services which continue to be provided.

Design, construction management and environmental assessments continue from engineering staff and consultants.

Staff continue to monitor all material shipments, supplies and construction contracts experiencing delays to understand larger impacts to ongoing construction project schedules.

Essential and critical project interpretation based on Provincial announcements continues to change and affects the delivery of projects and levels of service to the residents of Niagara Region. This is continuously monitored and adjusted to meet Provincial directions.

## **Service/Operational Changes**

- Dispatch is providing 24 hour support with all calls received by the Region; in particular directing residents for COVID-19 to Public Health and by-law enforcement (Local and Regional) seven days a week.
- Earlier in assessing the separation of staff in field operations, the normal weekday shift and management oversight had been split into two groups scheduled to not physically interact with each other. As a result, the hours of operation were stretched from 5 a.m. - 9:30 p.m. with the support of the union and management.
- Since the implementation of two (2) shifts, management have continued to review staffing levels and needs. Due to the number of redeployments to Long Term Care (LTC) and EMS in support of the pandemic, vacancies, plus sick time, management reassessed the two shifts and converted back to one shift per day from 7 a.m. - 3 p.m. Management is continuing to assess service levels against staffing needs and safety protocols and will adjust accordingly.

## **Significant Initiatives or Actions undertaken**

- Separation of field staff in vehicles where possible is being administered. Vehicle assignment to specific staff with the responsibility to clean / maintain on a daily basis.
- Face masks and shields have been ordered for additional staff protection in certain circumstances.
- Staff continue to monitor supplies out of Fleet stores such as wipes, hand sanitizer, N95 masks and are supporting other Divisions with resources as required.
- Screening signage, screening protocol and limited door access have been implemented at all yards and the service center. Daily reports of staff well-being and screening are being provided to management for recording and documentation purposes.
- Screening protocol for all vendors and contractors also implemented at yards and service centers.
- Constructors at various worksites have put into place proper distancing, working measures and PPE for the well-being of all staff.
- Updated protocols based on provincial regulations/guidelines for working on construction sites has been sent to Heavy Construction Association of the Region of Niagara to notify their members that they must adhere to these measures.
- IT equipment to assist with working from home has been provided where applicable.

- A number of Transportation Staff have already been trained and redeployed to assist other Departments where needed. In assisting with the redeployments to LTC, Staff manufactured personal screening barriers for screener positions at entry points of the homes as an additional safety measure.
- In meeting essential service levels throughout the pandemic, management continue to review staffing; in particular the redeployment numbers and will be phasing the return of Transportation staff throughout Q4. Key operations (ie Winter Operations) will require staff to be recalled for training and availability to meet legislated service level requirements in keeping Niagara's roads safe.

## **Operational Outlook**

### **1 month**

- Essential and critical project interpretation based on Provincial announcements will affect the delivery of projects and levels of service to residents of Niagara region. This continues to be under review. The Business Continuity Plan with Redeployment Strategy of staff for the Division will be administered accordingly.

### **3 months**

- Essential and critical project interpretation based on Provincial announcements will affect the delivery of projects and levels of service to residents of Niagara region. This continues to be under review. The Business Continuity Plan with Redeployment Strategy of staff for the Division will be administered accordingly.

### **6 months**

- Contractors have shared their concern that once non-essential work can recommence, there will be shortage within the trades due to demand. Contracts are continuing to be monitored by staff with regards to any shortages (supplies and trades) and updates will be highlighted.

## **Waste Management Services**

### **Current Status of Operations**

Restrictions to the curbside collection program and at the landfill sites/drop off depots have been lifted with minor restrictions still in place as noted below.

The processing of recyclable materials is being maintained. Storage capacity has become an issue. Staff have applied, and have been granted by the Ministry of Environment, Conservation and Parks to work on Sundays and during the hours of 11 pm to 6 am to process the backlog of recyclables. When necessary, unprocessed recyclables have been shipped to other recycling facilities for processing resulting in additional costs and loss of revenue.

An online tool was successfully implemented in June to provide residents the ability to purchase garbage tags, CFC stickers and recycling and organic bins on line. Garbage tags and CFC stickers are mailed to the residents. For recycling and organic bins, payment is made on line and residents can pick up the bins at one of the Regional distributions centres. Some local municipalities have begun to sell or distribute recycling boxes and green bins, by appointment.

Strategic initiatives are continuing such as the MRF Opportunity Review, implementation of new collection contracts and services levels, construction projects, and operational tenders. Staff continue to participate in stakeholder consultation sessions regarding the Blue Box program and other programs transitioning over to a Producer Responsibility model.

## **Service/Operational Changes**

### **Landfill Service Changes**

There have been delays at the sites due to the recent changes implemented, including limiting the number of people on the drop-off pad to support COVID-19 physical distancing guidelines.

Preferred methods of payment are debit and credit, using the tap option.

### **Collection of large household item resumes**

As of July, the collection of large household items has fully resumed.

### **Curbside Battery Collection**

Battery collection originally scheduled for April 20-24 was initially postponed so that staff could focus on the collection of regular garbage, recycling and organics. A decision was made to cancel the services due to staff redeployment as well as a change in the industry funding model.

## **Compost Giveaway**

Compost giveaway originally scheduled for May 4-9 has been postponed until the week of September 14, 2020.

## **Some /Green Bin Distribution Locations Remain Closed**

For more information on [waste management services](https://www.niagararegion.ca/waste), visit <https://www.niagararegion.ca/waste>.

## **Community Events**

Presentations, sites tours and special events recycling have been postponed until further notice. Unstaffed booths have been set up across Niagara to promote new collection services which are commencing October 19, 2020. Staff have engaged in booths at farmer markets during the month of August, and are complying with Public Health protocols.

## **Significant Initiatives or Actions undertaken**

- Screening signage, screening protocol and limited door access have been implemented at all facilities. Daily reports of staff well-being and screening are being provided to management for recording and documentation purposes.
- Screening protocol for all vendors and contractors has also been implemented at all facilities and sites.
- Installation of a portable washroom and hand washing station for commodity drivers to avoid visitors entering the Recycling Centre.
- Staggering breaks and lunch to reduce amount of people taking breaks at one time at the Recycling Centre.
- Increased cleaning being completed at night and during the day (i.e. between lunch breaks and in high traffic areas).
- Installed plexi-glass between sorters on the processing line, and at the scale houses located at the landfill sites/drop off depots.
- Staff are travelling in separate vehicles to maintain physical distancing per health guidelines.
- On-road staff working from home to start and end their day due to lack of public washroom availability, and to reduce the need to enter their work location.

## Operational Outlook

### 1 month

- Implementing the divisional Pandemic Re-Opening Plan in accordance with Public Health advisement and direction from the Region's Emergency Operations Centre.
- Staff are developing a contingency plan for the distribution of recycling boxes and Green Bins, should non-Regional distribution outlets need to close prior to the launch of new collection services.
- 2021 operational budgets are being developed.
- Staff will continue to develop and implement a communication strategy to inform residents about upcoming service changes that will occur with the new waste collection contracts. Initial communication plan adjusted due to COVID. The first direct mail piece (post card) is scheduled to hit mailboxes late June/early July.
- The Business Continuity Plan with Redeployment Strategy of staff for the Division will be administered accordingly, and work that cannot be deferred is being managed by existing staff.

### 3 months

- The Business Continuity Plan with Redeployment Strategy of staff for the Division will be administered accordingly.
- Staff will continue to implement communications about the service changes that will occur with the new waste collection contracts.
- RFP will be issued for the division's Long-term Strategic Plan.
- Staff will continue to meet with new collection contractors to ensure a successful start up
- New waste collection contracts are set to commence October 19, 2020. Staff will be working to address any major concerns and provide residents with information to fully participate in the curbside programs.
- Staff will work with existing collection contractors to wind down operations

### 6 months

- 2021 work plan will be developed
- The Business Continuity Plan with Redeployment Strategy of staff for the Division will be administered accordingly.



## **Niagara Region Transit/Specialized Transit & GO Implementation**

### **Current Status of Operations**

Niagara Region Transit (NRT) is operating at a modified version of the “Saturday” level of service:

- All Express routes were eliminated (40a, 40b, 45a, 45b, 60a, 65a, 70a, 75a) effective March 23
- 7:00 a.m. - 9:00 p.m. operating hours effective May 4 (typically 7:00 a.m. – 11:00 p.m.)
- Hourly service (60 minutes) on Routes 22, 25, 40, 45, 50, 55, 60, 65, 70 & 75

Niagara Specialized Transit (NST) is operating at the normal level of service, except for trips whose origins or destinations are to/from a location with reported cases of COVID-19 are not being provided. Reducing hours of operation is not a necessity in this case as Niagara Region only pays for trips delivered, rather than an hourly rate. Overall, NST trip requests are significantly reduced, however NST continues to deliver all requested trips within the capacity available. Ridership has continued to show small signs of recovery.

NRT OnDemand service operates in Grimsby, Lincoln, Pelham, Wainfleet and West Lincoln from Monday to Saturday, 7 a.m. to 10 p.m.

### **Service/Operational Changes**

The "Rear door boarding" policy enacted on March 23 to temporarily limit driver contact and respect physical distancing has been lifted. Through Inter-Municipal Transit Working Group (IMTWG) coordination, Niagara's transit providers have installed plexi-glass bio-barriers across the entire fleet of vehicles to protect bus operators. With these bio-barriers in place, reinstatement of front door boarding was able to begin on June 29, and collection of fares on July 2.

Hourly service on Routes 40 and 45 was reinstated to relieve capacity pressures on Routes 50 and 55 and to support the re-opening of the Outlet Collection at Niagara.

NRT OnDemand, a dynamic, ridesharing service, was launched on August 17 in Grimsby, Lincoln, Pelham, Wainfleet and West Lincoln. It does not operate on a fixed route or schedule; rather, riders are able to request trips in real-time through the NRT

OnDemand app (available on IOS or Android) or over the phone by selecting a pick-up point and destination.

Barriers have been installed on NRT OnDemand vehicles between the driver and rider to reduce the potential spread of COVID-19. Mandatory mask usage will also be required as per the Region's Face Covering By-law.

Links to download the app, as well as additional information on the service, including fares and service area boundaries, can be found [here](#).

### **Significant Initiatives or Actions undertaken**

- All NRT, and NST fleet vehicles have been professionally cleaned/disinfected/sanitized well beyond regular protocols, and Aegis antimicrobial spray was applied to all interior surfaces. This work was completed by the local transit service providers as they manage and operate the NRT fleet as part of their own.
- Due to the low volume of trips, BTS has made every effort to deliver trips with only a single occupant in each vehicle, although this has not been formalized as a public policy.

### **Operational Outlook**

#### **1 month**

- NRT staff continue to review ridership data closely in order to determine appropriate levels of service.
- The IMTWG has received provincial guidelines, however those guidelines did not address vehicle capacity. Through discussion with other transit properties in Ontario, Niagara's transit providers are on target to allow for an increased capacity to 100% effective September 7.
- Work continues with our post-secondary partners to review projected enrollment and transit ridership for the Fall 2020 semester at both Brock University and Niagara College. With the percentage of enrolled students on campus undetermined at this time, transit staff are developing scenarios for meeting needs that arise from the campus sites where typically, very significant volumes of students use transit.
- Staff continues to work with Brock University and the Brock University Student Union to maintain the U-Pass Program for the 2020-2021 academic year.

