



City of Port Colborne
Regular Meeting of Committee of the Whole 06-19
Monday, February 11, 2019 – 6:30 p.m.
Council Chambers, 3rd Floor, 66 Charlotte Street

Agenda

- 1. Call to Order:** Mayor William C. Steele
- 2. National Anthem:**
- 3. Introduction of Addendum and Delegation Items:**
- 4. Confirmation of Agenda:**
- 5. Disclosures of Interest:**
- 6. Adoption of Minutes:**
 - (a) Regular meeting of Committee of the Whole 04-19, held on January 28, 2019.
- 7. Determination of Items Requiring Separate Discussion:**
- 8. Approval of Items Not Requiring Separate Discussion:**
- 9. Presentations:**
 - (a) Recognition of Larry Olm and Jack O'Neil Re Community Christmas Dinner
 - (b) Nick Rosati, CET, Traffic Systems Program Manager and Petar Vujic, Supervisor Corridor Safety, Region of Niagara Re Providing information about PXOs in Niagara and the Port Colborne Pedestrian Crossover (Page No. 7)
 - (c) Brad Whitelaw, Program Manager, Policy & Planning, Region of Niagara – Waste Management Re Proposed Collection Options for the next Waste Collection Contract (Page No. 19) Note: 5 – 10 extra minutes is required for presentation
- 10. Delegations (10 Minutes Maximum):**
 - (a) Chris Comfort Re Drainage and Ditching in the Ward 4 Area (Page No. 37)
- 11. Mayor's Report:**
- 12. Regional Councillor's Report:**
- 13. Councillors' Items:**
 - (a) Councillors' Issues/Enquiries
 - (b) Staff Responses to Previous Councillors' Enquiries
- 14. Consideration of Items Requiring Separate Discussion:**

15. Notice of Motion:**16. Adjournment:****Upcoming Committee of the Whole and Council Meetings**

Monday, February 25, 2019	Committee of the Whole/Council – 6:30 P.M.
Monday, March 11, 2019	Committee of the Whole/Council – 6:30 P.M.
Monday, March 25, 2019	Committee of the Whole/Council – 6:30 P.M.
Monday, April 8, 2019	Committee of the Whole/Council – 6:30 P.M.
Tuesday, April 23, 2019	Committee of the Whole/Council – 6:30 P.M.

Note: If not otherwise attached to the staff report, by-laws are published and available for review under the "Consideration of By-laws" section of the Council agenda.

Committee Items:

Notes	Item	Description / Recommendation	Page
WCS MB EB RB GB FD AD DK HW	1.	<p><u>Motion by Councillor Desmarais Re: Affordable Housing Strategy</u></p> <p>Whereas access to adequate housing is a fundamental human right (paragraph 25(1) of the United Nations Universal Declaration of Human Rights, and Ontario Human Rights Commission - Human Rights Perspective on Housing Supply, January 2019); and</p> <p>Whereas Port Colborne is fast approaching a housing crisis with alarming occupancy rates, soaring housing costs and stagnating incomes (Ontario Association of Food Banks, Quarterly Report, September 2018, Port Colborne Primary Rental Market Statistics, 2016, Key Housing Indicators for Port Colborne, July 5, 2017 and Where Will We Live – Ontario’s Rental Housing Crisis, May 2018); and</p> <p>Whereas the Senior Citizens Advisory Committee and the Social Determinants of Health Committee, both being committees of this council have each placed housing as a priority to their mandate; and Whereas designing and implementing a poverty reduction strategy has been included in the Port Colborne Strategic Plan (CAO Report No.:2015-47); and</p> <p>Whereas adequate and affordable housing has been directly linked to poverty reduction (Wellesley Institute, Poverty Is a Health Issue: It’s time to address housing and homelessness, Oct 10, 2013)</p> <p>Therefore be it resolved that The Corporation of the City of Port Colborne does acknowledge that housing is a human right and that municipal government has a role to play in the gradual realization of this right for all residents of Port Colborne; and</p> <p>That staff be directed to engage with stakeholders to create a coordinated municipal affordable housing strategy for the city of Port Colborne with the goal to establish a definition for the term “affordable housing” and to create affordable housing options across the housing continuum, with a report due back to this council to include a high-level view of timelines and targets on or before May 27, 2019.</p> <p>Note: Notice of Motion was given at the Meeting of January 14, 2019.</p>	53

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WCS RB AD	MB GB DK	EB FD HW	2.	<p><u>Engineering and Operations Department, Engineering Division, Report 2019-15, Subject: Information Report on the Proposed Regional Niagara Waste Collection Services Contract</u></p> <p>That Council receive Engineering and Operations Department Report 2019-15 for information.</p>	95
WCS RB AD	MB GB DK	EB FD HW	3.	<p><u>Engineering and Operations Department, Engineering Division, Report 2019-12, Subject: Amendment to the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains Report</u></p> <p>That staff be directed to prepare a by-law appointing Paul Marsh P. Eng. of EWA Engineering Inc. to comply with Section 8, Chapter D. 17 of the Drainage Act R.S.O. 1990, as such a by-law will allow us to fulfill the requirement of Section 58(4), Chapter D. 17 of the Drainage Act R.S.O. 1990, as recommended by the Tribunal Coordinator; and</p> <p>That the Mayor and City Clerk be directed to execute the appropriate by-law.</p>	205
WCS RB AD	MB GB DK	EB FD HW	4.	<p><u>Planning and Development Department, By-law Enforcement Division, Report 2019-13, Subject: Encroachment request 104 Fraser Street</u></p> <p>That Council approve the encroachment application and authorize entering into a License Agreement with the applicant and owner Yvon Mousseau for 104 Fraser Street.</p>	311
Miscellaneous Correspondence					
WCS RB AD	MB GB DK	EB FD HW	5.	<p><u>Region of Niagara Re: Approval of Interim Levy Dates and Amounts (Report CSD 6-2019)</u></p> <p>That the correspondence received from the Region of Niagara Re: Approval of Interim Levy Dates and Amounts, be received for information.</p>	319
WCS RB AD	MB GB DK	EB FD HW	6.	<p><u>Region of Niagara Re: Vacancy Program Revisions to Ministry of Finance (Report CSD 3-2019)</u></p> <p>That the correspondence received from the Region of Niagara Re: Vacancy Program Revisions to Ministry of Finance, be received for information.</p>	325

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Outside Resolutions – Requests for Endorsement					
WCS	MB	EB	7.	<u>Town of Lincoln, Town of Pelham Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales</u>	353
RB	GB	FD		That the resolutions received from the Town of Lincoln and Town of Pelham Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales, be received for information.	
AD	DK	HW			
Responses to City of Port Colborne Resolutions					
Nil.					

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PXOs in Niagara

Nick Rosati, CET
Traffic Systems Program Manager

Petar Vujic
Supervisor Corridor Safety

Port Colborne City Council
February 11, 2019



Niagara Region

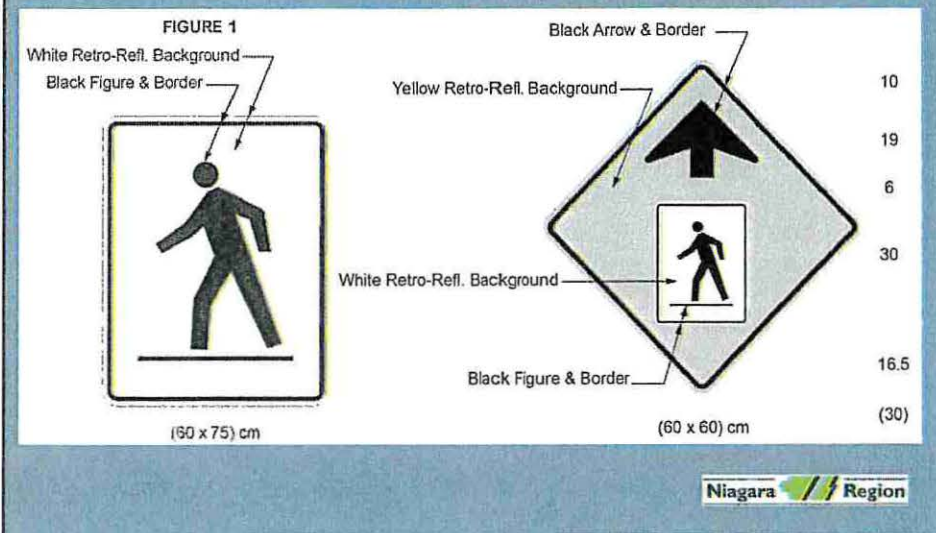
Controlled vs. Un-controlled



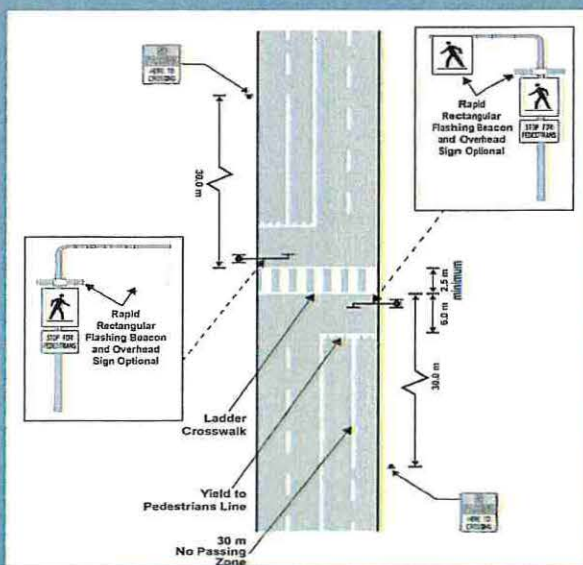
Niagara Region

O. Reg. 402

Level 2

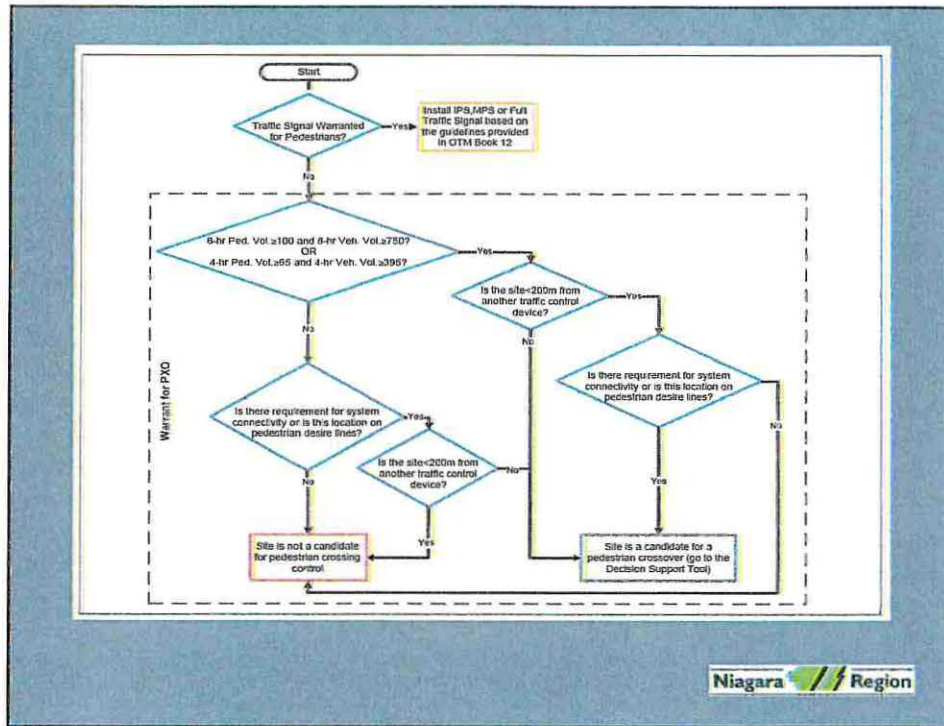


O. Reg. 402



Typical Layout

- Signs
- Pavement Markings
- Rapid Flashing Beacons



Book 10 • Pedestrian Crossing Treatments

Table 7: Pedestrian Crossover Selection Matrix

Peak Hour Vehicular Volume			Peak Hour Pedestrian Volume (Dm ³ /h)	Total Number of Lanes for the Roadway Cross Section*			
Time Period	Lower Bound	Upper Bound		1 or 2 Lanes	3 Lanes	4 Lanes w/ 1/2 shared hallway	4 Lanes w/ 2 shared hallways
8-Hour	750	2,750	<= 50	Level 2 Type D	Level 2 Type C	Level 2 Type C	Level 2 Type B
4-Hour	250	1,100	<= 50	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	750	2,750	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	250	1,100	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	2,250	4,200	<= 50	Level 2 Type B	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	1,100	2,200	<= 50	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	2,250	4,200	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	1,100	2,200	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	4,200	8,200	<= 50	Level 2 Type B	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	2,200	4,200	<= 50	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	4,200	8,200	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	2,200	4,200	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	8,200	16,000	<= 50	Level 2 Type B	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	4,200	8,200	<= 50	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	8,200	16,000	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	4,200	8,200	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	16,000	32,000	<= 50	Level 2 Type B	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	8,200	16,000	<= 50	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
8-Hour	16,000	32,000	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B
4-Hour	8,200	16,000	<= 100	Level 2 Type C	Level 2 Type B	Level 2 Type C	Level 2 Type B

Level A
Type B
Type C
Type D

*Level A is the preferred treatment for all conditions except separate medians.
 The total number of lanes is the number of crossing lanes. The total number of lanes is assumed to be between 2 (1 lane in 1 direction and 1 lane in the other direction) and 4 (2 lanes in 1 direction and 2 lanes in the other direction).
 *Use of Level C is only recommended for 4-lane roadways with 1/2 shared hallway.
 *Use Level D if the PXC is at a signalized intersection.
 The number of lanes in this table does not include a PXC in a road configuration for sites with three lanes and geometric conditions. Consult with the engineer to determine the appropriate treatment.

34 Ontario Traffic Manual • June 2016



OTM Book 15

Level 1
(Type A)

Toronto Style



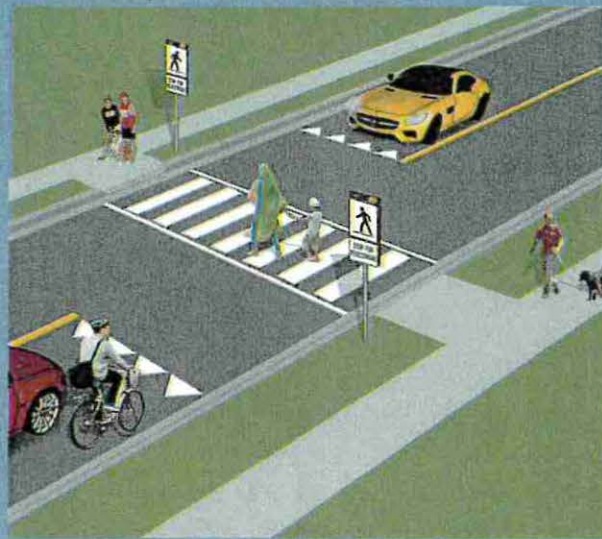
OTM Book 15

Level 2
(Type B)



OTM Book 15

Level 2
(Type C)



Niagara Region

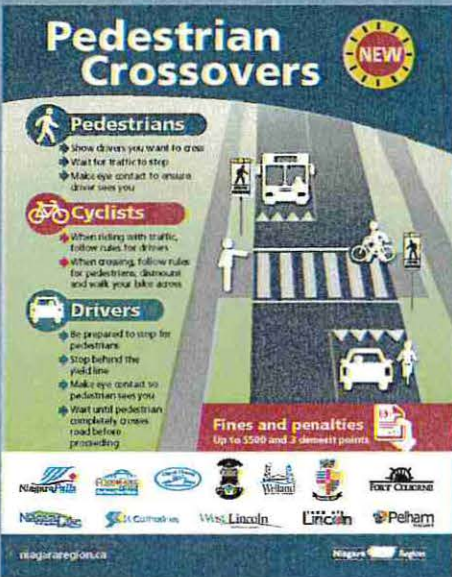
OTM Book 15

Level 2
(Type D)



Niagara Region

Public Education



The poster is titled "Pedestrian Crossovers" with a "NEW" badge. It features three sections: "Pedestrians" with icons of a person and a bus, "Cyclists" with a bicycle icon, and "Drivers" with a car icon. Each section lists specific safety rules. A central illustration shows a crosswalk with a pedestrian, a cyclist, and a car. A red box at the bottom right states "Fines and penalties: Up to \$500 and 3 demerit points". Logos for various municipalities and the Niagara Region are listed at the bottom.

Niagara Region

Niagara Region Traffic Control Design Practices

- PXO designs and installations follow the Traffic Signal Design and Operation model.
- The Region currently maintains all 467 signalized intersections in the Region.
- All intersections are designed and operate using the same operating characteristics to maintain driver familiarity.
- All municipalities and MTO have adopted our standard ensuring consistency throughout the Region.

Niagara Region

Niagara Region Traffic Control Design Practices

- Currently 2 types of PXOs in operation in the Region.

LEVEL 2 Type
B



LEVEL 2 Type
C



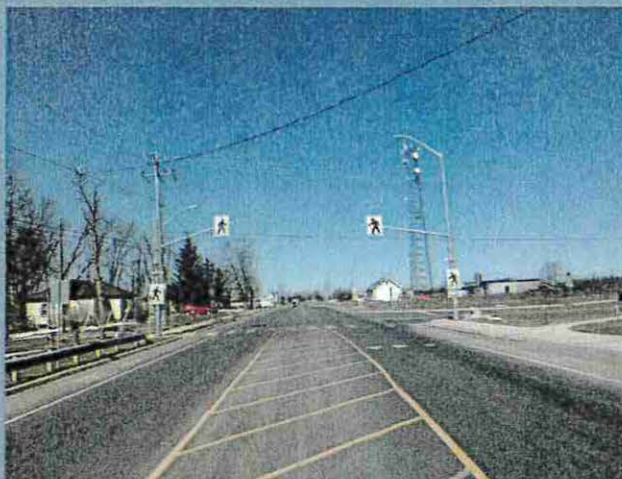
Niagara Region

Niagara Region Traffic Control Design Practices

1. Request received from Local Area Municipality for PXO design.
2. Ask for guidance on location, geometrics, layout etc.
3. Preliminary design completed and any issues discussed with LAM.
4. Detailed design completed and underground information is collected.
5. Pole and sign locations are spotted in the field.
6. Final design circulated to City staff.
7. Purchase and installation of equipment
8. Equipment activation and field observations.

Niagara Region

Regional Road 20 Smithville



Niagara Region

Sodom Rd. Niagara Falls



Niagara Region

Vine St. St. Catharines



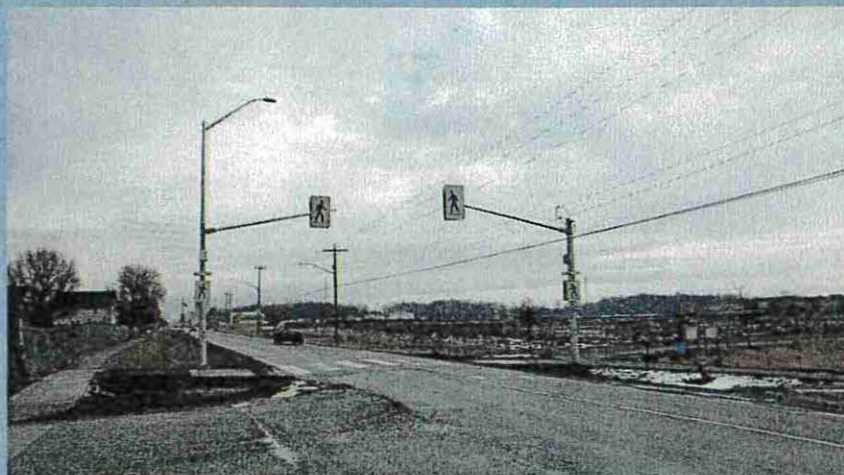
Niagara Region

Ormond St. Thorold



Niagara Region

McLeod Rd. Niagara Falls



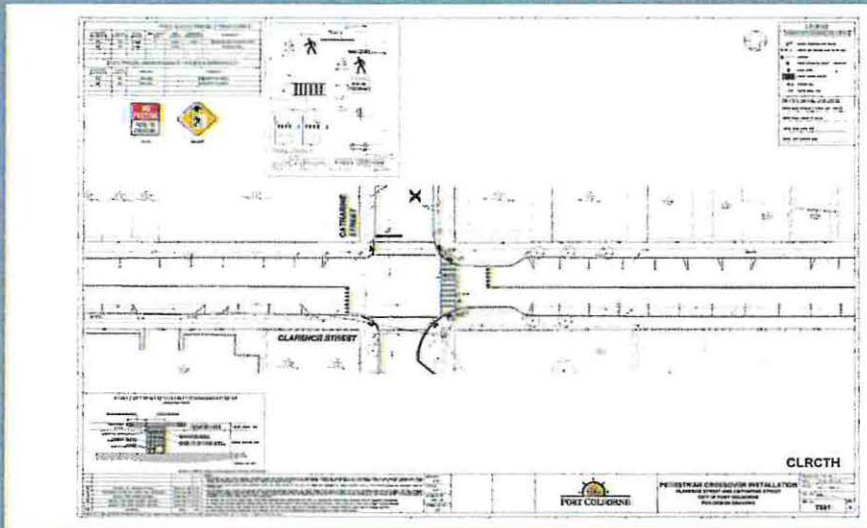
Niagara Region

St. Paul St. St. Catharines



Niagara Region

Clarence St. Construction Drawing



Niagara Region

Clarence at King – Facing West



Niagara Region

Clarence at King – Facing East



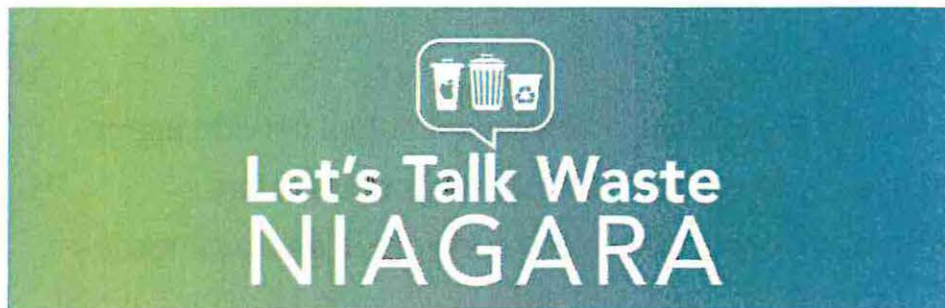
Niagara  Region

Questions?



Niagara  Region

Proposed Collection Options for Niagara Region's Next Contract



City of Port Colborne Council Meeting
February 11, 2019

Background

- Niagara Region's next waste collection contract (garbage, recycling and organics) set to begin by 2021
- Input received from various stakeholders on proposed collection options being considered for the next contract, through targeted and broad-based community consultation
- Local Area Municipalities (LAMs) comments are requested on proposed base changes and confirmation of enhanced services by February 1, 2019 (extended to Feb. 20)
- Letter with project report sent to LAM Clerks for inclusion on the Council agenda on May 4, 2018 and to Public Works Officials (PWOs) on June 6, 2018, along with presentations and engagement with PWOs at their June 11, Oct. 16 and Dec. 11, 2018 meetings
- Report submitted to Niagara Region's Public Works Committee (PWC) on January 8, 2019
- **Report with recommendations on collection options will be submitted in March 2019**

Background

- Proposed collection options for the Region's next contract are being considered for the following reasons:
 - Increase participation in Region's diversion programs
 - Potential cost avoidance
 - Results of curbside audits, which reflect actual service usage
 - Best practices of Niagara's 13 municipal comparators
 - Improve program communication to residents and businesses
 - Standardize garbage container (bag/can) limits for all Industrial, Commercial and Institutional (IC&I) and Mixed-Use (MU) properties as a base service

Proposed Base Collection Service Options

- 1) Every-other-week (EOW) garbage collection for the **residential sector and those IC&I and MU properties located outside DBAs**, as a **base** service:
 - Weekly collection of recycling and organics to continue
 - Garbage container limit for all properties would double
 - Garbage limit exemptions – children's diaper (home and daycare), medical and group homes, plus special set-out service to continueand/or
- 2) Mandatory use of clear bags for garbage, with the option of allowing an opaque privacy bag to be placed inside the clear bag:
 - The clear bag program will be for **all sectors (both inside and outside DBAs)**, as a **base** service
 - Niagara Region PWC amended the January 8, 2019 staff recommendation to not include clear bag in the RFP and now it will remain as an option for consideration

Key Drivers – EOW Garbage and Clear Bags

- extend existing landfill site capacity;
- contract cost avoidance (EOW garbage collection);
- increase participation and capture rates in diversion programs:
 - *Nearly 50% of low density residential garbage is organic waste and only 48% use the residential Green Bin program*
 - *IC&I and MU audits show diversion programs underutilized*



Niagara Region

Other Municipality Benefits of Implementing EOW Garbage and/or Clear Bags

- Other municipalities, which implemented EOW garbage and/or clear bags, have realized the following benefits:
 - 1) **Increased Waste Diversion:**
 - Range between 6% (Peel) and 16% (Durham), depending on whether they introduced other diversion programs (i.e. organics) at the same time as EOW garbage.
 - Markham's diversion rate increased by 35% with the introduction of EOW garbage and weekly organics collection. It increased by an additional 6%, as a result of implementing clear bags.
 - 2) **Contract Savings:**
 - Range between \$200k (Barrie) and \$12M (Peel) **per year**, depending on size of contract and other contract changes implemented (i.e. EOW, carts, etc.)

Niagara Region

Proposed Base Collection Service Options

- 3) Establishment of a 4 item limit per residential unit, per collection, for large item collection at LDR properties, as a **base** service.
- 4) Discontinuation of appliances and scrap metal collection at LDR properties.
 - Niagara Region PWC amended the January 8, 2019 staff recommendation to discontinue collection and instead include pricing for this option in the next contract.

Key drivers: Contract cost avoidance for services with limited usage.

- 93% of properties using the large item service set out 4 items or less and 92% of the total bookings were for 4 or less items
- Appliances and scrap metal:
 - Tonnages have decreased by 94% since 2007
 - Items can be recycled, at no cost, at the Region's Drop-off Depots, or by scrap metal haulers/dealers
 - Only 5% of properties are using the service

Other Municipality Benefits of Limiting Large Item Collection and Discontinuation of Appliance Collection

- Other municipalities, which implemented limits on large item collection and/or eliminated appliance collection, have realized the following benefits:

1) Municipal Best Practices:

- The average large item limit is 3 per residential unit for those municipalities with weekly collection, and 4 per residential unit with EOW collection.
- Approximately half of municipal comparators (Barrie, Hamilton, London, Ottawa, Peel and Windsor) do not provide appliance collection service.

2) Contract Savings:

- Municipalities that implemented collection limits on the number of large items reported contract savings.
- Municipalities that eliminated appliance collection realized a contract savings. In Peel, this was a net annual savings of \$100K.

Proposed Base Collection Service Options

- 5) Change weekly garbage container limits for **IC&I** and **MU** properties located **inside** Designated Business Areas (DBAs) from 7 containers to 4 containers per property, as a **base** service.
- 6) Change weekly garbage container limit for **MU** properties located **outside** DBAs from 6 containers to 4 containers per property, as a **base** service.

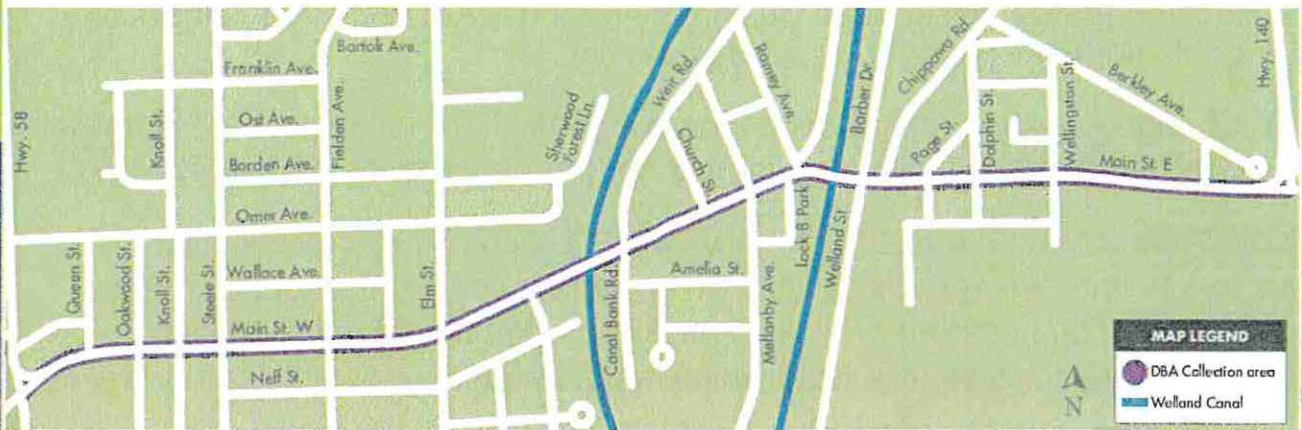
Key Drivers: Standardize base garbage collection limits across similar sectors to improve service delivery and program communication, increase participation and capture rates in diversion programs, potentially avoid contract costs for a service level which is not needed.

- *Average number of garbage containers placed out per week:*
 - *IC&I and MU properties inside the DBA is 2*
 - *MU properties outside the DBA is less than 2*

Port Colborne Downtown DBA - Base Collection Area



Port Colborne Main Street DBA - Base Collection Area



Port Colborne Audit Results – IC&I Inside DBAs (Base)

2018 Weekly Average Containers Set Out by IC&I Properties Inside the Port Colborne DBAs (Base Collection Area)

Collection Service	Average % of Participating IC&I Properties Using Regional Collection Service Inside DBAs ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	88%	2.2	3%
Recycling	75%	1.5	N/A
Organics	6%	0.6	N/A

Note:

- 1) In 2018, there were a total of 121 IC&I properties audited inside the two Port Colborne DBA base collection areas. Of this total, an average of 72 IC&I properties participated in a Regional collection service.
- 2) Although an average of 3% of IC&I properties exceeded their total weekly set-out limit of 7 garbage containers, there were 3 individual properties that had exceeded the 7 garbage container limit, at least once during the 2 day audit period.

Port Colborne Audit Results – MU Inside DBAs (Base)

2016 Weekly Average Containers Set Out by MU Properties Inside the Port Colborne DBAs (Base Collection Area)

Collection Service	Average % of Participating MU Properties Using Regional Collection Service Inside DBAs ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	92%	2.5	1%
Recycling	68%	1.8	N/A
Organics	19%	2.2	N/A

Note:

- 1) In 2016, there were a total of 64 MU properties audited inside the two Port Colborne DBA base collection areas. Of this total, an average of 53 MU properties participated in a Regional collection service.
- 2) Although an average of 1% of MU properties exceeded their total weekly set-out limit of 7 garbage containers, there were 5 individual properties that exceeded the 7 garbage container limit, at least once during the 4 day audit period.

Port Colborne Audit Results – MU Outside DBAs (Base)

2014 Weekly Average Containers Set Out by MU Properties Outside the Port Colborne DBAs (Base Collection)

Collection Service	Average % of MU Properties Using Regional Collection Service Outside DBAs ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	86%	1.6	0%
Recycling	66%	1.5	N/A
Organics	17%	1.0	N/A

Note:

- 1) In 2014, there were 58 MU properties audited outside the two Port Colborne DBAs with base collection.
- 2) There were no mixed-use properties that exceeded their total weekly set-out limit of 6 garbage containers

Enhanced Collection Services

- Enhanced collection services (i.e. additional garbage container limits, increased garbage or recycling collection frequency, street litter, front-end garbage, etc.), provided at the request of each LAM.
- Each LAM directly pays for the cost associated with their enhanced collection services.
- The City of Port Colborne's 2018 total enhanced service cost of approximately \$13,343 for enhanced collection approximately 0.76% of its total annual waste management charge of \$1.75 million.

Enhanced Collection Services – Port Colborne

Enhanced Collection Service	2018 Cost	Total No. of Containers Serviced
Street Litter Bins - City Facilities (i.e. Parks, Arenas, Beaches) (Twice-per-week)	\$720	8
Enhanced Waste Disposal Cost	\$143	n/a
Organics Cart Collection - Designated Business Area (Once-per-week)	\$11,761	57 (est.)
Public Spaces Recycling - City Facilities (i.e. Parks, Arenas, Beaches) (Twice-per-week)	\$720	8

Stakeholder Consultation/Engagement

- **Local Area Municipalities** (May/18 – Feb/19)
 - **May and June 2018** – Letters sent to LAM Clerks (May 4) and Public Works Officials (June 6) advising of proposed options and requesting LAM comments by February 1, 2019 (extended to Feb.20)
 - **June 11, Oct. 16 and Dec. 11, 2018** - Presentations made to Public Works Officials at their meetings

Stakeholder Consultation/Engagement

- **Organizations Representing Businesses** (Aug – Nov/18)
 - **July 2018** – Email providing information on proposed options.
 - *Port Colborne Downtown BIA (July 5); Port Colborne Main Street BIA (July 5); Port Colborne/Wainfleet Chamber of Commerce (July 19)*
 - **August and September 2018** – meetings held with Business Improvement Associations (BIAs), Chambers of Commerce, Tourism Agencies and Niagara Industrial Association.
 - *Port Colborne Downtown BIA (Aug 24); Port Colborne Main Street BIA (Aug 24); Port Colborne/Wainfleet Chamber of Commerce (Aug. 22)*
 - **October and November 2018** – two follow-up emails and formal letter with proposed options, link to on-line survey, open house/community booth information and invitation to contact Region
 - **November 30, 2018** (deadline for formal input)
 - Submissions received from Grimsby Downtown Improvement Association, Victoria Centre and Queen Street BIAs (Niagara Falls), Pelham Business Association, St. Catharines Downtown BIA, and Port Dalhousie BIA

Stakeholder Consultation/Engagement

- **Residents and Businesses:**

- **October and November 2018** – Promotion and outreach through project webpage, social media, newspaper print and on-line ads, media coverage and post cards

- **October 2018** - Letters sent to businesses and multi-residential properties (i.e. 7 or more residential units) that use Regional curbside garbage, with the proposed options, link to on-line survey, open house/community booth info and invitation to contact Region

- **Late October and November 2018** – Public open houses and community booths held in all 12 municipalities

- 12 open houses – approx. 70 attendees
- 12 community booths – approx. 450 visitors



Niagara Region

Stakeholder Consultation/Engagement

- **Surveys:**

- **Online Survey Responses** (closed November 30, 2018)

- Low Density Residential (LDR): approximately 6,600 completed
- Multi-Residential (MR): 38 completed
- Industrial, Commercial and Institutional and Mixed Use: 160 completed

- **Random Telephone Survey** (completed December 7, 2018)

- LDR only: 1,250 completed

- Comments also received through Region's Facebook advertisement (1,476), Waste Info-Line calls, emails, web submissions, emails, phone calls and in-person feedback (65)

Niagara Region

Making a Choice on Clear Bags and EOW Garbage

Preliminary Survey Results for Niagara Region

	LDR		MR	IC&I and MU Outside DBAs
	Telephone (1,253 responses)	On-line (6,639 responses)	On-line (38 responses)	On-line (166 responses)
Clear Bag	33%	17%	29%	36%
EOW Garbage	27%	33%	13%	15%
Both Clear Bag and EOW Garbage	21%	12%	18%	7%
Neither ¹	19%	38%	40%	42%

¹In the telephone survey, LDR households could not see the option of 'neither' and the interviewer worked to obtain a choice, which is why this option has a much lower response than in the on-line surveys.

Making a Choice on Clear Bags and EOW Garbage

Preliminary Survey Results for Port Colborne

	LDR	
	Telephone (75 responses)	On-line (318 responses)
Clear Bag	40%	20%
EOW Garbage	21%	33%
Both Clear Bag and EOW	24%	12%
Neither ¹	15%	35%

¹In the telephone survey, LDR households could not see the option of 'neither' and the interviewer worked to obtain a choice

Preliminary Survey Results

Proposed Options	Preliminary Survey Results
EOW garbage collection	<ul style="list-style-type: none"> Residents were split between those stating it would have: <ul style="list-style-type: none"> a big or some impact (48% telephone, 58% on-line) little to no impact (45% telephone, 33% on-line) Businesses outside DBAs expressed perceived need to continue weekly collection, although not fully utilizing diversion programs.
Mandatory use of clear garbage bags	<ul style="list-style-type: none"> Telephone survey support was split: 48% would support, 52% would not support. On-line response was more divided: 27% would support, 73% would not support.
4 item limit for large item collection	<ul style="list-style-type: none"> Largely supported by survey respondents. The majority of residents responded that it would have little to no impact on their household (89% telephone, 72% online)
Elimination of scrap metal collection	<ul style="list-style-type: none"> Program is not widely used and respondents indicated there would be little to no impact on their households (84% telephone, 78% on-line)

Preliminary Survey Results

Proposed Options	Preliminary Survey Results
Reduction of container limits for businesses inside DBAs from seven (7) to four (4) garbage bags/cans weekly	<ul style="list-style-type: none"> Slight majority could manage a reduction to four (4) garbage bags/containers (58%) Less than half feel there would be a significant impact on their business/property
Reduction of enhanced collection frequency for businesses inside DBAs	<ul style="list-style-type: none"> Small survey sample, but they were largely in agreement Reducing the frequency of collection by one day per week would be a challenge for these businesses

Preliminary Survey Results

Proposed Options	Preliminary Survey Results
Reduction of container limits for mixed-use properties outside DBAs from six (6) to four (4) garbage bags/cans weekly.	<ul style="list-style-type: none">• Only one-third could manage reducing from six (6) to four (4)• 60% feel there would be an impact on their business

Additional Potential Collection Contract Changes

1. Additional four weeks of dedicated leaf and yard waste and brush collection in the spring and fall seasons, in the urban areas only.



2. Elimination of the current restriction on Regional curbside garbage collection for IC&I properties outside DBAs with private garbage collection. These properties must be participating in the Region's diversion programs to qualify.

Additional Potential Collection Contract Changes

3. Provision of enhanced large item collection service to MR buildings and MU properties with 1 or more residential units, that receive the Region's curbside base or enhanced garbage collection service.
 - These properties must be participating in the Region's diversion programs in order to qualify to receive this service.
 - This service would be provided in a manner parallel to the approved service for the LDR sector.



Next Steps for Local Area Municipalities

- Formally, the Region would ask to receive the following from LAMs by February 1, 2019 (extended to Feb. 20):
 - i. Comments/position on proposed base collection service options
 - ii. Verification of current or additional enhanced services - this would include the provision of enhanced large item collection service to MR and MU residential units, in a manner parallel to the service provided to the LDR sector (i.e. if LDR has a 4 item limit per unit per collection day, this would also apply to MR and MU residential units)
 - iii. **NEW** – Verification if any municipality would like to include a per stop price for in-ground public space recycling and litter bins and/or for in-ground IC&I, MR and/or MU properties (all streams), as an enhanced service under provisional items

Questions?



Let's Talk Waste
NIAGARA

niagararegion.ca/letstalkwaste

Port Colborne Downtown Audit Results – IC&I Inside DBA (Base)

2018 Weekly Average Containers Set Out by IC&I Properties Inside the Port Colborne Downtown DBA (Base Collection Area)

Collection Service	Average % of Participating IC&I Properties Using Regional Collection Service Inside DBA ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	88%	2.4	4%
Recycling	75%	1.7	N/A
Organics	5%	0.7	N/A

Note:

- 1) In 2018, there were a total of 84 IC&I properties audited inside the Port Colborne Downtown DBA base collection area. Of this total, an average of 56 IC&I properties participated in a Regional collection service.
- 2) Although an average of 4% of IC&I properties exceeded their total weekly set-out limit of 7 garbage containers, there were 3 individual properties that had exceeded the 7 garbage container limit, at least once during the 2 day audit period.

Port Colborne Downtown Audit Results – MU Inside DBA (Base)

2016 Weekly Average Containers Set Out by MU Properties Inside the Port Colborne Downtown DBA (Base Collection Area)

Collection Service	Average % of Participating MU Properties Using Regional Collection Service Inside DBA ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	96%	2.8	2%
Recycling	63%	1.7	N/A
Organics	23%	2.6	N/A

Note:

- 1) In 2016, there were a total of 33 MU properties audited inside the Port Colborne Downtown DBA base collection area. Of this total, an average of 28 MU properties participated in a Regional collection service.
- 2) Although an average of 2% of MU properties exceeded their total weekly set-out limit of 7 garbage containers, there were 5 individual properties that exceeded the 7 garbage container limit, at least once during the 4 day audit period.

Port Colborne Main Street Audit Results – IC&I Inside DBA (Base)

2018 Weekly Average Containers Set Out by IC&I Properties Inside the Port Colborne Main Street DBA (Base Collection Area)

Collection Service	Average % of Participating IC&I Properties Using Regional Collection Service Inside DBA ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	88%	1.5	0%
Recycling	75%	1.0	N/A
Organics	6%	0.5	N/A

Note:

- 1) In 2018, there were a total of 37 IC&I properties audited inside the Port Colborne Main Street DBA base collection area. Of this total, an average of 16 IC&I properties participated in a Regional collection service.
- 2) There were no IC&I properties exceeded that their total weekly set-out limit of 7 garbage containers.

Port Colborne Main Street Audit Results – MU Inside DBA (Base)

2016 Weekly Average Containers Set Out by MU Properties Inside the Port Colborne Main Street DBA (Base Collection Area)

Collection Service	Average % of Participating MU Properties Using Regional Collection Service Inside DBA ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	86%	2.2	0%
Recycling	74%	1.9	N/A
Organics	14%	1.6	N/A

Note:

- 1) In 2016, there were a total of 31 MU properties audited inside the Port Colborne Main Street DBA base collection area. Of this total, an average of 25 MU properties participated in a Regional collection service.
- 2) There were no MU properties that exceeded their total weekly set-out limit of 7 garbage containers.

Port Colborne Audit Results – IC&I Outside DBAs (Base)

2014 Weekly Average Containers Set Out by IC&I Properties Outside the Port Colborne DBAs (Base Collection)

Collection Service	Average % of IC&I Properties Using Regional Collection Service Outside DBA ⁽¹⁾	Average Number of Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit ⁽²⁾
Garbage	42%	2.1	8%
Recycling	31%	2.0	N/A
Organics	8%	1.3	N/A

Note:

- 1) In 2014, there were 264 IC&I properties audited outside the Port Colborne DBAs with base collection.
- 2) Although an average of 8% of IC&I properties exceeded their total weekly set-out limit of 4 garbage containers, there were 9 individual properties that exceeded the 4 garbage container limit, at least once during the 2 day audit period.

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Drainage and ditching in Ward 4

Christopher Comfort to: brendaheidebrecht

Brenda, would you please forward to all Council members and anyone that should be included. Thanks!

Hello,

Thanks for your time.

First, I would like to thank all members of the current Council for bringing not only our concerns, but the concerns of our immediate neighborhood as well as those of all Ward 4 residents to a higher point than it seems to have been in the budget process for sometime.

I just finished watching the February 4, 2019 Budget meeting #3 on You Tube. It seems most of my issues were address to Council so what I would like to address at the Council meeting on Feb 11 may be a bit redundant as to my concerns with the water flow on Pinecrest and Cedar Bay Roads. However, after viewing the meeting, I am now very concerned as to taking ditching out of the Levy and billing as an "add on" going forward.

First, the ditching and drainage concerns (please see attached photos):

- pictures #1 and #2 show that ditching on Pinecrest was recently completed but ended abruptly and the water has no output heading south
- #3. As the ditch turns into the Scout Camp off Pinecrest, there is a great amount of vegetation growth
- Pictures 4, 5, 6, 7 and 8 show the ditch as it runs towards the east being restricted by a variety of vegetation, trees, debris and made made objects.
- Pictures 9 through 13 show the ditches inside Bell Acres that are severely congested with vegetation. Picture #10 shows a ditch that appears to be non-existent. The bottom of the ditch is is about .5 meters below the top of the overgrowth.
- Picture #12 shows the corner of Tammy and Richard. This corner is often under water much of the year. The ditch serves no purpose here to protect the road as the road is beginning to break apart at this location

I am glad to see from the meeting and delighted when I heard Mr. Chris Lee say that ditching in our area was next on the schedule. I hope that is what I heard.

However, I am very concerned to what as I understood as the ditching budget coming out of the tax levy in the near future and being paid for by a possible "per residence basis". My concerns as to this method of budgeting for ditching (not drains) are as follows:

- the amount being withdrawn from the levy never represented the actual costs of ditching since the ditching was never completed to a satisfactory level for many years. We've been here 24 years and this has mostly been the case.

- there have been issues that have been around for many years and should be resolved prior to any change in funding. One that concerns me is the bedrock in several areas that staff and council are aware of that impedes flow. If a remedy to this was ever budgeted for and that money was not used, redirected or simply fell off the sheet, why should we pay now. Essentially twice. I think this argument can be used for any issues that haven't been resolved over the past MANY years being borne out by the current property owners.
- my understanding of Market Value Assessment was to make Municipal Taxing more equitable. Basically, those with homes and properties valued higher, pay more. Although this is perhaps not as equitable as it may seem on the surface, this is the system that we have. By going to a "flat rate" per property seems to go against this convention. My example would be a property assessed a higher value would pay more for garbage pick up, for instance. Fair? Perhaps not. But that is the system.

Looking forward to bring my concerns to Council February 11, 2019.

Thanks for your time!

Chris and Josie Comfort

[REDACTED]

[REDACTED]

[REDACTED]

[#1 - Pinecrest.JPG](#)

[#2 - Pinecrest.JPG](#)

[#3 - Into Scout Camp facing east.JPG](#)

[#4 - Scout Camp.JPG](#)

[#5 - Scout Camp.JPG](#)

[#6 - Scout Camp.JPG](#)

[#7 - Scout Camp.JPG](#)

[#8 - Scout Camp.JPG](#)

[#9 - Richard Avenue.JPG](#)

[#10 - Richard.JPG](#)

[#11 - Richard facing west.JPG](#)

[#12 - corner Richard and Tammy facing east.JPG](#)

[#13 - North end of Richard facing west.JPG](#)

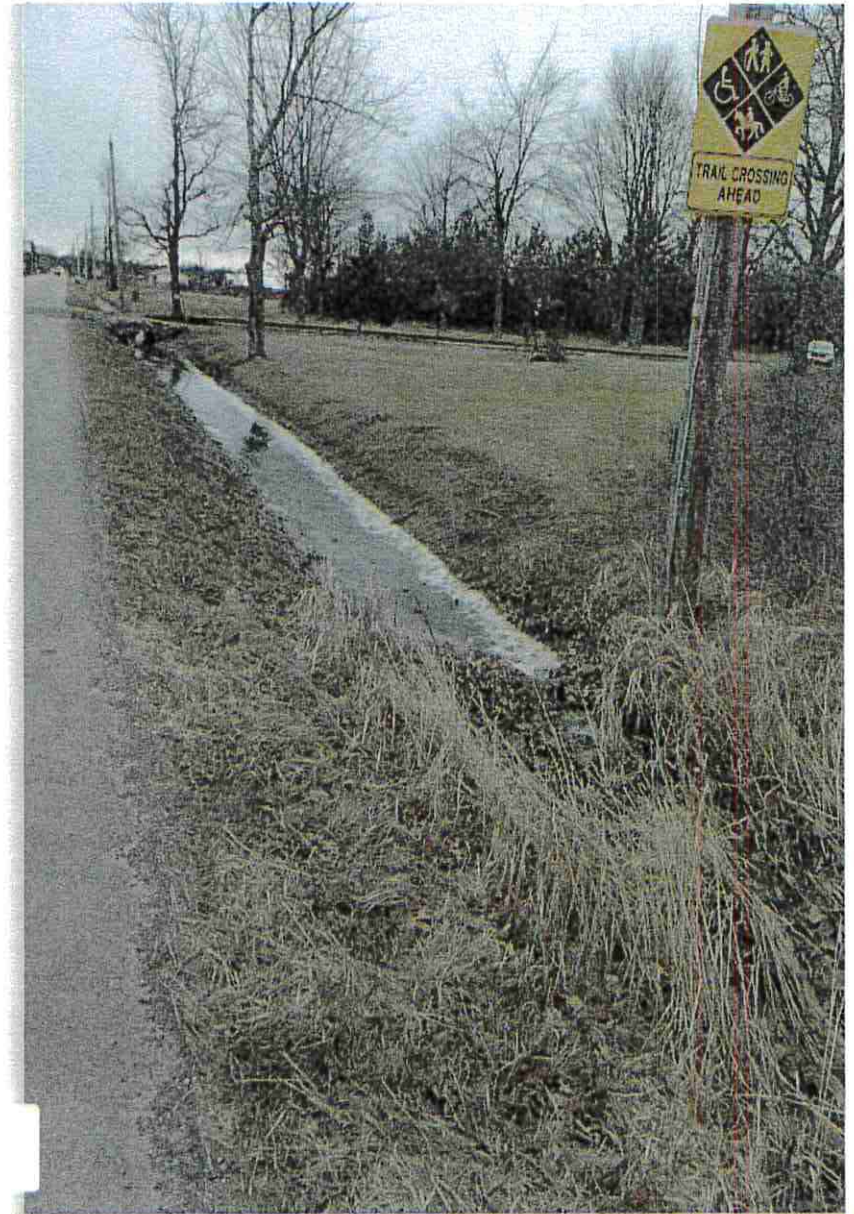
#1 - Pinecrest.JPG

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#2 - Pinecrest.JPG

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#3 - Into Scout Camp facing east.JPG

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#4 - Scout Camp.JPG

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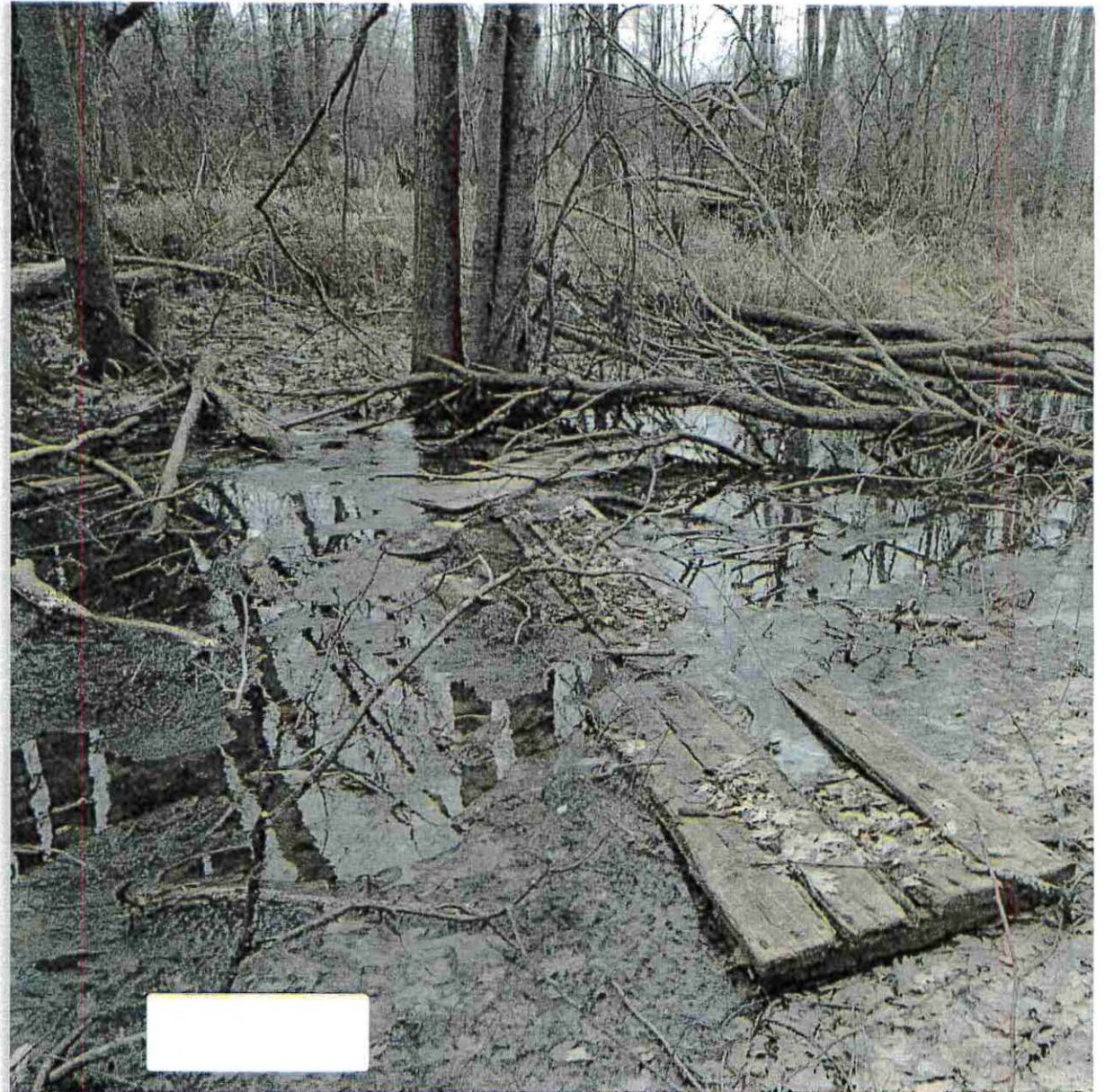
#5 - Scout Camp.JPG

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#6 - Scout Camp.JPG

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#7 - Scout Camp.JPG

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#8 - Scout Camp.JPG

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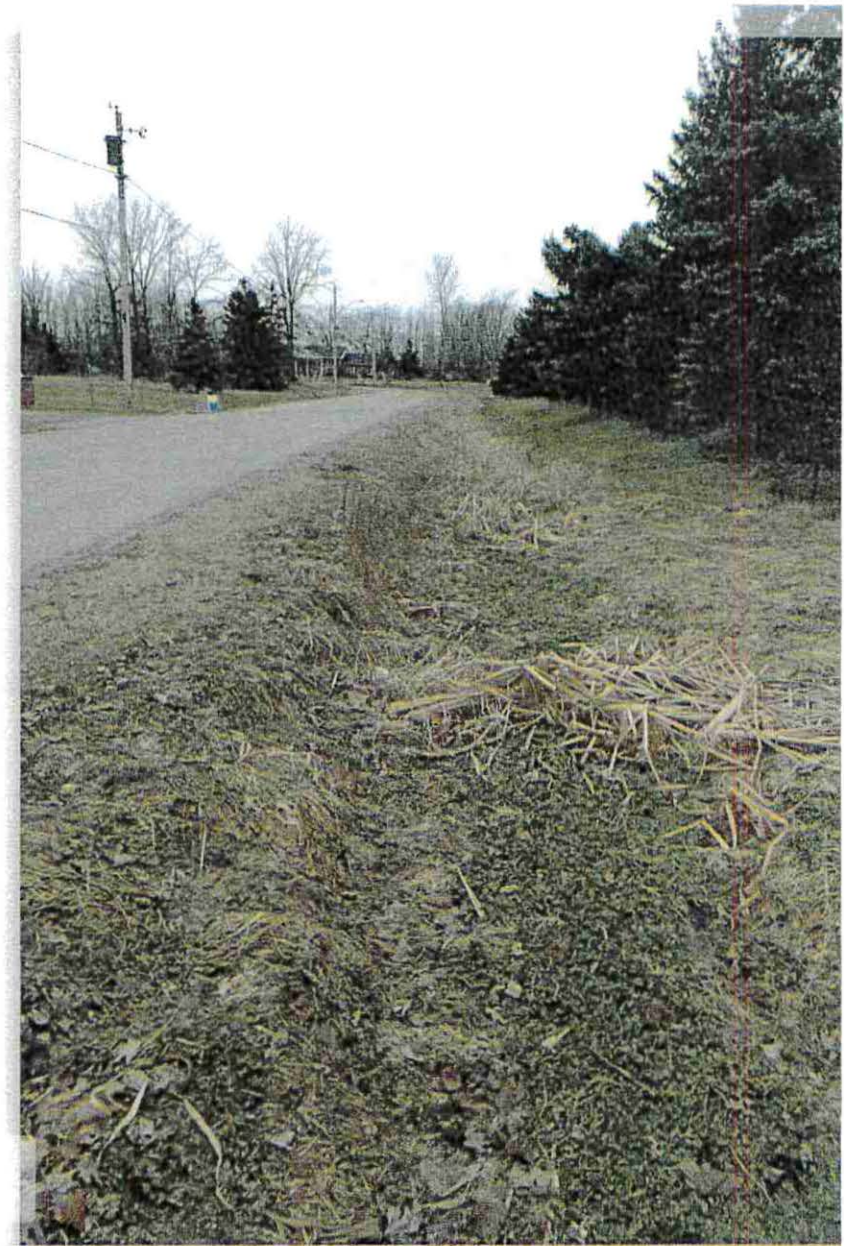
#9 - Richard Avenue.JPG

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#10 - Richard.JPG

Sign in



#11 - Richard facing west.JPG

[Sign in](#)



#12 - corner Richard and Tammy facing east.JPG

[Sign in](#)





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Angie Desmarais – Motion - Affordable Housing Strategy 1/20/2019

Whereas access to adequate housing is a fundamental human right (paragraph 25(1) of the United Nations Universal Declaration of Human Rights, and Ontario Human Rights Commission - Human Rights Perspective on Housing Supply, January 2019); and

Whereas Port Colborne is fast approaching a housing crisis with alarming occupancy rates, soaring housing costs and stagnating incomes (Ontario Association of Food Banks, Quarterly Report, September 2018, Port Colborne Primary Rental Market Statistics, 2016, Key Housing Indicators for Port Colborne, July 5, 2017 and Where Will We Live – Ontario’s Rental Housing Crisis, May 2018); and

Whereas the Senior Citizens Advisory Committee and the Social Determinants of Health Committee, both being committees of this council have each placed housing as a priority to their mandate; and

Whereas designing and implementing a poverty reduction strategy has been included in the Port Colborne Strategic Plan (CAO Report No.:2015-47); and

Whereas adequate and affordable housing has been directly linked to poverty reduction (Wellesley Institute, Poverty Is a Health Issue: It’s time to address housing and homelessness, Oct 10, 2013)

Therefore be it resolved that The Corporation of the City of Port Colborne does acknowledge that housing is a human right and that municipal government has a role to play in the gradual realization of this right for all residents of Port Colborne; and

That staff be directed to engage with stakeholders to create a coordinated municipal affordable housing strategy for the city of Port Colborne with the goal to establish a definition for the term “affordable housing” and to create affordable housing options across the housing continuum, with a report due back to this council to include a high-level view of timelines and targets on or before May 27, 2019.

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The proposed Housing Strategy for Port Colborne could/should:

- Key stakeholders could include: Developers, planners, community services, financiers, provincial/federal government officials, CMHC, social/health services, economic development,
- Explore: Municipal responsibilities/areas of influence, bylaws, incentives, secondary packages, communication, education, etc.
- Must have a vision, goals and targets – How do we construct our community to be healthy, vibrant and livable for all residents?
- Must be evidence-based – identify the problems, who is impacted, what solutions are needed – in the Port Colborne context
- Consider/Utilize ideas from the City of St Catharines housing report but recognize the unique context of Port Colborne
- Link to Regional Plans
 - 10 Year Housing and Homelessness Action Plan (HHAP)
 - New Regional Official Plan (2021-2041) – provincial growth plan for the Greater Golden Horseshoe
 - New Regional Affordable Housing Strategy

CITY OF PORT COLBORNE POLICIES WITH RESPECT TO AFFORDABLE HOUSING

OFFICIAL PLAN

2.4.2.2 Affordable Housing

- a) The City will work with other levels of government, the private sector, community and non-profit groups to ensure that sufficient *affordable* rental and ownership housing is provided.
- b) Studies of the need for *affordable* ownership and rental housing may be conducted from time-to-time.
- c) A variety of planning tools will be used to assist in the *development of affordable* housing such as supporting an "Affordable Housing as a Community Facility" by-law (to exercise financial assistance powers under Section 110 of the *Municipal Act* relating to municipal capital facilities), fast-tracking *affordable* housing development, reducing development charges and where required, identifying a specific share of new housing which must be *affordable*.
- d) The City will only consider the demolition or the conversion of rental accommodation to condominium ownership where the proposal will not adversely affect the supply of *affordable* rental housing. A vacancy rate of 3% is desirable. The City will not permit the demolition or conversion of rental housing to condominium ownership in situations where the vacancy rate is less than 3 percent and the ownership housing to be created is not considered to be *affordable*.
- e) Opportunities shall be made available for the provision of *affordable* housing within new intensified or infill *developments*

ZONING BY-LAW

(iv) ACCESSORY APARTMENTS (By-law 4915/140/06)

Notwithstanding any other provisions this bylaw, any single detached dwelling permitted in any zone may be internally converted or by way of an addition to the existing dwelling to provide an accessory apartment, subject to the zone requirements and the following regulations:

- (a) Only one accessory apartment is permitted per lot.
- (b) Where the parcel proposed for an accessory apartment is not serviced by a municipal sewer system and/or municipal water system, the minimum lot size of the parcel shall be 0.4 hectares.
- (c) The maximum floor area for the accessory apartment shall not exceed 40% of the gross floor area of the dwelling.

- (d) One additional on site parking space shall be provided for the accessory apartment, and parking spaces may be stacked.
- (e) The external appearance and character of the single detached dwelling, landscaped area, and outdoor amenity areas is to be preserved.
- (f) Additions shall be architecturally similar to the existing dwelling and use similar exterior building materials wherever possible, and,
 - (i) The entrance to the accessory apartment shall be located only in the interior side or rear yard;
 - (ii) No exterior stairway to the second floor of the dwelling or accessory apartment shall be permitted in the front yard or exterior side yard.
- (g) The accessory apartment shall be clearly attached to and form part of the main dwelling unit. For the purposes of this subsection, "attached" shall mean that a roof and wall of the accessory apartment is shared in common with the main dwelling unit.
- (h) Any accessory apartment located in the basement of a single detached dwelling is subject to the following additional requirements:
 - i. Window openings to each bedroom and living room and the room heights of the accessory apartment must meet the minimum requirements of the Ontario Building Code; or,
 - ii. A secondary means of ingress/egress must be provided to the accessory apartment unit.

DRAFT ZONING BY-LAW

2.9 Accessory Uses to a Dwelling

2.9.1 Accessory Dwelling Unit

- a) Notwithstanding any other provisions of this By-law, any single detached dwelling permitted in any zone may be internally converted or by way of an addition to the existing dwelling or creation of a standalone structure or building, provide an accessory dwelling unit, subject to the specific zone requirements and the following:
 - i) Only one accessory dwelling unit is permitted per lot.
 - ii) Where the parcel proposed for an accessory dwelling unit is not serviced by municipal sewer and/or municipal water services, the

minimum lot size shall be 0.4 hectares and all relevant requirements of the Region of Niagara are complied with.

- iii) The maximum floor area for the accessory dwelling unit shall not exceed 40% of the gross floor area of the dwelling.
- iv) One additional on-site parking space shall be provided for the accessory dwelling unit, and parking spaces may be stacked.
- v) All relevant requirements of the Ontario Building Code and Ontario Fire Code are complied with.

2.9.1.1 *Dwelling Unit, Interior Accessory*

- a) Notwithstanding any other provisions of this By-law, one interior accessory dwelling unit is permitted in any detached dwelling, semi-detached dwelling unit or townhouse dwelling unit provided it complies with Section 2.9.1 (i) to (v) and:
 - i) The interior accessory dwelling unit is entirely within the exterior walls of the principal dwelling unit.
 - ii) The external appearance and character of the single detached dwelling, landscaped area and outdoor amenity areas are to be preserved.
 - iii) Additions shall be architecturally similar to the existing dwelling unit and use similar exterior building materials.
 - iv) The entrance to the accessory dwelling unit shall be located only in the interior side or rear yard and no exterior stairway to the second floor of the dwelling or accessory dwelling unit shall be permitted in the front or corner side yard.

2.9.1.2 *Dwelling Unit, Detached Accessory*

- a) Notwithstanding any other provisions of this By-law, one detached accessory dwelling unit is permitted in any residential zone provided it complies with Section 2.9.1 (i) to (v) and shall not:
 - i) Be located in a required front yard or corner side yard.
 - ii) Be located within any sight triangle.
 - iii) Exceed a building height of 4.6 metres.
 - iv) Be located less than 1 metres from an interior side or rear lot line.
 - v) Be located closer than 1.5 metres to a main building.

2.9 Accessory Uses to a Dwelling

2.9.1 Accessory Dwelling Unit

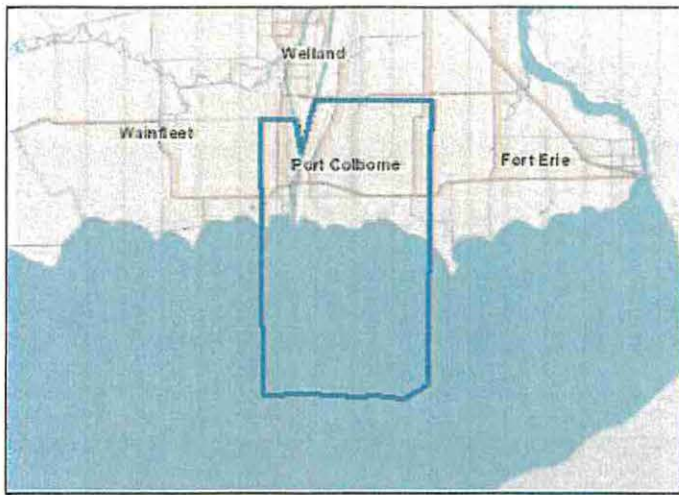
- a) Notwithstanding any other provisions of this By-law, any single detached dwelling permitted in any zone may be internally converted or by way of an addition to the existing dwelling or creation of a standalone structure or building, provide an accessory dwelling unit, subject to the specific zone requirements and the following:
 - i) Only one accessory dwelling unit is permitted per lot.
 - ii) Where the parcel proposed for an accessory dwelling unit is not serviced by municipal sewer and/or municipal water services, the minimum lot size shall be 0.4 hectares and all relevant requirements of the Region of Niagara are complied with.
 - iii) The maximum floor area for the accessory dwelling unit shall not exceed 40% of the gross floor area of the dwelling.
 - iv) One additional on-site parking space shall be provided for the accessory dwelling unit, and parking spaces may be stacked.
 - v) All relevant requirements of the Ontario Building Code and Ontario Fire Code are complied with.

2.9.1.1 Dwelling Unit, Interior Accessory

- a) Notwithstanding any other provisions of this By-law, one interior accessory dwelling unit is permitted in any detached dwelling, semi-detached dwelling unit or townhouse dwelling unit provided it complies with Section 2.9.1 (i) to (v) and:
 - i) The interior accessory dwelling unit is entirely within the exterior walls of the principal dwelling unit.
 - ii) The external appearance and character of the single detached dwelling, landscaped area and outdoor amenity areas are to be preserved.
 - iii) Additions shall be architecturally similar to the existing dwelling unit and use similar exterior building materials.
 - iv) The entrance to the accessory dwelling unit shall be located only in the interior side or rear yard and no exterior stairway to the second floor of the dwelling or accessory dwelling unit shall be permitted in the front or corner side yard.

2.9.1.2 *Dwelling Unit, Detached Accessory*

- a) Notwithstanding any other provisions of this By-law, one detached accessory dwelling unit is permitted in any residential zone provided it complies with Section 2.9.1 (i) to (v) and shall not:
 - i) Be located in a required front yard or corner side yard.
 - ii) Be located within any sight triangle.
 - iii) Exceed a building height of 4.6 metres.
 - iv) Be located less than 1 metres from an interior side or rear lot line.
 - v) Be located closer than 1.5 metres to a main building.



Number of Private Apartment Units				
	Oct-14	Apr-15	Oct-15	Oct-16
Bachelor	8	8	8	9
1 Bedroom	173	173	172	169
2 Bedroom	390	390	395	393
3 Bedroom +	60	60	58	59
Total	631	631	633	630

Private Apartment Vacancy Rates (%)				
	Oct-14	Apr-15	Oct-15	Oct-16
Bachelor	**	**	**	**
1 Bedroom	4.4 c	**	0.5 b	**
2 Bedroom	1.6 c	3.0 c	1.8 c	2.7 c
3 Bedroom +	**	**	**	0.0 d
Total	2.5 c	2.6 c	1.6 c	2.5 c

Private Apartment Average Rents (\$)				
	Oct-14	Apr-15	Oct-15	Oct-16
Bachelor	**	**	**	**
1 Bedroom	694 a	666 b	704 b	728 b
2 Bedroom	832 b	877 c	857 b	899 b
3 Bedroom +	976 b	**	974 c	**
Total	802 a	820 c	818 a	858 b

Private Apartment Availability Rates (%)				
	Oct-14	Apr-15	Oct-15	Oct-16
Bachelor	**	**	**	**
1 Bedroom	7.5 c	**	1.3 d	**
2 Bedroom	2.3 c	4.0 d	3.1 d	2.7 c
3 Bedroom +	**	**	**	0.0 d
Total	4.4 c	3.5 d	2.6 b	2.5 c

Private Apartment Estimate of Percentage Change (%) of Average Rent				
	Oct-14	Apr-15	Oct-15	Oct-16
Bachelor	**	**	**	**
1 Bedroom	++	++	2.6 c	**
2 Bedroom	1.4 d	**	2.3 c	**
3 Bedroom +	++	++	++	++
Total	**	1.4 d	2.2 b	1.5 d

Source: CMHC Rental Market Survey

Notes:
The following letter codes are used to indicate the reliability of the estimates:
a - Excellent, b- Very good, c - Good, d - Fair (Use with Caution)

** Data suppressed to protect confidentiality or data not statistically reliable.

- No units exist in the universe for this category

n/a: Not applicable

++ - Change in rent is not statistically significant. This means that the change in rent is not statistically different than zero (0).

The Percentage Change of Average Rent is a measure of the market movement, and is based on those structures that were common to the survey sample for both years.

The information contained in this document is a printable version of information originally contained on CMHC website application <https://www03.cmhc-schl.gc.ca/hmiportal/>. CMHC makes considerable effort to ensure that the information and analysis on this application is reliable, but cannot guarantee that it is accurate or complete. The content of the application is general in nature and is not intended as a substitute for professional advice when making significant financial decisions. You understand and agree that by using this document and the information it contains, you will be bound by the terms of use of the CMHC website (http://cmhc.ca/en/imno/imno_003.cfm), and in particular, you agree that you may not hold CMHC liable for any consequences that arise if you choose to rely on this information and analysis to make a financial decision.