Niagara College terminated the U-Pass agreement in response to COVID-19 and thus students will be purchasing monthly passes in September.

3 months

- Possible further service adjustments based on ridership and in reaction to any provincial changes. Staff will continue to work with the IMTWG in reviewing the available data to ensure that adequate service is being provided while being mindful of the financial challenges faced by each municipality.
- The Niagara Transit Governance Study report will be complete by summer 2020. Introduction of the final report to LNTC with recommendation on a new governance model by the Project Team and study consultants will be done in consultation with the CAO Working Group and the LNTC Chair.

6 months

- The IMTWG will begin working towards the implementation of a new fare payment technology through the funding provided by the Investing in Canada Infrastructure Program (ICIP). Due to the complexity of the program, an implementation date in 2021 is most likely. Staff will continue to provide updates once a timeline has been established and at the major milestones.

As both the Province and Region move through the recovery process, staff at each of Niagara's transit providers will continue to collaborate in monitoring service levels, processes, and policies to ensure the safety of the residents and employees remain a priority and that decisions are made and communicated jointly wherever possible.

Respectfully submitted and signed by,

---

Bruce Zvaniga, P.Eng.  
Commissioner of Public Works (Interim)

---

## **MEMORANDUM**

**PWC-C 25-2020**

**Subject:** Councillor Information Request – Plan to Address Potential Public Health Concerns Related to Every-Other-Week Garbage Collection

**Date:** Tuesday, September 8, 2020

**To:** Public Works Committee

**From:** Peter DiPietro, Collection and Diversion Advisor

---

The memorandum is intended to provide Committee members with a response to the Councillor Information Request, from the March 10, 2020 Public Works Committee meeting, that a plan to deal with public health problems that could arise as a result of moving to every-other-week (EOW) garbage pick-up be developed and implemented.

As of October 19, 2020, new collection contracts will begin in the Niagara region, which will be the beginning of EOW garbage collection for all residential properties and for those Industrial, Commercial & Institutional and Mixed-Use properties located outside Designated Business Areas as a base service. Weekly collection of recycling and organics will continue.

### **Potential Public Health Concerns**

Although, food waste (which is the most odorous materials and thus attracts pests) will continue to be collected weekly, some residents of Niagara have expressed concerns with EOW garbage collection and the possible environmental (i.e. odours and pest nuisance) and public health effects.

Niagara Region Waste Management staff have consulted with Niagara Region Public Health, Environmental Health staff on this matter. It was concluded that if measures are taken to contain garbage, which includes properly sealing all bags with garbage in them, and ensuring all organics are placed in the proper organics container, it will inhibit the attraction of pests, including flies and rodents. The organics container (Green bin) includes a locking mechanism to prevent pests from accessing discarded food waste.

As for odours that may be associated with waste, it is important to note that there is no public health hazard to the residents of Niagara, and measures as noted in this memorandum can be taken to reduce odours that may be caused by household garbage.

### **Experiences in other Municipalities**

Experiences in other jurisdictions (i.e. Barrie, Durham, Halton, Markham, Ottawa, Peel, Toronto and Waterloo) have found that, generally speaking, switching over to EOW garbage collection did not contribute to any significant increase in health and safety issues with rodents, provided that residents used their Green Bin and stored their waste properly. Additional observations provided from Peel Region included:

- A decrease in rodent complaints occurred after switching to EOW garbage collection. Participation in the organics program increased and the organic material that attracts rodents is placed in carts, which is collected weekly. If residents did call in about rodents, the first question asked was if they were using their organics cart; nine out of 10 times, they were not. These types of calls are rarely received anymore.

### **Addressing Potential Public Health Concerns Associated with EOW Collection**

#### **Promotion and Education**

Niagara Region is developing various promotion and education pieces (i.e. website, social media, brochure, newspaper articles, etc.) to inform residents on how they can prepare their garbage, organics and recycling to minimize any potential health and safety concerns with storing garbage for two weeks (i.e. rodents). This will include but not be limited to the following messages:

- Placing food waste and other organic material in the Green Bin, which will continue to be collected weekly, and will remove the most odorous part of the garbage stream;
- Keeping the Green Bin container securely closed at all times;
- Setting out the Green Bin for collection every week, even if it is not full;
- Setting out the Green Bin by 7 a.m. on collection day, not the night before;
- Storing the Green Bin in a shaded, cool area in warmer months; and lining the Green Bin with paper liner bags, sheets of newspaper or cereal boxes to absorb liquids;
- Bag and tie closed garbage or place in a can with a locking lid; and

- Promotion of the weekly diaper collection services.

To assist residents in remembering what week their garbage will be collected, Niagara Region has a new web and mobile application in development which will allow users to search their address to view their address-specific calendar in order to identify their collection day and receive waste collection reminders. Reminders are customizable for the day or morning before collection and are available in a variety of different formats, including email, phone call, Twitter, SMS text message, or they can be embedded in Outlook/Google/iCal calendars. As part of the tool, residents will also be able to search for material-specific disposal options and receive service alerts with any changes in collection. This tool will be available on Niagara Region's website and in the form of a mobile application that can be downloaded through Google Play and the Apple App store, free of charge. The application will be available this summer (approximately beginning of September) in advance of the new collection contracts.

### **Waste Collection Services as of October 19, 2020**

As approved by the Budget Review Committee of the Whole on November 28, 2019 and Regional Council on May 21, 2020 (PW 69-2019, PW 20-2020), Niagara Region will expand diaper collection to provide eligible households (single family homes, or apartments with six or fewer units receiving curbside collection with one or more children under the age of four) will receive curbside collection of diapers during the off-weeks of EOW garbage collection on a year-round basis. Residents who generate additional garbage as a result of a medical condition will continue to receive weekly collection under the new contracts. This program will assist with reducing any potential odours or concerns for those residents with diapers or a medical condition.

Niagara Region provides a set-out service for residents living with accessibility issues, and would continue to do so as part of the next collection contracts. Residents receiving the set-out service do not have to bring their garbage containers (bag/can), Blue/Grey Boxes, or Green Bins to their curbside for collection. Niagara Region's collection contractors will collect the standard limit of garbage containers, Blue/Grey Boxes and Green Bins from each property's designated set-out collection location (such as side door or front porch), on the scheduled collection day. The collection contractors will return emptied receptacles to their original, pre-approved location. This service does not apply to leaf and yard waste, branch, Christmas tree or large item collection.

## **Education and Enforcement of Waste Management By-Law**

Niagara Region Waste Management on-road staff currently conduct site visits and speak face to face with any resident that may need assistance with preparation of their material, and will continue to do so with the new collection contracts. Staff use the Waste Management By-Law as an education tool first; however, if education does not work and the residents continue to not properly prepare their material, staff will enforce the Region's Waste Management's By-Law, which may include fines.

## **Enforcement of Property Standards**

Niagara Region Waste Management is responsible for enforcement of the Waste Management By-Law and their jurisdiction is curbside on any Regional or Municipal Road. Any other issues that may occur at an address (i.e. property standards issues) within the Niagara region can be enforced by municipal By-Law Officers. Any property standards issues received by Niagara Region will continue to be forwarded to the respective local area municipality.

## **Conclusion**

When EOW garbage collection commences on October 19, 2020, some concerns may arise. Staff have already consulted with municipalities who have already switched to EOW garbage collection and either have, or will be implementing promotion and education tactics and programs to address concerns brought forth by residents related to EOW garbage collection. Staff will use the experiences from other municipalities in dealing with local issues, and staff will continue to make themselves available to assist residents with their concerns.

Respectfully submitted and signed by

---

Peter DiPietro  
Collection and Diversion Advisor

---

**MEMORANDUM**

**PWC-C 29-2020**

**Subject:** Update on Public Education Campaign and Contract Implementation  
**Date:** Tuesday, September 8, 2020  
**To:** Public Works Committee  
**From:** Susan McPetrie, Waste Management Services Advisor; Katelyn Avella, Waste Management Contract Supervisor; Kate Ashbridge, Waste Management Contract Supervisor

---

This memorandum provides an update of the public education campaign underway to raise awareness of the collection service level changes that will occur with the commencement of the new waste collection contracts on October 19, 2020. This memorandum also provides an update on the status of activities related to the implementation of the new curbside collection contracts in October.

**Overview of Campaign Implementation Phases**

As outlined in PWC-C 14-2020, implementation of the campaign began in June and will continue until November 2020. The campaign was designed to be delivered in three phases:

*Phase 1: The Pre-Change Campaign – June to September 21, 2020*

The focus of this phase is on educating all residents and businesses in Niagara about the upcoming changes and why they are being made.

*Phase 2: The Build-Up - September 21 to October 19, 2020*

In the month before the waste collection changes take effect, outreach and communication activities will ramp up. The goal is to encourage residents to prepare for every-other-week garbage collection by picking up a Green Bin and downloading the waste collection mobile application, currently in development.

*Phase 3: The Launch and Post-Launch - October 20 to November, 2020*



The final phase of the campaign will feature messages focusing on compliance and illegal dumping, while at the same time recognizing and expressing appreciation to residents and businesses that have embraced and adapted to the changes.

After completion of the campaign, program maintenance and support will occur as part of the annual divisional social marketing and outreach strategy.

### **Campaign Activities Completed in June and July**

The campaign was officially launched in mid-June with a media release on June 17. This provided an overview of the waste collection changes and the key outreach activities leading up to October 19 to raise awareness of these changes. Since that media release, the following campaign tactics have been completed:

- June 17:
  - A new subsection with details on the upcoming collection changes was added to Niagara Region's Waste Management webpage. The webpage includes information on the rationale and benefits of the changes, details of how different sectors will be affected and a section on illegal dumping.
- June 17, June 19 and June 22
  - Posts on Niagara Region's Facebook and Twitter accounts reflected upcoming waste collection contract changes. Topics have included: a general announcement of the upcoming changes, notification that recycling and organics containers are available for purchase online, the cancellation of curbside battery collection and the start of online garbage tag sales.
  - The June 17 Facebook post on the upcoming collection changes received 653 comments and was shared 797 times.
- First week of July:
  - Residents throughout Niagara received postcards with information on every-other week garbage collection, the new collection limit for large household items and the discontinuation of collection of scrap metal and appliances. The postcards also included information on diaper and medical exemptions.
  - There were 162,535 postcards delivered to single-family households and low-rise residential properties with two (2) or more units.

- July 1:
  - A two (2) page spread, including an editorial about the upcoming collection changes, was placed in Niagara's Home Show Digital Magazine. This publication was distributed to approximately 4,500 email addresses of past customers of the Niagara Region Home Show.
- July 15:
  - An advertisement informing readers of the move to every-other-week garbage collection was placed in the Seniors Review. This is a free publication with 20,000 copies distributed in outlets including senior's centres and apartments, pharmacies, libraries, retirement homes, hospitals and clinics.
- July 27 and ongoing:
  - With current COVID-19 restrictions, there have been challenges in arranging community outreach. Unstaffed booths have been scheduled at a mix of business types, such as grocery stores, hardware stores and pharmacies, in eleven (11) Local Area Municipalities (LAM). In every LAM, except Wainfleet, banner displays and take-away postcards will be set up for three (3) or four (4) days to provide information to residents on the upcoming collection changes.
  - The displays will be set up in at least two different locations in each municipality. In Welland, Niagara Falls and St.Catharines, the displays will be provided at four (4) different business locations.
  - The first unstaffed display started on July 27 and the last booth is scheduled to be completed on September 24.
- Last week of July:
  - There were 16,411 direct letters were sent to owners of Industrial, Commercial and Institutional (IC&I) properties, Mixed-Use (MU) properties and Multi-Residential (MR) buildings throughout Niagara. The letters were customized to provide each IC&I, MU and MR property owner with a summary of their waste collection services as of October 19<sup>th</sup>. The letters also provided the rationale for any changes they will experience and directed them to resources available to help prepare for those changes.