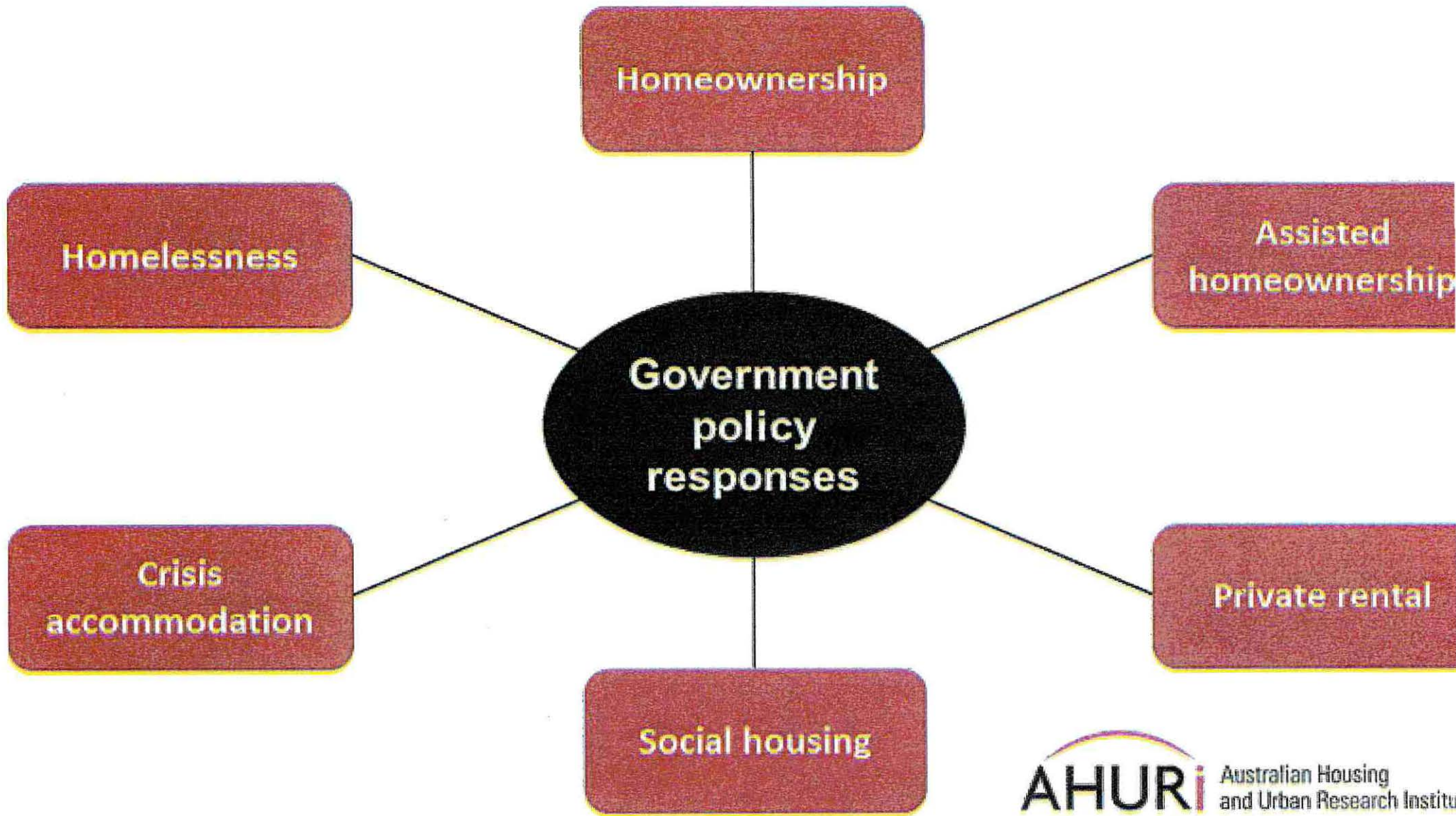
Key Housing Indicators in Port Colborne	Frequency of Data Collection	#	Source
# of residents experiencing homelessness	quarterly?		Port Cares + Niagara Region
# of unique residents who used shelter	annually		Port Cares + Niagara Region
# of times each person entered shelter per year	annually		Port Cares + Niagara Region
Average length of stay per household per shelter admission	annually		Port Cares + Niagara Region
# of days in shelter per person per year	annually		Port Cares + Niagara Region
# of residents experiencing homelessness who didn't use shelter	annually		Port Cares, Bridges CHC
<i>Top barriers that led to not using shelter</i>	annually	qualitative responses	Port Cares, Bridges CHC
<i>What did they do if they did not go to a shelter?</i>	annually	qualitative responses	Port Cares, Bridges CHC
# of residents who accessed housing/homelessness outreach interventions .	annually		Niagara Region/Salvation Army/Bridges CHC (to start)
# of outreach interventions per person	annually		Niagara Region/Salvation Army/Bridges CHC (to start)
# of residents experiencing homelessness who became housed	annually		Niagara Region
# of tenancies stabilized	annually		Port Cares
# of evictions prevented	annually		Port Cares
# of households using the utility bank	annually		Port Cares
# of users of food banks	monthly/quarterly		Port Cares
OW caseloads	annually		Niagara Region (Marc Todd)
ODSP caseloads	annually		Niagara Region (Marc Todd)
Total # of NRH affordable housing units in Port Colborne	annually	88 NRH + 139 NP/co-op	Niagara Regional Housing
<i># of NRH affordable bachelor housing units in Port Colborne</i>	annually	0	Niagara Regional Housing
<i># of NRH affordable 1 bdrm housing units in Port Colborne</i>	annually	82 NRH + 33 NP/co-op	Niagara Regional Housing
<i># of NRH affordable 2 bdrm housing units in Port Colborne</i>	annually	4 NRH + 49 NP/co-op	Niagara Regional Housing
<i># of NRH affordable 3 bdrm housing units in Port Colborne</i>	annually	2 NRH + 56 NP/co-op	Niagara Regional Housing
<i># of NRH affordable 4 bdrm housing units in Port Colborne</i>	annually	0 NRH + 1 NP/co-op	Niagara Regional Housing
Total # of households on NRH Affordable Housing wait list	annually	560	Niagara Regional Housing
<i># of single person households on NRH Affordable Housing wait list</i>	annually	243	Niagara Regional Housing
<i># of family households on NRH Affordable Housing wait list</i>	annually	112	Niagara Regional Housing
<i># of senior households on NRH Affordable Housing wait list</i>	annually	205	Niagara Regional Housing
Total # of households housed from NRH Affordable Housing wait list	annually	23	Niagara Regional Housing
<i># of single person households housed from NRH Affordable Housing wait list</i>	annually	N/A	Niagara Regional Housing
<i># of family households on NRH Affordable Housing wait list</i>	annually	N/A	Niagara Regional Housing
<i># of senior households on NRH Affordable Housing wait list</i>	annually	N/A	Niagara Regional Housing
Total average wait time to access a NRH affordable housing unit in Port Colborne	annually	5.6 yrs	Niagara Regional Housing
<i>Average wait time to access a NRH affordable bachelor housing unit in Port Colborne</i>	annually	N/A	Niagara Regional Housing
<i>Average wait time to access a NRH affordable 1 bdrm housing unit in Port Colborne</i>	annually	10.25 yrs	Niagara Regional Housing

Average wait time to access a NRH affordable 2 bdrm housing unit in Port Colborne	annually	3 yrs	Niagara Regional Housing
Average wait time to access a NRH affordable 3 bdrm housing unit in Port Colborne	annually	2.5 yrs	Niagara Regional Housing
# of rent supplements provided to households	annually	38 (current)	Niagara Regional Housing
# of individuals housed through Housing First	annually		Port Cares
Average length of time individuals received Housing First	annually		Port Cares
# of new NRH affordable housing units developed (by type)	annually	0	Niagara Regional Housing
Total # of primary (Private Row (Townhouse) and Apartment) private market rental units	annually	638	CMHC
<i># of bachelor primary private market rental units</i>	annually	9	CMHC
<i># of 1 bdrm primary private market rental units</i>	annually	169	CMHC
<i># of 2 bdrm primary private market rental units</i>	annually	397	CMHC
<i># of 3 bdrm primary private market rental units</i>	annually	63	CMHC
# of secondary private market rental units (i.e. granny suites)	annually		unsure - City of Port Colborne (permits?)
# of new affordable private market rental units (Non IAH)	annually	5	CMHC
# of new affordable units built w/ assistance from NRH programs (ie secondary suites)	annually	1 secondary suite	Niagara Regional Housing
Private primary market (Private Row (Townhouse) and Apartment Vacancy Rates - All units	annually	2.5%	CMHC
Private primary market (Private Row (Townhouse) and Apartment Vacancy Rates - by Bedroom	annually	** (suppressed)	CMHC
Private primary market (Private Row (Townhouse) and Apartment Vacancy Rates - by Bedroom	annually	** (suppressed)	CMHC
Private primary market (Private Row (Townhouse) and Apartment Vacancy Rates - by Bedroom	annually	2.7%	CMHC
Private primary market (Private Row (Townhouse) and Apartment Vacancy Rates - by Bedroom	annually	0%	CMHC
Private primary market rental vacancy rates - lowest quartile -all types		** (suppressed)	CMHC
Private primary market rental vacancy rates - 2nd lowest quartile - all types		** (suppressed)	CMHC
<i>Private primary market rental vacancy rates - lowest quartile - bachelor</i>	annually	** (suppressed)	CMHC
<i>Private primary market rental vacancy rates - 2nd lowest quartile - bachelor</i>		--	CMHC
<i>Private primary market rental vacancy rates - lowest quartile - 1 bdrm</i>	annually	0%	CMHC
<i>Private primary market rental vacancy rates - 2nd lowest quartile - 1 bdrm</i>		0%	CMHC
<i>Private primary market rental vacancy rates - lowest quartile - 2 bdrm</i>	annually	** (suppressed)	CMHC
<i>Private primary market rental vacancy rates - 2nd lowest quartile - 2 bdrm</i>		0%	CMHC
<i>Private primary market rental vacancy rates - lowest quartile - 3 bdrm</i>	annually	** (suppressed)	CMHC
<i>Private primary market rental vacancy rates - 2nd lowest quartile - 3 bdrm</i>		** (suppressed)	CMHC
Average private primary market rental rates - lowest quartile - bachelor	annually	** (suppressed)	CMHC
Average private primary market rental rates - second lowest quartile - bachelor	annually	** (suppressed)	CMHC
Average private primary market rental rates - second highest quartile - bachelor	annually	** (suppressed)	CMHC
Average private primary market rental rates - highest quartile - bachelor	annually	** (suppressed)	CMHC
Average private primary market rental rates - lowest quartile - 1 bdrm	annually	<\$575	CMHC

Average private primary market rental rates - second lowest quartile - 1 bdrm	annually	\$575-\$800	CMHC
Average private primary market rental rates - second highest quartile - 1 bdrm	annually	\$801-878	CMHC
Average private primary market rental rates - highest quartile - 1 bdrm	annually	>\$878	CMHC
Average private primary market rental rates - lowest quartile - 2 bdrm	annually	<\$690	CMHC
Average private primary market rental rates - second lowest quartile - 2 bdrm	annually	\$690-\$920	CMHC
Average private primary market rental rates - second highest quartile - 2 bdrm	annually	\$921-\$973	CMHC
Average private primary market rental rates - highest quartile - 2 bdrm	annually	>\$973	CMHC
Average private primary market rental rates - lowest quartile - 3 bdrm	annually	** (suppressed)	CMHC
Average private primary market rental rates - second lowest quartile - 3 bdrm	annually	** (suppressed)	CMHC
Average private primary market rental rates- second highest quartile - 3 bdrm	annually	** (suppressed)	CMHC
Average private primary market rental rates - highest quartile - 3 bdrm	annually	** (suppressed)	CMHC
Changes in average private primary market rent - all (Oct to Oct over previous year)	annually	4.9%	CMHC
Changes in average private primary market rent - bachelor	annually	** (suppressed)	CMHC
Changes in average private primary market rent - 1 bdrm	annually	3.4%	CMHC
Changes in average private primary market rent - 2 bdrm	annually	4.9%	CMHC
Changes in average private primary market rent - 3 bdrm	annually	** (suppressed)	CMHC
Changes in housing ownership prices (resale and new)	annually	20%	Niagara Association of Realtor's
# of motel/hotel units available for rent	annually		Bridges CHC
Occupancy rate of motel/hotel units available for rent	annually		Bridges CHC
# of individuals living in motel/hotel units	annually		Bridges CHC
<i>Living in a motel/hotel room because... Would you prefer to be living somewhere else? If so, what?</i>	annually	qualitative responses	Bridges CHC/Port Cares
# of boarding room units	annually		Bridges CHC
Occupancy rate of boarding rooms	annually		Bridges CHC
# of individuals living in boarding rooms	annually		Bridges CHC
<i>Living in a boarding room because... Would you prefer to be living somewhere else? If so, what?</i>	annually	qualitative responses	Bridges CHC/Port Cares
# of group homes/units per home	annually		Bridges CHC
Occupancy rate of boarding rooms	annually		Bridges CHC
# of individual living in group homes	annually		Bridges CHC
<i>Living in a group home because... Would you prefer to be living somewhere else? If so, what?</i>	annually	qualitative responses	Bridges CHC/Port Cares
Other Indicators?			
# of households that received NEEF	quarterly/semi-annually	95	Niagara Region
# of households accessing Supported Transitional Housing or Housing First	quarterly/semi-annually	30	Niagara Region
# of households accessing prevention services (including trusteeship)	quarterly/semi-annually	216	Niagara Region
# of households issued Housing Stability Plan benefits	quarterly/semi-annually	172	Niagara Region

# of households at risk of homelessness that received supports and services that contributed to housing loss prevention, retention, and re-housing	quarterly/semi-annually		Niagara Region
# of households at risk of homelessness that are stabilized	quarterly/semi-annually		Niagara Region
Population	Lagging (every 4 years)	18306	Census Data 2016
Total private dwellings	Lagging (every 4 years)	9825	Census Data 2016
Private dwellings occupied by usual residents	Lagging (every 4 years)	8018	Census Data 2016
Population aged 0-14	Lagging (every 4 years)	2455	Census Data 2016
Population aged 15-64	Lagging (every 4 years)	11345	Census Data 2016
Population aged 65+	Lagging (every 4 years)	4510	Census Data 2016
Average age	Lagging (every 4 years)	46.5	Census Data 2016
Occupied Private Dwellings by Structural Type	Lagging (every 4 years)	8015	Census Data 2016
Single-detached house	Lagging (every 4 years)	5850	Census Data 2016
Apartment in a building that has five or more storeys	Lagging (every 4 years)	185	Census Data 2016
Movable	Lagging (every 4 years)	55	Census Data 2016
Other attached dwelling (as below)	Lagging (every 4 years)	1925	Census Data 2016
Semi-detached house	Lagging (every 4 years)	155	Census Data 2016
Rowhouse	Lagging (every 4 years)	160	Census Data 2016
Apartment or flat in a duplex	Lagging (every 4 years)	505	Census Data 2016
Apartment in a building that has fewer than five storeys	Lagging (every 4 years)	1020	Census Data 2016
Other single-attached house	Lagging (every 4 years)	85	Census Data 2016
Private Households by Household Size	Lagging (every 4 years)	8020	Census Data 2016
1 person	Lagging (every 4 years)	2490	Census Data 2016
2 persons	Lagging (every 4 years)	3100	Census Data 2016
3 persons	Lagging (every 4 years)	1175	Census Data 2016
4 persons	Lagging (every 4 years)	820	Census Data 2016
5 or more persons	Lagging (every 4 years)	430	Census Data 2016
Average household size	Lagging (every 4 years)	2.2	Census Data 2016
Families, households and marital status	Lagging (every 4 years)	TBD	Census Data 2016
Language	Lagging (every 4 years)	TBD	Census Data 2016
Income	Lagging (every 4 years)	TBD	Census Data 2016
Immigration and ethnocultural diversity	Lagging (every 4 years)	TBD	Census Data 2016
Housing	Lagging (every 4 years)	TBD	Census Data 2016
Aboriginal peoples	Lagging (every 4 years)	TBD	Census Data 2016
Education	Lagging (every 4 years)	TBD	Census Data 2016

Labour	Lagging (every 4 years)	TBD	Census Data 2016
Journey to work	Lagging (every 4 years)	TBD	Census Data 2016
Language of work	Lagging (every 4 years)	TBD	Census Data 2016
Mobility and migration	Lagging (every 4 years)	TBD	Census Data 2016





WHERE WILL WE LIVE?

ONTARIO'S AFFORDABLE RENTAL HOUSING CRISIS



48% of Ontario renters make less than **\$40,000** a year.



46% of all renters in Ontario live in the **Toronto** metropolitan region.



Over **50%** of Ontario households aged **25** to **34** rent their home.

Nearly **half** of Ontario renters pay **unaffordable** rental housing costs.



In **Toronto** a household must earn **\$24 an hour** for their rents to be **affordable**.



KEY ISSUES

The percentage of renters is increasing in Ontario and across Canada. Renters in Ontario now constitute over 30% of the total population. In the City of Toronto, almost half of all households rent their home. This increase has been largely driven by a growing proportion of renters within the younger generations. **Over half of Ontario households between the ages 25 to 34 are renters.** This trend may be due to the increasing cost of homeownership, the lack of well-paid and secure jobs and the increasing numbers of single-person households. Low- and moderate-income households are also much more likely to rent their homes. **71% of households with income below \$20,000 are renters, compared to only 10% of households with income over \$100,000.**

A significant percentage of renters across Ontario and in Toronto are facing unaffordable housing costs that limit their ability to spend money on other life necessities. Too many people are choosing to forgo a healthy diet or the medication they need just to keep a roof over their head. Many facing rising rents are being displaced from their communities and many more are commuting longer hours between home and work. **The road to homelessness for renters living on lower incomes is a stark reality if they lose their job or face a health challenge.**

Renters are facing a combination of rising housing costs, stagnating incomes, and limited access to subsidized housing. Renters tend to have much lower incomes compared to homeowners. As rental housing costs continue to rise, all levels of government must focus on alleviating the burden of unaffordable housing, especially for low-income renters. Solving the affordable rental housing crisis in our province requires long-term commitment to targeted housing policies and investments that focus on the needs of low- to moderate-income renter households.

Rents have risen across Ontario over the past 20 years, particularly since 2011. We know for a fact that our affordable rental housing crisis will not be solved by building more condominiums or luxury purpose-built rentals. We need a combination of **targeted policies and investments including funding for social housing, government support for non-profit housing, and strong protections in place for tenants.** Preserving the status-quo is no longer an option for the hundreds of thousands of renters struggling every day to keep a roof over their head.

* According to the Canada Mortgage and Housing Corporation (CMHC), housing is considered affordable if shelter costs account for less than 30% of before-tax household income.

* This report will refer to renter households as renters for short.

A healthy rental market requires a minimum vacancy rate of 3% to 5%.

Vacancy rates in 2017

	1 Bedroom (%)	2 Bedroom (%)
Barrie	1.8	3.3
Greater Sudbury	4.5	4.1
Guelph	1.3	1.0
Hamilton	2.2	1.7
Kingston	0.5	0.9
Kitchener - Cambridge - Waterloo	1.6	1.9
London	1.7	1.8
Ontario	1.6	1.6
Oshawa	3.0	1.9
Ottawa	1.4	2.1
Peterborough	1.5	1.1
Sarnia	2.4	2.7
Sault Ste. Marie	3.9	3.9
St. Catharines - Niagara	1.4	1.6
Thunder Bay	4.2	2.7
Toronto	1.1	0.9
Windsor	2.4	2.0

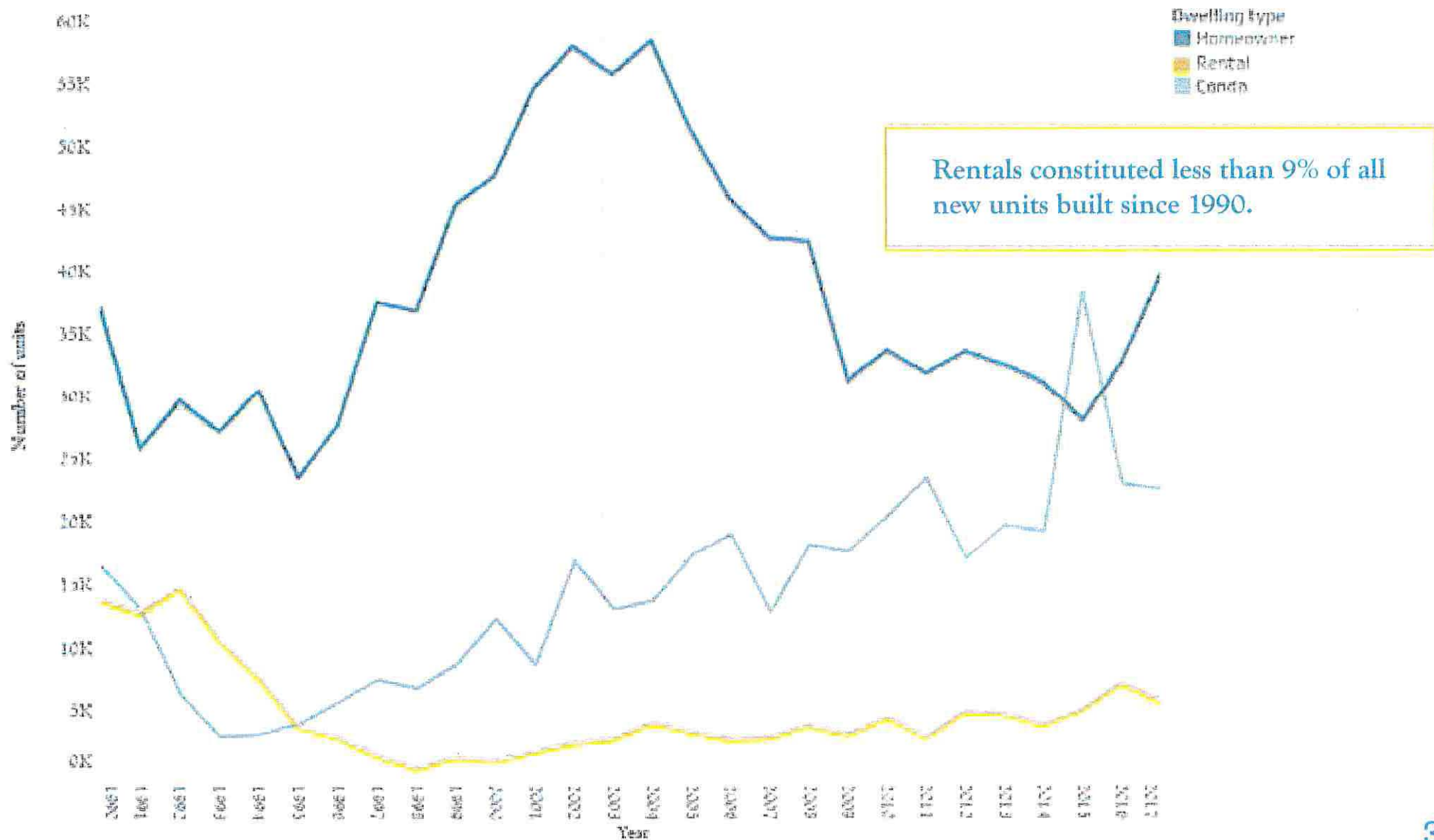
A low vacancy rate means:

- * Renters looking for affordable rental homes have limited choices.
- * Rents continue to rise due to limited supply.

Based on CMHC Housing Market Information Portal.

Since 1990, Ontario has built: 1,075,779 units for homeownership;
410,562 condo units; 143,091 purpose-built rental units.

Dwelling completions Ontario

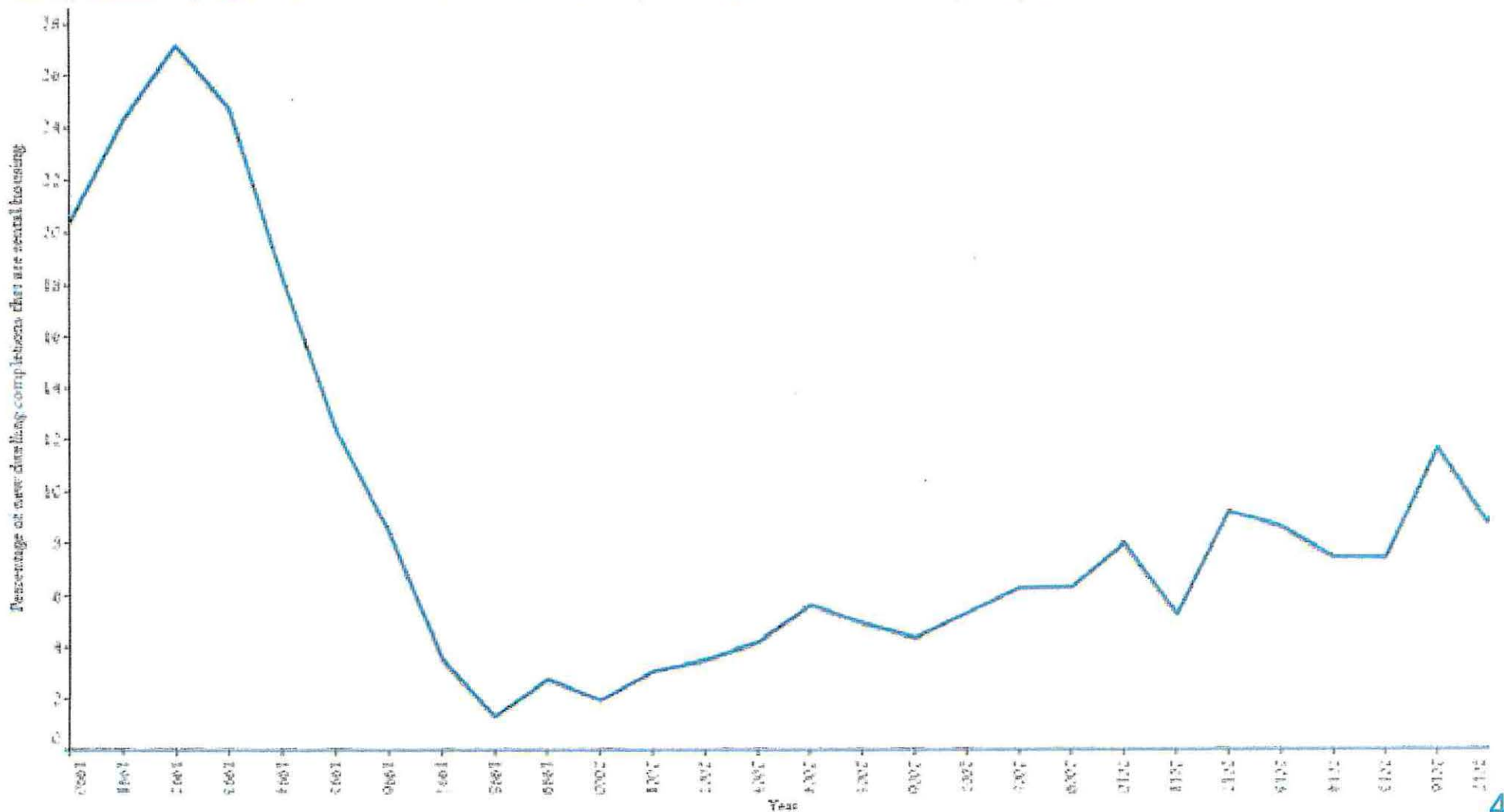


Based on CMHC Housing Market Information Portal.

In Toronto, the average rent for a 1-bedroom **condo** in 2017 was **\$1,803** while the average rent for a 1-bedroom **purpose-built rental** was **\$1,194**.

Purpose-built rentals are a key source of affordable rental housing. Condos are not a replacement for purpose-built rentals.

Completions of purpose-built rental units in Ontario as percentage of all new housing completions

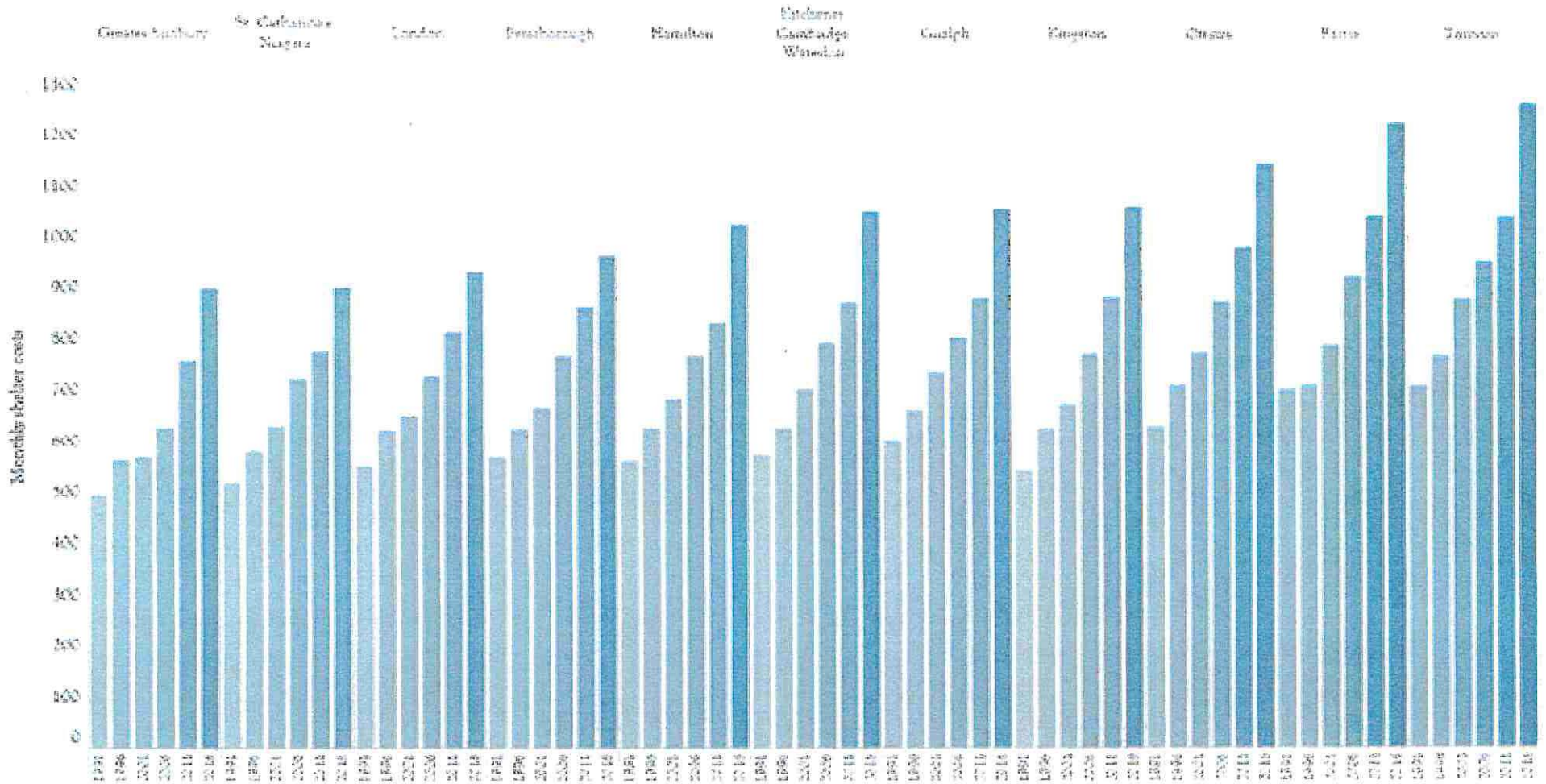


Based on CMHC Housing Market Information Portal.

The **majority** of Ontario **urban centres** have experienced larger **increases** in **housing costs** in the period between **2011 and 2016** than in the previous five years

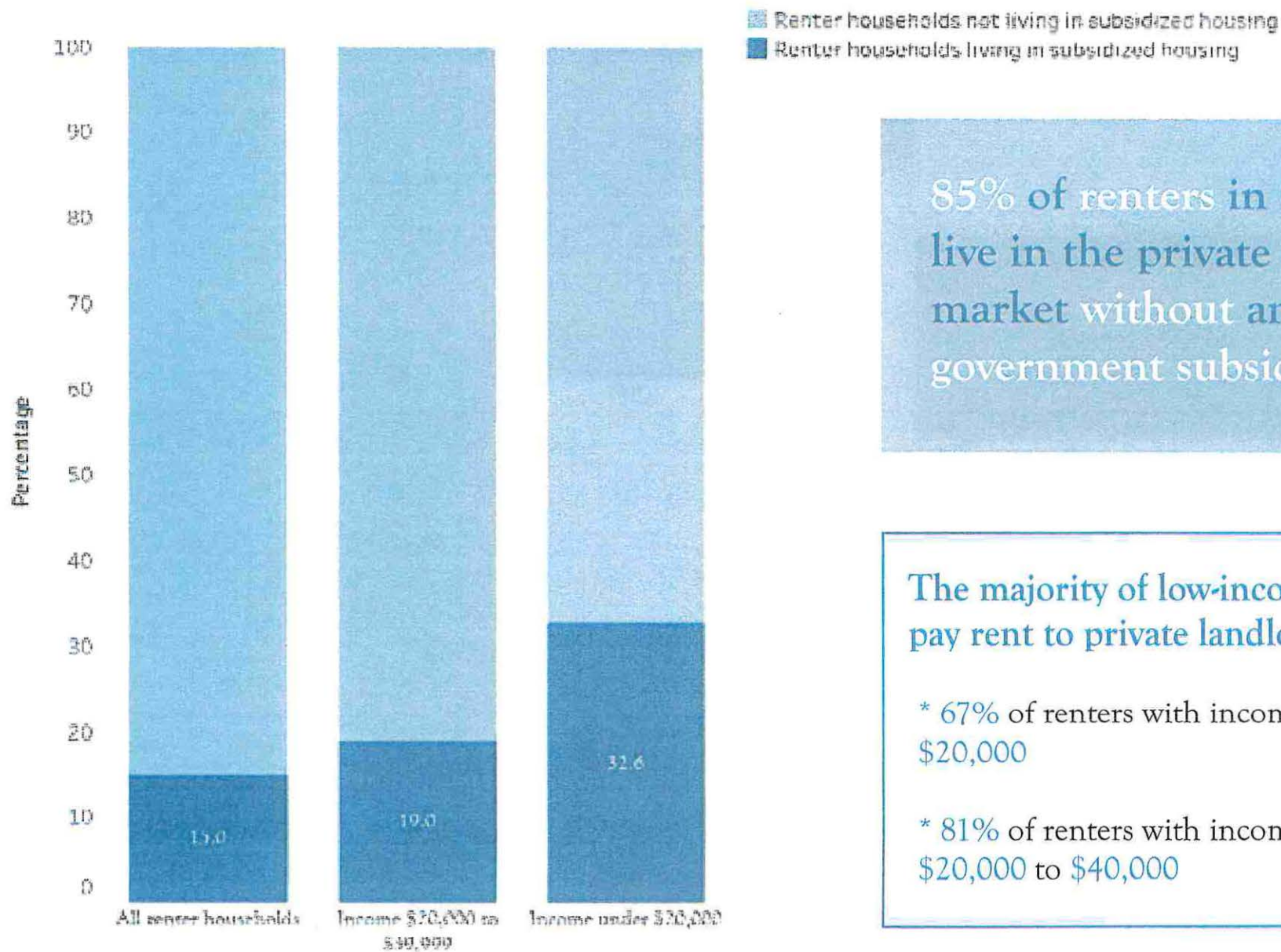
Average shelter costs have risen consistently across major urban centres in Ontario between 1991 and 2016.

Average shelter costs for renter households



Based on 2016 Census data.

Renter households in subsidized housing (%)



85% of renters in Ontario live in the private rental market without any government subsidies.

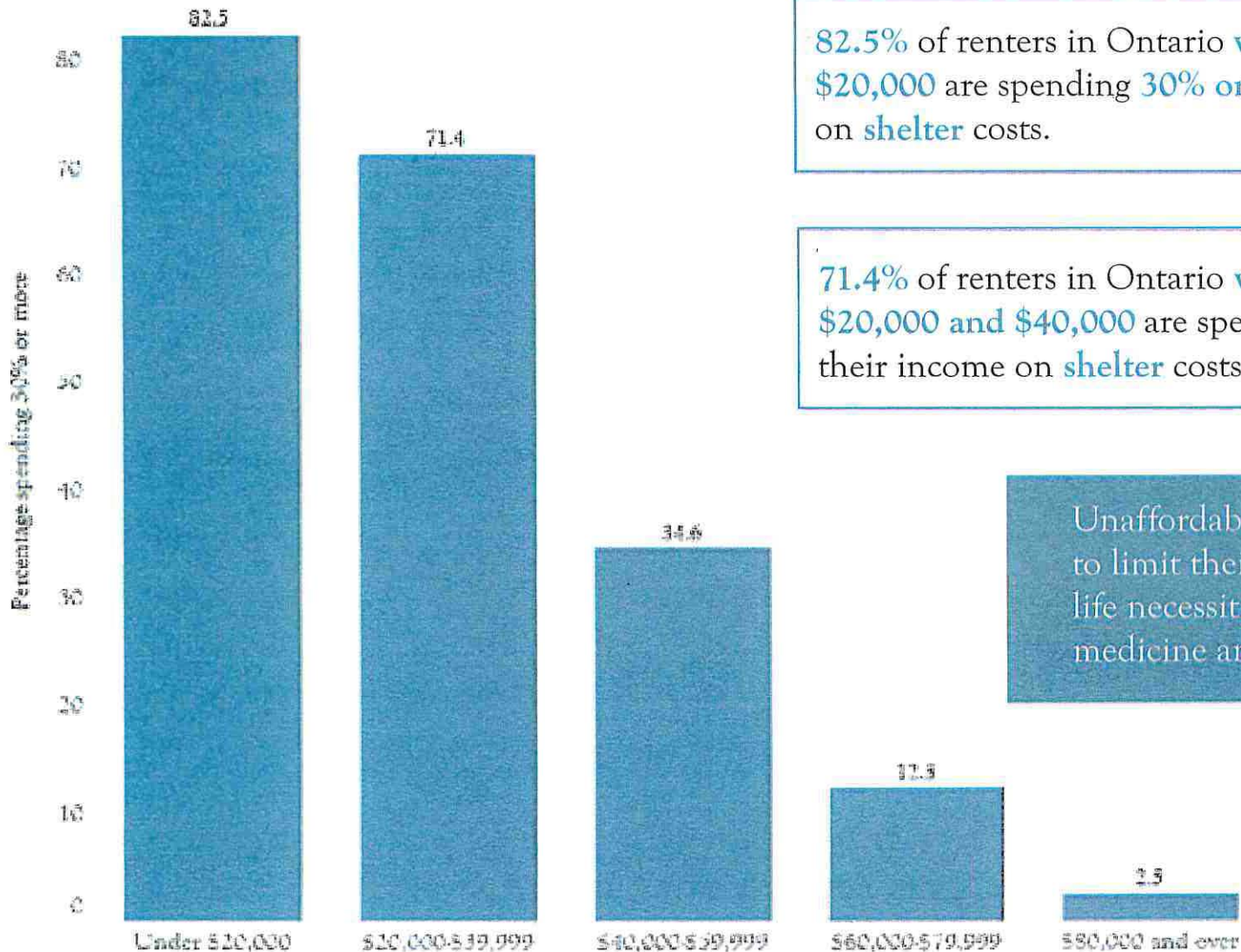
The majority of low-income renters pay rent to private landlords:

- * 67% of renters with income below \$20,000
- * 81% of renters with income between \$20,000 to \$40,000

“Subsidized housing” includes rent-g geared-to-income, social housing, public housing, government-assisted housing, non-profit housing, rent supplements and housing allowances. Based on 2016 Census data.

Ontario has the highest proportion of renters in Canada paying over 30% of their income on housing.

Percentage of Ontario renter households spending 30% or more of income on shelter costs by annual income



82.5% of renters in Ontario with incomes below \$20,000 are spending 30% or more of their income on shelter costs.

71.4% of renters in Ontario with incomes between \$20,000 and \$40,000 are spending 30% or more of their income on shelter costs.

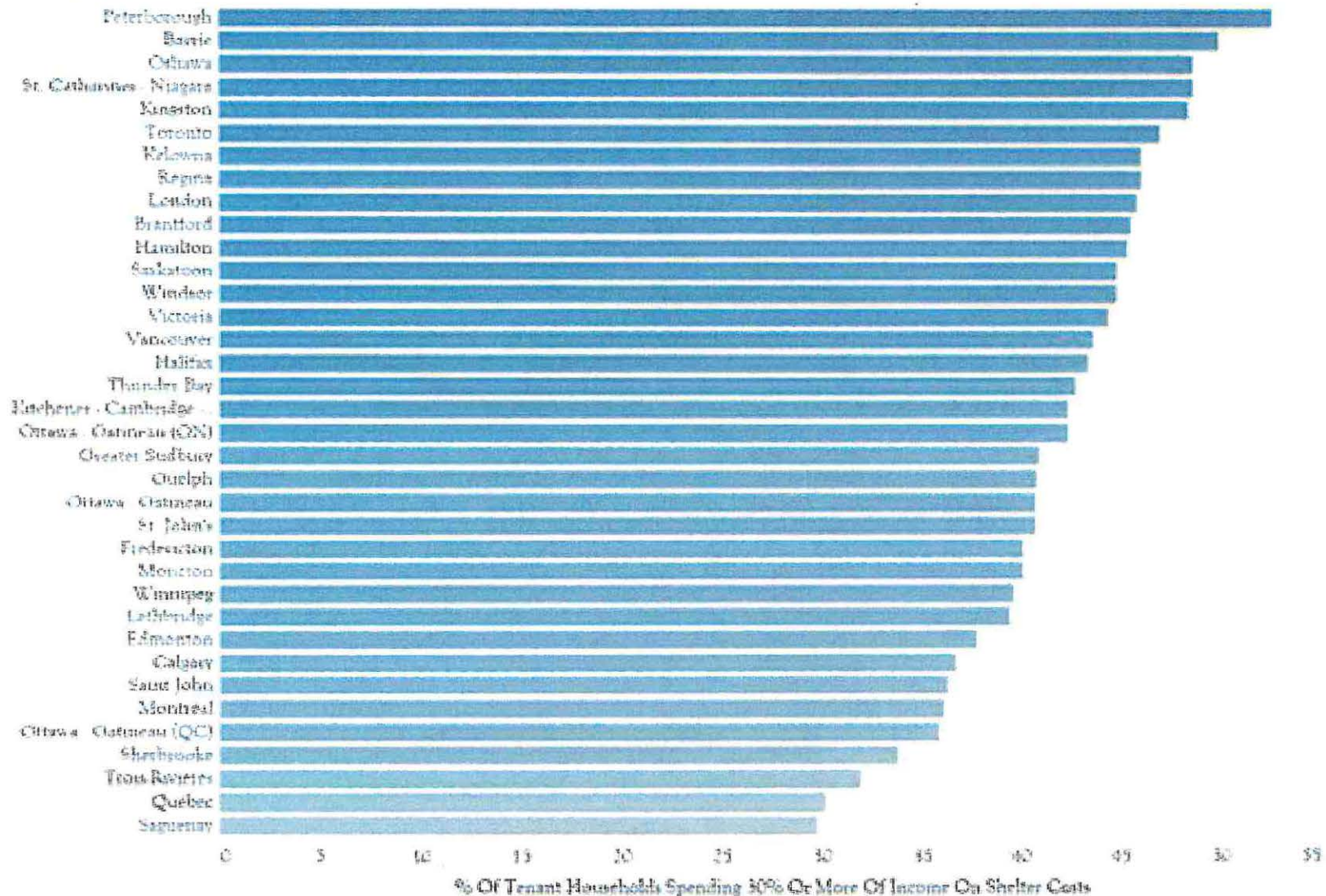
Unaffordable rents force people to limit their spending on other life necessities such as food, medicine and transportation.

Based on 2016 Census data.

8 of the 10 metropolitan areas in Canada with the highest percentage of tenants paying unaffordable rents are in Ontario.

In Peterborough, Barrie, Oshawa, St. Catharines - Niagara, Kingston, and Toronto close to or over half of renters have unaffordable shelter costs.

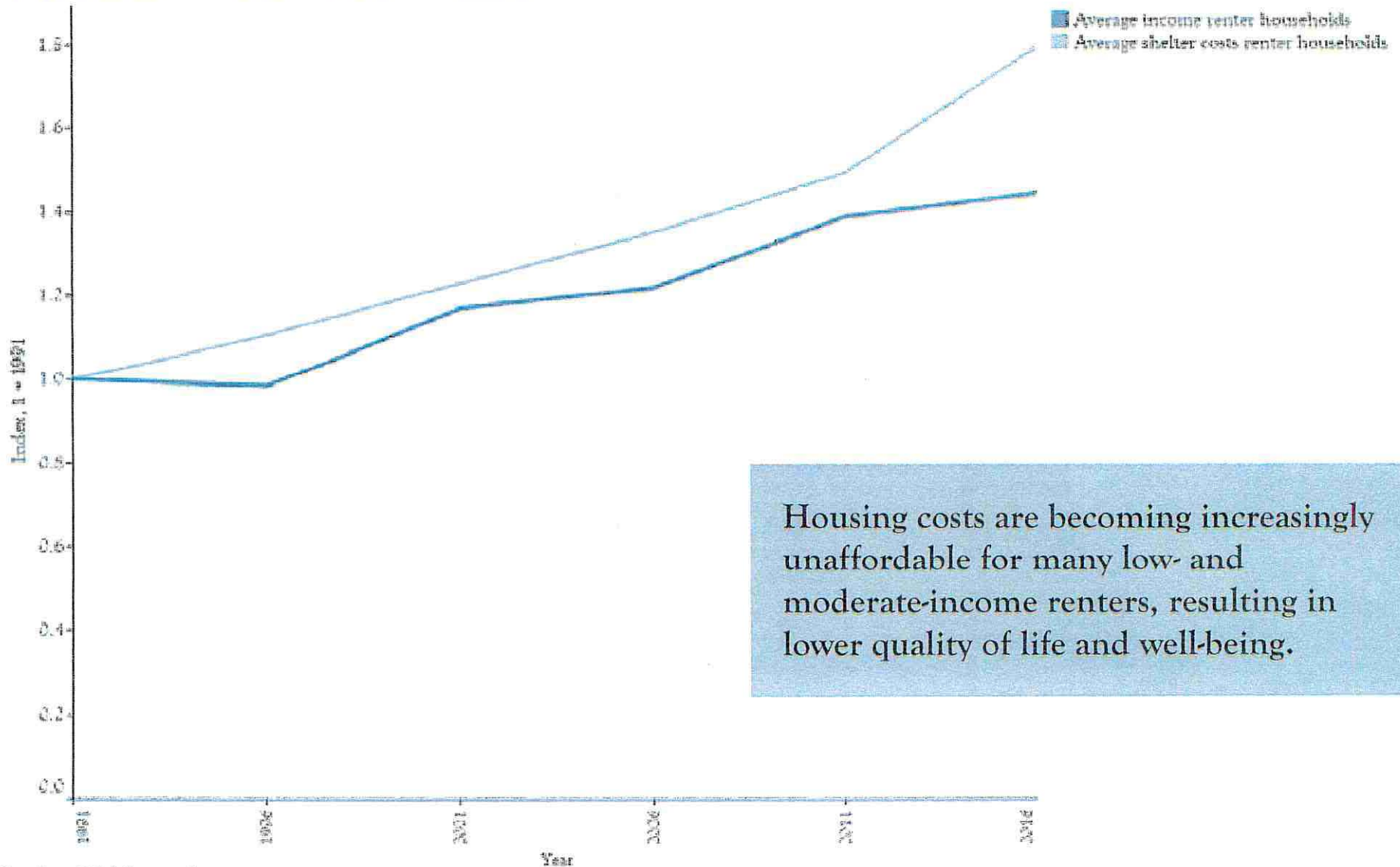
Percentage of renter households with unaffordable shelter costs



Based on 2016 Census data.

The average income of renter households has increased at a much lower rate than average housing costs between 1991 and 2016.

Average income and average shelter costs, renter households in Ontario



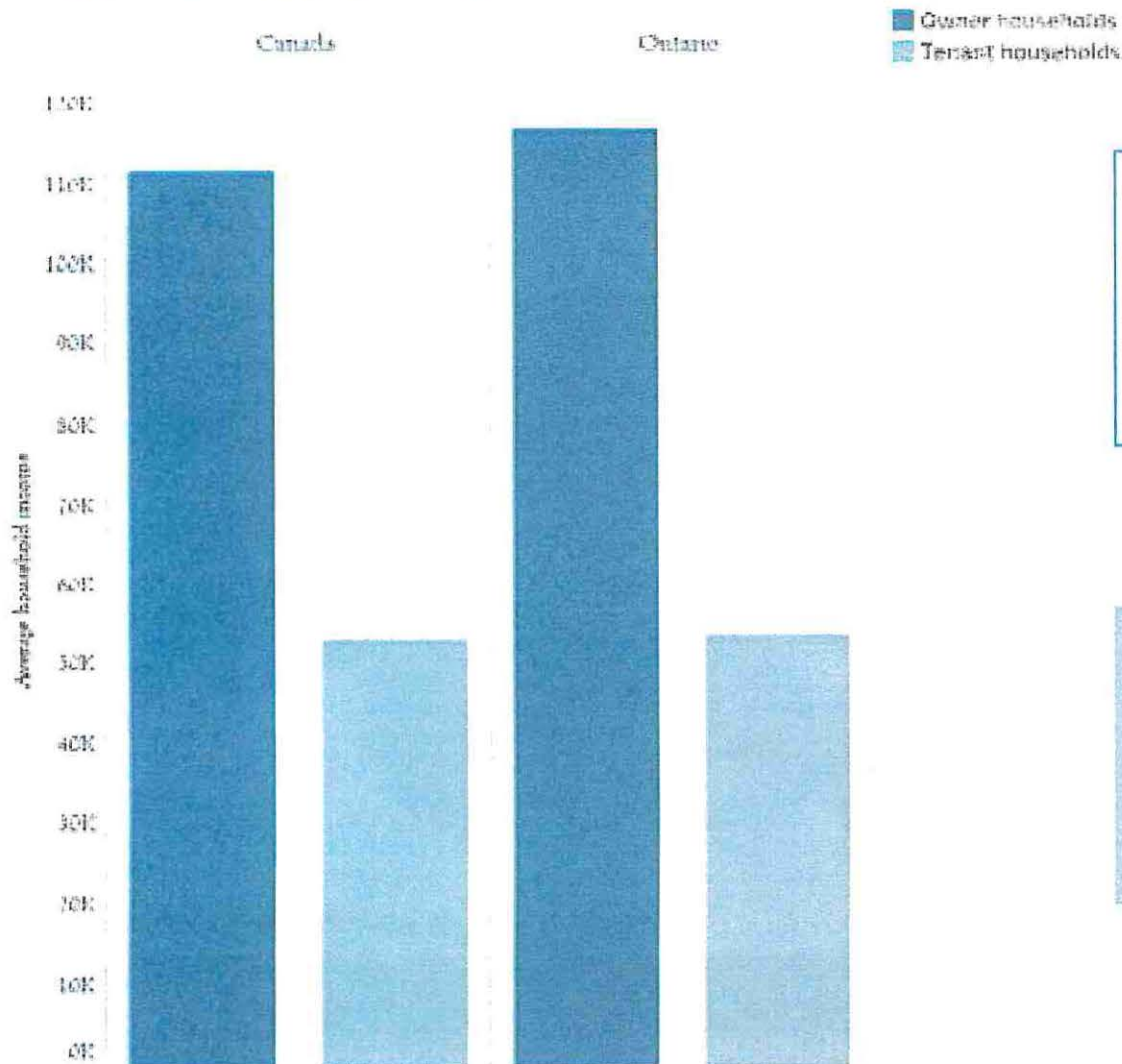
Housing costs are becoming increasingly unaffordable for many low- and moderate-income renters, resulting in lower quality of life and well-being.

Based on 2016 Census data.

Income disparity between renters and homeowners has been increasing for the past 25 years.

Ontario renters' income is less than half of homeowners' income.

Average household income by tenure



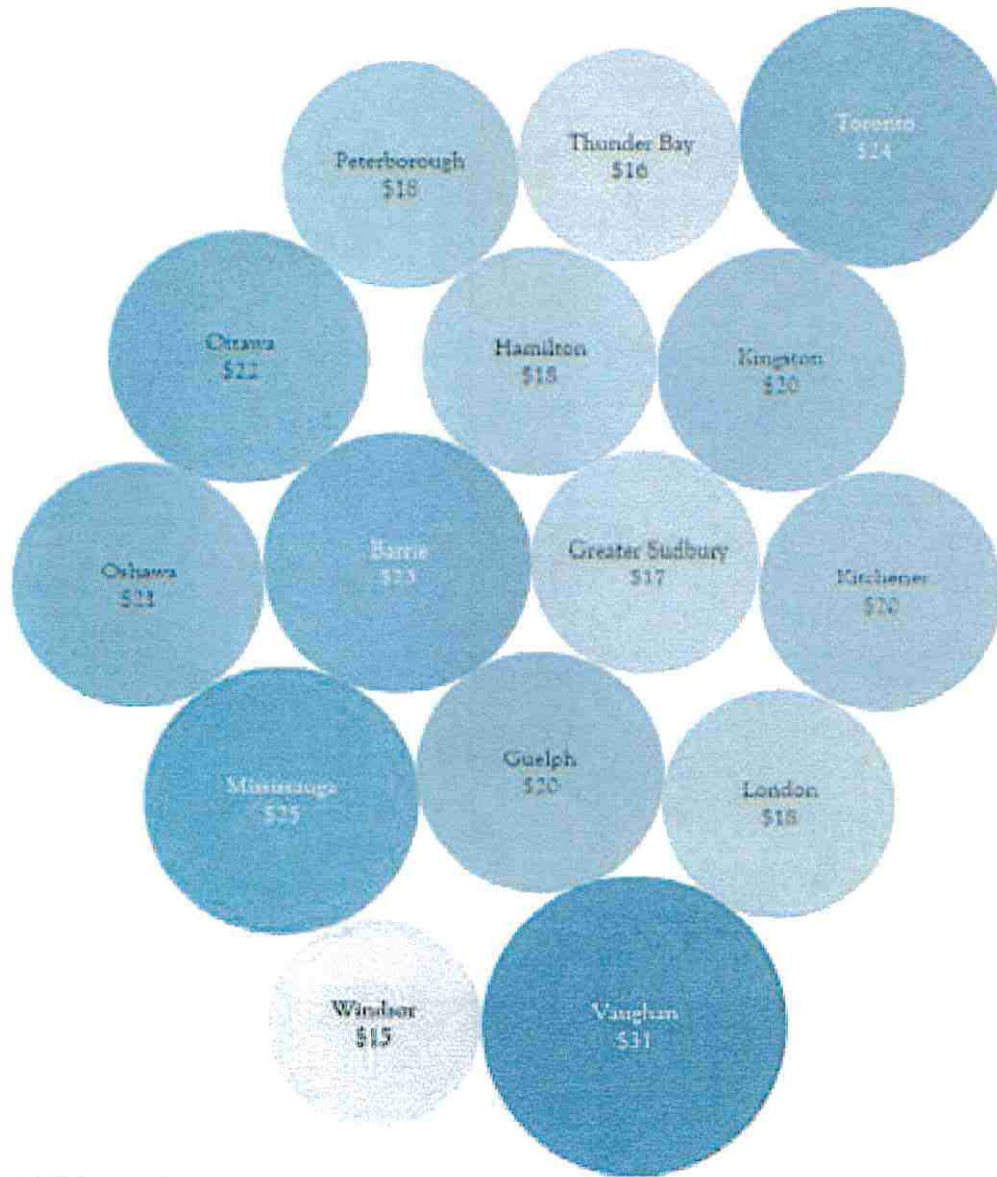
The average income of homeowners has grown by 84% between 1991 and 2016. The average income of renters has only grown 45% over the same time period.

In 2015, the average income for renters in Ontario was \$53,573 while the average income of homeowners was \$117,139.

Based on 2016 Census data.

Households earning minimum wage (\$14/hour) or slightly above are facing significant affordability challenges in most urban centres in Ontario.

Hourly wage needed for rent to be affordable



Since urban centres constitute Ontario's main employment centres, many renters find themselves unable to afford a rental home in the areas where they work, leading to displacement and longer commutes.

Other households may find themselves working longer hours or taking on more than one job in order to be able to afford the rising rents.

	Average monthly shelter costs for all rented dwellings	Hourly wage needed for average shelter costs to be affordable	Weekly hours at minimum wage (\$14) for average shelter costs to be affordable
Barrie	\$1,219	\$23	67
Brampton	\$1,225	\$24	67
Chatham-Kent	\$744	\$14	41
Greater Sudbury	\$901	\$17	50
Quebec	\$1,050	\$20	58
Hamilton	\$947	\$18	52
Kawartha Lakes	\$937	\$18	51
Kenora	\$873	\$17	48
King	\$1,401	\$27	77
Kingston	\$1,065	\$20	59
Kitchener	\$1,028	\$20	56
London	\$941	\$18	52
Markham	\$1,436	\$28	79
Milton	\$1,522	\$29	84
Mississauga	\$1,281	\$25	70
Newmarket	\$1,217	\$24	69
Nipissing	\$988	\$19	54
Oakville	\$1,523	\$29	84
Oshawa	\$1,070	\$21	59
Ottawa	\$1,148	\$22	63
Peterborough	\$956	\$18	53
Richmond Hill	\$1,446	\$28	79
Sault Ste. Marie	\$786	\$15	43
St. Catharines	\$907	\$17	50
Thunder Bay	\$843	\$16	46
Toronto	\$1,242	\$24	68
Vaughan	\$1,587	\$31	87
Windsor	\$796	\$15	44

Based on 2016 Census data.

WHAT ONTARIO NEEDS

- 1 Provincial cost-matching of the federal National Housing Strategy funds.
- 2 Build more affordable purpose-built rental housing with deep affordability (where people are not forced to pay more than 30% of their income on rent).
- 3 Build new social housing and preserve the existing social housing stock.
- 4 Preserve existing affordable rental units by decreasing financial incentives for landlords to push out sitting tenants.
- 5 Recognize the right to housing in law.



Advocacy Centre
for Tenants Ontario

Tenant Duty
Counsel Program

Our vision is safe, well-maintained, secure and
affordable housing for all Ontarians.

www.acto.ca



ONTARIO ASSOCIATION OF FOOD BANKS
QUARTERLY REPORT
SEPTEMBER 2018

(Un)Affordable Housing & Hunger

How the high cost of housing in Ontario
continues to drive food bank use



ONTARIO
ASSOCIATION OF
FOOD BANKS



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In This Report

Introduction	05
About Food Bank Use in Ontario	06
Ontario's Housing Crisis and How it Affects Low-Income Ontarians	08
Recommendations for Change	14
Endnotes	19

About the OAFB

Last year, Ontario's food banks were visited by over a half-million people. Some were born here. Some recently immigrated. Some were young. Some were old. Some had life-long disabilities. Some had only recently hit a rough patch. All faced the difficult choice of either paying for a roof over their head, or putting food on the table.

Every municipality, every town, and every city in Ontario is faced with hunger. From securing fresh and healthy food sources, to driving change through policy research and public education programs, the Ontario Association of Food Banks unites local business leaders, the food industry, food banks and agencies to work together to eradicate hunger across the province.

The Ontario Association of Food Banks is not government funded and relies exclusively on the support of caring individuals and organizations to achieve its mission. For every \$1 donated, the OAFB can provide the equivalent of three meals to someone in need.

Introduction

With a half million Ontarians turning to food banks each year, we know that there is a problem: far too many adults and families are unable to afford their most basic expenses each month.

Ontario's current housing crisis is having a particularly negative effect on low-income adults and families, with housing costs increasing far faster than income or wages. While the Government of Canada, in partnership with the Government of Ontario, has taken the first steps in implementing a 10-year housing strategy to help address this issue, there is still an immediate need to assist struggling families who have to choose between putting a roof over their head and having enough to eat each month.

This report discusses the impact that the current housing crisis is having on low-income Ontarians, as well as provides three recommendations for change on how the Government of Ontario can take immediate action, alongside the National Housing Strategy, to address the root-causes of poverty and hunger in our province.

Summary of Recommendations:

1. Increase Social Assistance Rates to Reflect Today's Cost of Living
2. Reform Ontario's Social Assistance Programs to Help Recipients Move Out of Poverty
3. Invest in Affordable Housing through Construction, Repairs, and a Portable Housing Benefit

Food Bank Use in Ontario

LAST YEAR:



499,415

INDIVIDUALS ACCESSED A FOOD BANK

2,861,872

VISITS WERE MADE TO ONTARIO'S FOOD BANKS

WHO USES FOOD BANKS?



70%

INDICATED SOCIAL ASSISTANCE AS PRIMARY SOURCE OF INCOME



50%

IDENTIFIED AS SINGLE-PERSON HOUSEHOLDS



33%

WERE CHILDREN

Between April 1st, 2016 – March 31st, 2017, Ontario's food banks were accessed by half a million people, who visited more than two million times over the course of the year. Of these individuals, 90 per cent were either rental or social housing tenants, and almost 70 per cent listed social assistance as their primary source of income. This reflects a growing trend in our province: an increasing number of Ontarians do not have sufficient income to afford all of their most basic necessities each month.

In 2016, the Census revealed that, for the first time on record, 'one-person households' had become the most common type of household in the country.¹ This is reflected in the client demographics of food banks as well, with 50 percent identifying as single person households.

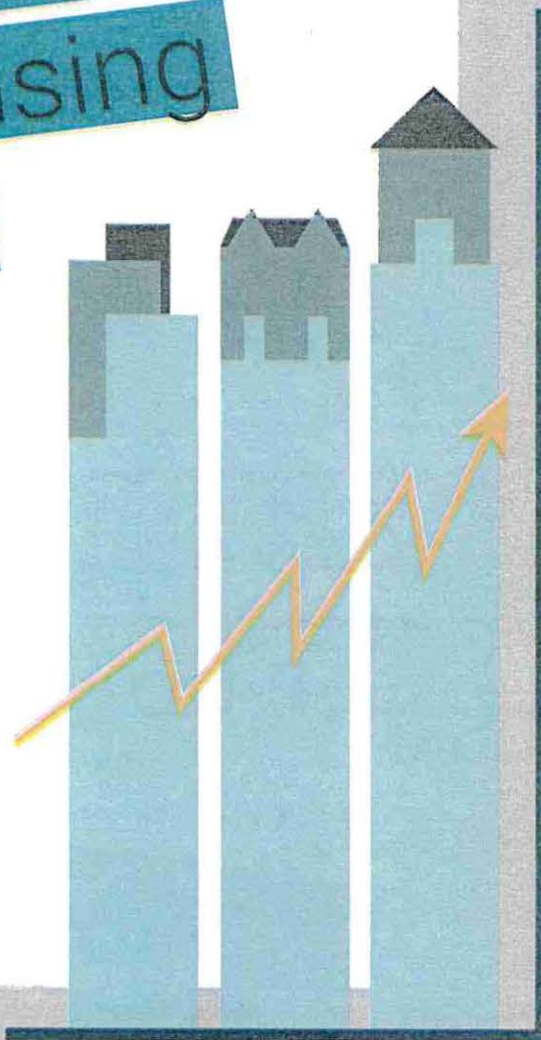
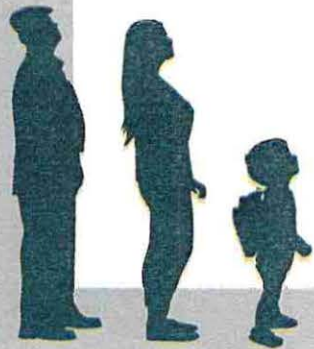
In Ontario, a single person accessing Ontario Works receives \$721 per month, and a single person on the Ontario Disability Support Program receives \$1,151 per month.² The average price of a one-bedroom apartment, however, exceeds \$900 per month provincially, and over \$1,200 per month when looking at urban centres.

What makes this growing trend a concern is that single person households are often at greater risk of financial insecurity because there is typically only one income to support all household expenses, like rent, heat, and hydro. For a single person living alone, balancing a monthly budget can be a challenge. However, for a single person with a low income, balancing a monthly budget can quickly transition from being difficult to impossible, and often results in having to make choices between fixed expenses, like rent, and other necessities, like food.

Without sufficient income to afford both rent and all other necessities, many individuals report skipping meals, delaying bill payments, or simply 'going hungry' to ensure that rent is paid.³ In a province like Ontario, adults and families should never have to choose between putting a roof over their head or purchasing food – and yet, it is a choice that hundreds of thousands of Ontarians must make every day.

Ontario's Housing Crisis

AND HOW IT AFFECTS LOW-INCOME ONTARIANS



A Lack of Affordable Housing Drives Food Bank Use

One of the primary drivers of food bank use is the lack of affordable housing options for low-income Ontarians. According to the Canada Mortgage and Housing Corporation, housing is considered affordable if it consumes no more than 30 percent of a household's before-tax income.⁴ This helps to ensure that individuals have sufficient income to not only afford the roof over their head, but also other basic necessities, like heat, hydro, transportation, and food.

The average food bank client, however, spends more than 70 percent of their monthly income on housing. Not only does this leave very little for other basic necessities, but it makes it near-impossible to save for unexpected expenses in the future, and increases the risk of displacement or homelessness.

Social housing, where rent is set to an affordable percentage of income, is meant to address this problem. Yet there are 171,363 households on the wait list for social housing in Ontario, with an average wait time of four years.⁵ In the meantime, individuals have to find housing on the market.

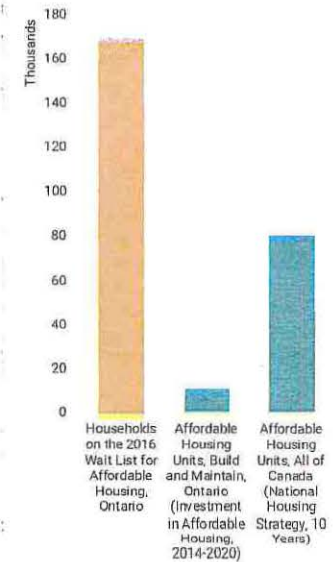
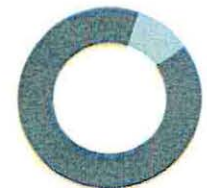


FIGURE 1: AFFORDABLE HOUSING WAITLIST VS GOVERNMENT COMMITMENTS TO BUILD

90% OF FOOD BANK CLIENTS ARE RENTAL OR SOCIAL HOUSING TENANTS



Housing Is Unaffordable Across Ontario

In the 2017 Hunger Report, the Ontario Association of Food Banks analyzed the cost of renting in ten

cities across the province, and found that in all ten cities, a person that is employed, full-time on minimum wage does not earn enough to comfortably afford the cost of housing. For individuals that rely on social assistance, the budgetary requirements are even more alarming, with the rental rates in the majority of the cities profiled far exceeding their monthly income.

FIGURE 2: THE COST OF RENTING, BY CITY (2017 FIGURES)

City	Population ³⁹	Unique Food Bank Clients	Percentage of Population Served by Food Bank	Average Household Size ⁴¹	Average Cost of A 1 Bedroom Apt ⁴⁰	Vacancy Rate ⁴¹
Toronto	2,731,571	113,370 ⁴²	4%	2.4	\$1,137	1.3%
Ottawa	934,243	55,483	6%	2.5	\$982	3.0%
Hamilton	536,917	29,083	5%	2.5	\$811	3.8%
London	383,822	25,093	7%	2.3	\$807	2.1%
Windsor	217,188	22,152	10%	2.3	\$706	2.9%
Sudbury	161,531	7,586	5%	2.3	\$776	5.3%
St. Catharines	133,113	10,961	8%	2.3	\$801	2.2%
Thunder Bay	107,909	17,401	16%	2.2	\$765	5.0%
Brockville	21,854	2,737	13%	2	\$761	N/A
Elliot Lake	10,741	1,083	10%	1.9	\$693	N/A
Ontario	13,448,494	499,415	4%	2.6	\$972	2.1%

FIGURE 3: PERCENT OF INCOME SPENT ON MARKET RENT (2017 FIGURES)

City	Percentage of Income Spent on Market Rent					
	Median After Tax Income, All Households	Median After Tax Income, One Person Households	Minimum Wage FT Worker	Minimum Wage PT Worker	ODSP Recipient	OW Recipient
Toronto	23%	40%	58%	96%	102%	158%
Ottawa	16%	29%	50%	83%	88%	136%
Hamilton	16%	32%	41%	68%	73%	112%
London	18%	31%	41%	68%	73%	112%
Windsor	17%	29%	36%	60%	64%	98%
Sudbury	15%	27%	39%	65%	70%	108%
St Catharines	18%	33%	41%	68%	72%	111%
Thunder Bay	16%	29%	39%	65%	69%	106%
Brockville	20%	31%	39%	64%	69%	106%
Elliot Lake	21%	35%	35%	58%	62%	96%

30-60% of Income
 60-100% of Income
 100%+ of Income

The above chart highlights the average percentage that Ontarians from six income demographics spend on housing each month, based on the average rent for a one-bedroom apartment in each of those cities, including: the average Ontarian household, single person households, full-time minimum wage workers, part time minimum wage workers, ODSP recipients, and OW recipients.

Since the report's release, this trend has continued with rental prices - particularly for new leases - increasing province-wide.⁶

In addition to many low-income individuals having to make difficult choices between basic necessities, rising rental prices has led to an increasing number of families living in spaces that are too small for their

family size. For example, as revealed by ACORN Canada, it is becoming common for families of four or five people to be living in a one-bedroom apartment, simply because they cannot afford to move.⁷

Moving The Needle On The Housing Crisis

In November 2017, the Government of Canada announced its new National Housing Strategy, 'A Place to Call Home'. This strategy detailed a number of commitments to help shift the needle on affordable housing in Ontario and across the country, including: legislation that will require the government to maintain a National Housing Strategy, the creation of 100,000 new housing units across the country over the next 10 years, and the establishment of a new housing benefit.⁸

In April 2018, Ontario became the first province to sign a bilateral agreement with federal government, committing to the implementation of the strategy, and to matching the investments being made into the protection, renewal, and expansion of affordable housing options in the province. This agreement also included working with the federal government on the design and implementation of a new Canada Housing Benefit in Ontario.⁹

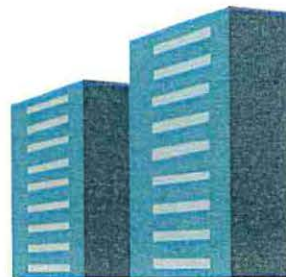
While this is a positive first step in moving the needle on Ontario's housing crisis, there are still details that need to be clarified, particularly related to how many individuals will be able to access the benefit, how much support it will provide, and its timing.



THE NATIONAL HOUSING STRATEGY
COMMITTS TO CREATING

100,000

NEW SOCIAL HOUSING UNITS ACROSS
THE COUNTRY OVER THE NEXT 10 YEARS



ONTARIO'S AGREEMENT WITH
THE FEDERAL GOVERNMENT
COMMITTED TO MATCHING
THE INVESTMENTS MADE IN
AFFORDABLE HOUSING, INCLUDING
THE INTRODUCTION OF A NEW

Housing Benefit

The Ontario Association of Food Banks is pleased with the work being done by both the provincial and federal governments to address Ontario's housing crisis and provide some relief for low-income Ontarians that are struggling to put a roof over their head and afford their most basic necessities each month.

While predictable and long-term funding for the National Housing Strategy's 10 year plan is expected to start in April 2019, it is important to remember that, with half a million Ontarians accessing food banks each year, there is still a very real and urgent need to invest in poverty reduction solutions today.