Appendix A provides examples of graphics and messages used in campaign.

Following these communication tactics, there has been an increase in calls about the collection changes to Niagara Region's Waste Info-Line. There were 56 calls regarding

the changes in July, compared to zero in the two previous months. In particular, there has been an increased interest in diaper exemptions and waste related to medical conditions. While there are typically fewer than 40 exemption applications per month, there were 909 exemption applications received between July 6 and July 31.

Green Bin distribution data also suggests that residents are beginning to prepare for the start of every-other-week garbage collection in October. In June and July, 2,250 Green Bins were delivered to distribution sites. This is a 127% increase in Green Bin distribution compared to June and July of 2019.

### **Upcoming Campaign Activities**

Campaign activities will ramp up as the start date of the new collection contract approaches. Key tactics that will take place in the upcoming months include:

- Formal launch of Niagara Region's online collection calendar, updated disposal search tool, and mobile application;
- Banners at Regional landfill sites and take-away postcards at scale houses;
- Magnets for Waste Management on-road staff vehicles;
- Staffed booths at farmers markets;
- Webinar presentations to organizations representing businesses (i.e. Business Improvement Associations, Chambers of Commerce etc.);
- Advertisements on buses in St.Catharines, Welland and Niagara Falls;
- Billboard advertisements;
- Radio advertisements;
- Interviews on YourTV;
- A second reminder letter to all businesses and ICI/MU/MR property owners;
- Letters to all properties that will experience a collection day change;
- Direct mail out of Collection Guides to all low-density residential properties and apartments with 2- 6 units;
- New animated video segments promoting Green Bin use, diversion and the upcoming collection changes posted online and on social media;

- New series of hosted video segments demonstrating Green Bin and recycling tips and dispelling common myths about participation posted online and on social media;
- Print advertisements in weekly and daily newspapers;
- Outreach to school aged children through school presentations and videos;
- Dedicated e-blasts to the Greater Niagara Chamber of Commerce and the South Niagara Chambers of Commerce;
- In-person delivery of Designated Business Area collection guides to businesses;
- Advertisement in Business Link magazine;
- Metroland Media digital display and banner ads;
- New illegal dumping videos posted online and on social media;
- Participation in a virtual vendor fair for post-secondary students hosted by Brock University; and
- Ongoing social media posts with key campaign messages.

## **Contract Implementation Update**

Since January, Niagara Region has continued to meet with GFL and Miller on a monthly basis to discuss various aspects of the implementation for the next waste collection contract. The sections below provide a high level update on major items/tasks.

### **GFL & Miller Yards**

GFL's yard is located at 411 Glendale Avenue in St. Catharines, which is the current yard of Emterra Environmental (Emterra). GFL currently only has access to the upper floor of the operations building and has begun renovations. GFL plans to have full access to the new yard in St. Catharines on October 1, 2020.

The Miller yard, located at 335 Townline Road in Niagara-on-the-Lake, is currently undergoing renovations to the parking lot. Work is scheduled to be completed for October 1, 2020.

### Collection Vehicles

As reported in the July 14, 2020 memorandum PW-C 22-2020, as a result of COVID-19, GFL is still reporting that potentially four (4) collection vehicles will not arrive until just before or after the start of the new collection contract. As a result, GFL has committed that six (6) vehicles from another municipal contract will be used for the October 19 new contract start. GFL has not reported any further delays or issues with fleet delivery.

GFL's collection vehicles will be fueled with compressed natural gas (CNG) and beginning September 1, 2020, work will begin at the new GFL yard to install CNG fuel rails. It is estimated that the installation work will take approximately three (3) weeks to complete.

Miller is reporting no delays to the original equipment delivery schedule, with the first vehicles scheduled to arrive in late September. Four additional vehicles that were ordered following the confirmation of enhanced services, may arrive later than the contract start date. However Miller has indicated existing equipment resources will be utilized at the start of the contracts to supplement the Niagara Region fleet and ensure a successful contract transition. The supplemental fleet will be used to facilitate training and ensure timely completion of collection.

### Collection Routes

Wainfleet, Pelham, Thorold, West Lincoln, St. Catharines, Niagara-on-the-Lake, and Fort Erie will receive garbage collection on week 1 (October 19-23, 2020) of every-other-week collection. Lincoln, Grimsby, Niagara Falls, Welland and Port Colborne will receive garbage collection on week 2 (October 26-30) of every-other-week collection. No municipalities will be divided between week 1 and week 2, allowing for clear communication to residents.

The Region has accepted GFL's proposed collection day changes in Wainfleet and Pelham. Beginning October 19, all of Wainfleet will be collected on a Monday and the area in Pelham currently collected on Wednesday will also be changed to a Monday collection day. GFL has indicated these changes will create a full five (5) day work week that will balance the workload throughout Area One and also help retain staff. No collection day changes will be occurring in Area Two (Miller).

### Staffing

As previously communicated, both collection contractors have hired their Operations Managers. They have been working cooperatively with staff as part of the contract implementation process.

Miller hosted job fairs during the months of July and August. Both Miller and GFL have attended meet and greets at Emterra's current Niagara office. Both contractors reiterated to current contract staff the importance of completing the existing contract, prior to being hired full-time by GFL and Miller.

GFL has begun recruiting On-Road Supervisors and drivers. If needed, two temporary agencies will conduct job fairs in Niagara on behalf of GFL to assist with hiring new collection staff.

GFL and Miller have both confirmed their compensation to all employees will not be less than the Living Wage, as set by the Ontario Living Wage Network. GFL has committed to becoming a member of the Ontario Living Wage Network.

### Next Steps

Niagara Region staff are meeting with GFL and Miller on a bi-weekly basis to ensure deliverables and reporting requirements are being met as per the established contract timelines. Staff have finalized contingency plans with GFL and Miller in the event a second wave of COVID-19 occurs. Any changes to collection days/schedules will be communicated to residents and/or businesses in advance of October 19, 2020. Staff will be available during the contractors' employee training sessions, scheduled for late September and early October.

Respectfully submitted and signed by

---

Susan McPetrie  
Waste Management Services Advisor

---

Katelyn Avella  
Waste Management Contract Supervisor

---

Kate Ashbridge  
Waste Management Contract Supervisor

## Appendix A: Examples of Campaign Graphics and Messaging



Figure 1: Display banners and take-away postcards with information on the upcoming changes. Photo taken at a St. Catharines' grocery store.



Figure 2: Photo of mascot with recent Green Bin delivery used for to promote Green Bins in media release and social media post





Figure 3: Graphic used in Niagara's Home Show Digital Newsletter

---

## MEMORANDUM

PWC-C 30-2020

**Subject:** Illegal Dumping Enforcement Plan  
**Date:** Tuesday, September 8, 2020  
**To:** Public Works Committee  
**From:** Katelyn Avella, Contract Supervisor, Waste Management Services

---

This memorandum is intended to provide Committee members with a response to the Councillor Information Request, from the March 10, 2020 Public Works Committee meeting, for a plan to deal with possible increased events of illegal dumping that may arise as a result of transitioning to every-other-week (EOW) garbage collection, commencing on October 19, 2020.

In preparation for EOW garbage collection, Niagara Region surveyed municipal comparators to gain insight on how this service change influenced illegal dumping. Staff contacted comparator municipalities such as Barrie, Durham, Halton, Markham, Ottawa, Toronto, Vaughan, Peel and Waterloo. These municipalities currently provide EOW garbage collection. All nine (9) municipalities did not track before and after statistical data specifically on illegal dumping. However, Niagara Region did receive anecdotal comments from these municipalities. The overall response to how EOW garbage collection influenced illegal dumping was that it did not create a significant long-term issue, but rather it was observed that there was a short-term increase in the number of illegal dumping issues during the transition period to EOW garbage collection. Municipal comparators also noted that common items that were illegally dumped during this transition period included items that are not collected curbside (i.e. construction and renovation waste and shingles) from non-residential sources.

In order to combat the influence of service level changes on illegal dumping, Niagara Region has developed an Illegal Dumping Enforcement Plan (the Plan) that outlines the current approach to enforcing illegal dumping and also outlines an enhanced strategy Niagara Region has committed to in order to deal with a potential increase of illegal dumping events. The full Illegal Dumping Enforcement Plan (the Plan) is attached as Appendix A.

In summary, the Plan details the following:

- Background information on every-other-week garbage collection and the progress of the Illegal Dumping Working Group (IDWG). The IDWG is a Region-lead committee that began in 2012 and consists of Niagara Region staff, members from each Local Area Municipality (LAMs) and partnerships with Crime Stoppers and the St. Lawrence Seaway. The purpose of the IDWG is to ensure a consistent and collaborative approach when dealing with illegal dumping and educate the public on illegal dumping through awareness campaigns. To date, the IDWG has collaborated and put forth various deliverables that have made improvements to the way in which illegal dumping is reported, managed and monitored in Niagara region.
- The personnel responsible for investigating, enforcing and cleaning up illegal dumping events.
- How information pertaining to illegal dumping is managed at Niagara Region.
- Niagara Region's current process to address illegal dumping events. This section details how illegal dumping reports are currently received, dispatched, investigated, cleaned, and enforced. Further, it also discusses how residents are incentivised to report non-compliant acts through a rewards program, where residents who report acts of illegal dumping may be entitled to a reward up to \$200 if the report leads to a conviction, or \$50 if the report leads to compliance. This rewards program is a tactic to encourage residents to report non-compliant acts and assists by-law officers with their investigation and enforcement.
- Niagara Region's plan to enhance the current approach to illegal dumping and enforcement methods. This section outlines plans to:
  - Refresh the illegal dumping campaign, incorporate illegal dumping messaging into the communication plan for the new waste collection contract and the introduction of a new anti-litter campaign that helps to educate and spread awareness on decreasing the amount of street litter in our communities.
  - Improve illegal dumping data tracking through the creation of a mobile app to track and analyze illegal dumping data.
  - Create by-law amendments to improve and clarify illegal dumping wording and other non-compliant acts that will allow by-law staff to enforce these issues more effectively and efficiently.
  - Improve the functionality of the IDWG by updating membership, defining more structure to attendance, generating more member participation and evaluate the effectiveness of the group's operations as a whole.
  - Dispatch staff to conduct more proactive monitoring at locations such as hot spots and litter bins. Beginning October 2020, Niagara Region plans to use

existing intern resources as additional resources to help monitor illegal dumping issues.

- Work with local area municipalities to ensure street litter bins are designed to prevent these bins from being used for illegal dumping.
- Request assistance from the new collection contractors with regards to reporting illegal dumping issues and assisting with illegal dumping cleanup if needed.