In addition to the National Housing Strategy, the Ontario Association of Food Banks (OAFB) supports the actions outlined in the Income Security Reform Working Group's report, *Income Security: A Roadmap for Change*. This report details recommended improvements to Ontario's income security system, including the establishment of a Minimum Income Standard in Ontario to be achieved over the next 10 years, and significant improvements to Ontario's social assistance programs.¹⁰

By launching these two strategies in tandem, the OAFB believes that the province of Ontario will significantly move the needle on poverty and, ultimately, create a firm foundation for a stronger and more inclusive province.

Recommendations For Change

There are almost half a million Ontarians that turn to food banks every year simply because they do not have sufficient income to afford all of their basic necessities, like rent, hydro, transportation, and food.

Hunger is a symptom of poverty, and without long-term solutions to poverty reduction, there will always be a need for food banks in Ontario. This is why it is so important for the Government of Ontario to continue working towards solutions that address the core needs of those who are going hungry.

The Ontario Association of Food Banks has put forward the following three recommendations as the first steps that the new Government of Ontario should take to address hunger and poverty in our province:

1. Invest in Affordable Housing Through Construction, Repairs, and a Portable Housing Benefit

Why?

Over 89 percent of food bank clients are rental or social housing tenants who spend more than 70 percent of their income on rent. This leaves very little for other necessities like heat, hydro, transportation, medicine, and food.

How?

The Ontario Association of Food Banks recommends **investing in affordable housing** through construction, repairs, and a portable housing benefit.

In *Income Security: A Roadmap for Change* and *Canada's National Housing Strategy: A Place to Call Home*, the following key recommendations were made:

- Introduce a housing benefit to assist all low-income people with the high cost of housing so they are not forced to choose between a home and other necessities
- Implement the portable housing benefit in 2019-20 at a modest "gap coverage" of 25%, with the gap defined as the difference between the actual cost of housing and a minimum household contribution given household income
- Increase gap coverage to 35% in 2020-21 and continue to increase gap coverage, reaching 75% by or before 2027-28
- Implement the investments outlined in the National Housing Strategy, including investments in affordable housing construction and repair, including:
 - The preservation of at least 130,000 community housing units in Ontario
 - Create 100,000 new housing units, as well as renew and repair more than 300,000 housing units over the next 10 years
 - The development of a provincial, three-year action plan, beginning in 2019-2020, setting targets and outlining how the Government of Ontario will use federal and cost-matched funding to achieve the desired outcomes.

2. Reform Social Assistance Programs to Help Recipients Move Out of Poverty

Why?

Ontario Works and the Ontario Disability Support Programs adhere to a number of complex policy directives that penalize recipients for their assets, savings, and housing. This makes it difficult for adults living on social assistance to establish a foundation that will allow them to break the cycle of poverty.

How?

The Ontario Association of Food Banks recommends **updating Ontario's social assistance programs** to improve their assessment and reporting processes as well as their overall implementation in order to help individuals move out of poverty.

In *Income Security: A Roadmap for Change*, the following reforms were recommended to improve and modernize Ontario's social assistance system:

- Improve social assistance rules and redesign benefits to make it easier for people to pursue their employment goals and realize the benefits of working.
- Modernize income and asset rules so people can maximize the income sources available to them and save for the future.
- Eliminate financial penalties related to employment efforts and rigid reporting requirements, and place a firm emphasis on problem-solving and addressing urgent needs first (eg. risk of homelessness). This includes revising policies that create barriers to safety and well-being (e.g., fleeing an unsafe home).
- Redesign the social assistance rate structure so that all adults have access to a consistent level of support regardless of living situation
 - Transition to a Standard Flat Rate that does not distinguish between basic needs and shelter

3. Increase Social Assistance Rates to Reflect Today's Cost of Living

Why?

Almost 70 percent of adults that visit a food bank throughout the year cite social assistance as their primary source of income. This is a clear indication that these support programs do not provide sufficient income to afford all of the recipient's most basic needs.

How?

The Ontario Association of Food Banks recommends an **immediate increase to the income support available through Ontario Works (OW) and the Ontario Disability Support Program (ODSP)**, with the eventual goal of progressing these programs towards a Minimum Income Standard (equivalent to the Low Income Measure as used by Ontario's Poverty Reduction Strategy, plus an additional 30% for persons with a disability) by 2027-28.

In *Income Security: A Roadmap for Change*, the following increases and timeline were recommended:

- Fall 2018:
 - Set the Standard Flat Rate at \$794/month (10% increase over Fall 2017 OW maximum basic needs and shelter rates)
 - Set the Standard Flat Rate – Disability at \$1,209/month (5% increase over Fall 2017 ODSP maximum basic needs and shelter rates)
- Fall 2019:
 - Increase the Standard Flat Rate to \$850/month (7% increase)
 - Increase the Standard Flat Rate – Disability to \$1,270/month (5% increase)
- Fall 2020:
 - Increase the Standard Flat Rate to \$893/month (5% increase)
 - Increase the Standard Flat Rate – Disability to \$1,334/month (5% increase)
- Continue to raise the level of income support available until the Minimum Income Standard is achieved in combination with other income security components by 2027-28.

Helping the Government of Ontario Achieve its Objectives

The Government of Ontario has emphasized the importance of increasing efficiencies and cost savings in the provincial budget. Investing in poverty reduction has been demonstrated to have long-term cost savings related to poverty-induced medical costs, the criminal justice system, and lost productivity.

In 2008, the Ontario Association of Food Banks released 'The Cost of Poverty: An Analysis of the Economic Cost of Poverty in Ontario.' While this report was released almost ten years ago, its findings still remain true today. In short, 'poverty' costs the federal and provincial governments up to \$13 billion per year (\$15.1 billion when indexed to inflation). It is an expensive problem to have, but equally one that can be solved.

By investing in solutions that not only help Ontarians afford their most basic necessities, but help to move individuals out of poverty, the Government of Ontario will be investing in overall economic health and wellbeing of the province and its citizens.

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ONTARIO
ASSOCIATION OF
FOOD BANKS

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Report Number: 2019-15

Date: February 11, 2019

SUBJECT: Information Report on the Proposed Regional Niagara Waste Collection Services Contract

1) PURPOSE:

This report has been prepared by Chris Lee, Director of Engineering and Operations. The purpose of this report is to inform Council and the public of the proposed Regional Niagara waste collection services contract, the past public consultation process that Regional Staff have undertaken to date and to present Regional Niagara Public Works Reports PW 3-2019 and WMPSC-C 9-2018, all of which speak to the matter.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES:

Presently, Regional Niagara staff have been undertaking preliminary Stakeholder Consultation and Engagement on their proposed waste collection services for the period going forward from 2020, after the expiration of their existing collection contract with Emterra Environmental and Progressive Waste Solutions Ltd.

There is a great deal of background and detail within the two attached Regional Niagara, Public Works Reports, WMPSC-C 9-2018 and PW 3-2019, which highlight the work to date by Regional staff regarding the issue.

3) STAFF COMMENTS AND DISCUSSIONS:

None at this time.

4) OPTIONS AND FINANCIAL CONSIDERATIONS:

a) Do nothing.

If no action is taken at this time, Regional staff will proceed as directed by Regional Council without input from the City of Port Colborne.

b) Other Options

Accept staff's recommendation and receive the attached reports for information purposes.

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

N/A

6) ATTACHMENTS

Appendix A - Regional Niagara Public Works Report WMPSC-C 9-2018

Appendix B - Regional Niagara Public Works Report PW 3-2019

7) RECOMMENDATION

That Council receive Engineering & Operations Department Report 2019-15 for information.

8) SIGNATURES

Prepared on January 31, 2019 by: :



Chris Lee
Director of Engineering and
Operational Services

Reviewed by:



Peter Senese
Director of Corporate Services

Reviewed and respectfully
submitted by:



C. Scott Luey
Chief Administrative Officer

**Public Works Committee Meeting
January 8, 2019
(Excerpt from Minutes 1-2019)**

6. ITEMS FOR CONSIDERATION

6.1 PW 3-2019

Proposed Base Services for Next Collection Contract

Catherine Habermehl, Acting Commissioner, Public Works, and David Kains, Metroline Research Group, provided information respecting Proposed Base Services for Next Collection Contract. Topics of the presentation included:

- Proposed Collection Service Options (background, rationale)
- Results and key insights of the targeted and broad stakeholder consultations
- The research methodology for conducting the stakeholder consultations
- Base Garbage Collection Service Options
- Stakeholder Consultation
- Recommendations

A copy of the presentation is attached to these minutes.

Moved by Councillor Sendzik
Seconded by Councillor Steele

That Report PW 3-2019, dated January 8, 2019, respecting Proposed Base Services for Next Collection Contract, **BE RECEIVED** for information and the following recommendations **BE APPROVED**:

1. That, based on the results of the stakeholder engagement process, the Request for Proposals for Niagara Region's next garbage, recycling and organics collection RFP **BE APPROVED** to be issued with the following, subject to final comments from Local Area Municipalities:
 - a. Pricing for the following garbage collection frequency options:
 - i. Every-other-week (EOW) garbage collection for all residential properties and for those Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located outside Designated Business Areas (DBAs), as a base service (weekly recycling and organics to continue, and current garbage container (bag/can) limits would double for affected sectors, on an EOW basis), and,
 - ii. Status quo – weekly base garbage collection service.
 - b. Establishment of a four (4) item limit per residential unit, per collection, for large item collection at Low-Density Residential (LDR) properties, as a base service;
 - c. Pricing for the continuation of appliances and scrap metal curbside collection at LDR properties, as a base service.

- d. Change the weekly garbage container (bag/can) limits for Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located inside Designated Business Areas (DBAs) from seven (7) containers to four (4) containers per property, as a base service;
 - e. Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service;
2. That Report PW 3-2019 and Council’s resolutions, along with the Metroline stakeholder consultation report, when finalized, **BE CIRCULATED** to the Local Area Municipalities, for their review, and comments to be provided by February 1, 2019 or no later than February 20, 2019; and,
 3. That staff **BE DIRECTED** to provide a follow-up report on the position of the Local Area Municipalities on the base and enhanced services to be included in the next garbage, recycling and organics collection contract Request for Proposals.

The following friendly *amendment* was accepted by the Committee Chair, and the mover and seconder of the motion to add clause 1(f) as follows:

f. Mandatory use of clear garbage bags for garbage collection.

Moved by Councillor Foster Seconded by Councillor Nicholson

That clause 1(c) **BE AMENDED** to read as follows:

c. Discontinuation and continuation of appliances and scrap metal curbside collection at LDR properties, as a base service.

Carried

The Committee Chair called the vote on the motion, as amended, as follows:

That Report PW 3-2019, dated January 8, 2019, respecting Proposed Base Services for Next Collection Contract, **BE RECEIVED** for information and the following recommendations **BE APPROVED**:

1. That, based on the results of the stakeholder engagement process, the Request for Proposals for Niagara Region’s next garbage, recycling and organics collection RFP **BE APPROVED** to be issued with the following, subject to final comments from Local Area Municipalities:
 - a. Pricing for the following garbage collection frequency options:
 - i. Every-other-week (EOW) garbage collection for all residential properties and for those Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located outside Designated Business Areas (DBAs), as a base service (weekly recycling and organics to continue, and current garbage container (bag/can) limits would double for affected sectors, on an EOW basis), and,
 - ii. Status quo – weekly base garbage collection service.

- b. Establishment of a four (4) item limit per residential unit, per collection, for large item collection at Low-Density Residential (LDR) properties, as a base service;
 - c. Discontinuation and continuation of appliances and scrap metal curbside collection at LDR properties, as a base service;
 - d. Change the weekly garbage container (bag/can) limits for Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located inside Designated Business Areas (DBAs) from seven (7) containers to four (4) containers per property, as a base service;
 - e. Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service;
 - f. Mandatory use of clear garbage bags for garbage collection;
2. That Report PW 3-2019 and Council's resolutions, along with the Metroline stakeholder consultation report, when finalized, **BE CIRCULATED** to the Local Area Municipalities, for their review, and comments to be provided by February 1, 2019 or no later than February 20, 2019; and,
 3. That staff **BE DIRECTED** to provide a follow-up report on the position of the Local Area Municipalities on the base and enhanced services to be included in the next garbage, recycling and organics collection contract Request for Proposals.

Carried

Subject: Proposed Base Services for Next Collection Contract

Report to: Public Works Committee

Report date: Tuesday, January 8, 2019

Recommendations

1. That, based on the results of the stakeholder engagement process, the Request for Proposals for Niagara Region's next garbage, recycling and organics collection RFP **BE APPROVED** to be issued with the following, subject to final comments from Local Area Municipalities:
 - a) Pricing for the following garbage collection frequency options:
 - i) Every-other-week (EOW) garbage collection for all residential properties and for those Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located outside Designated Business Areas (DBAs), as a base service (weekly recycling and organics to continue, and current garbage container (bag/can) limits would double for affected sectors, on an EOW basis), and
 - ii) Status quo – weekly base garbage collection service.
 - b) Establishment of a four (4) item limit per residential unit, per collection, for large item collection at Low-Density Residential (LDR) properties, as a base service.
 - c) Discontinuation of appliances and scrap metal curbside collection at LDR properties, as a base service.
 - d) Change the weekly garbage container (bag/can) limits for Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located inside Designated Business Areas (DBAs) from seven (7) containers to four (4) containers per property, as a base service.
 - e) Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service.
2. That Report PW 3-2019 and Council's resolutions, along with the Metroline stakeholder consultation report, when finalized, **BE CIRCULATED** to the Local Area Municipalities, for their review, and comments to be provided by February 1, 2019 or no later than February 20, 2019; and,

3. That staff **BE DIRECTED** to provide a follow-up report on the position of the Local Area Municipalities on the base and enhanced services to be included in the next garbage, recycling and organics collection contract Request for Proposals.

Key Facts

- Niagara Region's next garbage, recycling and organics collection contract is set to begin by March 8, 2021.
- The preparation for the next collection contract provides an opportunity to complete a service delivery review to improve program effectiveness (i.e. increase diversion of waste from disposal) and efficiencies (i.e. mechanisms to reduce costs and changes to service to reflect usage).
- On April 12, 2018, Regional Council approved WMPSC-C 9-2018, which identified the proposed base collection services options to be included in the stakeholder consultation and engagement process.
- The purpose of this report is to seek Council's approval of the proposed base collection services being recommended for inclusion in Niagara Region's next collection RFP, based on the results of input received during the stakeholder consultation and engagement phase, subject to further input from Local Area Municipalities (LAMs).
- Niagara Region is consulting with LAMs on the proposed base collection service changes and to confirm which enhanced collection services they would like included in the next collection RFP.

Financial Considerations

It is estimated that without any changes to the existing collection service levels to be provided in Niagara Region's next contract, the annual contract cost could be greater than \$25 million in 2021. This is based on an average of the bids received for the current collection contract, plus annual escalation of 1.9%. Factors such as, but not limited to, the increase in minimum wage and driver shortages will more than likely impact pricing.

The primary financial implications of implementing the proposed recommendations include:

- Final consideration of inclusion of EOW garbage collection in the next collection contract would occur after pricing is received for this option. As a point of reference:
 - In response to Niagara Region's last collection contract RFP, excluding one submission anomaly, on average bidders priced a cost reduction of approximately \$1.2 million annually for EOW garbage collection.
 - Region of Waterloo's implementation of EOW garbage collection in their 2017 contract resulted in an annual contract savings of approximately \$1.5 million.

- Elimination of Niagara Region's annual contract cost to provide appliance and scrap metal curbside collection, which currently is approximately \$130,000.
- Incremental cost avoidance for the proposed weekly large item and garbage container limit changes, which would likely be offset by incremental increases in the organics and recycling collection costs, based on anticipated increased participation in diversion programs.
- Extended site life for open Regional landfills, and more revenue generating capacity from the reduction of divertible materials being landfilled by residents and other service users who are participating in the curbside recycling and organics collection programs.
- Cost avoidance/cost reduction in the landfill contract with Walker Environmental due to an increase in the diversion of waste from disposal.
- Increased tonnages of food and organic waste collected at the curb from improved participation and capture rates would result in increased processing contract costs, unless the tonnages are offset by food waste avoidance and other reduction initiatives.
- Reduced methane emissions due to the reduction of organics being landfilled will result in less leachate generated, thereby reducing costs associated with care and control of these landfill sites.

Analysis

A) BACKGROUND

Current Collection Contracts:

Niagara Region's current collection contracts with Halton Recycling Ltd., doing business as Emterra Environmental, and Waste Connections of Canada Inc. expire March 7, 2021. Niagara Region recently awarded a new collection contract for the municipalities of Lincoln and West Lincoln to Canadian Waste Management Inc. from January 2, 2019 until March 7, 2021. These contracts include provision of base and enhanced collection services, which are defined as follows:

i) Base Collection Services

Niagara Region currently provides base collection services (i.e. weekly garbage, recycling, and organics) to all property types, including IC&I and MU properties located inside and outside DBAs, in all 12 Local Area Municipalities (LAM). Each LAM pays a proportional share of this cost, based on their total household units, as a percentage of the Region's total household units.

Appendix 1 provides a comparison of the current vs. proposed base collection services for each property type.

ii) Enhanced Collection Services

Niagara Region also provides enhanced collection services (i.e. street litter, front-end garbage, additional garbage container limits, increased garbage or recycling collection frequency, etc.), at the request of each LAM. Each LAM directly pays for the cost associated with providing their enhanced collection services. Each LAM was requested to verify which enhanced collection services they would like included as part of Niagara Region's next collection RFP.

Appendix 2 provides a detailed comparison of the current vs. previous enhanced collection services provided in each LAM.

Current Residential Diversion Rate:

Over the past seven years, Niagara Region's residential diversion rate has increased from 42% (2010) to 56% (2017), however this rate may be plateauing. In preparation for the next contract, Niagara Region is investigating options to increase participation in the recycling and organics diversion programs, such as EOW garbage collection and mandatory use of clear garbage bags. Experience in other Ontario jurisdictions demonstrates that EOW garbage collection is an effective mechanism to increase diversion. It is a best practice in Ontario and the highest residential diversion rate primarily attributable to EOW was in York Region (66% in 2016). While Niagara has achieved its 2016 residential diversion target of 56%, additional mechanisms are needed to achieve the 2020 target of 65%. These mechanisms also include improved recognition of waste reduction and reuse efforts, which traditionally are more difficult to measure.

Estimated Landfill Capacity:

At the time of this report, approval for the Humberstone Landfill expansion is expected to be finalized before the end of 2018. This landfill expansion will provide capacity for an estimated 25 years or more, based on serving the southern Niagara municipalities. The current remaining capacity at the Niagara Road 12 Landfill is 48 years, based on serving the municipalities of Pelham, Grimsby, Lincoln and West Lincoln. Niagara Region's current disposal contract with Walker Environmental for the remaining Niagara municipalities ends in February 2031, or just over 12 years.

In order to ensure long term disposal capacity is available, Niagara Region staff are:

- i) Initiating the RFP for the Long Term Waste Management Strategic Plan in 2019-2020.
- ii) Participating in the Municipal Mixed Waste Processing (MWP) Working Group, which has the objective to "identify collaboration opportunities and specific information needs, actions and timelines, in order to determine the feasibility of jointly implementing waste management policies, programs and/or facilities", which includes alternative technology facilities.
- iii) Continuing to engage other neighbouring municipalities in discussions related to available capacity at their current/future alternative waste management technology

facilities and future needs that could be addressed by partnering on alternative technologies.

B) PROPOSED BASE COLLECTION OPTIONS

The following proposed base collection options were included as part of the stakeholder consultation and engagement phase for Niagara Region's next collection contract:

- 1) Change the weekly garbage container (bag/can) limits for IC&I and MU properties located inside DBAs from seven (7) containers to four (4) containers per property.
- 2) Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property.
- 3) Every-other-week (EOW) collection for garbage only (weekly recycling and organics to continue) for all sectors outside DBAs:
 - Current garbage container limits would double for all sectors (i.e. LDR properties would be allowed to set out two (2) garbage containers, on an EOW basis).and/or
- 4) Mandatory use of clear bags for garbage, with the option of allowing an opaque privacy bag to be placed inside the clear bag:
 - The clear bag program will be for all sectors (both inside and outside DBAs).
- 5) Establishment of a four (4) item limit per residential unit, per collection, for large item collection at LDR properties, and, if requested by LAMs, as an enhanced collection service at eligible Multi-Residential (MR) and MU properties.
- 6) Discontinuation of appliances and scrap metal collection at LDR properties.

Rationale for Proposed Base Collection Options:

The following rationale was taken into consideration when determining which collection options were recommended for consultation:

- 1) Increasing participation and capture rates in the Region's recycling and organics diversion programs and extending existing landfill site capacity;
 - Nearly 50% of low density residential garbage is organic waste and only 48% use the residential Green Bin program;
 - IC&I and MU audits show diversion programs underutilized.
- 2) Benchmarking collection services, based on the best practices and/or major trends observed from the service levels provided at Niagara's 13 municipal comparators that would result in financial, environmental and/or social benefit e.g. contract cost avoidance and increased diversion through the implementation of EOW garbage collection.
- 3) Reflecting actual service usage based on results of curbside audits and other collection monitoring/measurements and contract cost avoidance for services with limited usage:
 - 99% of properties using the large item service set out 4 items or less and 92% of the total bookings were for 4 or less items.
 - Appliances and scrap metal:
 - Tonnages have decreased by 94% since 2007;

-
- Items can be recycled, at no cost, at the Region's Drop-off Depots, or by scrap metal haulers/dealers;
 - Only 6% of properties are using the service.
- 4) Standardizing base garbage collection limits across similar sectors to improve service delivery and program communication, increase participation and capture rates in diversion programs, potentially avoid contract costs for a service level which is not needed and reduce contract complexity – this specifically includes consistent base garbage collection container (bag/can) limits for the IC&I and MU sectors inside and outside DBAs;
- Average number of garbage containers placed out per week:
 - IC&I properties inside DBAs was 2.1;
 - MU properties inside DBAs was 2.0;
 - MU properties outside the DBA is 2.4.
 - Proposed four (4) garbage container limit should meet the set-out needs of the IC&I and MU properties, based on these audit results, particularly if diversion services are utilized. IC&I properties outside DBAs already have a base four (4) garbage container limit in place.

The associated rationale for each proposed base collection option and the curbside set-out audit data for the IC&I and MU sectors are included in more detail in Appendix 3.

C) STAKEHOLDER CONSULTATION AND ENGAGEMENT PHASE

The stakeholder consultation and engagement phase was referred to as “Let’s Talk Waste Niagara”.

Stakeholder consultation and engagement began in May 2018 and was carried out in two phases:

- 1) Targeted Stakeholder Consultation
- 2) Broad-based Community Consultation

1) Targeted Stakeholder Consultation:

Various stakeholder groups were targeted for consultation to provide input on the proposed collection options being considered for Niagara Region's next contract.

These stakeholder groups included:

- a) Regional Departments and Agencies, Boards and Commissions (ABCs) (i.e. Niagara Region's Planning and Development Services Department, Niagara Regional Housing, and Niagara Region's Economic Development);
- b) Waste Management Advisory Committee (WMAC);
- c) Organizations Representing Businesses (i.e. Business Improvement Associations, Chambers of Commerce, Niagara Tourism Agencies, and Niagara Industrial Association);
- d) LAMs (i.e. municipal staff and Councillors).

The formal input on the proposed collection options was received from the following targeted stakeholder groups:

a) Regional Departments and ABCs:

i) Niagara Region's Planning and Development Services:

Niagara Region's Planning and Development Services noted the proposed options align with and support policy 4.2.9.1 d) i) of the Growth Plan, which relates to waste management. Staff also reviewed the proposed container limit changes pertaining to MU properties inside and outside DBAs, to ensure alignment with broader Corporate initiatives, including the objectives of Growth Management policies. Based upon their review, it was anticipated that smaller MU developments would not be affected by the proposed change in container limits.

ii) Niagara Regional Housing:

Niagara Regional Housing reviewed the relevant proposed collection options and indicated they would not be in support of EOW garbage collection, or mandatory use of clear bags for garbage at their properties.

iii) Niagara Region's Economic Development:

Niagara Region's Economic Development indicated that their work generally revolves around larger industrial companies, which would not use the Region's curbside garbage collection service, and would not be impacted by the proposed collection options.

b) Waste Management Advisory Committee (WMAC)

A meeting was held with members of the WMAC on November 21, 2018 to discuss the proposed collection options and obtain their formal comments. The WMAC members voted all in favour or majority in favour of all of the proposed collection options.

c) Organizations Representing Businesses (ORBs):

Meetings were held with representatives from each of Niagara's local Business Improvement Associations (including LAM staff), Chambers of Commerce, Niagara Tourism Agencies, Niagara Economic Development Corporation, and Niagara Industrial Association, during the months of July, August and September. The dates of these meetings can be found in Appendix 5.

The purpose of these meetings was to:

- Discuss the proposed collection options;
- Obtain their preliminary input on these options;
- Obtain their input on how to further engage their members; and,
- Request their formal comments on the proposed collection options by November 30, 2018.

The following ORBs provided formal comments on the proposed collection options for the next contract:

- Queen Street BIA, Niagara Falls
- Victoria Centre BIA, Niagara Falls
- St. Catharines Downtown Business Association
- Port Dalhousie Business Association
- Grimsby Downtown Improvement Association
- Pelham Business Association

A copy of the ORB's comments were provided to the respective LAM, for their consideration, and are included in Appendix 4.

Based on the comments received, there was limited support for the mandatory use of clear bags for garbage, or the reduction in the garbage container limits for IC&I and MU properties inside the DBAs.

d) Local Area Municipalities (LAMs)

Correspondence on the proposed collection options and enhanced collection services was sent to LAM Clerks and Public Works Officials (PWO) in May 2018, for their review and comment.

Niagara Region made presentations on the proposed collection options at several PWO meetings during 2018. In addition, Region staff offered to attend LAM Committee or Council meetings to make a presentation. As of December 19, Region staff were requested to present at the following LAM Committee or Council meetings:

- Grimsby Council (December 17, 2018)
- Niagara-on-the-Lake Council (January 7, 2019)
- Lincoln Council (January 14, 2019)
- Niagara Falls Council (January 15, 2019)
- Fort Erie Council (January 21, 2019)
- West Lincoln Council (January 21, 2019)
- Welland General Committee (January 22, 2019)

Town of Grimsby

Town of Grimsby Council, at its December 17, 2018 meeting, approved the eight recommendations, which were included in Report DPW18-42:

- 1) Implement EOW garbage collection for all residential properties and for those IC&I and MU properties located outside the Grimsby DIA area, as a base service.
- 2) Do not implement clear garbage bags.
- 3) Establish a four-item limit for large item collection, per residential unit.
- 4) Provide large-item collection at MR buildings with 7 or more residential units and MU properties with 1 or more residential unit.
- 5) Discontinue appliances and scrap metal curbside collection at LDR properties.
- 6) Reduce the number of garbage bags/containers for IC&I and MU properties inside the DIA area from 7 to 4 per week, as a base service.
- 7) The Town's enhanced service and extra payment for collection inside the Grimsby DIA area remain at two collection days per week but changed to Tuesdays and Fridays and that the number of garbage bags/containers be reduced from 12 per pick-up day to 6 per pick-up day (12 per week), resulting in the Town's Enhanced service payment being reduced from 17 bags/containers per week to 8.
- 8) The number of garbage bags/containers for MU properties outside the Grimsby DIA area be reduced from 6 to 4 per week, or 8 containers under EOW garbage collection, as a base service.

Formal comments from the remaining LAMs on the proposed base collection options and which enhanced services are to be included in Niagara Region's next contract are requested by February 1, 2019 or no later than February 20, 2019.

2) Broad-based Community Consultation:

In addition to targeted stakeholder consultation, a broad-based community consultation was undertaken with the following stakeholder groups:

- LDR households;
- MR property owners, groups and associations (i.e. property management companies);
- IC&I and MU property owners

This broad-based community consultation included the following activities and approaches:

- a) Promotion & Outreach;
- b) Surveys;
- c) Public Open Houses and Community Booths;
- d) Social Media; and
- e) Waste Management Info-Line and Website.

a) Promotion & Outreach:

The following mediums were used during the last week of October and the entire month of November to promote community consultation on the proposed collection options:

- (i) Niagara Region's Website

- (ii) Social Media (i.e. Facebook paid ads and posts and Twitter posts) with a link to the “Let’s Talk Waste” webpage;
- (iii) Letters sent to IC&I, MU and MR properties, which use Region’s curbside garbage;
- (iv) Newspaper Advertisements (i.e. print and on-line);
- (v) Media Coverage (i.e. Cogeco YourTV, 610 CKTB, newspaper articles);
- (vi) Postcards (Regional and Municipal offices)

Details on each of the various promotional mediums can be found in Appendix 5.

b) Surveys:

A Request for Proposal was awarded to Metroline Research Group to undertake quantitative research to determine whether there was sufficient support for recommending the proposed collection options. The following surveys were completed:

- (i) On-line surveys were completed by 6,639 LDR households, 38 MR and 166 IC&I and MU properties (86 outside DBAs and 80 inside DBAs);
- (ii) Telephone survey of 1,253 LDR households;

Based on preliminary results, as of December 17, 2018, strong support for the following options occurred:

- Establishment of a four (4) item limit per residential unit, per collection, for large item collection at LDR properties, as a base service.
- Discontinuation of appliances and scrap metal curbside collection at LDR properties, as a base service.

However, no clear LDR support for EOW garbage collection or mandatory use of clear garbage bags was demonstrated in the survey results:

- LDR households were roughly split on supporting EOW garbage collection with slightly more leaning towards continuing their weekly collection.
- Opposition to the mandatory use of clear garbage bags was apparent, particularly from the on-line survey (73% of LDR households opposed).

In order to determine the order of preference for clear garbage bags versus EOW garbage collection (or both), all survey respondents were asked to make a program choice. The below table highlights the results from all stakeholder groups, with the exception of IC&I and MU inside DBAs who would not receive EOW garbage collection, and in many cases receive enhanced services.

	LDR		MR	IC&I and MU Outside DBAs
	Telephone	On-line	On-line	On-line
Clear Bag	33%	17%	29%	36%
EOW	27%	33%	13%	15%

	LDR		MR	IC&I and MU Outside DBAs
Both Clear Bag and EOW	21%	12%	18%	7%
Neither ¹	19%	38%	40%	42%

1. In the telephone survey, LDR households could not see the option of 'neither' and the interviewer worked to obtain a choice, which is why this option has a much lower response than in the on-line surveys.

In the case of the IC&I and MU sectors:

- Majority of those property owners (58% of 43 respondents) receiving base garbage collection inside the DBAs indicated they can manage if the container limit is reduced from seven (7) containers to four (4);
- Majority of those property owners (65% of 43 IC&I respondents and 74% of 35 MU respondents) outside the DBAs support continuing the current level of service.

A more detailed description of results is provided below.

(i) On-line Surveys:

On-line surveys were developed to obtain formal input from various stakeholder groups (i.e. LDR, MR, IC&I and MU) on the proposed collection options. These on-line surveys were open to all residents and businesses receiving Niagara Region's curbside garbage collection service.

A total of 6,639 on-line surveys were completed by LDR households, 38 on-line surveys by MR households, and 166 on-line surveys by IC&I and MU properties. There were no controls to limit the regions or populations for survey participants. However, Metroline monitored and deleted any duplicate survey submissions.

The highlights of the on-line survey results for each sector are included below.

- LDR:
 - 43% would be able to manage with EOW garbage collection;
 - 62% would not support mandatory use of clear bags for garbage;
 - 33% would choose the option of EOW garbage collection; 17% clear bags; 12% both EOW and clear bags; and 38% neither option;
 - 72% would not be impacted with placing a maximum limit of four large items per weekly collection;
 - 61% would not be impacted with the elimination of curbside collection of appliances/scrap metal
- MR:
 - 37% would be able to manage with EOW garbage collection;

- 42% would not support mandatory use of clear bags for garbage;
 - 13% would choose the option of EOW garbage collection; 29% clear bags; 18% both EOW and clear bags; and 40% neither option

 - IC&I and MU Inside DBAs (Base Collection):
 - 58% could manage if the weekly base container limit was reduced from seven to four containers;
 - 46% of IC&I and 49% of MU properties would not support mandatory use of clear bags for garbage

 - IC&I and MU Inside DBAs (Enhanced Collection):
 - 66% feel they need to maintain their current container limits;
 - 87% feel they need to continue with their current frequency of collection

 - IC&I and MU Outside DBAs (Base Collection):
 - 66% of MU properties could manage if the weekly base container limit was reduced from six to four containers;
 - 35% of IC&I and 26% of MU properties would be able to manage with EOW garbage collection
 - 38% of IC&I and 63% of MU properties would not support mandatory use of clear bags for garbage
- (ii) Telephone Survey:
Metroline conducted a random telephone survey of residents living in LDR properties. In total, 1,253 surveys were conducted, which can be considered statistically accurate to within +/-2.8%, 19 times out of 20 (95% Confidence Interval). The sample was divided between the 12 LAMs, with minimum of 75 surveys was completed in each.

The highlights of the telephone survey results are included below:

- LDR:
 - 46% would be able to manage with EOW garbage collection;
 - 38% would not support mandatory use of clear bags for garbage;
 - 27% would choose the option of EOW garbage collection; 33% clear bags; 21% both EOW and clear bags; and 19% neither option;
 - 89% would not be impacted with placing a maximum limit of four large items per weekly collection;
 - 75% would not be impacted with the elimination of curbside collection of appliances/scrap metal

Additional details on the LDR on-line and telephone survey results can be found in Appendix 8.

c) Public Open Houses and Community Booths:

Niagara Region conducted one public open house and one community booth event in each of Niagara's 12 LAMs during the month of November. The dates and locations of these events can be found in Appendix 6.

The purpose of these events was to engage participants on the proposed collection options and request their input on the proposed collection options through completion of the on-line survey. There were over 500 participants that attended these various events held across the region.

The majority of comments received were related to the options for EOW garbage collection and mandatory use of clear garbage bags. Participants attending the community booths and open houses were divided about every-other-week garbage collection. While approximately half of the participants expressed their support, there were some specific concerns that were repeated throughout the consultation process. There was less support for clear bags, with the majority of participants expressing opposition to this option.

A minority of the feedback and conversations at these events dealt with the options to introduce a four-item limit on large item collection and the discontinuation of appliances and scrap metal curbside collection, but of those commenting, there was a high level of support to implement these changes.

Appendix 4 provides a summary of the more commonly-repeated concerns raised during these events.

d) Social Media:

Facebook was the primary social media platform used by stakeholders to comment on the proposed collection options for the next contract. The majority of comments were related to the proposed options for the mandatory use of clear garbage bags and every-other-week garbage collection. Of all the comments documented that were related to every-other-week garbage collection, 22% of comments were in support of this proposed option. For clear garbage bags, 10% of comments related to this option were supportive.

Overall, the majority of commenters used this platform as a means of communicating their concerns. The comments posted on the Region's paid Facebook advertisement were reviewed, categorized and tallied. As of November 30, 2018, there were 1,467 Facebook comments were posted.

Appendix 4 provides a summary of the ten most frequently reported concerns, in order of the frequency that they appeared in the comments section.

- e) Comments from Niagara Region's Waste Management Info-Line and Website:
A total of 65 comments/inquiries on the proposed collection options were received and responded to by staff through Niagara Region's Waste Management Info-Line, Website or by email in either June, October, or November.

D) OVERVIEW OF KEY RECOMMENDATIONS

1. Base Collection Service Changes

As a result of the stakeholder engagement and consultation process, the following key recommendations are being made:

a) EOW Garbage Collection

Based on best practices and experience with EOW garbage collection in Niagara's municipal comparator group (municipalities with populations greater than 300,000) and the potential for significant cost reduction, it is recommended that this option be included for pricing in the next collection contract RFP, for comparison with weekly garbage collection frequency. Although there was no clear stakeholder support and Niagara Regional Housing expressed opposition to this option, municipalities who have implemented this change note that residents do adapt and increase their diversion efforts, as a result.

EOW garbage collection would apply to all residential properties and those Industrial, Commercial & Institutional (IC&I) and Mixed-Use (MU) properties located outside Designated Business Areas (DBAs), as a base service (weekly recycling and organics to continue, and current garbage container (bag/can) limits would double for affected sectors, on an EOW basis).

b) Limit on Large Item Collection

Establishment of a four (4) item limit per residential unit, per collection, for large item collection at LDR properties, as a base service is recommended, based on actual usage statistics and responses from a majority of survey respondents.

c) Discontinuation of Appliances and Scrap Metal

Discontinuation of appliances and scrap metal curbside collection at LDR properties, as a base service is recommended based on actual usage statistics and responses from a majority of survey respondents.

d) Weekly Base Garbage Container Limits Inside DBAs

Changing the weekly garbage container limits for IC&I and MU properties located inside Designated Business Areas (DBAs) from seven (7) containers to four (4) containers per property, as a base service, is recommended, based on actual usage statistics and responses from a majority of base service user on-line survey respondents. Although the base garbage container limit would decrease, eligible IC&I and MU properties inside the DBAs have unlimited organics and recycling collection once weekly, but currently

these diversion programs are underutilized. It should be noted that of the six (6) ORBs that provided formal comment, only one (1) supported this change.

e) Weekly Base Garbage Container Limits Outside DBAs

Changing the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service, is recommended, based on actual usage statistics and to achieve a standardized base collection service across all similar sectors (in combination with option d) above). This will reduce service and contract complexity and improve program communication across the region. This change is also expected to result in increased diversion efforts, as the current unlimited recycling and organics program for all eligible IC&I and MU properties are currently underutilized. The IC&I sector outside the DBAs has had four (4) container limit per property, as a base service since March 2011. However, it should be noted that out of the 43 MU survey respondents, only one third felt they could manage if this change was made.

While the initial list of all proposed options is supported by WMAC and Niagara Region's Planning and Development Services noted the options align with and support policy 4.2.9.1 d) i) of the Growth Plan, which relates to waste management, one of the options is not recommended for implementation based on the general lack of support from survey respondents. The use of mandatory clear garbage bags will continue to be monitored for potential future implementation but based on existing data from Ontario jurisdictions, EOW garbage collection is expected to have more of a positive financial and diversion performance impact.

In order to address the concerns and comments received on the proposed options being recommended for inclusion in the next collection contract, Appendix 7 proposes potential solutions to minimize impact of the change(s) on the service user. This appendix will continue to be developed and expanded, as required.

2. Enhanced Collection Service Changes

Niagara Region is requesting that LAMs confirm existing or new enhanced services that should be provided as part of the next collection contract. There are three areas that should be specifically addressed:

- a) In those LAMS that provide enhanced garbage collection service to DBAs, Regional staff have been engaged in discussions with Local Public Works Officials on one or more of the following proposals for the IC&I and MU sectors, based on usage of current garbage collection service and underutilization of the diversion programs:
- Reducing DBA garbage container limits;
 - Reducing frequency of DBA garbage collection; and
 - Increasing recycling and/or organics collection service to align with frequency of garbage collection.

- b) Provision of enhanced bulky goods collection to those households in MR buildings with seven (7) or more residential units (garbage limit of a maximum of 12 containers per week with no tags) and MU properties with one (1) or more residential unit (garbage limit of a maximum of seven (7) containers per week outside the DBA and a maximum of six (6) containers per week inside the DBA), that receive the Region's curbside base garbage collection and/or to those MR building receiving enhanced Regional containerized front end garbage collection service:
- These properties must be participating in the Region's diversion programs (i.e. recycling and organics) in order to qualify to receive this service.
 - This service would be provided in a manner that is parallel to the approved service for the LDR sector.
- c) Verification if any municipality would like to include a per stop price for in-ground public space recycling and litter bins and/or for in-ground IC&I, MR and/or MU properties (all streams), as an enhanced service under provisional items.

3. Contract Service Improvements

As outlined in Report WMPSC-C 9-2018, staff will be pursuing the following service improvements in the next collection contract RFP:

- a) Potential changes to how the Region collects leaf and yard waste (L&YW) and brush at LDR households, which would be a seamless change to residents:
- In addition to the current service level, the Region would obtain pricing to provide an additional four weeks of dedicated L&YW and branch collection in the spring and the fall seasons, in the urban areas only, or potentially expanding a dedicated L&YW and brush collection to approximately ten (10) months of the year in urban areas;
 - This change would result in lower organics processing costs by separating L&YW material from green bin material, thereby removing this material from the GORE system;
 - This change would result in increased organics collection costs associated with providing these additional L&YW and branch collection service;
 - Staff will need to complete a cost-benefit analysis to determine whether the organics processing cost savings outweigh the increased collection costs before determining whether to proceed with these changes.
- b) Elimination of a current restriction that impacts IC&I properties with private garbage collection. Currently, these properties, which would otherwise have been eligible to receive curbside garbage collection, are restricted from using this service.
- These properties must be participating in the Region's diversion programs (i.e. recycling and organics), in order to qualify to receive the curbside garbage collection service.

E) NEXT STEPS

The Region is requesting receipt of the following from LAMs by February 1, 2019 or no later than Feb 20, 2019:

- Comments/position on proposed base collection service options;
- Verification of current or additional enhanced services - this would include:
 - Services to IC&I and MU properties inside DBAs;
 - Provision of enhanced large item collection service to MR and MU residential units, in a manner parallel to the service provided to the LDR sector (i.e. if LDR has a 4 item limit per unit per collection day, this would also apply to MR and MU residential units);
 - Inclusion of a per stop price for in-ground public space recycling and litter bins and/or for in-ground IC&I, MR and/or MU properties (all streams), as an enhanced service under provisional items.

The milestones for the collection contract RFP development are outlined below:

- Report to Public Works Committee (PWC) and Council on results of stakeholder consultation and engagement (PWC January 8, 2019 and Council January 17, 2019);
- Receipt of each LAM's position on base and enhanced services (no later than February 20, 2019);
- Council approval of service levels to be included and RFP development initiated (Q2 to Q3 2019);
- RFP issuance (early Q4 2019);
- Award of new collection contract (Q1 2020);
- One year for successful bidders to order/receive their fleet of collection vehicles (Q1 2020 to Q1 2021);
- Start of new contract (March 8, 2021).

Alternatives Reviewed

Niagara Region investigated the option of switching over to cart-based collection for the next collection contract. Under the Province's Environmental Plan, waste diversion programs, such as the Blue Box Program, may be moving to the producer responsibility model. As a result, Niagara Region would no longer be responsible for providing collection and processing of Blue Box materials. This would be the responsibility of the Blue Box industry stewards. Therefore, at this time, staff did not believe implementing major program changes was advisable.

Also, based on the experiences of other municipalities that implemented a cart-based collection program, this option was not recommended for further consideration for the following reasons:

- 1) Significant capital costs to purchase and distribute the carts

- 2) On-going annual maintenance and replacement costs associated with the carts
- 3) Higher contamination rates of the recycling and organics streams associated with the use of carts. As a result, there would be a decrease in the Region's revenues and difficulty with marketing the recyclables.
- 4) Additional costs associated with retrofitting Niagara Region's Materials Recycling Facility from the current two-stream operation to a single-stream operation, if all recyclables are collected in one cart.

Based on the results received during the stakeholder consultation and engagement phase, the following proposed collection option is not being recommended for implementation, as part of Niagara Region's next collection contract:

- 1) Mandatory use of clear bags for garbage, with the option of allowing an opaque privacy bag to be placed inside the clear bag

Relationship to Council Strategic Priorities

The recommendation to approve the proposed base collection services for Niagara Region's next collection contract supports Council's Strategic Priority of Investment, Innovation and Entrepreneurship.

Other Pertinent Reports

- CWCD 357-2018 Let's Talk Waste Niagara – Stakeholder Consultation and Engagement Activities for the Proposed Waste Collection Options
- CWCD 216-2018 Fact Sheet – Consultation and Engagement Strategy for Proposed Service Level Collection Options Under Consultation
- WMPSC-C 9-2018 Stakeholder Consultation and Engagement on Proposed Collection Service Changes for Next Collection Contract
- WMPSC-C 34-2017 Schedule for the Next Regional Waste, Recycling and Organics Collection Contract
- PW 42-2014 A Matter of the Security of the Property of the Municipality – Bulky/ White Goods Collection Service for Multi-Residential and Mixed-Use Properties
- WMPSC-C 44-2013 Bulky/White Goods Collection Service for Multi-Residential and Mixed-Use Properties
- WMPSC-C 2-2013 Large Item Collection Service for Multi-Residential Buildings and Mixed-Use Properties
- PW 47-2012 Consultation Results on Proposed Clear Bag Pilot for Industrial, Commercial and Institutional Properties
- WMPSC 24-2011 Clear Bag for Garbage Pilot for Industrial, Commercial and Institutional Properties

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Appendices

Appendix 1 - Comparison of Current vs. Proposed Base Collection Services	Page 20
Appendix 2 - Comparison of Current vs. Previous Enhanced Collection Services	Page 24
Appendix 3 - Rationale for Proposed Collection Options for Next Contract	Page 29
Appendix 4 - Stakeholder Comments on Proposed Base Collection Options	Page 46
Appendix 5 - Stakeholder Consultation and Engagement Process	Page 55
Appendix 6 - Summary of Stakeholder Consultation and Engagement Events	Page 63
Appendix 7 - Addressing Concerns Related to Proposed Collection Options	Page 64
Appendix 8 – LDR Telephone and On-line Survey Results	Page 67

Appendix 1 - Comparison of Current vs. Proposed Base Collection Services

Property Type	Current Base Collection Service Level	Proposed Base Collection Service Level
Low-Density Residential (1 to 6 units): single-family, townhouse, semi-detached, duplex, triplex, fourplex, fiveplex, sixplex, cottages	<ul style="list-style-type: none"> Weekly garbage, 1 bag/can limit per residential unit 	<ul style="list-style-type: none"> Every-other-week garbage, 2 bag/can limit per residential unit, and/or Mandatory use of clear garbage bags
	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes 	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes
	<ul style="list-style-type: none"> Weekly, unlimited Green Bins 	<ul style="list-style-type: none"> Weekly, unlimited Green Bins
	<ul style="list-style-type: none"> Large items, with no limit per collection, per residential unit 	<ul style="list-style-type: none"> Large items, with 4 item limit per collection, per residential unit
	<ul style="list-style-type: none"> Appliances and scrap metal, with no limit per collection, per residential unit 	<ul style="list-style-type: none"> No appliances and scrap metal collection
	<ul style="list-style-type: none"> Weekly Leaf & Yard Waste (L&YW) and 8 brush collections per year 	<ul style="list-style-type: none"> Weekly L&YW and 8 brush collections per year Additional 4 weeks of dedicated L&YW and brush collections in the spring and the fall seasons, in urban areas only
Multi-Residential (7 or more units): <ul style="list-style-type: none"> apartments, cottages, condominiums and rentals, nursing and retirement homes, mixed-use, rooming/boarding houses 	<ul style="list-style-type: none"> Weekly garbage, 1 bag/can limit per residential unit, maximum 12 bags per building 	<ul style="list-style-type: none"> Every-other-week garbage, 2 bag/can limit per residential unit, maximum 24 bags per building and/or Mandatory use of clear garbage bags
	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts 	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts
	<ul style="list-style-type: none"> Weekly, unlimited Green Bins or Green Carts (by request) 	<ul style="list-style-type: none"> Weekly, unlimited Green Bins or Green Carts (by request)

Property Type	Current Base Collection Service Level	Proposed Base Collection Service Level
	<ul style="list-style-type: none"> No large item collection 	<ul style="list-style-type: none"> Provision of large item collection to properties receiving Region's curbside base or enhanced garbage collection (ELOS provided only)
	<ul style="list-style-type: none"> No appliances and scrap metal collection 	<ul style="list-style-type: none"> No appliances and scrap metal collection
	<ul style="list-style-type: none"> No L&YW or brush collection 	<ul style="list-style-type: none"> No L&YW or brush collection
Mixed Use Buildings – <u>Inside</u> DBA	<ul style="list-style-type: none"> Weekly garbage, maximum 7 bag/can limit per property 	<ul style="list-style-type: none"> Weekly garbage, maximum 4 bag/can limit per property and/or Mandatory use of clear garbage bags
	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts 	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts
	<ul style="list-style-type: none"> Weekly, unlimited Green Bins/Carts 	<ul style="list-style-type: none"> Weekly, unlimited Green Bins/Carts
	<ul style="list-style-type: none"> No large item collection 	<ul style="list-style-type: none"> Provision of large item collection to residential units only, which receive Region's curbside base or enhanced garbage collection (ELOS provided only)
	<ul style="list-style-type: none"> No appliances and scrap metal collection 	<ul style="list-style-type: none"> No appliances and scrap metal collection
	<ul style="list-style-type: none"> No L&YW or brush collection 	<ul style="list-style-type: none"> No L&YW or brush collection
Mixed Use Buildings – <u>Outside</u> DBA	<ul style="list-style-type: none"> Weekly garbage, maximum 6 bag/can limit per property 	<ul style="list-style-type: none"> Weekly garbage, maximum 4 bag/can limit per property Every-other-week garbage collection, maximum 8 bag/can limit per property (if container limit decrease approved) and/or Mandatory use of clear garbage bags

Property Type	Current Base Collection Service Level	Proposed Base Collection Service Level
	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts 	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts
	<ul style="list-style-type: none"> Weekly, unlimited Green Bin/Carts 	<ul style="list-style-type: none"> Weekly, unlimited Green Bin/Carts
	<ul style="list-style-type: none"> No large item collection 	<ul style="list-style-type: none"> Provision of large item collection to residential units only, which receive Region's curbside base or enhanced garbage collection (ELOS provided only)
	<ul style="list-style-type: none"> No appliances and scrap metal collection 	<ul style="list-style-type: none"> No appliances and scrap metal collection
	<ul style="list-style-type: none"> No L&YW or brush collection 	<ul style="list-style-type: none"> No L&YW or brush collection
IC&I Properties – <u>Inside DBA</u>	<ul style="list-style-type: none"> Weekly garbage, maximum 7 bag/can limit per property 	<ul style="list-style-type: none"> Weekly garbage, maximum 4 bag/can limit per property and/or Mandatory use of clear garbage bags
	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts 	<ul style="list-style-type: none"> Weekly, unlimited Blue/Grey Boxes or Carts
	<ul style="list-style-type: none"> Weekly, unlimited Green Bin/Carts 	<ul style="list-style-type: none"> Weekly, unlimited Green Bin/Carts
	<ul style="list-style-type: none"> No large item collection 	<ul style="list-style-type: none"> No large item collection
	<ul style="list-style-type: none"> No appliances and scrap metal collection 	<ul style="list-style-type: none"> No appliances and scrap metal collection
	<ul style="list-style-type: none"> No L&YW or brush collection 	<ul style="list-style-type: none"> No L&YW or brush collection
IC&I Properties– <u>Outside DBA</u>	<ul style="list-style-type: none"> Weekly garbage, maximum 4 bag/can limit per property 	<ul style="list-style-type: none"> Every-other-week garbage, maximum 8 bag/can limit per property and/or Mandatory use of clear garbage bags Elimination of restriction on curbside garbage collection for

Property Type	Current Base Collection Service Level	Proposed Base Collection Service Level
		IC&I properties receiving private garbage collection
	<ul style="list-style-type: none"> • Weekly, unlimited Blue/Grey Boxes or Carts 	<ul style="list-style-type: none"> • Weekly, unlimited Blue/Grey Boxes or Carts
	<ul style="list-style-type: none"> • Weekly, unlimited Green Bin/Carts 	<ul style="list-style-type: none"> • Weekly, unlimited Green Bin/Carts
	<ul style="list-style-type: none"> • No large item collection 	<ul style="list-style-type: none"> • No large item collection
	<ul style="list-style-type: none"> • No appliances and scrap metal collection 	<ul style="list-style-type: none"> • No appliances and scrap metal collection
	<ul style="list-style-type: none"> • No L&YW or brush collection 	<ul style="list-style-type: none"> • No L&YW or brush collection

Appendix 2 – Comparison of Current vs. Previous Enhanced Collection Services

Municipality	2004-11 Collection Contract	2011-21 Collection Contract
Fort Erie	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Once-per-week collection (Jarvis and Ridge Road) 	<ul style="list-style-type: none"> • Twice-per-week collection (Jarvis St, Ridge Rd and Niagara Blvd.) • Once-per-week collection (Crystal Beach DBA) • Once-per-week collection (Garrison Rd.)
Grimsby	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Twice-per week collection 	<ul style="list-style-type: none"> • Three days-per-week collection • Once-per-week collection on Windward Dr.
	Additional Curbside Waste Collection	
<ul style="list-style-type: none"> • One additional garbage collection day per week in the downtown core • Maximum of 12 garbage containers per property per collection day in the downtown core 	<ul style="list-style-type: none"> • One additional collection day per week in the downtown core • Maximum of 12 garbage containers per property per collection day in the downtown core 	
Lincoln	Containerized Waste Collection	
	<ul style="list-style-type: none"> • Once-per-week collection 	<ul style="list-style-type: none"> • Once-per-week collection
	Weekly (Blue and Grey) Recycling Cart Collection	
<ul style="list-style-type: none"> • Once-per-week (Monday) 	<ul style="list-style-type: none"> • Every municipality with a Designated Business Area receives weekly recycling collection as part of base collection service 	
Niagara Falls	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Seven days-per-week, year-round collection in Mainline business district • Chippawa area collected on Thursday by residential truck and Sundays, mid-May to mid-October, as part of Mainline business district 	<ul style="list-style-type: none"> • Seven days-per-week, year-round collection in Mainline business district • Chippawa DBA collected once-per week. One additional day per week collection from mid-May to mid-October • Collection once-per-week for street litter receptacles outside the Mainline

Appendix 2 – Comparison of Current vs. Previous Enhanced Collection Services

Municipality	2004-11 Collection Contract	2011-21 Collection Contract
	Containerized Waste Collection	
	<ul style="list-style-type: none"> Once or twice per week (Monday and/or Thursday) 	<ul style="list-style-type: none"> Multi-residential buildings with varying collection frequency
	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> All tourist/commercial business (lodging and food outlets only) on the Mainline receive an increase to 20 garbage containers per property, between July 1 to Labour Day 	<ul style="list-style-type: none"> All tourist/commercial businesses (lodging and food outlets only) on the Mainline receive an increase from seven to fifteen garbage containers per property, between the Victoria Day weekend and Labour Day
	Old Corrugated Cardboard Collection	
	<ul style="list-style-type: none"> Once-per-week collection (over two days-Thursday and Friday) 	<ul style="list-style-type: none"> No collection of old corrugated cardboard
Special Set-out Collection for Physically-Challenged Residents		
<ul style="list-style-type: none"> Set-out and collection service of standard limit garbage, organics and recycling containers 	<ul style="list-style-type: none"> Included in base collection services 	
Niagara-on-the-Lake	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> Two additional garbage collection days per week in the downtown core Maximum of 20 garbage containers per property for each collection day 	<ul style="list-style-type: none"> Two additional garbage collection days per week in the downtown core Maximum of 20 garbage containers per property for each collection day
	Old Corrugated Cardboard Collection	
	<ul style="list-style-type: none"> Weekly cardboard collection from commercial properties in the Queen Street Commercial Area, two days per week: Monday and Thursday 	<ul style="list-style-type: none"> Two days of curbside collection of cardboard from commercial properties in the Queen Street Commercial Area
	Weekly (Both Streams) Recycling Cart Collection	
<ul style="list-style-type: none"> Once-per-week collection 	<ul style="list-style-type: none"> Every municipality with a Designated Business Area receives weekly recycling collection as part of base collection service 	

Appendix 2 – Comparison of Current vs. Previous Enhanced Collection Services

Municipality	2004-11 Collection Contract	2011-21 Collection Contract
Pelham	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Once-per-week collection 	<ul style="list-style-type: none"> • Twice-per-week collection
	Containerized Waste Collection	
	<ul style="list-style-type: none"> • Once-per-week collection 	<ul style="list-style-type: none"> • Once-per-week collection, with the exception on one property receiving twice-per-week collection
	Weekly (Both Streams) Recycling Cart Collection	
	<ul style="list-style-type: none"> • Once-per-week collection (Thursday) 	<ul style="list-style-type: none"> • Every municipality with a Designated Business Area receives weekly recycling collection as part of base collection service
	Special Set-out Collection for Physically-Challenged Residents	
<ul style="list-style-type: none"> • Set-out and collection service of standard limit garbage, organics and recycling containers 	<ul style="list-style-type: none"> • Included in base collection services 	
Port Colborne	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • No street litter receptacle collection 	<ul style="list-style-type: none"> • There are street litter receptacles (OMG bins) that require separate collection of Grey and/or Blue Box materials. The recycling from the compartmentalized bins are collected separately and at the same frequency as garbage containers
	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> • Daily garbage collection at Port Colborne Hospital (Monday-Friday). No container limit. • Additional garbage container limits at group homes, schools, Home Hardware 	<ul style="list-style-type: none"> • No additional curbside waste collection as part of enhanced services
Old Corrugated Cardboard Collection		
<ul style="list-style-type: none"> • Once-per-week collection (Thursday) 	<ul style="list-style-type: none"> • Every municipality with a Designated Business Area receives weekly recycling 	

Appendix 2 – Comparison of Current vs. Previous Enhanced Collection Services

Municipality	2004-11 Collection Contract	2011-21 Collection Contract
		collection as part of base collection service
St.Catharines	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Seven days-per-week, including all parks, sports facilities and recyclables from OMG bins 	<ul style="list-style-type: none"> • Four days-per-week collection for Downtown St.Catharines • Seven days-per-week, from May 1 to October 31 inclusive, and one (1) day per week, from November 1 to April 30 inclusive in Port Dalhousie • Once-per-week collection for all other street litter receptacles located on city streets, in front of schools, in sports facilities, parks, cemeteries, and recreational and community centres
	Containerized Waste Collection	
	<ul style="list-style-type: none"> • Variable frequency - multi-residential/Downtown IC&I properties and pullout service 	<ul style="list-style-type: none"> • Variable frequency - multi-residential properties
	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> • Six additional collection days per week in the downtown core, over and above the Base Level of Service 	<ul style="list-style-type: none"> • Three additional collection days per week in the downtown core, over and above the Base Level of Service • Maximum of 7 garbage containers per property per collection day in the downtown core
	Old Corrugated Cardboard Collection	
		<ul style="list-style-type: none"> • Communal front-end cardboard containers shared by businesses in the downtown collection area
Weekly (Both Streams) Recycling Cart Collection		
<ul style="list-style-type: none"> • Once-per-week collection (Monday or Thursday) 	<ul style="list-style-type: none"> • Every municipality with a Designated Business Area receives weekly recycling collection, as part of base 	

Appendix 2 – Comparison of Current vs. Previous Enhanced Collection Services

Municipality	2004-11 Collection Contract	2011-21 Collection Contract
		collection service
	Special Set-out Collection for Physically-Challenged Residents	
	<ul style="list-style-type: none"> • Set-out and collection service of standard limit garbage, organics and recycling containers 	<ul style="list-style-type: none"> • Included in base collection services
Thorold	Street Litter Receptacle Collection	
	<ul style="list-style-type: none"> • Three days-per-week collection 	<ul style="list-style-type: none"> • Three days-per-week collection
	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> • Two additional collection days per week in the downtown core 	<ul style="list-style-type: none"> • Two additional collection days per week in the downtown core
	Additional Blue Box Collection	
	<ul style="list-style-type: none"> • Additional weekly collection of Blue Box recyclables for all commercial properties located within the City of Thorold's BIA. 	<ul style="list-style-type: none"> • Additional weekly collection of Blue Box recyclables for all commercial properties located within the City of Thorold's BIA.
Welland	Containerized Waste Collection	
	<ul style="list-style-type: none"> • No containerized waste collection 	<ul style="list-style-type: none"> • Once-per-week collection (condo properties)
West Lincoln	Containerized Waste Collection	
	<ul style="list-style-type: none"> • Once-per-week collection 	<ul style="list-style-type: none"> • Once or twice-per-week collection depending on location
	Additional Curbside Waste Collection	
	<ul style="list-style-type: none"> • No additional curbside waste collection 	<ul style="list-style-type: none"> • One additional collection day per week in the downtown core • Maximum of 7 garbage containers per property per collection day in the downtown core

Appendix 3 - Rationale for Proposed Collection Service Options for Next Contract

Proposed Collection Service Options:

- 1) **Change the weekly garbage container (bag/can) limits for IC&I and MU properties located inside Designated Business Areas (DBA) from seven (7) containers to four (4) containers per property, as a base service.**

Pros	Cons
<p>1) Fairness & equity: <u>Base Collection Service:</u></p> <ul style="list-style-type: none"> • based on the 2018 curbside audits: <ul style="list-style-type: none"> - average # of garbage containers placed out per week by <u>IC&I</u> properties <u>inside</u> DBAs was 2.1. - in 2018, audits were completed in: Grimsby, Welland (Downtown and North End), Port Colborne (Main St. and Downtown), Lincoln (Beamsville and Vineland), Pelham, Thorold, St. Catharines (Downtown and Port Dalhousie), Fort Erie (Ridgeway, Bridgeburg, and Crystal Beach), and Niagara Falls (Queen, Main St., Lundy's Lane, Clifton Hill and Chippawa) DBAs. • based on the 2016 and 2018 curbside audits: <ul style="list-style-type: none"> - average # of garbage containers placed out per week by <u>MU</u> properties <u>inside</u> DBAs was 2.0. - in 2016, audits were completed in: Fort Erie (Ridgeway, Bridgeburg, and Crystal Beach), Welland (Downtown and North End), and Port Colborne (Main St. and Downtown) DBAs. - in 2018, audits were completed in: Grimsby, Lincoln (Beamsville and Vineland), Pelham, Thorold, St. Catharines (Downtown and Port Dalhousie), and Niagara Falls (Queen, Main St., Lundy's Lane, Clifton Hill and Chippawa) DBAs. • the proposed 4 garbage container limit should meet the set-out needs of the IC&I and MU properties, based on these audit results, particularly if diversion services are 	<p>1) Potential illegal dumping:</p> <ul style="list-style-type: none"> • if garbage container limits are decreased, there is potential for businesses and residents to illegally dump items. <p>2) Potential for increased number of complaints from business owners, MU property owners and residents due to reduced container limit:</p> <ul style="list-style-type: none"> • business owners may potentially complain about this reduction in container limit being provided to their property.

Pros	Cons
<p>utilized.</p> <ul style="list-style-type: none"> • the proposed 4 garbage container limit will align with the existing 4 garbage container limit for IC&I properties located outside DBAs, and the proposed limit for IC&I and MU properties located inside DBAs. • it will encourage participation in diversion programs, which are under-utilized. <p><u>Enhanced Collection Service:</u></p> <ul style="list-style-type: none"> • based on the 2014 garbage set-outs at enhanced <u>IC&I</u> properties: <ul style="list-style-type: none"> - Grimsby (12 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 3.6 - West Lincoln (7 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 2.5 - Thorold (7 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 4.5 • based on the 2015 garbage set-outs at enhanced Niagara Falls <u>IC&I</u> and <u>MU</u> properties: <ul style="list-style-type: none"> - Main Street, Lundy's Lane and Queen Street DBAs – average # of garbage containers placed out per set-out: 5.2 (IC&I) and 2.9 (MU) - audits were completed during the summer months, when the 15 garbage container limit was in effect for food and lodging outlets (1 collection per week). It is a 7 garbage container limit elsewhere, once/week. • based on the 2018 garbage set-outs at enhanced <u>IC&I</u> and/or <u>MU</u> properties: <ul style="list-style-type: none"> - Grimsby (12 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 1.6 (MU) - West Lincoln (7 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 1.7 (MU) 	

Pros	Cons
<ul style="list-style-type: none"> - Thorold (7 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 1.9 (MU) - NotL (20 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 6.0 (IC&I) and 6.8 (MU) - St. Catharines (7 garbage container limit, four times per week) – average # of garbage containers placed out per set-out: 2.7 (IC&I) and 1.5 (MU) 	

2) **Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service.**

Pros	Cons
<p>1) Fairness & equity: <u>Base Collection Service:</u></p> <ul style="list-style-type: none"> • based on the 2014 curbside audit: <ul style="list-style-type: none"> - average # of garbage containers placed out per week by MU properties outside DBAs: 2.4 • the proposed four (4) container limit would meet the set-out needs of the MU properties, based on these audit results. • the proposed four (4) container garbage limit will align with the existing four container garbage limit for IC&I properties located outside DBAs, and the proposed limit for IC&I and MU properties located inside DBAs. • it will increase diversion, with less reliance on landfill. 	<p>1) Potential illegal dumping:</p> <ul style="list-style-type: none"> • if garbage container limits are decreased, there is potential for businesses and residents to illegally dump items. <p>2) Potential for increased number of complaints from business owners, due to reduced container limit:</p> <ul style="list-style-type: none"> • business owners, MU property owners and residents may potentially complain about this reduction in container limit being provided to their property.

3) **Every-other-week (EOW) collection for garbage only (weekly recycling and organics to continue) for all sectors outside DBAs, as a base service. Current garbage container limits would double for all sectors (i.e. LDR properties would be allowed to set out two (2) garbage containers, on an EOW basis).**

Pros	Cons
1) Municipal best practice/trend:	1) Potential illegal dumping:

Pros	Cons
<ul style="list-style-type: none"> • approximately 70% of the municipal comparators (Barrie, Durham, Halton, Markham, Ottawa, Toronto, Vaughan, Peel and Waterloo) provide EOW garbage collection service. Residents have adapted to this change. <p>2) Increased waste diversion:</p> <ul style="list-style-type: none"> • waste diversion rates increased between 6% (Peel) and 16% (Durham) for these municipal comparators. This depended on whether they introduced other diversion programs (i.e. organics) at the same time as EOW garbage. <p>3) Potential contract savings:</p> <ul style="list-style-type: none"> • annual contract savings for the municipal comparators ranged between \$200,000 (Barrie), Waterloo (\$1.5 million), and \$12 million (Peel), depending on size of the contract and any other contract changes that were implemented (i.e. EOW, carts, etc.). <ul style="list-style-type: none"> - However, Peel staff reported a one-time initial cost to implement three stream cart collection of \$35 million (based on 325,000 single-family homes), with an estimated annual maintenance and replacement cost of \$1 to 3 million. • avoided Walker disposal costs, if there is a decrease in the volume of garbage collected. <p>4) Regional disposal capacity:</p> <ul style="list-style-type: none"> • preservation of existing Regional disposal capacity, if the volume of garbage landfilled decreases. <p>5) Fairness & equity:</p> <ul style="list-style-type: none"> • based on the 2015-16 waste composition study, Niagara's LDR properties set out an average of 0.9 garbage containers per 	<ul style="list-style-type: none"> • if residents/businesses are not provided with weekly garbage collection service, there is potential for them to illegally dump items. <p>2) Potential increased number of complaints, due to reduction in service:</p> <ul style="list-style-type: none"> • Residents/businesses may complain about this reduction in garbage collection service being provided to their property.

Pros	Cons
week.	

4) **Mandatory use of clear bags for garbage, with the option of allowing an opaque privacy bag to be placed inside the clear bag. The clear bag program will be for all sectors (both inside and outside DBAs), as a base service.**

Pros	Cons
<p>1) Increased waste diversion:</p> <ul style="list-style-type: none"> studies completed by Ontario's Stewardship Effectiveness & Efficiency Fund report that "<i>clear bag programs are successful in decreasing the amount of recyclables being landfilled or incinerated, and have shown that mandatory by-laws and clear bags result in maximum participation and diversion</i>". implementing clear bags resulted in a 6% increase in Markham's 2014 diversion rate, for a total diversion rate of 81%. residents are motivated to recycle due to social pressure. <p>2) Enforcement/safety:</p> <ul style="list-style-type: none"> increases awareness of what is placed in the garbage, due to visibility of bag contents. eliminates (or minimizes) the option of concealing hazardous or other non-acceptable materials (e.g. recyclables and organics) in the garbage. facilitates education and enforcement of Niagara's Waste Management By-law, where necessary. <p>3) Fairness & equity:</p> <ul style="list-style-type: none"> clear bags are currently being used for diapers by those Niagara residents operating daycares out of 	<p>1) Perception of invasion of privacy:</p> <ul style="list-style-type: none"> residents using clear bags may complain it is an invasion of their privacy. <ul style="list-style-type: none"> this concern is partially addressed by allowing the use of an opaque bag inside the clear bag. IC&I business groups, who participated in the Region's 2012 consultation sessions for a clear garbage bag pilot, expressed privacy concerns, as well. <p>2) Potential illegal dumping:</p> <ul style="list-style-type: none"> residents and businesses opposing the use of clear garbage bags may potentially illegally dump their garbage. <p>3) Collection issues:</p> <ul style="list-style-type: none"> if a clear bag is placed inside a reusable container, enforcement may become more difficult if driver dumps the contents of the container directly into truck, as opposed to pulling the clear bag out of the container to look at it. the IC&I business groups expressed concerns about the aesthetics of uncollected bags, which would contain non-acceptable materials, being left in downtown or tourist areas. <p>4) Other Municipal programs:</p>

Pros	Cons
<p>their households, or families with at least two children under the age of four years old.</p> <ul style="list-style-type: none"> - these residents may feel the program ensures equal treatment for all households. 	<ul style="list-style-type: none"> • clear bag pilots were implemented in two comparator municipalities (Durham and Markham), however only Markham implemented a full program. • Durham decided not to implement a region-wide clear bag program in 2014, due to a lack of information on the effectiveness of the clear bag in reducing the amount of garbage collected.

5) Establishment of a four (4) item limit per unit per collection for large item service at LDR, MR and MU properties.

Pros	Cons
<p>1) Municipal best practice/trend:</p> <ul style="list-style-type: none"> • average large item limit is three per residential unit for those municipalities with weekly collection, and four per residential unit with bi-weekly collection. <p>2) Potential contract savings:</p> <ul style="list-style-type: none"> • municipalities that implemented collection limits on the number of large items reported contract savings. <p>3) Fairness & equity:</p> <ul style="list-style-type: none"> • provides a standardized collection limit for all properties. • Niagara residents set out an average of fewer than 2 large items per collection in 2018. 	<p>1) Potential illegal dumping:</p> <ul style="list-style-type: none"> • if residents are limited in the amount of large items that can be collected, there is potential for them to illegally dump items. <p>2) Potential increased number of complaints from residents, due to reduction in service:</p> <ul style="list-style-type: none"> • residents may complain about this reduction in service being provided to their property.

6) Discontinuation of appliances and scrap metal collection at LDR properties.

Pros	Cons
<p>1) Municipal best practice/trend:</p> <ul style="list-style-type: none"> • approximately half of municipal comparators (Barrie, Hamilton, 	<p>1) Potential illegal dumping:</p> <ul style="list-style-type: none"> • if residents are not provided with service, there is potential for them

Pros	Cons
<p>London, Ottawa, Peel and Windsor) do not provide appliance collection service.</p> <p>2) Potential contract savings:</p> <ul style="list-style-type: none"> • municipalities that eliminated this collection service realized a contract savings. In Peel, this was a net annual savings of \$100K. • Niagara’s current annual cost to collect these items is \$126K (or \$2,032 per tonne due to the reduced tonnage). • many appliances and scrap metal items are scavenged before municipal contractors can collect them. <ul style="list-style-type: none"> - for the first two months of 2018, Emterra reported that approximately 60% of the items scheduled for collection were “not out” and were potentially scavenged. • appliance and scrap metal tonnages collected in 2017 were 94% lower than what was collected in 2007. <p>3) Fairness & equity:</p> <ul style="list-style-type: none"> • residents have the option to recycle these items, at no cost, at the Region’s drop-off depots or a scrap metal dealer, as well as call a scrap metal hauler to collect them. 	<p>to illegally dump items.</p> <ul style="list-style-type: none"> • Barrie reported an increase in illegal dumping when bulky/white goods collection service was discontinued; however it was not sustained (approximately six months). • Peel provided its residents with advanced notice of this discontinuation of service and options for collection, so they did not see any significant increase in illegal dumping. <p>2) Potential increased number of complaints from residents, due to elimination of this service:</p> <ul style="list-style-type: none"> • residents may complain about the elimination of this service. • those municipalities that discontinued collection (Barrie, Hamilton, Ottawa and Peel) reported a minimal reaction from their residents.