Overall, illegal dumping continues to be an environmental, aesthetic and financial concern throughout the Niagara region. Illegal dumping is not unique to Niagara, but rather all Ontario municipalities have similar challenges. Appendix B provides an overview of illegal dumping statistics. Addressing illegal dumping takes time and there is no one quick fix in completely resolving the issue. Therefore, Niagara Region staff will continue to work with their counterparts at the LAMs to promote reporting of illegal dumping, educate residents that illegal dumping is a crime and cooperatively enforce and clean-up these dumped items.

Respectfully submitted and signed by

---

Katelyn Avella  
Contract Supervisor, Waste Management Services

## **Appendices**

Appendix A – Illegal Dumping Enforcement Plan

Appendix B – Illegal Dumping Statistics and Trends

# Niagara Region

## Illegal Dumping Enforcement Plan



### 1. Purpose

Illegal dumping continues to be an environmental, aesthetic and financial concern throughout the Niagara region. Illegal dumping is not unique to the Niagara region; all Ontario municipalities have similar challenges. It is defined as the disposal or abandonment of material in non-designated areas such as public roads, ditches, public property, rural areas, vacant lots and in public litter receptacles. It is a crime and Niagara Region along with the Local Area Municipalities (LAMs) advocates, if you see it, report it.

The purpose of this illegal dumping enforcement plan is to outline Niagara Region's current enforcement approach and put forth a plan with enhanced methods that will address the potential for an increased number of illegal dumping reports, as a result of the upcoming every-other-week (EOW) garbage collection services, commencing on October 19, 2020.

### 2. Background Information

#### 2.1 Every-Other-Week Garbage Collection

In preparation for EOW garbage collection, the Niagara Region surveyed municipal comparators to gain insight on how this service change influenced illegal dumping. Staff contacted comparator municipalities such as Barrie, Durham, Halton, Markham, Ottawa, Toronto, Vaughan, Peel and Waterloo. These municipalities currently provide EOW garbage collection. All nine (9) municipalities did not track before and after statistical

data specifically on illegal dumping. However, Niagara Region did receive anecdotal comments from these municipalities. The overall response to how EOW garbage collection influenced illegal dumping was that it did not create a significant long-term issue, but rather it was observed that there was a short-term increase in the number of illegal dumping issues during the transition period to EOW garbage collection. Municipal comparators also noted that common items that were illegally dumped during this transition period included items that are not collected curbside (i.e. construction and renovation waste and shingles) from non-residential sources. These observations are consistent with past experiences in Niagara as a result of the various garbage service levels changes that have occurred over the past 24 years.

In 2007, Niagara Region procured a consultant to conduct a study entitled, “Assessment of Illegal Dumping in the Niagara Region”. This study reviewed the opinions of various stakeholders and historical illegal dumping data to assess the current state of illegal dumping in Niagara region and determine if service level changes lead to higher levels of illegal dumping or not. One of the key conclusions outlined in this report was that there was no clear indication that service level changes resulted in an increase of illegal dumping. The extent to which service adjustments may trigger illegal dumping is difficult to determine, particularly during the spring, when clean-up and disposal of garbage tends to be at its highest, regardless of any service level changes. The report also noted that although illegal dumping may increase after service changes, the impact of service level changes, such as increased number of illegal dumping events, is very short in duration. Overall, the study recommended that illegal dumping requires ongoing management and in order to achieve this goal, the Niagara Region would have to continuously provide education, create public awareness, monitor, clean-up and enforce illegal dumping.

## **2.2 Illegal Dumping Working Group**

The Illegal Dumping Working Group (IDWG) is a Region-lead committee that began in 2012 and consists of Niagara Region staff, members from each Local Area Municipality (LAMs) and partnerships with Crime Stoppers and the St. Lawrence Seaway. The purpose of the IDWG is to ensure a consistent and collaborative approach when dealing with illegal dumping. The group coordinates clean-up efforts between Niagara Region and LAMs collaboratively. It ensures a consistent enforcement approach through the use of the Niagara Region Waste Management By-Law, as well as other Municipal anti-dumping By-Laws. Further, the IDWG helps educate the public on illegal dumping through awareness campaigns.

To date, the IDWG has collaborated and put forth various deliverables that have made improvements to the way in which illegal dumping is reported, managed and monitored in Niagara region. Below is a summary of work completed by the IDWG.

In 2012, the IDWG coordinated a litter bin audit which focused on addressing illegal dumping and was titled the Litter Bin Blitz. Typically this audit was to be scheduled annually, utilizes Region intern staff who audit and sort through litter bin waste and mail out warning letters to any suspects of illegal dumping. Due to resourcing issues, subsequent Litter Bin Blitzes have only occurred in 2017 and 2018.

In 2013, the Region conducted an illegal dumping engagement survey where 124 responses were received. 87% of respondents indicated illegal dumping is a problem in the Region and other responses helped direct the IDWG on how to prioritize actions that would lead to reducing illegal dumping. For instance, 33% of people did not know how or where to report acts of illegal dumping and 16 % had issues with wanting to remain anonymous during a report. As a result, the IDWG used these survey results to enhance how residents can report illegal dumping and revised their promotion and education materials to highlight the phone number or online reporting tool.

Since 2013, Niagara Region has continued to track the location and frequency of illegal dumping in Niagara as a means of monitoring high occurrence areas (hot spots) and measuring success. Niagara Region translates this raw illegal dumping data into hot-spot maps and distributes to interested LAMs to better direct monitoring and clean-ups.

In 2014, the IDWG implemented an incentive plan to increase the number of illegal dumping reports received through a reward program. A \$50 dollar reward is given to any person whose report of illegal dumping results in an act of compliance (i.e. person who dumped material, returns to site and cleans the material) or a \$200 reward is given to any person whose report of illegal dumping leads to a conviction.

In 2017, the IDWG collaborated with Crime Stoppers to allow residents to report illegal dumping anonymously and entice more people to report and maintaining anonymity.

Throughout the lifespan of the IDWG, other projects that have been ongoing include: updating illegal dumping signage, keeping an inventory of illegal dumping signage to monitor hot-spots, tracking costs associated with illegal dumping and creating consistent wording amongst Regional and Municipal by-laws.

Overall, the IDWG is a platform where information is shared to create a common goal of reducing illegal dumping. For instance, the IDWG shares illegal dumping promotion and

education tools; illegal dumping signage inventories to help enforce hot-spots and shares local clean up groups details so that residents interested in volunteering for clean ups can be better directed.

### **3. Personnel**

Niagara Region and LAMs have trained and equipped by-law staff to address issues of illegal dumping. Niagara Region's Waste Management Services department has a total of seven (7) on road staff who have jurisdiction to enforce illegal dumping issues found on public property and roadside. All private property illegal dumping issues are addressed by LAM by-law staff as property standards issues, where applicable.

### **4. Information Management System**

Illegal dumping reports are received in various ways. Niagara Region staff may come across these issues during on-road monitoring, LAMs may flag issues to Niagara Region, or residents may also report illegal dumping issues. Niagara Region has created various platforms for illegal dumping reports to be submitted to Niagara Region staff. For instance, residents can call the Waste Info-Line, submit a report online, or call Crime Stoppers to submit a report anonymously. Once a report is received, all events are recorded within an internal database, dispatched to staff for follow up and any investigative details obtained or enforcement results are saved for future analysis and investigation.

## **5. Niagara Region Process to Address Illegal Dumping**

### **5.1 Illegal Dumping Reports**

Niagara Region receives reports of illegal dumping from residents and LAMs through various portals: via telephone through our Waste Info-Line, online electronic submissions and anonymously through Crime Stoppers. Further, on-road waste management staff that monitor waste related issues throughout the region also address illegal dumping issues as they come across them. All illegal dumping reports received by Niagara Region are tracked, dispatched and addressed in a timely manner.

When residents report illegal dumping events, customer service staff and online reporting tools encourage residents to report as many details as possible to assist with the investigation. For instance, it is extremely helpful if residents can provide details on



the time, location, material dumped, witnessed events, description of accused, car make and model and/or license plate.

## **5.2 Jurisdiction & Filed Investigation**

When a Region by-law officer receives an illegal dumping issue within their jurisdiction (public property or roadway), their first step is to find and investigate the material as soon as possible or within 24 hours of receiving the report. All private property illegal dumping issues are forwarded to the LAMs for follow up since this is outside of the Niagara Region's jurisdiction. When conducting the field investigation, Region by-law staff will sort waste and attempt to uncover pieces of evidence that would lead to a potential suspect. If evidence is discovered during the field investigation stage, then by-law officers will use those leads to tactically speak with suspects and work towards compliance or will issue a ticket if possible. If suspects cannot be tracked down, then by-law staff will coordinate cleanup efforts between the Region and or LAMs and close out the issue. If the illegally dumped material is roadside, then the owner of the road, Niagara Region or LAMs, will be responsible for the final clean-up.

## **5.3 Compliance Promotion**

Once field investigations are complete, if there is not enough evidence to issue a certificate of offence for illegal dumping beyond reasonable doubt, by-law staff will still attempt to promote compliance. By-law staff achieve compliance promotion through various techniques such as issuing warning letters to suspects, communicating potential fines, verbal warnings, providing promotion/education and possibly even requesting immediate cleanup. All of these measures are used to deter people from committing acts of illegal dumping in the future and possibly obtaining compliance.

## **5.4 Enforcement**

In Canada, a person accused of a crime is presumed innocent until the Justice of the Peace finds them guilty, which is known as "presumption of innocence". This right means: the accused does not have to prove their innocence; the prosecutor must prove that the accused is guilty beyond reasonable doubt and the judge must be fair. Therefore, it is vital for by-law officers to have sufficient evidence that proves beyond reasonable doubt or is close to absolute certainty that the accused committed an act of illegal dumping. Issuing a fine without evidence that proves absolute certainty, may jeopardize the officer's credibility with the Justice of the Peace.

In the event by-law staff discover enough evidence, where they feel the accused has committed an act of illegal dumping beyond reasonable doubt, then the officer in charge will issue a certificate of offence and charge the resident with a fine of up to \$500 dollars, excluding the victim fine surcharge and the court fee. Although it can be challenging to gather enough evidence to prove the accused guilty beyond reasonable doubt, usually if the officer in charge can confirm: the accused's identity; has a piece of physical evidence (disposed mail or bills) that links the accused to the illegally dumped material; and has proof of the non-compliant act (video, picture or witness), then the officer may be more likely to build a sufficient case to lay a charge.

## **5.5 Rewards**

In 2014, the IDWG implemented an incentive plan to increase the number of illegal dumping reports received through a reward program. Therefore, residents who report acts of illegal dumping may be entitled to a reward of \$200 if the report leads to a conviction or a \$50 rewarded if the illegal dumping results in an act of compliance (i.e. the person returns to the site and removes the dumped material). This tactic encourages residents to report non-compliant acts, which ultimately assist by-law officers with their investigations and enforcement. Since 2014, the Region has issued eighteen (18) rewards to residents who have reported suspects who were either successfully convicted of illegal dumping or have cleaned up the illegal dump. On average, Niagara Region has issued approximately three (3) rewards per year.

Upon confirmation of successful illegal dumping conviction or compliance, Niagara Region will contact the reward winner to inform them their illegal dumping report lead to a successful conviction or compliance. Niagara Region By-Law Officer will coordinate the reward to be paid out to the reward winner and a joint letter from the Region and participating LAM will accompany the reward payment, co-signed by the Regional Chair, and the Mayor of the LAM. Niagara Region will charge back the LAM for their share of the reward at 50%.

## **6. 2020 Enhancements to Addressing Illegal Dumping**

### **6.1 Illegal Dumping Campaign & Refresh**

Niagara Region uses various strategies to communicate and promote illegal dumping messaging to encourage reporting and help deter future acts of illegal dumping. As part of our annual illegal dumping campaign, messaging is communicated through a variety of different tactics, including transit ads, post-secondary student outreach, arena board

advertisements, pop-up banners, public litter bin stickers, social media, newsletters, and collection guides.

The current illegal dumping campaign messaging is simple and to the point - 'See it. Report it.' with reference to a bag of garbage. In preparation for the new contract, the illegal dumping campaign is undergoing a branding refresh, which will look at developing an entirely new campaign brand with new graphics, while the current 'See it. Report it.' message will be updated to 'See it. Report it. Stop it.'

Repeat advertisements for several years can cause your audience to become accustomed to the content/images which can result in people ignoring the message. This new campaign refresh will capture resident's attention, promoting our message to increase reporting, and deter illegal dumping in Niagara region. It will also tie into the new education campaign for the new contract, which includes an Anti-Dumping campaign.

In May 2019, Niagara Region also implemented an educational awareness campaign to decrease the amount of street litter in our communities, specifically in neighbourhoods, parks and other public spaces, while increasing the understanding and use of proper disposal methods for commonly littered items.

The key messages were educational in nature, including the following:

- Don't litter
- Keep our public spaces clean
- Use waste and recycling containers

The campaign engaged the public through animated characters of commonly littered items (i.e. coffee cups, chip bags etc.) seen in a variety of streetscapes where litter is often found (i.e. roadside, sidewalk, park, and shoreline). The characters, shown with tears in their eyes, are upset that they have been discarded and left behind. The message included asked residents to rethink their current litter behaviour, and place these materials in the appropriate waste and recycling containers. Communication tactics included targeting public space advertising in litter hot spots (i.e. bus shelters or waste containers), web promotion, and social media.

## **6.2 Communication Plan for the New Collection Contract**

The Communication Strategy and Education campaign for the new waste collection contract includes two main objectives which aim to promote awareness of the upcoming service collection changes and encourage an increase participation in diversion

programs and increase the quality of recyclable materials collected at the curb. To support the main objectives there are various secondary messages, several of which focus on encouraging reporting of illegal dumping, raising awareness of the Region's reward program for reporting, and educating residents about illegal dumping and proper disposal methods. These messages can be found in phase two of the campaign as we approach the collection changes, and phase three of the campaign where there is the collective expectation of compliance.

This campaign nevertheless maintains positive messages while embracing the community solidarity ("We all need to do our share") to help rally Niagara residents towards the goal of increasing diversion rates across the board, reducing our environmental impact and avoiding costs for future generations.

Below is a sample of some of the illegal dumping messages that are a part of the new 'See it. Report it. Stop it.' campaign:

- Illegal dumping costs: You can be fined \$500 or more (this amount may change due to recent changes to Niagara Region's Waste Management Bylaw).
  - Illegal dumping is a crime. Report illegal dumping by contacting Crime Stoppers of Niagara at 1-800-222-TIPS or by submitting an online form
  - Illegal dumping is everyone's responsibility – report it on online or call 1-800-222-TIPS.
  - Do your share to keep Niagara region clean by reporting illegal dumping.
  - You can earn cash rewards for reporting illegal dumping through Crime Stoppers.
- We all need to do our share to keep Niagara beautiful.

The Anti-Dumping campaign will be implemented in October to educate residents about illegal dumping activity, using our Illegal Dumping Campaign artwork and new messaging 'See it. Report it. Stop it.' Tactics such as print ads, videos, web, social media posts and editorials will be used to promote our messaging.

In addition to the Anti-Dumping campaign in October and looking ahead to 2021, if there is budget availability, Niagara Region will embark on an Anti-Litter campaign in the spring of 2021. This campaign aims to further educate residents about street litter in our communities, while increasing the understanding and use of proper waste disposal methods for commonly littered items. There may also be some supporting messaging around helpful proactive measures, such as proper preparation of recyclables for the curb to avoid wind-blown litter. Promotion will include social media posts and transit ads.

### **6.3 Improved Data Tracking**

In January 2020, Niagara Region improved the way in which illegal dumping issues and investigative details are documented and tracked. On-road staff are now equipped with a mobile application where they can add an event of illegal dumping on a cell phone while in the field. Each staff have their own login that tracks their illegal dumping report submissions. Staff can take pictures of the material and evidence found and also enter applicable information from convenient drop-down menus such staff name, evidence found, material type, compliance achieved, etc. Once the event is saved and submitted, the information is automatically available for viewing in a desktop dashboard that automatically analyzes illegal dumping data in various charts, graphs and maps. For instance, this dashboard can manipulate data to compare the number of illegal dumps per municipality per month or can compute the total number of illegal dumps where evidence was found, versus no evidence was found. This application is connected to ArcGIS which is a mapping software that is also used to translate illegal dumping data into “hot-spot” mapping that illustrates areas of high occurrences. Please see Section 6.6 of this Enforcement Plan for more information on hot-spot mapping.

This improved method of electronic tracking is more efficient, convenient and allows staff to analyze data fluctuations in real time. Niagara Region has the ability to share this technology with LAMs if they are interested.

### **6.4 Waste Management By-Law Amendments**

Niagara Region is making significant updates and revisions to our Waste Management By-Law, which is planned to be amended by October 2020. These amendments aim to improve and clarify wording surrounding illegal dumping and other non-compliant acts that will allow by-law staff to address these issues more effectively and efficiently. More specifically, the Niagara Region is amending this by-law to include a definition of illegal dumping; adding the ability to issue an Order for clean-up of any non-compliance outlined in the by-law; and includes an improved charge back process where convicted persons of illegal dumping could be charged back for remedial action. These improvements to definitions, enforcement and remedial action sections of this by-law will help deter illegal dumping from occurring, assist by-law officers to obtain compliance and have stricter enforcement penalties.

As a result of the August 4, 2020 memorandum PWC 7-2020, committee members requested that the Region increase the illegal dumping set fine from \$500 to \$1000. In order to initiate this change, the Region must first complete a set fine application and provide reasoning as to why an increased fine is being sought for the offence of illegal

dumping. If the increased set fine application is approved by the Chief Justice of the Ontario Court of Justice the Region would request LAMs submit the same application to maintain a consistent enforcement approach.

## **6.5 Illegal Dumping Working Group**

In the later part of 2020/early 2021, Niagara Region plans to lead a review and update of the IDWG Terms of Reference. The purpose of this review will reevaluate the effectiveness of the group's operations as a whole. It will include updating membership, defining more structure to attendance and generating more member participation. The proposed updates will ensure the correct staff are in attendance and dedicate members who can play an active role. For instance, the IDWG plans to review and compare waste related Regional and Municipal by-laws and work towards aligning illegal dumping wording and fines. This task of creating consistency around illegal dumping enforcement will be a critical improvement to streamline our approach in addressing illegal dumping throughout Niagara Region.

## **6.6 Proactive Hot-Spot Monitoring**

Hot-spot mapping is a technique that incorporates the location of each illegal dumping event and plots it on a map which identifies areas of high occurrence. Dark red "heated" areas illustrate where illegal dumping often occurs, and low occurrence areas are illustrated in lighter warm colours. Currently hot-spot locations are used as a means of justifying and erecting illegal dumping signage. The Niagara Region and LAMs continue to evaluate and install illegal dumping signage in hot-spot areas.

Niagara Region staff will now use these "hot-spot" locations to conduct proactive monitoring in these areas where illegal dumping often occurs. The more staff are present and visibly monitoring areas where dumping commonly occurs, the less likely people will have the chance to illegal dump there.

More specifically, the Niagara Region plans to utilize intern staff as a secondary illegal dumping monitoring resource at the start of the next Collection Contract, beginning in October 2020. Intern staff will help monitor illegal dumping hot-spots and also conduct litter bin audits. Interns will focus on locations in smaller municipalities that may not have dedicated staff to conduct regular monitoring. If intern staff come across illegal dumping issues in these areas, they will be directed to report the issues to Niagara Region's on-road staff immediately who will then follow up and address the issue accordingly. In addition, three temporary staff that were hired to assist with the current

collection contract will be retained until the end of December 2020 to assist with various issues including illegal dumping.

## **6.7 Collection Contractor Assistance – Illegal Dumping**

The new collection contractors, Miller Waste and GFL, that have been procured to service the Niagara region for waste collection will also be utilized to assist with illegal dumping. On-road waste management staff will direct both contractors to ensure their collection staff are reporting any illegal dumping issues they observe each day. Having collection staff report these issues will allow on-road staff to address issues more efficiently and expand the geographical area we monitor on a regular basis.

In addition, Niagara Region has included improved terms in our Collection Contract that allows the Region to request assistance with illegal dumping. More specifically, our Collection Contract outlines that Niagara Region staff can direct GFL and Miller Waste to clean-up a maximum of 36 illegal dumping events in Area 1 (GFL) and a maximum of 84 illegal dumping events in Area 2 (Miller Waste) per year, at no additional cost. If illegal dumping assistance is required in excess of this provision, then each Contractor has provided a price per illegal dumping clean-up, where Area 1 has a cost of \$120 per clean-up event and Area 2 has a cost of \$400 per clean-up event.

## **6.8 Collection Contractor Assistance – Community Clean-Ups**

Niagara Region has included improved terms in our Collection Contract that allows the Region to request collection assistance with community clean-ups. Sometimes minor illegal dumping issues are not uncovered until community groups organize clean-ups in their area. Although community clean-ups usually focus more on collecting litter, these clean-ups can also include illegally dumping material. As a result, our Collection Contract now outlines that Niagara Region staff can direct GFL and Miller Waste to clean-up a maximum of 12 community clean-up events in Area 1 (GFL) and a maximum of 28 community clean-up events in Area 2 (Miller Waste) per year, at no additional cost. If community clean-up assistance is required in excess of this provision, then each Contractor has provided a price per community clean-up, where Area 1 has a cost of \$150 per clean-up event and Area 2 has a cost of \$1,000 per clean-up event.

## **7. Challenges**

There are challenges that by-law officers face when enforcing illegal dumping issues and making non-compliant persons accountable for their actions. These challenges prevent staff from issuing charges and force the Niagara Region and LAMs to: allocate

resources for clean-up/disposal and ultimately absorb remedial action costs. In order to continue to combat illegal dumping, these challenges must be considered and addressed (if possible) in order to help improve the way in which illegal dumping is enforced.

## **7.1 Lack of Evidence**

Investigating illegally dumped material often results in a lack of evidence where staff cannot find information that leads back to the generator or person who dumped the material. By-law officers will collect any material they suspect may contain pertinent information to help identify the non-compliant person and if they are not able to find bills, mail, flyers, magazines or cards with a name or address that would identify the illegal dumper, then the investigation is cut short, clean-up will commence and enforcement is not an option.