Audit Results

Base Collection Service Audit Results

**Weekly Average Garbage Containers Set Out by IC&I Properties Inside the DBA
 (Base Collection Area)**

Municipality	Audit Year	Average Number of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection Service Inside DBA	Average Number of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Fort Erie	2018	56	88%	1.6	0%
Grimsby	2018	9.0	89%	1.2	0%
Lincoln	2018	18	83%	2.1	3%
Niagara Falls	2015	94.5	87%	2.7	6%
Pelham	2018	34	85%	2.3	3%
Port Colborne	2018	72	88%	2.2	3%
St. Catharines	2018	56	71%	1.7	0%
Thorold	2018	2	100%	1.8	0%
Welland	2018	68	91%	2.0	3%

**Weekly Average Garbage Containers Set Out by MU Properties Inside the DBA
 (Base Collection Area)**

Municipality	Audit Year	Average Number of MU Properties Participating in Regional Collection Service	Average % of Participating MU Properties Using Regional Garbage Collection Service Inside DBA	Average Number of Garbage Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit
Fort Erie	2016	63.5	95%	2.6	7%
Grimsby	2018	2	50%	1.0	0%
Lincoln	2018	21	90%	2.1	5%
Niagara Falls	2015	63	98%	1.8	3%
Pelham	2018	19	79%	2.8	0%
Port Colborne	2016	53	92%	2.5	1%
St. Catharines	2018	16	75%	1.6	0%
Thorold	2018	0	0%	0	0%
Welland	2016	54.5	91%	2.8	3%

Weekly Average Recycling and Organics Containers Set Out by IC&I Properties Inside the DBA (Base Collection Area)

Municipality	Audit Year	Average % of Participating IC&I Properties Using Regional Recycling Collection Service Inside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional Organics Collection Service Inside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	2018	66%	1.9	11%	1.8
Grimsby	2018	56%	1.5	22%	0.8
Lincoln	2018	72%	1.9	17%	1.0
Niagara Falls	2015	61%	2.0	11%	1.3
Pelham	2018	62%	3.1	12%	1.0
Port Colborne	2018	72%	1.6	6%	0.6
St. Catharines	2018	73%	1.5	16%	1.5
Thorold	2018	50%	0.5	0%	0.0
Welland	2018	65%	2.1	9%	2.4

Weekly Average Recycling and Organics Containers Set Out by MU Properties Inside the DBA (Base Collection Area)

Municipality	Audit Year	Average % of Participating MU Properties Using Regional Recycling Collection Service Inside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional Organics Collection Service Inside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	2016	72%	2.0	16%	0.8
Grimsby	2018	100%	1.8	0%	0.0
Lincoln	2018	52%	2.4	19%	1.1
Niagara Falls	2015	46%	1.3	11%	1.0
Pelham	2018	84%	2.5	32%	0.5
Port Colborne	2016	67%	1.9	19%	1.5
St. Catharines	2018	69%	1.5	13%	1.0
Thorold	2018	0%	0.0	0%	0.0
Welland	2016	72%	2.3	17%	1.0

2014 Weekly Average Garbage Containers Set Out by IC&I Properties Outside the DBA (Base Collection)

Municipality	Average % of IC&I Properties Using Regional Collection Service Outside DBA	Average Number of Containers Per Set-Out	Average Number of IC&I Properties Exceeding 4 Garbage Container Limit	Average % of IC&I Properties Exceeding 4 Garbage Container Limit
Fort Erie	41%	1.7	12	7%
Grimsby	46%	1.8	6	7%
Lincoln	47%	1.7	10	5%
Niagara Falls	43%	1.8	28	7%
Niagara-on-the-Lake	62%	1.3	11	3%
Pelham	37%	1.8	3	6%
Port Colborne	42%	2.1	9	8%
St. Catharines	41%	1.9	35	7%
Thorold	26%	1.7	7	11%
Wainfleet	44%	1.5	1	2%
Welland	39%	1.7	10	6%
West Lincoln	46%	1.4	3	3%
Regional Average:	44%	1.7	11	6%

2014 Weekly Average Garbage Containers Set Out by MU Properties Outside the DBA (Base Collection)

Municipality	Average % of MU Properties Using Regional Collection Service Outside DBA	Average Number of Containers Per Set-Out	Average Number of MU Properties Exceeding 6 Garbage Container Limit	Average % of MU Properties Exceeding 6 Garbage Container Limit
Fort Erie	71%	1.7	1	1%
Grimsby	85%	1.5	0	0%
Lincoln	79%	1.6	1	2%
Niagara Falls	70%	2.0	2	2%
Niagara-on-the-Lake	62%	1.6	0	0%
Pelham	67%	1.7	1	5%
Port Colborne	86%	1.6	0	0%
St. Catharines	69%	1.9	4	2%
Thorold	70%	1.1	0	0%
Wainfleet	70%	1.4	0	0%
Welland	74%	2.0	2	2%
West Lincoln	74%	1.5	0	0%
Regional Average:	72%	1.8	1	1%

2014 Weekly Average Recycling and Organics Containers Set Out by IC&I Properties Outside the DBA (Base Collection)

Municipality	Average % of Participating IC&I Properties Using Regional Recycling Collection Service Outside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional Organics Collection Service Outside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	33%	1.6	7%	1.0
Grimsby	35%	1.8	11%	0.7
Lincoln	41%	1.8	11%	0.8
Niagara Falls	32%	1.7	7%	0.8
Niagara-on-the-Lake	58%	1.9	28%	0.8
Pelham	27%	1.6	12%	0.9
Port Colborne	31%	2.0	8%	1.3
St. Catharines	29%	1.8	9%	0.9
Thorold	21%	1.6	6%	0.7
Wainfleet	37%	1.7	7%	0.8
Welland	28%	1.8	7%	1.4
West Lincoln	34%	1.5	10%	0.7
Regional Average:	34%	1.7	11%	0.9

2014 Weekly Average Recycling and Organics Containers Set Out by MU Properties Outside the DBA (Base Collection)

Municipality	Average % of Participating MU Properties Using Regional Recycling Collection Service Outside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional Organics Collection Service Outside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	68%	2.0	23%	0.9
Grimsby	76%	1.8	29%	1.3
Lincoln	70%	2.3	27%	0.9
Niagara Falls	50%	1.9	18%	0.7
Niagara-on-the-Lake	54%	2.0	16%	0.6
Pelham	73%	1.7	17%	0.9
Port Colborne	66%	1.6	17%	1.0
St. Catharines	57%	1.8	17%	0.8
Thorold	70%	1.4	35%	0.8
Wainfleet	56%	1.4	7%	0.5
Welland	63%	1.7	19%	1.1
West Lincoln	59%	1.7	15%	0.8
Regional Average:	61%	1.8	20%	0.8

Enhanced Collection Service Audit Results

**Weekly Average Garbage Containers Set Out by IC&I Properties Inside the DBA
 (Enhanced Collection Area)**

Municipality	Audit Year	Average # of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection	Average # of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Grimsby	2014	38	88%	3.6	0%
Niagara Falls	2015	147	82%	5.2	6%
NOTL	2018	30	80%	6.0	21%
St. Catharines	2018	77	52%	2.7	0%
Thorold	2014	62.5	94%	4.5	2%
West Lincoln	2014	38	95%	2.5	0%

**Weekly Average Garbage Containers Set Out by MU Properties Inside the DBA
 (Enhanced Collection Area)**

Municipality	Audit Year	Average # of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection	Average # of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Grimsby	2018	18	89%	1.6	0%
Niagara Falls	2015	21	95%	2.9	3%
NOTL	2018	17	100%	6.8	12%
St. Catharines	2018	71	94%	1.5	0%
Thorold	2018	30	92%	1.9	0%
West Lincoln	2018	12	100%	1.7	0%

Weekly Average Recycling and Organics Containers Set Out by IC&I Properties Inside the DBA (Enhanced Collection Area)

Municipality	Audit Year	Average % of Participating IC&I Properties Using Regional <u>Recycling</u> Collection	Average # of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional <u>Organics</u> Collection	Average # of Organics Containers Per Set-Out
Grimsby	2014	64%	2.6	7%	1.6
Niagara Falls	2015	55%	2.4	6%	4.4
NOTL	2018	57%	2.9	7%	6.0
St. Catharines	2018	52%	2.6	10%	2.4
Thorold	2014	54%	2.2	6%	0.9
West Lincoln	2014	78%	1.8	7%	0.8

Weekly Average Recycling and Organics Containers Set Out by MU Properties Inside the DBA (Enhanced Collection Area)

Municipality	Audit Year	Average % of Participating MU Properties Using Regional <u>Recycling</u> Collection	Average # of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional <u>Organics</u> Collection	Average # of Organics Containers Per Set-Out
Grimsby	2018	78%	0.9	0%	0.0
Niagara Falls	2015	57%	1.1	14%	0.6
NOTL	2018	59%	2.3	0%	0.0
St. Catharines	2018	55%	2.5	7%	2.6
Thorold	2018	67%	1.1	3%	3.5
West Lincoln	2018	67%	1.8	0%	0.0

Appendix 4 - Stakeholder Comments on Proposed Base Collection Options

Consultation and engagement with stakeholders commenced in May of 2018 to obtain input on the proposed base collection options. The following sections summarize the results of the comments provided by stakeholders throughout the consultation process. Not all stakeholders that staff engaged with provided formal comments on the proposed collection options. In addition, the results of the on-line and telephone survey are contained in a separate appendix. The following section summarizes the formal comments provided from the following stakeholders:

- Regional Departments and Agencies, Boards and Commissions
- Waste Management Advisory Committee
- Organizations Representing Business (ie. Business Improvement Associations, Chambers of Commerce, Tourism Agencies and Industrial Associations)
- Local Area Municipalities
- Residents and Business Owners (excluding feedback provided through the on-line and telephone surveys)

1.0 Regional Departments and Agencies, Boards and Commissions (ABCs):

Staff from the following Regional Departments and ABCs provided input on the proposed base collection options.

1.1 Planning and Development Services

Planning and Development Services reviewed the proposed container limit changes pertaining to MU properties inside and outside DBAs, to ensure alignment with broader Corporate initiatives, including the objectives of Growth Management policies. The following comments were provided by Pat Busnello, Manager Development Planning:

“the proposed reduced limit would not affect larger mixed-use developments that already exceed the current container limits and require private garbage collection”

“recent curbside audits referenced in Appendix A of Report WMPSC-C 9-2018 indicate the average number of garbage containers placed out weekly by mixed-use properties was below the proposed limit. The report therefore, indicates that the needs of mixed-use properties are expected to be met based on the audit results, particularly if diversion services are utilized. As

such, it is generally not anticipated that smaller mixed-use developments would be affected by the proposed change.”

Lindsey Savage, Planner with Community and Long Range Planning provided comments on the alignment of the proposed collection options with the new Growth Plan for the Greater Golden Horseshoe, which took effect on July 1, 2017:

- “The proposed changes to waste collection services align with and support policy 4.2.9.1 d) i) of the Growth Plan, which requires municipalities to develop and implement official plan policies and other strategies in support of integrated waste management, including through enhanced waste reduction, composting and recycling initiatives. In addition, a new Regional Official Plan is under development which will include policies supporting integrated waste management, in conformity with the Growth Plan.”

1.2 Economic Development

Valerie Kuhns, Economic Development Manager with Economic Development indicated that their work generally revolves around larger industrial companies, which would not use the Region’s curbside garbage collection service, and would not be impacted by the proposed collection options

1.3 Niagara Regional Housing

Cameron Banach, Manager Housing Operations with Niagara Regional Housing reviewed the relevant proposed collection options and indicated they would not be in support of EOW garbage collection, or mandatory use of clear bags for garbage at their properties.

2.0 Waste Management Advisory Committee (WMAC)

At the November 21, 2018 WMAC meeting, members voted all in favour or majority in favour of all base collection options.

3.0 Organizations Representing Business

Meetings were held with representatives from each of Niagara’s Business Improvement Associations, Chambers of Commerce, Niagara Tourism Agencies, Niagara Economic Development Corporation, and Niagara Industrial Association, during the months of August and September.

The following ORBs provided formal comments on the proposed collection options for the next contract:

- **Grimsby Downtown Improvement Association:**
 - Do not support reducing base container limit from seven (7) cans/bags to four (4) cans/bags per week.
 - Do not support mandatory use of clear garbage bags due to concern about enforcement and mixed-use properties.
 - Do not support reducing enhanced container limit without knowing the associated cost savings.
- **Niagara Falls - Queen Street Business Improvement Association:**
 - Do not support reducing base container limit from seven (7) cans/bags to four (4) cans/bags per week.
 - Do not support mandatory use of clear garbage bags.
- **Niagara Falls - Victoria Centre Business Improvement Association:**
 - Request reduction in container limit for enhanced collection service from fifteen (15) cans/bags weekly to seven (7) cans/bags weekly.
 - Do not support mandatory use of clear garbage bags. Support would be contingent on seeing a report on how the contractor will educate its staff on the proper materials that go into the proper containers/bags.
 - Request collection start time change to 5 a.m., instead of 7 a.m.
- **Pelham Business Association:**
 - Support all proposed collection options
- **Port Dalhousie Business Association:**
 - Expressed concern that proposed options would make collection more onerous and/or costly for businesses.
 - Also have concerns about storing garbage in the hot summer months.
- **St. Catharines Downtown Business Association:**
 - Do not support reducing base container limit from seven (7) cans/bags to four (4) cans/bags per week.
 - Do not support mandatory use of clear garbage bags due to concern about enforcement and mixed-use properties.
 - Request for increased organics/recycling collection and review of days and times of collection for the enhanced collection area. Also request continued front-end cardboard collection bins.

Based on these comments, there was very limited support for the mandatory use of clear bags for garbage, or the reduction in the garbage container limits for IC&I and

MU properties inside the DBAs. The exception was the Pelham Business Association, which supported all proposed options.

4.0 Local Area Municipalities (LAMs)

Formal comments from the LAMs on the proposed collection options and which enhanced services to be included in Niagara Region's next contract are being requested by February 1, 2019.

5.0 Residents and Businesses

The primary method for collecting input from residents and businesses on the proposed collection options was through the on-line survey. Residents of low density residential properties were also targeted for feedback through a telephone survey.

Individuals that wanted to provide comments and feedback in addition to or as an alternative to the surveys were able to do so through a number of options. While this feedback cannot be included in the statistical analysis as representative of the population, it can be considered as part of the anecdotal findings to support the overall findings.

Residents and business owners provided additional comments by posting on Facebook, calling the Waste Info-Line, sending emails, providing web submissions and/or speaking with staff in-person at open house and community booth events. These comments are summarized in the subsections below.

5.1 Facebook

Facebook was the primary social media platform used by members of the public to comment on the proposed collection options for the next contract. The majority of comments were related to the proposed options for the mandatory use of clear garbage bags and every-other-week garbage collection. Of all of the comments documented that were related to every-other-week garbage collection, 22% of comments were in support of this proposed option. For clear garbage bags, 10% of comments related to this option were supportive.

Overall, the majority of commenters used this platform as a means of communicating their concerns. The comments posted on the Region's paid Facebook advertisement were reviewed, categorized and tallied. The ten most frequently reported concerns are listed below in order of the frequency that they

appeared in comment section. As of November 30, 2018, 1,467 Facebook comments were posted.

Most Common Comments (by % of most posted comments)

1. Concern about odours from products that cannot be placed in the Green Bin (i.e. diapers and raw meat packaging) increasing with every-other-week garbage collection (16%)
2. Concern about privacy with the use of clear garbage bags for personal items (i.e. incontinence products, feminine hygiene products, prescription bottles, bills) and that one opaque bag is not sufficient to contain all of these items (12%)
3. Concern that services are decreasing, but residents will not receive an associated decrease in taxes (10%)
4. Concern about a potential increase in pests (i.e. rats, raccoons, squirrels, coyotes, maggots) if garbage is collected every-other-week (10%)
5. Concern that mandatory use of clear garbage bags is adding unnecessary plastic waste to the landfills (8%)
6. Requests for Region to use carts, bigger containers and/or containers with lids (7%)
7. Complaints about current service, including missed collection (7%), late collection (7%) and generally displeased with service (4%)

Facebook Analytics for “Lets Talk Waste” Campaign:

• **Impressions: 271,397**

- The number of times any content from the “Niagara Region” Facebook page entered a person’s screen.

• **Link clicks: 6,633**

- The number of clicks on links within the “Lets Talk Waste” Facebook paid ad that led to the Niagara Region “Lets Talk Waste” webpage.

• **Reach as per analytics: 78,784**

- Number of people who had a paid post from the Niagara Region Facebook page enter their screen.

- **Reach with organic: 112,159**
 - Number of people who had an unpaid post from Niagara Region Facebook page enter their screen.
- **Cost per click: 2.44%**
 - The actual price paid for each click in the “Lets Talk Waste” Facebook paid ad campaign.
- **Total engagements: 19,733**
 - Includes all actions that people take involving the “Lets Talk Waste” Facebook paid ad while it was running. Post engagements can include actions such as reacting to, commenting or sharing the ad, or clicking on a link.
- **Reactions as per analytics: 367**
 - On the “Lets Talk Waste” Facebook paid ad itself, Facebook only reports direct reactions on those people who the ad was delivered to. So if a Facebook user received the ad and reacted, that is counted as one reaction per analytic. But if the Facebook user’s friend saw their feed (but did not receive the ad) reacted, it is not counted.
- **Comments as per analytics: 331**
 - On the “Lets Talk Waste” Facebook paid ad itself, Facebook only reports direct comments on those people who the ad was delivered to. So if a Facebook user received the ad and commented, that is counted as one comment per analytic. But if the Facebook user’s friend saw their feed (but did not receive the ad) commented, it is not counted.
- **All reactions: 561**
 - This is the total number of reactions on the “Lets Talk Waste” Facebook paid ad. This provides a better picture of the total engagement.
- **All comments: 1,467**
 - All comments (including replies) on the “Lets Talk Waste” Facebook paid ad.
- **Shares: 358**
 - The number of times Facebook users shared the “Lets Talk Waste” Facebook paid ad to their Facebook profile or a different Facebook page.
- **Amount spent: \$2,456.23**

5.2 Open Houses and Community Booths

A public open house, with a presentation was held in each of the twelve municipalities in Niagara. Staffed community booths with informational displays were also held in a public space in each municipality. The community booths were very

well attended with approximately 450 attendees and open house attendance was lower with 67 attendees, perhaps due to poor weather conditions.

The majority of the comments heard were related to the options for every-other-week garbage collection and mandatory use of clear garbage bags. Members of the public visiting the booths and open houses were divided about every-other-week garbage collection. While approximately half of the people that talked to staff at events expressed support, there were some specific concerns that were repeated throughout the consultation process. There was less support for clear bags, with the majority of participants expressing opposition to the option. A minority of the feedback and conversations at these events dealt with the options to introduce a four-item limit on bulky item collection and the discontinuation of scrap metal collection, but of those commenting there was a high level of support to implement the changes. The key concerns about the proposed options heard at these stakeholder consultation events are listed below.

Most Common Comments (listed in no particular order)

1. Concern about odours from products that cannot be placed in the Green Bin (i.e. diapers and raw meat packaging) increasing with every-other-week garbage collection
2. Concern that illegal dumping will increase as a result of every-other-week garbage collection and/or mandatory use of clear garbage bags.
3. Concern about privacy with the use of clear garbage bags for personal items (i.e. incontinence products, feminine hygiene products, prescription bottles, bills) and that one opaque bag is not sufficient to contain all of these items
4. Concern about the additional expense of having to purchase clear bags and/or privacy bags and potential issues with the quality and availability of clear garbage bags
5. Concern about storing additional garbage bags due to every-other-week garbage collection and/or clear garbage bags that are left behind due to unacceptable materials.
6. Concerns about the ability of collectors to monitor and enforce clear garbage bag contents

7. Concern about how residents will transport scrap metals and large appliances to the drop-off depots.
8. Concern about a potential increase in pests (i.e. rats, raccoons, squirrels, coyotes, maggots) if garbage is collected every-other-week
9. Concern that mandatory use of clear garbage bags is adding unnecessary plastic waste to the landfills
10. Complaints about current service, including missed collection, late collection, and generally displeased with service

6.0 Waste Info-Line, Emails, Web Submissions

Residents and business owners interested in providing the Region with additional comments were able to do so by calling the Waste Info-Line, sending an email or submitting their comments through the Region's website. Comments from individuals that provided an address were recorded in CityView, Waste Management's customer service software. These comments were categorized based on support or opposition to the proposed options. Comments from individuals that did not provide an address recorded in a public comment tracking sheet, separate from the CityView program. As of December 2, 2018, 38 comments were recorded in CityView and 27 additional comments without associated addresses were recorded in the spreadsheet public comment tracking sheet.

6.1 CityView

Due to the self-selected nature of the input and the small number of comments recorded, the CityView data cannot be considered representative of the viewpoints of the broader population. The comments do provide anecdotal insight into some of the key attitudes that residents and business owners have towards the proposed collection options.

The majority (74%) of individuals that commented were contacting the Region to express concern over one or more of the proposed collection options. The key concerns expressed in the comments align with those provided through Facebook and at the open houses/community booths. Individuals opposed to every-other-week garbage collection were concerned about potential odours and pests. Comments related to clear bags were focused on privacy issues. There were also

concerns from multi-residential and mixed-use property owners about tenants not complying with the diversion programs and thus presenting a challenge for both the every-other-week and clear garbage bag options.

Of the 38 comments recorded, 26% were in favour of one or all of the proposed options. In particular, 16% were in favour of every-other-week garbage collection. Other comments provided included suggestions for alternative options, including collection from alternating sides of the road and communal collection areas.

6.2 Additional Comments

The additional comments from residents and business owners that did not provide an address align with the comments provided through Facebook, at public consultation events and in CityView. The most frequent comments were concerns about odours and pests related to every-other-week garbage collection and privacy issues associated with clear garbage bags.

Appendix 5 - Stakeholder Consultation and Engagement Process

An extensive public consultation and engagement process was undertaken to obtain stakeholder input on the proposed base collection options for the next collection contract. The consultation began in May 2018 was carried out in two phases: targeted stakeholder consultation and broad-based community consultation. Targeted stakeholder consultation involved direct communication with specific stakeholder groups to provide information and gather feedback on the proposed collection options. Broad-based community outreach was completed to reach residents and businesses eligible for Regional curbside collection services to inform them about the proposed collection options and encourage participation in the on-line survey, which was the principle mechanism for collecting public input and feedback.

A summary of both phases of the consultation is described below.

1. Targeted Stakeholder Consultation and Engagement

1.1. Regional Departments and Agencies, Boards and Commissions (ABCs):

- The following Regional Departments and ABCs were contacted to discuss proposed options and invite questions, comments and input into the process:
 - Planning and Development Services Department
 - Economic Development
 - Niagara Regional Housing

1.2. Waste Management Advisory Committee (WMAC)

- At the November 21, 2018 meeting of the WMAC, members were provided with a presentation on the proposed collection options and an opportunity for questions and comments.
- Members were provided with an opportunity to vote on each proposed service option.

1.3. Organizations Representing Business

1.3.1. Business Improvement Associations (BIAs), Chambers of Commerce, Industrial Associations

- Waste Management staff met with each of Niagara's BIAs, Chambers of Commerce and the Niagara Industrial Association in August and September of 2018 to provide a presentation on the proposed service options. The purpose of these meetings was to discuss the proposed collection options, obtain preliminary input on these options, obtain input on how to further engage their members and to request formal comments

by November 30, 2018. The meeting dates and representatives that attended the meetings are listed in the tables below.

- Waste Management staff sent follow-up emails to each organization after the meetings on October 9, 2018 and November 22, 2018 to request formal feedback.
- Those organizations were also provided with letters for distribution to their membership on October 24, 2018. The letters contained information about the proposed options and stakeholder consultation process as well as a link to the on-line survey and open house/community booth dates and locations.
- The following four organizations confirmed they would reach out to members on behalf of the Region to encourage participation in the consultation process:
 - St. Catharines Downtown Association, Queen Street Niagara Falls BIA, Downtown Welland BIA, Grimsby Downtown Improvement Association

Business Improvement Associations

LAM Represented	Organization/Representative	Meeting Date
Fort Erie	<ul style="list-style-type: none"> • Ridgeway Business Improvement Association (BIA) - Marge Ott • Crystal Beach BIA – No rep attended • Bridgeburg Station BIA – No rep attended • Town of Fort Erie – Kelly Walsh 	August 23, 2018
Grimsby	<ul style="list-style-type: none"> • Grimsby Downtown Improvement Association – Leigh Jankiv • Town of Grimsby – Bob LeRoux 	August 1, 2018
Lincoln	<ul style="list-style-type: none"> • Downtown Beamsville BIA – Stephanie Hicks • Town of Lincoln – Dave Graham 	August 10, 2018
Niagara Falls	<ul style="list-style-type: none"> • Clifton Hill BIA – No rep attended • Fallsview BIA – Sue Mingle • Lundy’s Lane BIA – David Jankovic • Main and Ferry BIA – Ruth Ann Nieuwesteeg • Victoria Centre BIA – Eric Marcon • Queen Street BIA – No rep attended • City of Niagara Falls – Geoff Holman 	August 15, 2018
Pelham	<ul style="list-style-type: none"> • Pelham Business Association – David Tucker • Town of Pelham – Derek Young & Ryan Cook 	August 8, 2018

LAM Represented	Organization/Representative	Meeting Date
Port Colborne	<ul style="list-style-type: none"> • Port Colborne Main Street BIA – Frank Danch • Port Colborne Downtown BIA – Betty Konc • Town of Port Colborne – Chris Lee 	August 24, 2018
Port Dalhousie	<ul style="list-style-type: none"> • Port Dalhousie Business Association – Wolfgang Guembel 	August 22, 2018
St. Catharines	<ul style="list-style-type: none"> • St. Catharines Downtown Association - Tisha Polocko • City of St. Catharines – Dan Dillon 	August 22, 2018
Thorold	<ul style="list-style-type: none"> • Thorold BIA – Marsha Coppola, Tim Whalen • City of Thorold – Sean Dunsmore 	August 2, 2018
Welland	<ul style="list-style-type: none"> • Welland Downtown BIA – Amanda MacDonald, Delores Wright • Welland North BIA – John Clark • City of Welland – Eric Nickel 	August 9, 2018

Chambers of Commerce

LAM Represented	Organization/Representative	Meeting Date
Niagara-on-the-Lake (NotL)	<ul style="list-style-type: none"> • Chamber of Commerce – Janice Thompson • Town of NotL – Sheldon Randall 	September 10, 2018
Fort Erie, Grimsby, Lincoln, Niagara Falls, NotL, Pelham, Port Colborne, St. Catharines, Welland, West Lincoln	<ul style="list-style-type: none"> • Greater Niagara Chamber of Commerce - Mishka Balsom 	September 13, 2018

Fort Erie, Grimsby, Lincoln, Niagara Falls, Pelham, Port Colborne, Welland, West Lincoln	<ul style="list-style-type: none"> Niagara Chamber of Commerce Partnership – Rebecca Shelley (Grimsby); Johnathan George (Fort Erie); Paul Scottile, Jim Arnold (Niagara Falls); Denise Potter (West Lincoln); Len Stolk (Port Colborne/Wainfleet); Gary Bruce, Anna Murre (Lincoln); Delores Fabiano (Welland/Pelham, Niagara Falls, Fort Erie, Port Colborne/Wainfleet) 	August 22, 2018
Thorold	<ul style="list-style-type: none"> Venture Niagara – Susan Morin Niagara Centre Board of Trade & Commerce – John D’Amico 	September 26, 2018

Industrial Associations

LAM Represented	Organization/Representative	Meeting Date
All Niagara Municipalities	<ul style="list-style-type: none"> Niagara Industrial Association – Adam Joon & Aaron Tisdelle 	September 21, 2018

1.3.2. Tourism Agencies

- Waste Management staff met with the Tourism Partnership of Niagara on behalf of five tourism agencies (Destination Marketing Organizations): Niagara Falls Tourism, Tourism Niagara-on-the-Lake, City of St.Catharines Department of Economic Development and Tourism, Twenty Valley Tourism Association and Niagara South Coast Tourism Association.
- Staff offered to provide a presentation at the meeting.
- On September 18, 2018, letters were provided to each tourism agency describing proposed options, audit data, info about survey and public events. The letter requested formal feedback on the proposed options be December 7, 2018.
- A follow-up email containing a link to the project website and on-line survey was sent to the Tourism Partnership of Niagara on November 23, 2018, for distribution to their membership.

Tourism Agencies

LAM Represented	Organization/Representative	Meeting Date
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Fort Erie, Grimsby, Lincoln, Niagara Falls, Niagara-on-the- Lake, Port Colborne, St. Catharines, Welland, West Lincoln	<ul style="list-style-type: none"> • Tourism Niagara – Anthony Annunziata & Karin Jahnke-Haslam (on behalf of Niagara Falls Tourism, Tourism Niagara-on-the-Lake, City of St.Catharines Department of Economic Development and Tourism, Twenty Valley Tourism Association and Niagara South Coast Tourism Association) 	September 18, 2018
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1.4. Local Area Municipalities (LAMs) (i.e. municipal staff and Councillors)

- Letters were sent to LAM Clerks on May 4, 2018 and Public Works Officials (PWOs) on June 6, 2018 advising of proposed options and requesting LAM comments by February 1, 2019
- Presentations were made to PWOs at their June 11, Oct. 16 & Dec. 11, 2018 meetings
- In addition, Region staff offered to attend LAM Committee or Council meetings to make a presentation. As of December 11, Region staff were requested to present at the following LAM Committee or Council meetings:
 - Grimsby Council (December 17, 2018)
 - Niagara Falls Council (January 15, 2019)
 - Fort Erie Council (January 21, 2019)
 - West Lincoln Council (January 21, 2019)
 - Welland General Committee (January 22, 2019)

2. Broad-Based Community Consultation and Engagement

Broad-based community consultation employed a range of outreach activities to engage with as many low density residential (LDR) households, multi-residential (MR) property owners, groups and associations (i.e. property management companies) and Industrial, Commercial and Institutional (IC&I) and mixed-use (MU) property owners as possible during October and November of 2018. The table below provides details on each outreach activity undertaken as part of the broad-based consultation and engagement.

Outreach Activity	Description	Location	Date (2018)
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Letters	Letters mailed out containing information on proposed collection options, link to survey, open house/community booth information and an invitation to contact the Region	<ul style="list-style-type: none"> • 1,369 businesses <u>inside</u> Designated Business Areas (DBAs) • 1,980 businesses <u>outside</u> DBAs • 125 multi-residential properties 	October 22
Web	Project website provided information on the proposed collection options, details about public open house events/community booths and the link to the survey	<ul style="list-style-type: none"> • Project webpage on Niagara Region website 	October 23, to November 30
	Link to project website	<ul style="list-style-type: none"> • Webpage banner on Niagara Region Waste webpage • LAM provided with P&E for websites that had link to project webpage 	
Social Media	Link to project website	<ul style="list-style-type: none"> • Facebook paid advertisement with link to project webpage • Twitter post on Niagara Region Twitter with link to project webpage 	October 25- November 28
	Link to project website and details about open houses/community booths	<ul style="list-style-type: none"> • Facebook posts 	November 1- November 28
Newspaper: Print Ads	Invitation to participate in stakeholder consultation with link to project website	<ul style="list-style-type: none"> • Niagara This Week 	October 25, November 1, 8, 15, 22
		<ul style="list-style-type: none"> • St. Catharines Standard 	October 27, November 10,
		<ul style="list-style-type: none"> • Welland Tribune 	November 3,
		<ul style="list-style-type: none"> • Niagara Falls Review 	November 3,
		<ul style="list-style-type: none"> • News Now 	November 15 and November 22

Newspaper: On-line Ads	Invitation to participate in stakeholder consultation with link to project website	• 24 hour ad - St. Catharines Standard, Welland Tribune, Niagara Falls Review websites	October 30, November 6,13, 20
		• 24 hour ad - Niagara This Week website	November 24
		• 1 week ad - News Now website	November 22-29, 2018
		• 2 week ad - Niagara Independent website	November 19-30
		• Big Box Takeover- St. Catharines Standard, Welland Tribune, Niagara Falls Review	October 30, November 5,11,20
Media Coverage	An overview of proposed options and rationale and reference to project webpage, survey and events	• Media release	October 25
		• Radio interview on 610 CKTB Newstalk	November 5
		• Television coverage on Cogeco YourTV; accessible on-line and aired daily on YourTV	November 5 - November 30
		• Articles - St. Catharines Standard/Niagara Falls Review, Voice of Pelham, Erie Media	October 28, November 5, 7, 23
Post Cards	Invitation to participate in consultation, list of key options and link to survey/webpage	<ul style="list-style-type: none"> • Post cards displayed at LAM offices: 100 each in Fort Erie, Grimsby, Lincoln, Niagara-on-the-Lake, Pelham, Port Colborne, Thorold and Wainfleet; 200 each in Niagara Falls, St.Catharines and Welland. • Post cards available at Regional Headquarters and landfill sites • Post cards distributed at every community booth and open house 	October 23- November 30
Internal Advertising	Campaign banner and link to survey/webpage	• Vine intranet for all Regional employees	October 31- November 30

		<ul style="list-style-type: none"> • Vine weekly for all Regional employees 	November 1
Community Booths	A table with educational material and poster boards with information on proposed options were set up in public spaces including malls, arenas, community centres and libraries. Staff were available with iPads to allow visitors complete the on-line surveys and to respond to questions and comments	<ul style="list-style-type: none"> • One booth in each LAM during day and/or evening hours 	<p>Each booth set up for one day in each LAM between Oct 30 –Nov 26</p> <p>Approx. 450 visitors in total at booths</p>
Open Houses	Staff provided a 25-minute presentation and the opportunity for a question and answer period. Staff were also available with iPads to allow attendees to complete the on-line survey to respond to questions and comments	<ul style="list-style-type: none"> • One open house in each LAM from 6pm-8pm 	<p>Various dates from Nov 1- Nov 28</p> <p>Total of 67 attendees</p>

Appendix 6 - Summary of Stakeholder Consultation and Engagement Events

Public Open Houses (All public open houses were held from 6:00pm to 8:00pm, with a presentation at 6:30pm)

Municipality	Location	Date
Niagara-on-the-Lake	Community Centre	November 1, 2018
Niagara Falls	Gale Centre	November 5, 2018
Welland	Community Wellness Complex	November 6, 2018
Port Colborne	Roselawn Centre	November 8, 2018
Pelham	Pelham Meridian Centre	November 12, 2018
Fort Erie	Leisureplex	November 13, 2018
St. Catharines	St. Catharines Public Library- Central Branch	November 15, 2018
Thorold	Niagara Region Headquarters Building	November 19, 2018
Lincoln	Fleming Centre	November 20, 2018
West Lincoln	Municipal Office	November 22, 2018
Grimsby	Peach King Centre	November 27, 2018
Wainfleet	Firefighters Memorial Community Hall	November 28, 2018

Community Booths:

Municipality	Location	Date	Time
St. Catharines	Pen Centre	October 30, 2018	9am-9pm
Niagara Falls	MacBain Community Centre	November 5, 2018	9:30am-4pm
Niagara-on-the-Lake	Community Centre	November 6, 2018	9am-3:30pm
Port Colborne	Vale Health and Wellness Centre	November 7, 2018	4:30pm-9pm
Thorold	Thorold Public Library	November 8, 2018	10am-7:30pm
Pelham	Pelham Public Library	November 12, 2018	10am-4:30pm
Fort Erie	Fort Erie Centennial Library	November 13, 2018	9:30am-4:30pm
Welland	Seaway Mall	November 14, 2018	10am-8pm
Lincoln	Fleming Centre	November 20, 2018	9am -5pm
West Lincoln	West Lincoln Public Library	November 21, 2018	10am-4:30pm
Wainfleet	Wainfleet Arena	November 22, 2018	2:30pm-8:30pm
Grimsby	Grimsby Public Library	November 26, 2018	9am-8:30pm

Appendix 7 - Addressing Concerns Related to Proposed Collection Options

During the stakeholder consultation and engagement process, concerns were expressed by residents and business owners through Facebook, public open houses/community events and communication by email, phone and web submission. Those concerns are summarized in Appendix 4. The following table provides potential responses for addressing those concerns and minimizing potential impacts of the proposed collection options.