To provide further insight into a lack of evidence being a challenge, as of May 6, 2020, Niagara Region staff have investigated a total of 154 illegal dumping issues, where 134 of those issues resulted in finding no evidence after investigation. Of the illegal dumping issues where evidence was found, only two (2) tickets have been issued, 12 warning letters were distributed (seven for public property/roadside dumping and five for litter bin dumping) and the remaining are still under investigation.

If evidence is discovered upon inspection of illegally dumped material, the by-law officer will then continue their investigation to confirm the identity, address and non-compliant action of the suspect. Follow up on identity confirmation is critical and is usually time consuming, requiring multiple attempts to find and speak with suspects. Only when the by-law officer is certain, beyond reasonable doubt, that the suspect committed an act of illegal dumping, then a by-law officer should issue a certificate of offence. It is in the by-law officer's best interest to only issue tickets when there is sufficient evidence to support the charge, if not, the by-law officer can lose credibility with the Justice of the Peace if the charge is dropped due to lack of evidence.

Regardless if fines are issued, staff believe that making contact with a suspect can be effective and sends a strong message that individuals can be located and possibly fines could be subsequently issued, if a re-offense occurs.

## **7.2 Surveillance**

Surveillance is the one mechanism to help enforce illegal dumping, if the footage is clear enough to capture critical details, then it can be used to prove a non-compliant act



and identity of the criminal. Home videos and/or photo evidence are usually the ultimate form of surveillance since they can be mobile; they are usually taken from a close proximity and can better capture critical investigative details. Security camera surveillance can also be helpful, but has limitation. Security cameras are stationary, and the quality of the video varies if footage is taken at night or from a far distance. As a result, Region staff mainly rely on eyewitness accounts or video/picture submission from staff and residents who submit reports of illegal dumping. Typically, if a resident provides clear video or photo proof of non-compliant events and is willing to testify in court, Niagara Region is much more likely to be able to enforce illegal dumping through fines and possibly obtain compliance by getting the suspect to return and remove the material.

Currently the Niagara Region, Waste Management has three surveillance cameras at the Humberstone landfill due to repeat issues of theft and vandalism. This surveillance system is currently being upgraded to a high-resolution system to help enforce perpetrators in case a fine is laid. Unfortunately, this surveillance system alone has not stopped theft and vandalism from reoccurring. As a result, Niagara Region is currently looking into additional mechanisms, such as enhanced signage and security patrolling to enforce this issue.

In February 2016, the Niagara Region investigated the use of surveillance cameras for illegal dumping at hot-spot locations. It was determined that the benefits of using surveillance may lead to more illegal dumping charges and it may reduce illegal dumping occurrences if people are being recorded. However, the challenges with surveillance seemed to outweigh the benefits where there may be a high probability of poor quality of videos, expensive costs for night vision technology, finding discrete locations to install cameras, moving cameras to ever changing hot-spot locations and implementing policies for managing surveillance footage from cameras would be time consuming. As a result, the report concluded that using surveillance cameras would not result in an increase in convictions due to the low visibility at night and subsequent difficulty obtaining appropriate, usable evidence. Alternatively, staff decided to amended the Niagara Region's Waste Management by-law to allow by-law officers to issue charges based on witnesses willing to testify in court.

### **7.3 Staffing Level & Geographical Area**

Niagara Region encompasses a total area of 1,852 km<sup>2</sup> with a growing population of 449,098. The Niagara Region's Waste Management department addresses and

monitors illegal dumping issues on public property and roadside. Private property illegal dumping issues are addressed by LAMs by-law staff.

Niagara Region has a total of seven (7) on-road waste management staff who cover this large geographical area and investigate an increasing number of illegal dumping issues each year. Currently, Niagara Region and LAMs do not have dedicated staff where their entire job is devoted to only addressing illegal dumping issues. However, Niagara Region and LAMs utilize various staff (by-law, roads, transportation and waste management) to address illegal dumping issues on a daily basis. Specifically in Niagara Region, seven (7) on-road staff prioritize time to address illegal dumping issues each day as efficiently and effectively as possible, along with the rest of their daily tasks.

## **8. Conclusion**

Overall, illegal dumping is an ongoing challenge that continues to affect our environment, safety and financial resources. Illegal dumping not only poses a concern to Niagara Region, but is also a challenge across all Ontario municipalities. Further, as the Niagara Region moves towards collecting garbage every-other-week, we predict a transition period where illegal dumping may also increase, short term. In order to combat the influence of service level changes on illegal dumping, the Niagara Region plans to continue to work with LAMs and also make enhancements to our enforcement methods. As outlined in this enforcement plan, Niagara Region has made the following enhancements to address illegal dumping by: refreshing our illegal dumping campaign; incorporating illegal dumping into our new collection contract communication plan; creating a mobile app to track and analyze illegal dumping data; amending the Niagara Region's waste management by-law; planning to improve the operations of the IDWG; incorporating "hot-spot" mapping into monitoring; and utilizing the collection Contractor for illegal dumping clean-up assistance. Although there are many challenges by-law officers face when attempting to enforce illegal dumping, these enhancements to our current methods will continue to help reduce non-compliant acts, educate residents that illegal dumping is a crime and ultimately keep Niagara region clean.

## Niagara Region Illegal Dumping Statistics and Trends

Table 1: Illegal Dumping Statistics 2013-2020

Statistics	2013	2014	2015	2016	2017	2018	2019	2020 Jan 1 - July 31
<b>TOTAL ILLEGAL DUMPING REPORTS</b>	394	506	530	589	681	755	676	367
<b>ONLINE REPORTING TOOL SUBMISSIONS</b>	42	83	112	129	115	42	103	55
<b>CRIME STOPPERS REPORTS</b>	N/A	N/A	N/A	N/A	11	1	5	8
<b>WARNING LETTERS ISSUED</b>	35	42	39	37	47	140	74	15
<b>COMPLIANCES ACHIEVED</b>	1	2	5	4	4	2	8	10
<b>OFFENCE NOTICES /SUMMONS ISSUED</b>	1	2	7	7	3	2	5	3
<b>REWARDS AWARDED</b>	N/A	1	1	5	4	2	2	2

Niagara Region has continued to track the location and frequency of illegal dumping as a means of monitoring high occurrence areas (hot spots) and measuring success. Further, the Region has continued to encourage illegal dumping reporting through promotion and education materials, offering rewards and utilizing various reporting mechanisms such as the Waste-Info Line phone number, online reporting tool or anonymous reporting through Crime Stoppers.

Since 2013, these promotional improvements, incentives and reporting mechanisms have created a positive impact on the total number of illegal dumping reports we receive year-over-year. As seen in the table above, as residents became more educated on how to report these acts of non-compliance, more residents have reported illegal dumping events. This data does not necessarily suggest increased acts of illegal dumping, but could be an indication of more residents, who have witnessed these events, wanting to be part of the solution. The more eyewitness illegal dumping reports

received, the more likely staff are able to obtain the necessary evidence needed to enforce.

Region staff have jurisdiction to address and enforce illegal dumping issues on public property and roadside. All private property illegal dumping issues are forwarded to counterparts at the Local Area Municipalities (LAMs) for follow up. Table 1 above highlights the enforcement actions Region staff have completed since 2013, with regards to issuing warning letters and fines. Warning letters are issued when minimal evidence is found, such as a suspect's contact information on a piece of mail, but does not contain enough proof to issue a fine. The number of warning letters issued has increased each year since 2013, which has become an effective tool at warning suspects of their crime and help deter non-complaint acts from occurring again. Although the number of fines issued in comparison to the total number of illegal dumping events reported are minimal (due to lack of evidence), staff continue to stay committed to investigating each issue to the best of their ability.

When any suspect information is discovered during an illegal dumping investigation, staff also make every attempt to contact and conduct a site visit to the suspect's address. The purpose of this contact is a tactic to encourage compliance and request the dumper to return and clean up the material. Table 1 above illustrates that acts of compliance continue to increase each year. This is a result of Region staff utilizing their negotiation skills and having a working knowledge of by-law enforcement to persuade suspects to resolve the illegal dumping issue they committed.

Overall, Niagara Region will continue to work with LAMs to improve the way in which we cooperatively address and enforce illegal dumping. By keeping a detailed record illegal dumping events, the Region can continue to analyze trends and pinpoint what improvements have resulted in success or what actions needs to be pursued to direct positive change.

---

## **MEMORANDUM**

**PWC-C 34-2020**

Subject: Material Recycling Facility Processing Contract Information and Material Recycling Facility Opportunity Review

Date: Tuesday, September 8, 2020

To: Public Works Committee

From: Sherri Tait, Program Manager, Waste Management

---

The purpose of this memorandum is to provide responses to the questions and four requests made by Councillor Gale at the August 13, 2020 Council meeting in regards to the Material Recycling Facility (MRF) processing contract with Niagara Recycling and the MRF Opportunity Review.

### **1. Overview of MRF Processing Contract with Niagara Recycling and Audit Process**

#### Background on Niagara Recycling

The Niagara Training and Employment Agency (N-TEC) began a recycling program in 1974 to provide training and employment for developmentally challenged adults in the Niagara Region. The recycling operation was incorporated as Niagara Employment Agency Inc. (NEA) in 1978, and shortly thereafter the operating name Niagara Recycling was chosen to more specifically identify the nature of services provided by the organization. Niagara Recycling is a non-profit agency governed by a volunteer Board of Directors.

Niagara Recycling pioneered the Blue Box program in the Niagara region. The Town of Pelham became the first municipality in the region and the second in Canada to implement a residential recycling program. Shortly thereafter, other area municipalities began to implement Blue Box recycling collection programs through agreements with Niagara Recycling. These municipalities later formed the Niagara Municipal Recycling Board to administer the processing and collection agreement. In April 1996, when Niagara Region assumed the responsibility for waste diversion, the processing agreement was, at that time, transferred to the Region for administration.

Similar to other departments in the Region, annual operating and capital budgets are submitted for approval. These budgets are developed by Niagara Recycling in consultation with Niagara Region staff. Niagara Region's finance department controls the accounts receivable and payable functions. The program is operated on a cost basis and in the event that it is determined that there is a surplus or deficit in operating funds, the necessary adjustments are made. Niagara Region has access to all operational costs as detailed in the annual budget and the Recycling Centre costs are audited as part of the full Niagara Region audit, which is led by Niagara Region's Finance staff.

In exchange for its processing services provided to Niagara Region, Niagara Recycling receives a management fee. The management fee is in the amount of \$100,000 or 12% of the annual net revenue, whichever is greater. These funds are ultimately channeled back into the local community to assist people with intellectual disabilities.

The Region receives all revenues generated from the sale of recyclable materials. The Region also retains ownership of all capital assets.

#### Niagara Region and Niagara Recycling Agreement Timelines

Based on Committee/Council reports, below is a timeline of agreements between Niagara Region and Niagara Recycling:

1996 - Region assumed the responsibility for waste diversion, the processing agreement was, at that time, transferred to the Region for administration.

1999 - Niagara Region staff re-negotiated an agreement with Niagara Recycling that included a management fee based on tonnages processed and annual sales, rather than an annual flat fee.

2003 - Niagara Region staff were authorized to enter into formal negotiations with Niagara Recycling to extend the agreement for processing recyclable materials for the period of April 1, 2003 to March 31, 2006 (PWA 20-2003). The extension was successfully negotiated and approved by Council. In summary, the agreement with Niagara Recycling was extended due to the following:

1. Being an example of the Region's Corporate Social Responsibility to the community by continuing to connect our waste management goals to social welfare goals (such as employment for individuals with intellectual disabilities) and to developing longer term social capital (like life skill development).

2. Niagara Region was in the midst of relocating its recycling operations to the current location within the next year at the time of this report and included the purchase of new and improved processing equipment and the report highlighted the transition would be more seamless by maintaining the expertise of Niagara Recycling staff.
3. Niagara Recycling providing a cost-effective service to residents.

2006/2007 - Regional Council authorized entering into an agreement with Niagara Recycling for the operation of the Recycling Centre for a period of five (5) years, ending on December 31, 2011. Prior to this authorization, Niagara Recycling was operating the facility on a month-to-month basis under the same terms and conditions of the contract. A series of confidential reports in 2006 and 2007, provided additional details (PWA04-2006/CSD05-2006 and CSD133-2007/PWA132-2007).

2009 - Regional Council approved the extension of the agreement with Niagara Recycling until April 4, 2014 to align with the end date of the Region of Waterloo Material Purchase Agreement to process mixed fibres and plastic bags (PWA 30-2009).

Niagara Region submitted a bid price to Waterloo based on Niagara Recycling's competitive operating cost, and their proven track record of producing high quality products and finding the highest markets for materials processed at the Recycling Centre and was awarded the contract.

2013/2014 - In 2013, staff were authorized to enter into negotiations with Niagara Recycling for an extension to the agreement, to March 3, 2018, to align with the original contract end date of the current collection contract (PW 67-2013).

An extension was recommended for the following key reasons:

1. Provided an opportunity to gain further clarity on a changing provincial recycling landscape at that time and to undertake a Niagara-specific cost/benefit analysis on the recycling program, prior to evaluating alternative service delivery methods.
2. Ensured continuation of a highly competitive operation, favourable revenues and good working relations.

As per report PW 67-2013, Region staff requested that a study be completed by Continuous Improvement Fund (CIF), who retained exp. Services Inc. (exp.), to evaluate Niagara Recycling's performance over a five year period. exp. undertook a full evaluation of Niagara's operations and compared its performance to other similar programs.

The findings of the study were reported in PW 67-2013 and presented to Committee by CIF. Based on the reviewing and comparing Niagara's costs and revenues over the past five years (at the time of the report), exp. concluded that:

- The current processing costs for Niagara's MRF compare favourably with MRFs from other comparable jurisdictions and with the model dual stream MRF.
- When Niagara's unique contracted items (Glass Facility, fibre-quality demands and customer relations etc.) are factored out, the cost to operate Niagara's MRF is in line with top performers.
- The revenue Niagara is getting from the sale of its recyclables compares very favourably to the revenues received by the sample jurisdictions.
- Niagara Recycling is operating cost competitively and providing value to Niagara that is on par or better than what is being received by the sample municipalities.

In 2014, Council authorized a four year agreement with Niagara Recycling until April 6, 2018 (PW 50-2014). As part of the agreement, the annual management fee payment was reduced from \$120,000 to the current \$100,000.

2016 - Council approved the end date for the agreement with Niagara Recycling be amended from April 6, 2018 to March 5, 2021 to align with the extension of the collection contract (PW 35-2016), which Council directed staff to negotiate with Emterra.

2018 - An update was provided to Committee on the status of the amending agreement with Niagara Recycling (WMPSC-C 5-2018). The memo indicated the amending agreement was executed and included the extension from April 6, 2018 to March 5, 2021 to align with the collection contract expiry dates and also included a six-month early termination clause.

2019 - Council approved the end date for the agreement with Niagara Recycling be amended from March 5, 2021 until the Region fully transitions to producer responsibility or proceeds with a direction based on the outcome of the Material Recycling Facility Opportunity Review (PW 58-2019). The six-month early termination clause still remains.

An extension of the fibre processing Contract with Region of Waterloo was also approved at the same time to such date that Waterloo transitions to full producer responsibility or until the end of Waterloo's existing curbside collection contract (March 2024), whichever comes first.



As part of the amending agreement with Niagara Recycling, the Management Fee paid to them by the Niagara Region will be increased by \$25,000 to \$125,000, effective March 2021. Since 2014, Niagara Recycling has been subject to a Management Fee of \$100,000 annually or 12% of net revenue, whichever is greater.

#### Cost Competitiveness of Niagara Region's MRF

Phase 3 of the MRF Opportunity Review included completion of the MRF Business Valuation, Strategic Option Evaluation and Market Analysis by RSM Canada LLP (RSM), previously Collins Barrow Toronto LLP. The consultant provided an initial valuation of the MRF and developed and established the baseline financial model, which is used in subsequent phases of the MRF Opportunity Review project to assess strategic options. This included assessing the contracts, cost competitiveness of the MRF and other factors related to the MRF operations. RSM assessed the relative competitiveness of the MRF against neighbouring regions, counties and municipalities and made the conclusion that Niagara Region's MRF is cost competitive relative to other MRFs in the area as per the report excerpt provided below.

'In 2016, Niagara Region's net residential processing costs (gross processing costs less gross revenue) represented the lowest cost within Southwestern Ontario (this cost was compared to both single-stream and dual-stream MRFs within the area). In some cases, Niagara Region's MRF is substantially more cost effective'

The CIF-sponsored study conducted by exp. and their conclusions that the Niagara Region MRF compares favourably to other municipal MRFs in Southern Ontario regarding net cost of processing was also reviewed and referenced by RSM.

The CIF is a partnership between the Association of Municipalities of Ontario (AMO), the City of Toronto, Stewardship Ontario (SO) and the Resource Productivity and Recovery Authority (formerly Waste Diversion Ontario – WDO). The CIF's mandate is to improve the effectiveness and efficiency of Ontario's municipal blue box Programs. This mandate is fulfilled through the provision of funding, technical support and training to aid municipalities and program stakeholders in the identification and development of best practices and technological and market based solutions that lead to program improvements.

Table 1 below provides Niagara Region's net residential processing program costs compared to municipal comparators, which is based on data published by the Resource Productivity and Recovery Authority (RPPRA). Using the same calculation applied by

RSM in the Phase 3 report, the net processing cost per marketed tonne is shown in the table.

Table 1 – RPRA Net Residential Processing Program Cost Per Tonne Marketed – 2014 to 2018

Large Urban:

<b>Municipality</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Halton Region	\$189	\$173	\$175	\$180	\$237
Hamilton	\$248	\$279	\$280	\$261	\$351
London	\$248	\$282	\$278	\$258	\$321
Peel Region	\$330	\$391	\$308	\$314	\$368
Toronto	\$332	\$387	\$434	\$446	\$642
York Region	\$247	\$240	\$235	\$251	\$372
<b>Large Urban Simple Average<sup>1</sup></b>	\$266	\$292	\$285	\$285	\$382
<b>Large Urban Weighted Average<sup>2</sup></b>	\$289	\$321	\$317	\$322	\$426

Urban Regional<sup>4</sup>

<b>Municipality</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Durham Region	\$268	\$304	\$301	\$292	\$342
Essex-Windsor	\$176	\$185	\$182	\$151	\$214
Niagara Region	\$209	\$203	\$188	\$148	\$222
Ottawa	\$149	\$169	\$146	\$120	\$205
Simcoe	\$232	\$243	\$234	\$216	\$287
Waterloo Region	\$206	\$220	\$232	\$185	\$200
<b>Urban Regional Simple Average<sup>1</sup></b>	\$207	\$221	\$214	\$185	\$245
<b>Urban Regional Weighted Average<sup>2</sup></b>	\$203	\$219	\$210	\$182	\$244
<b>Comparator Group Simple Average<sup>1</sup></b>	\$236	\$256	\$250	\$235	\$313
<b>Comparator Group Weighted Average<sup>2</sup></b>	\$259	\$285	\$277	\$269	\$354
<b>Ontario Grand Total (Weighted Average<sup>2</sup>)</b>	\$278	\$302	\$301	\$296	\$374
<b>Niagara Region's Ranking Among Comparator Municipalities</b>	5	4	4	2	4

Notes:

1. Simple average of per tonne values.
2. Weighted averages are group total costs or revenues divided by total group tonnage.
3. Niagara's program includes a wide range of materials which, in some cases, is greater than those collected by other municipalities and will increase the net cost per tonne marketed.

4. The Urban Regional group is defined by RPRA as municipalities with a population greater than 250,000 and less than four (4) people per square km and Large Urban has more four (4) or more people per square km.

As noted above, Niagara Region's recycling programs includes materials that are not accepted by some other municipalities in their Blue Box program, which increases the net cost per tonne marketed. For example, Niagara Region accepts plastic film and polystyrene which is expensive material to process. In 2011, it was calculated that removing the processing cost and tonnage for film and polystyrene from Niagara Region's processing costs reduces the Region's per tonne processing costs by about \$3.

#### Relationship Between Niagara Recycling and Niagara Region

RSM also made the following observations in regards to the beneficial relationship between Niagara Recycling and Niagara Region:

'Niagara Region and Niagara Recycling have had a positive relationship, with Niagara Recycling bringing the following benefits:

- Extensive materials processing and MRF knowledge and expertise (e.g., were instrumental in developing the original facility design, provide ongoing strong technical expertise regarding facility upgrades);
- As per the MRF Processing Lines and Systems, Rolling Stock and Equipment State of Repair and Valuation Assessment, CIF Project 993 (August 2017) the report notes that for a plant the size of Niagara the MRF and Glass Plant repair and maintenance costs are below average, again indicating a good operator grasp of plant conditions and that the MRF downtime associated with breakdowns is negligible;
- Long-standing relationships with end markets, allowing them to obtain favorable pricing and the ability to successfully market materials;
- Flexibility and willingness to work with the Region in adding new materials, conducting audits and pilot programs, etc. at no additional cost;
- Developed the unique glass recycling system, through their own initiative, that results in a marketable product called Eco-Glass – making the Niagara Region MRF the only municipal MRF in Ontario to sell an end product;
- Developed unique partnerships with other businesses that provide material to the facility, and result in revenues to the Region;

- Willing to extend operation hours as needed to accommodate delayed collection vehicles;
- Cost competitive, as is shown through the award of the Haldimand County and Waterloo contracts; and
- Niagara Recycling has a strong sense of corporate social responsibility – hiring developmentally challenged adults, and contributing financially to local social initiatives.'

Niagara Recycling has Niagara Region accounts and email addresses. This is in order to complete obligated work under their agreement with Niagara Region. For example to allow access to Niagara Region's Customer Relation Management software to record and dispatch waste collection issues from the public; to operate scalehouse systems; and to input requisitions (to be approved by Niagara Region staff), receive orders, submit billing requests (end market billing), etc. into Niagara Region ERP software for work or supplies related to the MRF. Niagara Recycling staff accounts are restricted and Niagara Recycling staff are required to complete a Contractor Acknowledgement and Privacy Oath prior to being given an account.

## **2. MRF Opportunity Review Project Phases**

The completed MRF Opportunity Review project phases are summarized below and the associated consultant reports are attached as appendices to Confidential PWC-C 35-2020.

- Phase 1 - MRF Market Appraisal of Buildings and Land
- Phase 2 - MRF Processing Lines and Systems, Rolling Stock and Equipment State of Repair Assessment and Valuation
- Phase 3 - MRF Business Valuation, Strategic Option Evaluation and Market Analysis

Phase 4 is in progress and consists of issuing the proposed Negotiated Request for Proposals (NRFP) to determine the best future opportunity for the MRF and minimize the risk of a potentially devalued facility considering the transition of the residential Blue Box Program to full producer responsibility.

The status update and next steps are contained in Confidential report PW 17-2020 A Matter of Commercial Information, 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, under s. 239(2) of the Municipal Act, 2001 - Procurement Process for MRF Opportunity Review –

Phase 4. This report was approved by Public Works Committee on June 16, 2020 and by Council on June 25, 2020. There are no further significant project updates at this time.

The Continuous Improvement Fund (CIF) program provided 100% funding for Phases 1 to 3 and is providing partial funding in the amount of \$30,000 to Niagara Region for Phase 3.

Respectfully submitted and signed by

---

Sherri Tait  
Program Manager, Waste Management

---

**MEMORANDUM**

**PWC-C 36-2020**

**Subject:** Supplementary Information for Report PW 35-2020 – Reprioritization of Capital Project Funds for Recycling Centre Facility Improvements

**Date:** Tuesday, September 8, 2020

**To:** Public Works Committee

**From:** Jennifer Wilson, Supervisor, Collection and Diversion

---

This memorandum is to address the comments/questions from Councillor Insinna and Councillor Gale at the August 13, 2020 Regional Council meeting.

**Single Sourcing Drum Feeder to Van Dyk (VDRS)**

As stated in PW 35-2020, Procurement issued two separate Requests for Proposals (RFP) for the supply and installation of a drum feeder with ripper teeth for the fibre line (December 3, 2019 and March 9, 2020). Procurement in consultation with Waste Management Services staff, cancelled the first RFP, as all three submissions were non-compliant (VDRS was administratively non-compliant). The second RFP closed with no bid submissions.

Staff retained the services of a consultant to conduct a peer review of the specifications, prior to the issuance of the RFP. The consultant had advised manufacturers that Niagara Region would be issuing a procurement for this requirement and some indicated that they would not be interested. The consultant advised staff that there were five (5) companies that could potentially meet our required specifications and submit a bid.

After two (2) unsuccessful attempts to procure a drum feeder for the fibre line, through a competitive process, staff in consultation with Niagara Recycling, proceeded to negotiate with two (2) vendors that manufacture drum feeders with bag opening capabilities. Staff conducted reference checks on both vendors and based on those findings coupled with the ability for the vendors to meet the required specifications (which were the same as what has been included in the RFP), the drum feeder purchase was singled sourced to VDRS for the following reasons:

- A critical requirement of the RFP was that the unit needed to fit within an area and not reduce the tip floor space. The unit proposed by VDRS had significantly more cubic yard capacity than the other vendor within the required space. A larger unit from the vendor would have taken up more space on the tip floor and increased the cost. A reduction in tip floor space would reduce the holding capacity of the tip floor and limit the amount of space available to offload collection vehicles.
- The drum design for VDRS also enables further modifications to add longer teeth or more teeth whereas the drum design from the other vendor is fixed. This ability to modify the teeth allows for changing the aggressiveness of the bag opening capabilities.
- There was a requirement that the drum feeder was to open a minimum of 50% of bags that are larger than 45L in size. References for VDRS were positive with 50-80% of large bags being ripped/torn. Whereas a reference from the other vendor indicated close to 100% of bags were opened and liberated. Liberation was a concern for shredded office waste in the fibre stream as it would be difficult to remove loose shredded paper by hand, resulting in lost office waste revenue and a mess at the optical sorters due to all the fines.
- VDRS is a supplier of equipment to many Material Recycling Facilities (MRF's) across Canada and is familiar with all applicable Canadian rules and regulations such as ESA approvals. The other vendor did not have any drum feeders operating within Canada.

Waste Management Staff did consult with Procurement, and the single source was in accordance with Niagara Region's Procurement By-Law.

While the specifications for the drum feeder on the container line will be similar to the specifications of the fibre line, it will be one (1) foot narrower as the width of the conveyor on the container line is less than the fibre line. Given the unsuccessful outcomes of the two previously conducted RFPs coupled with the challenges presented herein which resulted in months of delay, staff recommended a single source to VDRS for the drum feeder on the container line.

Staff could proceed with a new RFP for the drum feeder on the container line and Procurement affirms that if deemed essential and urgent; procurement would allocate the resources needed to prioritize the finalization of the RFP. Staff anticipate that it would take a minimum eight (8) weeks to facilitate the RFP process and the supply and installation of the drum feeder for the container line by the successful Proponent would take a minimum of three (3) to four (4) months. The timing for the procurement process is predicated on finalizing the specifications, the open RFP period, receiving compliant



submissions, the evaluation of those submissions, which culminate in award to the highest scoring proponent and contract execution.

Delays in the installation of the drum feeder on the container line may affect the Region's ability to process all of the container line volumes (bagged and unbagged) currently being received which would result in Niagara Region needing to ship out additional loads of unprocessed materials to other MRFs in Ontario for processing. Additionally, Niagara Region would need to maintain space for collection vehicles to offload curbside collected material. Of note, bagged material contains voids, which take up more space on the tipping floor. In July and August, Niagara Region had to transport additional unprocessed material to another MRF in Ontario. Costs associated with transporting unprocessed material to a third party were identified in PW 35-2020.

In addition to the current challenges with bagged recyclables entering the facility, there is a potential that the total amount of curbside material collected would increase by 8% in October with the new service level changes. Staff project that this will amount to an additional 1041 tonnes of containers annually assuming 35% of the incoming volume is containers with an estimated cost for transporting and processing of approximately \$197,790. The revenue loss, as a result of, shipping unprocessed material is estimated to be approximately \$154,280 annually, based on current market pricing. This value can fluctuate based on total tonnage collected and changes to incoming material composition.

### **Additional Staff**

Staff are not recommending the hiring of additional staff to manually open bags of containers for the following reasons:

- The use of drum feeders have successfully increased throughput of material at MRFs by up to 20%. Higher throughput reduces overtime hours worked per year to process material, and improves the quality and volume of material being marketed. Staff projected that in 2020 Niagara Region will receive approximately 16,000 tonnes of containers; a 10% increase in throughput would be equal to approximately 1600 tonnes of additional capacity. These translate into annual savings related to the drum feeder, identified herein and referenced in PW 35-2020.
- The space available within the pre-sort room to add more staff to open bags is limited due to the degree of sorting already taking place in this area. There is only room to accommodate two (2) additional staff within this area due to constraints on the line and access to bunkers. Any new sorters would be required to fill up a bin

beside/behind them and walk approximately 30 feet to empty the bin into the film bunker (storage space prior to shipping) every 10-15 minutes.

- Opening bags manually does not free up staff in the pre-sort room to remove more loose film that is in the bags and other items such as HDPE bottles and mixed plastics. The drum feeder will open more than 50% of the bags prior to the pre-sort room.
- Currently, the flow of material onto the processing line varies. The drum feeder will improve the metering of material onto the processing line to allow for a more consistent flow and burden depth, which reduces operational downtime that is a direct result of material jamming due to fluctuations on the line. Between February and early June, the average downtime per day at the container line was approximately 32 minutes.

## Summary of Cost Analysis

Below is a summary of the estimated costs for the procuring the drum feeder in comparison to the alternatives reviewed.

*Scenario 1: Projected financial impacts of purchasing a drum feeder.*

Financial Impacts	Estimated Costs/Savings
Estimated Cost of Drum Feeder (One-time Cost)	\$275,000 US excluding net HST
Annual Estimated Cost Avoidance (Overtime & Residue)	(\$45,000)
Annual Estimated Additional Revenue Generated (Marketed Materials & Tip Fees)	(\$134,500)
Annual Financial Impact	(\$179,500)

\* Does not include cost avoidance of shipping unprocessed material under Scenario 2.

*Scenario 2: Projected financial impacts of status quo.*

Financial Impacts	Estimated Costs/Savings
Annual Estimated Costs of Shipping Unprocessed Material to Third Parties	\$197,790
Annual Estimated Revenue Loss	\$154,280
Annual Total Financial Impact	\$352,070

*Scenario 3: Projected financial impacts of adding two additional sorters.*

Financial Impacts	Estimated Costs/Savings
Annual Cost of Adding Two (2) Staff Members	\$80,000
Annual Estimated Cost Avoidance (Overtime & Residue)	(\$11,200)
Annual Estimated Additional Revenue Generated (Marketed Materials & Tip Fees)	(\$33,625)
Annual Estimated Costs of Shipping Unprocessed Material to Third Parties	\$170,240
Annual Estimated Revenue Loss	\$126,730
Annual Total Financial Impact	\$332,145

Alternatively, if there is a policy change to no longer permit the use of clear plastic bags for placement of material curbside by residents and businesses who utilize Niagara Region's recycling collection services, it is projected that the Recycling Centre will be able to process all incoming container volumes. This includes the anticipated volume increase in October due to the anticipation that the quantity of loose film within the container stream would be reduced. By eliminating bagged material, it would free up

approximately eight (8) staff to focus on removal of other recyclables and residue from the container stream on the line. In addition, by eliminating bags, it will also reduce the equipment downtime at the perforator and optical sorter. With the implementation of the policy, there is also potential to realize labour savings on the container line.

As previously stated in PW 35-2020, some residents prefer the use of clear plastic bags to contain material, in particular those in rural areas with longer driveways or in high wind areas. In addition, bags may be used by residents for health reasons or by those with physical limitations to carry material to the curb. It would take time to implement the policy change and therefore the benefits would not be immediately realized. It is anticipated that if this policy was implemented, we would not get full compliance from residents. In addition, this change would require the Region to go back to the new contractors and negotiate pricing as the policy change would be a change to the scope of work in the contract. There would also be additional costs associated with the development and distribution of promotional and educational material.

Another alternative option not previously considered in report PW 35-2020, is to not extend Niagara Region's third party contract with Haldimand County for processing and marketing of Haldimand's Blue Box material. The current contract extension is set to expire March 5, 2021. There is one extension year remaining. On average, the annual net revenue from the Haldimand contract is approximately \$160,000. It is projected that in 2020, the Region will process approximately 1,442 tonnes of containers and 1,830 tonnes of fibre. By electing to not approve the last extension period, if Haldimand requests the last year extension, this would allow for the Recycling Centre to handle the additional 8% container volumes (1041 tonnes) projected from the new collection contract. In doing so, this would eliminate the need to purchase a drum feeder for the container line. This option will not resolve the need to have staff to open incoming bagged materials. It should also be noted that by not electing to extend the contract, with Halimand, it may negatively impact the value of the MRF.

## **Use of Funds Outside Waste Management**

Waste Management staff consulted with Finance staff to address Councillor Gale's question regarding the use of the requested reprioritized funds for other initiatives outside of Waste Management, the reprioritized Recycling Centre improvement funding was from an existing, approved 2020 capital project funded primarily by the Waste Management Capital Reserve. The Waste Management Capital Reserve is funded solely from contributions from the Waste Management operating budget and is a

segregated capital reserve from those funded via levy. The Waste Management Capital Reserve is solely for WM capital initiatives.

Respectfully submitted and signed by

---

Jennifer Wilson  
Supervisor, Collection and Diversion