Resident Concern	Options for Addressing Concern
Odours from diapers, feminine hygiene products, raw meat packaging increasing with every-other-week garbage	<ul style="list-style-type: none"> • Provide option for residents to drop-off clear bags of diapers at landfill sites/drop-off depots at no charge. • Diapers, feminine hygiene products and raw meat packaging should be sealed tightly a plastic bag and placed in a container with a lid for storage in a cool, dry location. • Styrofoam meat trays can be washed and placed in the Blue Box for weekly collection.
Increased illegal dumping of garbage as a result of every-other-week garbage and/or clear garbage bags	<ul style="list-style-type: none"> • Experience in other municipalities has shown that property owners readily adapt to collection changes and if there is an increase in illegal dumping after the change in collection is implemented, it is temporary and short-lived. • By-law officers work to enforce ongoing issues with illegal dumping.
Privacy issues with the use of clear garbage bags for personal items	<ul style="list-style-type: none"> • To conceal private or sensitive materials, allow an opaque privacy bag (i.e. grocery bag) to be placed inside the clear garbage bags. • Confidential documents should be shredded and placed inside a clear plastic bag before being placed inside the Grey Box or Grey Cart. These materials can also be placed in the Green Bin. • Experience in Markham showed that allowing multiple opaque privacy bags at outset of clear bag program facilitated implementation and reduced privacy concerns.

<p>Additional expense of having to purchase clear bags and/or privacy bags and potential issues with quality and availability of clear garbage bags</p>	<ul style="list-style-type: none"> • Clear plastic and coloured plastic garbage bags are manufactured from the same type of plastic resin. The quality and strength of clear plastic bags is similar to that of opaque plastic bags. • Differences in price and quality may occur, based on individual bag size, closure type, packaging size or brand name. • Regional staff would communicate with local businesses to ensure that clear bags would be available for purchase at the same local retailers as traditional opaque bags.
<p>Storing additional garbage bags due to every-other-week garbage collection and/or clear garbage bags that are left behind due to unacceptable materials</p>	<ul style="list-style-type: none"> • Residents and businesses can significantly reduce their garbage by fully utilizing the weekly, unlimited recycling and organics collection services provided by Niagara Region. • Once unacceptable materials are removed from clear garbage bags, the materials can be placed out on the next scheduled collection day or taken to a drop-off depot for a fee.
<p>Ability of collectors to monitor and enforce clear garbage bag contents</p>	<ul style="list-style-type: none"> • Collectors would evaluate whether a bag conforms to the Waste Management By-law regarding recyclables, organics and hazardous waste, based on what can be seen through the clear bag. • Collectors would not be opening bags or searching contents. Bags would be assessed visually during collection time to address clear instances of non-conformance, including situations where non-acceptable materials are visible or a clear garbage bag has not been used. • Regional staff will follow-up with the property owner regarding the proper set out of material for collection to avoid re-occurrence of uncollected garbage.
<p>Ability of residents to transport scrap metal and large appliances to drop-off depots.</p>	<ul style="list-style-type: none"> • Residents that do not have the ability to transport scrap metal and large appliances would have the option of contacting private scrap metal haulers for pick-up.

<p>Increase in pests (i.e. rats, raccoons, squirrels, maggots) if garbage is collected every-other-week</p>	<ul style="list-style-type: none"> • Placing food waste and food soiled-paper products in the Green Bin, which will continue to be collected weekly, will remove the most odorous part of the garbage stream, which can attract pests. • Residents can take simple steps to deter pests, such as rodents, from their Green Bins, including: <ul style="list-style-type: none"> ◦ 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 7am on collection day, not the night before ◦ Storing the Green Bin in a shaded, cool area ◦ Lining the Green Bin with paper liner bags, sheets of newspaper or cereal boxes to absorb liquids
<p>Clear garbage bags adding unnecessary plastic waste to landfills</p>	<ul style="list-style-type: none"> • For those residents already using garbage bags and/or grocery bags, clear bags would not increase the amount of plastic bags being sent to landfills. • Plastic opaque privacy bags would be optional. • Use of clear garbage bags would be expected to increase diversion rates, potentially offsetting any additional plastic introduced through use of clear garbage bags.
<p>Requests for Region to use carts, bigger containers and/or containers with lids</p>	<ul style="list-style-type: none"> • The Region has explored the option using carts for residential curbside collection. The results of that research indicate that the costs of that change would be prohibitive at this time. In addition, cart programs utilize single stream recycling collection, which have higher rates of contamination than the two stream recycling program that Niagara Region is currently using and would negatively affect revenue from the sale of recyclables.



Appendix 8

LDR Telephone and On-line Survey Results

A quantitative survey with residents of Niagara Region



Metroline Research Group Inc.

301-7 Duke Street West, Kitchener, Ontario
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LOW DENSITY RESIDENTIAL

1.0 Current Attitudes/Behaviour

1.1 Importance of Waste Diversion

Q11 - How important would you say it is that Niagara region works to reduce the amount of garbage that is sent for disposal? (Full sample)

Diverting waste is important to the vast majority of residents in Niagara Region. In total, 94% of those in the telephone survey said it is 'important' to them, with 72% saying "very" important, and 22% saying "somewhat" important. Only 4% told us it was "not important", or they "don't know".

Residents in the online survey scored the importance slightly lower, but even still 87% find waste diversion important.

This question was asked in Hamilton in 2016, and the results were similar to what Niagara Region residents have said in this survey. Residents in both surveys feel that waste diversion is important, but in the random telephone survey are more likely to say it is "very" important.

Figure 1.1a – Importance of waste diversion by survey type

	Telephone (n=1,253)	Online (n=6,639)
Very important	72%	52%
Somewhat important	22%	35%
Not very important	3%	8%
Not important at all	2%	3%
Don't know	1%	2%

Figure 1.1b ¹– Importance of waste diversion by survey type (Hamilton)

Hamilton Waste Survey	Telephone (n=800)	Online (n=1,468)
Very important	75%	60%
Somewhat important	21%	30%
Not very important	2%	6%
Not important at all	1%	3%
Don't know	1%	1%

¹ City of Hamilton Waste Management Services Public Engagement Survey – Metroline Research Group, 2016

Where relevant, this report will indicate statistically significant differences by sub-groups for the random telephone survey.

Respondent Sub-Segment Findings (Telephone)

- Women (76%) are more likely to say reducing the amount of garbage sent for disposal is “very” important than men (68%).
- Those 65+ years (76%) and those 45-64 years (73%) are more likely to find it “very” important than those 18-44 years (63%).
- Those participating in the organics collection program (74%) are more likely to find it “very” important than those who are not (67%).
- Those who support clear bags (80%) more likely to find it “very” important than those who do not (65%).
- Those who could manage every-other-week (EOW) garbage collection (80%) are more likely to find it “very” important than those who would continue to need/want weekly collection (64%).

Figure 1.1c - Importance of waste diversion by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Very important	72%	81%	73%	83%	74%	80%	76%	73%	68%	61%	60%	69%	73%
Somewhat important	22%	14%	17%	13%	22%	16%	19%	19%	24%	31%	32%	24%	22%
Not very important	3%	3%	3%	1%	2%	2%	4%	4%	4%	4%	5%	3%	4%
Not important at all	2%	2%	3%	3%	1%	--	--	1%	4%	3%	3%	2%	1%
Don't know	1%	--	4%	--	1%	2%	1%	3%	--	1%	--	2%	--

Looking across the municipalities in Niagara Region, there are some differences when residents were asked to choose an importance level. Primarily though this difference is between “very” and “somewhat” important.

Overall, the sentiment of important (very/somewhat) vs. not important (not very/not important/don't know) is pretty similar. At least 9 in 10 residents for all municipalities find diverting waste to be ‘important’.

1.2 Garbage Limits

Q12 - Niagara Region allows for one bag/container of garbage to be put out per week. Dimensions of the container cannot exceed three feet high by two feet wide (91cm by 61cm) and must not weight more than 50 pounds. Which of the following best describes your situation in an average week? (Full Sample)

Figure 1.2a – Typical garbage set out by survey type

Residents were pretty much evenly split about how much garbage they put out at the curb in an average week.

On one side is the group (53% combined) who put out the maximum one bag (42%) and those who need more than one bag (11%).

On the other side (47% combined) is the group who doesn't have a full bag (34%) or sometimes can afford to skip a week (13%).

	Telephone (n=1,253)	Online (n=6,639)
We put out more than one garbage bag/container	11%	9%
We put out one full garbage bag/container	42%	49%
On a weekly basis, our garbage bag/container is not completely full	34%	29%
Some weeks, we do not have enough to put out the garbage bag/container	13%	13%

Respondent Sub-Segment Findings (Telephone)

- Those 18-44 years are more likely to put out a full bag or more (72%) than those 45-64 years (50%) and those 65+ years (45%).
- Those living in households of three or more people are more likely (73%) to put out a full bag or more than those in households of two people (41%) and those in single person households (30%).
- Those with a household member using diapers are more likely to put out a full bag or more (87%) than those without (51%).
- Those who use seven or more bag tags a year are more likely to put out a full bag or more (91%) than those who use 1-6 tags (61%) and those use don't use any tags in an average year (42%).
- Those who do not participate in the organics program are more likely to put out a full bag or more (63%) than those who participate (49%).
- Those who would need to continue weekly garbage collection are more likely to put out a full bag or more (70%) than those who could manage EOW (33%).

Figure 1.2b – Typical garbage set out by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
We put out more than one garbage bag/ container	11%	7%	11%	8%	13%	9%	10%	4%	11%	11%	16%	14%	8%
We put out one full garbage bag/container per week	42%	45%	35%	35%	44%	43%	34%	45%	41%	50%	39%	46%	49%
On a weekly basis, our garbage bag/container is not completely full	34%	30%	37%	45%	34%	34%	44%	39%	35%	24%	32%	25%	34%
Some weeks, we do not have enough to put out the garbage bag/container	13%	18%	17%	12%	9%	14%	12%	12%	13%	15%	13%	15%	9%

All percentage differences fall within the margin of error. There are a few trends in the data, however these could potentially be a result of the size of the households interviewed for the study rather than something unique to the municipalities:

- Residents of Thorold (60%), Welland (60%) and Niagara Falls (57%) are slightly higher in putting out one bag or more per collection.
- Residents of Lincoln (43%) and Pelham (44%) and Grimsby (46%) are slightly lower in putting out one bag or more per collection.

1.3 Garbage Tags

Q13 - How many tags for additional garbage bags does your household buy and use in an average year, if any? (Full Sample)

About two-thirds of the community (65%) told us they do not buy/use any garbage tags in the course of an average year.

About one-third (35%) will use a garbage tag at least once a year on average, between those buying and using one to six tags (24%), and those using seven or more tags (11%).

Figure 1.3a – Garbage tags used by survey type

(Random telephone survey)	Telephone (n=1,253)	Online (6,639)
None	65%	49%
1-6	24%	32%
7+	11%	19%

Respondent Sub-Segment Findings (Telephone)

Household size was the biggest determinant in using garbage tags. About half of those (48%) of household with three or more people require at least one tag a year. 20% of households with three or more people use seven or more tags a year.

Figure 1.3b – Garbage tags used by household size

(Random telephone survey)	Total (n=1,253)	Household Size		
		1	2	3+
None	65%	86%	72%	52%
1-6	23%	10%	23%	28%
7+	12%	4%	5%	20%

Age is also a determining factor. The younger the resident in the survey, the more likely they were to have used bag tags.

Figure 1.3c – Garbage tags used by age group

(Random telephone survey)	Total (n=1,253)	Age group		
		18-44	45-64	65+
None	65%	54%	62%	78%
1-6	23%	25%	27%	17%
7+	12%	21%	11%	5%

Other significant findings:

- Those who deal with infant/adult diapers (53% use at least one a year) are more likely to need bag tags than those without diapers (33% use at least one per year).
- Those who need to put out more than one bag of garbage per week are more likely to use at least one bag tag per year (67%) than those who put out one bag per week (41%), those who put out a bag per week that isn't full (26%), and those who can afford to occasionally skip a week (12%).
- Those who need to continue having garbage picked up weekly are more likely to use at least one bag tag per year (41%) than those who could manage every-other-week (27%).

Figure 1.3d – Garbage tags used by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
None	65%	69%	69%	74%	61%	69%	77%	60%	62%	60%	75%	58%	73%
1-6	23%	21%	19%	21%	25%	24%	19%	32%	24%	24%	16%	29%	20%
7+	12%	10%	12%	5%	14%	7%	4%	8%	14%	16%	9%	13%	7%

Municipalities less likely to have used any garbage tags in the past year:

- Pelham (23%), Wainfleet (25%), Lincoln (26%) and West Lincoln (27%)

Municipalities more likely to have used a garbage tag in the past year:

- Welland (42%), Thorold (40%), Niagara Falls (39%) and St. Catharines (38%)

1.4 Waste Collection Participation

Q21 – Does your household put out the following items for curbside collection?

(Full sample)

Virtually all households in Niagara Region are participating in the recycling program (99%/99%).

About 7 in 10 households say they participate in the organics collection program. The participation level is virtually the same between the random telephone survey and the online survey (71%/72%).

Participation in leaf/yard waste collection is next (63%/82%), and the brush collection in spring and fall (52%/63%).

Participation in both the appliances/scrap metal collection (26%/27%), and the bulky/large item collection (35%/46%) is lower.

Figure 1.4a – Waste collection program participation by survey type



The percentages were different, but we found a similar sentiment/pattern in Hamilton in 2016.

Virtually all participate in recycling, the organics collection and yard waste collection (which included brush in this survey) were next, and the bulky/large item collection (which includes scrap metal/appliances) had the lowest participation.

Figure 1.3b²– Waste collection program participation by survey type (Hamilton)

<i>Hamilton Waste Survey</i>	Telephone (n=800)	Online (n=1,468)
Blue Box recycling	99%	99%
Organics/Green Bin	83%	84%
Yard waste	80%	88%
Bulky/large item collection	45%	55%

Respondent Sub-Segment Findings (Telephone)

Participate in Organics/Green Bin collection

- Those 65+ years (77%) and 45-64 years (73%) are more likely to participate than those 18-44 years (55%).
- Those in a single person household (72%) and dual person household (74%) are more likely to participate than those in a household of three or more people (66%).
- Those with no household members using diapers (72%) are more likely to participate than those with a household member in diapers (50%).
- Those who can afford to skip a weekly collection (81%), and those who put out a garbage bag every week that isn't full (76%) are more likely to participate than those who put out a full bag every week (68%) or those who put out more than one bag (52%).
- Those who can manage every-other-week collection (77%) are more likely to participate than those who need to continue having their garbage collected every week (66%).

Participate in bulky/large item collection

- Those in households of three or more (37%) and two people (35%) are more likely to participate than those in single person households (28%).
- Those who use seven or more bag tags per year (45%) or 1-6 bag tags (44%) are more likely to participate than those who do not use bag tags in an average year (30%).

² City of Hamilton Waste Management Services Public Engagement Survey – Metroline Research Group, 2016



Participate in leaf/yard waste pickup

- Those who could manage garbage collection every-other-week are more likely to participate (67%) than those who need to continue having garbage picked up weekly (61%).
- Those who participate in organics collection are more likely to participate in leaf/yard waste pickup (71%) than those who do not participate in organic collection (45%).

Participate in brush pickup

- Those who could manage garbage collection every-other-week are more likely to participate (54%) than those who need to continue having garbage picked up weekly (47%).
- Those who participate in organics collection are more likely to participate in brush pickup (56%) than those who do not participate in organic collection (36%).

Figure 1.4c – Waste collection program participation by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Recycling – Blue and/or Grey Box	99%	99%	100%	99%	100%	97%	99%	99%	100%	97%	96%	98%	99%
Organics – Green Bin	71%	63%	84%	73%	72%	73%	70%	75%	74%	74%	59%	64%	60%
Appliances/Scrap Metal	26%	16%	36%	19%	35%	24%	19%	19%	34%	30%	23%	24%	7%
Bulky/Large Items	35%	36%	36%	27%	42%	28%	29%	31%	44%	41%	25%	36%	14%
Leaf/Yard Waste	63%	45%	77%	55%	73%	58%	59%	55%	82%	70%	19%	68%	35%
Brush in spring/fall	50%	32%	53%	45%	60%	52%	43%	35%	69%	55%	12%	50%	28%

Participation rates in the different programs vary by municipality. Some of this may be a result of their geographical location. Municipalities in areas that are less urban may have residents with larger properties to manage their own composting and leaf/yard waste or brush disposal, for example.

1.5 Recycling Participation

1.5.1 Blue Boxes

Q22 - Blue Box recycling includes containers that are made of plastic, metals, glass or styrofoam. How many Blue Boxes does your household put out at the curb in an average week? (Base – Converted to full sample)

Virtually all residents (99%) of Niagara Region are participating in the recycling program.

97% of residents in the telephone survey are putting out at least one blue box per week. About 1 in 5 residents puts out two or more blue boxes per week.

Figure 1.5.1a – Number of Blue Boxes by survey type

	Telephone (n=1,253)	Online (n=6,639)
None/Not participating in program	1%	1%
Less than once a week	2%	--
One per week	78%	70%
Two or more per week	19%	29%

Respondent Sub-Segment Findings (Telephone)

- Household size was a primary factor in the number of blue boxes. Households of three or more people are most likely to be putting out two or more boxes (34%), compared to two person households (9%) and single person households (3%).
- Those 18-44 years (29%) are most likely to be putting out two or more boxes, compared to those 45-64 years (23%) and those 65+ years (7%).
- Those buying the most (7+) garbage tags per year are also most likely to put out 2+ blue boxes (42%), compared to those who buy 1-6 tags (20%), and those who do not use garbage tags (15%).
- Those who would need to continue having waste collected weekly are most likely to be putting out two or more blue boxes (22%), compared to those who could manage every-other-week collection (16%).

Figure 1.5.1b – Number of Blue Boxes by municipality

(Random telephone survey)	Total (n=1253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
None/Not participating	1%	2%	1%	1%	1%	4%	3%	1%	--	4%	4%	2%	1%
Less than once a week	2%	--	2%	3%	1%	3%	--	1%	1%	--	--	4%	--
One per week	78%	85%	81%	84%	79%	75%	77%	82%	80%	74%	71%	71%	75%
Two or more per week	19%	13%	16%	12%	19%	18%	20%	16%	19%	22%	25%	23%	24%

Across all municipalities, there is not much difference when looking at the percentage of households who put out at least one blue box per week on average. Niagara-on-the-Lake was lowest, but even there it was 93% of households.

1.5.2 Grey Boxes

Q24 – Grey Box recycling includes items such as paper, cardboard, cereal boxes, tissue boxes, etc., and bundled plastic bags. How many Grey Boxes does your household put out at the curb in an average week? (Base – Converted to full sample)

Almost all Niagara residents are participating in the grey box recycling program as well. Slightly fewer (92%) than the blue box (99%) participation.

92% of Niagara low-density households put out at least one grey box per week on average.

Residents are less than half as likely (8%) to put out two or more grey boxes than blue boxes (19%).

Figure 1.5.2a – Number of Grey Boxes by survey type

	Telephone (n=1,253)	Online (6,639)
None/Not participating in program	6%	2%
< 1 x week	2%	1%
One per week	84%	81%
Two or more per week	8%	16%

Respondent Sub-Segment Findings (Telephone)

- Household size a factor once again. Those in households of three or more people are most likely (14%) to put out two or more grey boxes, compared to two person households (4%) and single person households (2%).
- Those 18-44 years are most likely to put out two or more grey boxes (14%), compared to those 45-64 years (9%) and those 65+ years (2%).
- Those buying the most (7+) garbage tags per year are also most likely to put out 2+ grey boxes (20%), compared to those who buy 1-6 tags (8%), and those who do not use garbage tags (6%).

Figure 1.5.2b – Number of Grey Boxes by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
None / Not participating	6%	8%	4%	5%	4%	8%	4%	4%	3%	8%	13%	4%	12%
< 1 per week	2%	--	1%	3%	3%	3%	4%	4%	1%	--	1%	3%	--
One per week	84%	91%	88%	87%	85%	81%	84%	84%	85%	84%	79%	84%	80%
Two or more per week	8%	1%	7%	5%	8%	8%	8%	8%	11%	8%	7%	9%	8%

As with the blue box recycling, there is no difference statistically by municipality. Only two municipalities are below 90% of residents putting out at least one grey box in an average week – Wainfleet (86%) and West Lincoln (88%).

1.6 Green Bin/Organics Participation

Q26 – Green Bin organics program includes food waste, paper napkins/towels/bags, paper take-out trays/egg cartons, coffee grounds/filters & tea bags. How many Green Bins or containers marked as organics does your household put out at the curb in an average week? *(Base – Converted to full sample)*

About 7 in 10 (71%) of Niagara Region residents told us they are participating in the organics collection program. That number dropped slightly when looking at green bins in an average month, to 69%.

68% of residents in the telephone survey told us they put out at least one green bin per week. In this particular question, the finding of the online survey was similar, where 70% told us they are putting out one green bin per week on average.

Figure 1.6a – Number of Green Bins by survey type

<i>(Random telephone survey)</i>	Telephone (n=1,253)	Online (n=6,639)
None / Not participating	31%	29%
Less than one per week	1%	1%
One per week	63%	63%
Two or more per week	5%	7%

Respondent Sub-Segment Findings (Telephone)

- Those 65+ years (73%) and 45-64 years (70%) are more likely to put out at least one green bin per week than those 18-44 years (53%).
- Those using diapers for someone in their household (49%) are less likely to put out at least one green bin per week than those with no diapers in their household (69%).
- Those who do not use any garbage tags in an average year (68%) and those who use 1-6 garbage tags per year (70%) are more likely to put out at least one green bin per week than those who use 7+ garbage tags per year (57%).
- Those who would need to continue having waste collected weekly (62%) are less likely to put out one or more green bins per week compared to those who could manage every-other-week collection (73%).
- Those who feel there would be little to no impact to their household with every-other-week collection (72%) are more likely to be putting out at least one green bin per week than those who feel every-other-week would have at least some impact (62%).

- Those who can afford to skip a week on garbage collection occasionally (77%), and those who put out less than one full bag/container per week (73%) are more likely to be putting out at least one green bin per week, compared to those who put out one full bag/container per week (65%) and those who put out more than one full bag/container per week (48%).

Figure 1.6b – Put out one or more Green Bins by typical garbage set out

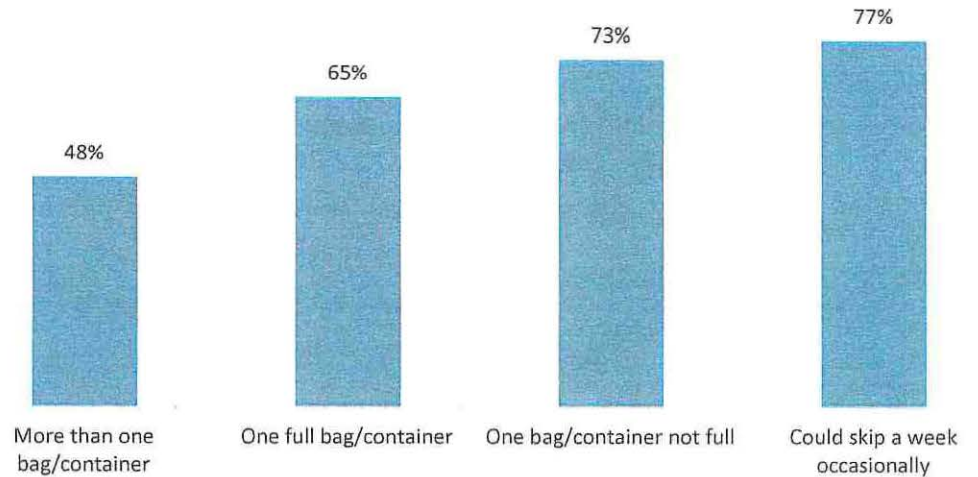


Figure 1.6c – Number of Green Bins by municipality

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wainfleet.	Welland	West Lincoln
None / Not participating	31%	39%	17%	28%	28%	27%	32%	29%	28%	27%	45%	36%	46%
< 1 per week	1%	1%	2%	--	1%	3%	--	1%	1%	3%	--	3%	--
One per week	63%	57%	76%	72%	65%	61%	62%	56%	65%	66%	51%	58%	54%
Two or more per week	5%	3%	5%	--	6%	9%	6%	14%	6%	4%	4%	3%	--

1.6.1 Not participating in Green Bin/Organics collection

Q28 – Why do you not participate in the Green Bin/Organics program? (Base – Not participating)

Just under a third (31%) of those not participating in the Green Bin/Organics program told us they are doing their own composting/vermiposting.

“We have a farm and dispose of it in our manure pile...”

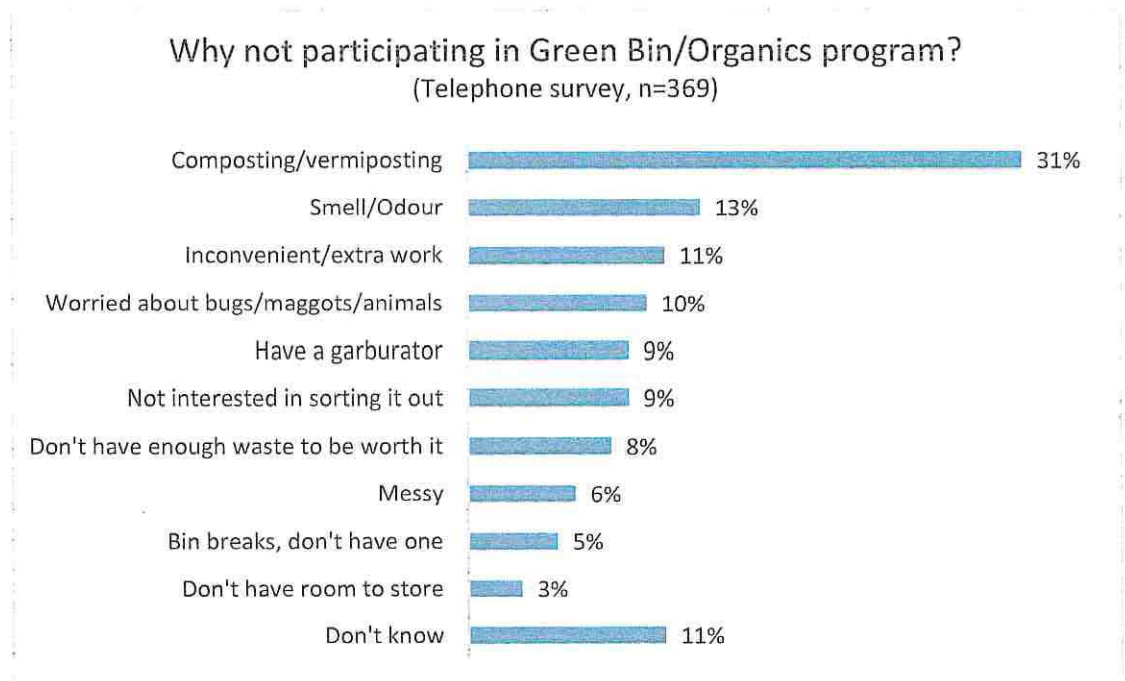
The next biggest barrier to participating in the Green Bin/Organics program is a concern about smells/odours. 13% of those not participating in this program indicated they do not participate because of a worry about the smell.

“It smells awful. We freeze organic waste throughout the week and dispose with the trash on garbage day. You can always tell when someone uses the green organics bin as soon as you walk into their house. It isn't practical...”

Lack of motivation was third, with people telling us that separating the waste was inconvenient or extra work for them (11%).

“Waste of time separating items and keeping another bin full of stinking food around for rodents and insects to find...”

Figure 1.6.1a – Why not participating in Green Bin/Organics program?



The other major barrier is a concern about bugs/maggots/animals in and around the green bin (10%).

“Many animals in my neighbourhood makes it difficult to keep the organics from being eaten. I have the same problem with my regular garbage container...”

The ‘ick’ factor was expressed as well, with 6% talking about the process being messy and 9% not being interested in sorting out the waste for the Green Bin.

“I find it gross and disgusting...”

“Because I do not have very much for the green bin and find it disgusting to deal with in the summer...”

1.7 Appliances/Scrap Metal Participation

1.7.1 Put out at the curb

Q29 - How many times per year would you say your household puts out appliances or scrap metal at the curb for collection? (Base –Converted to full sample)

4 in 5 households in Niagara Region (80%) told us they do not participate in the appliances/scrap metal collection program. Among those who have participated, at most it was about once a year.

The results of the online survey are similar in this case, with 75% not participating in the program.

Figure 1.7a – Appliance/Scrap Metal participation by survey type

	Telephone (n=1,253)	Online (n=6,369)
None / Not participating	80%	75%
Once per year	15%	15%
Twice or more per year	5%	10%

Respondent Sub-Segment Findings (Telephone)

- Those 18-44 years (21%) and those 45-64 years (22%) are more likely than those 65+ years (15%) to participate in the program at least once a year on average.
- Those with households of three or more people (23%) and households of two people (20%) are more likely than those in single person households (13%) to participate in the program at least once a year on average.
- Those who use 7+ garbage tags per year (27%) and those who use 1-6 garbage tags per year (25%) are more likely than those who do not use garbage tags (17%) to participate in the program at least once a year on average.

Figure 1.7a – Appliance/Scrap Metal participation by survey type

(Random telephone survey)	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
None / Not participating	80%	86%	73%	85%	75%	81%	85%	84%	75%	77%	81%	84%	95%
Once per year	15%	11%	23%	15%	16%	18%	8%	8%	19%	19%	16%	11%	4%
Twice or more per year	5%	3%	4%	--	9%	1%	7%	8%	6%	4%	3%	5%	1%

1.7.2 Scheduling a pick up

Q210 - Do you schedule a pick up with Niagara Region for scrap metal or appliances, or put them out at the curb for anyone to pick up without scheduling a pick up? (Base – Participate at least once a year on average)

Those who participate in the appliances/scrap metal program at least once a year on average were asked how they arrange for pick up.

Three-quarters (74%) of program participants told us they schedule a pick up with Niagara Region, and one-quarter (26%) will simply put the item at the curb.

The online survey respondents felt similarly (77% scheduled, 23% leave at curb).

Figure 1.7.2a – Appliance/Scrap Metal pick up type by survey type

Note: Sample size varies according to participation rates and survey type	Telephone (n=249)	Online (n= 1,696)
Schedule a pick up	74%	77%
Leave out	26%	23%

Respondent Sub-Segment Findings (Telephone)

- Women (81%) were more likely than men (65%) to say they scheduled a pick up.
- Those 65+ years (88%) were more likely to have scheduled a pick up than those 45-64 years (72%) or those 18-44 years (64%).

Figure 1.7.2b – Appliance/Scrap Metal pick up type by municipality

Note: Sample size varies according to participation rates and survey type	Total (n=249)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain-fleet.	Welland	West Lincoln
Schedule a pick up	74%	92%	90%	82%	69%	85%	73%	83%	69%	65%	79%	74%	75%
Leave out	26%	8%	10%	18%	31%	15%	27%	17%	31%	35%	21%	26%	25%

1.8 Bulky/Large Item Collection

1.8.1 Put out at the curb

Q211 - Bulky/large item collection includes items like carpet and furniture. How many times per year would you say your household puts out items like this out at the curb for collection? (Base – Converted to full sample)

More households (29%) do participate in bulky/large item collection compared to the scrap metal/appliances collection (20%).

In total, 29% of households told us they participate at least once a year, with the majority (19%) of households participating once a year, and 10% of households participating two or more times a year on average.

Those in the online survey told us they are participating more often.

Figure 1.8a – Bulky/Large Item collection by survey type

	Telephone (n=1,253)	Online (n=6,639)
None/not participating	71%	56%
Once per year	19%	20%
Twice or more per year	10%	24%

Respondent Sub-Segment Findings (Telephone)

- Those in households of three or more are more likely to participate at least once a year (33%), compared to households of two people (28%), or single person households (19%).
- Those who use 7+ garbage tags per year (43%) are more likely to participate at least once a year (43%), compared to those who use 1-6 garbage tags per year (38%) and those who do not use garbage tags (23%).

Figure 1.8b – Bulky/Large Item collection by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
None	71%	71%	72%	83%	67%	78%	74%	72%	61%	66%	80%	70%	89%
Once per year	19%	19%	24%	13%	20%	14%	14%	15%	25%	27%	16%	18%	8%
Twice or more per year	10%	10%	4%	4%	13%	8%	12%	13%	14%	7%	4%	13%	3%

1.8.2 Scheduling a pick up

Q212 - Do you schedule a pick up with Niagara Region for these bulky/large items, or put them out at the curb for anyone to pick up without scheduling a pick up? (Base – Participate at least once a year on average)

Those participating in the bulky/large item pick up are most likely going to be scheduling a pick up with Niagara Region. 94% said they would schedule a pickup for bulky/large items, compared to 74% of those participating in scrap metal/appliances.

Figure 1.8.2a – Bulky/Large Item collection type by survey type

<i>Note: Sample size varies according to participation rates and survey type</i>	Telephone (n=365)	Online (n=2,943)
Schedule a pick up	94%	92%
Leave out	6%	8%

Figure 1.8.2b – Bulky/Large item collection type by municipality

<i>Note: Sample size varies according to participation rates and survey type</i>	Total (n=365)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Schedule a pick up	94%	96%	95%	100%	97%	93%	100%	81%	92%	92%	100%	94%	87%
Leave out	6%	4%	5%	--	3%	7%	--	19%	8%	8%	--	6%	13%

2.0 Waste Collection Options For Next Contract

For Niagara Region’s new waste collection (garbage, recycling and organics) contract, residents and businesses are being asked for their opinion about several proposal collection options. Adopting some or all of these options would help reduce the amount of waste going to disposal, and limit future costs to businesses and taxpayers.

The purpose of this survey is to receive feedback from residents on the possible collection options and to help Regional staff understand resident’s feelings about each option.

2.1 Bulky/Large Item Collection

Q31 - The first option is related to large or bulky item pick up, such as carpet or furniture. The change would be to limit the number of large/bulky items collected to a maximum of four per week. In 2018, 92% of the bookings for large or bulky item pick up were for four items or less. If Niagara Region was to make this change, what would be the impact on your household? (Base – Full sample)

Making a change to the bulky/large item collection so that a maximum of four items per collection can be put out will not unduly impact Niagara region residents.

6% of residents in the telephone survey, and 14% in the online survey feel this change would have an impact on their household.

The vast majority told us there would be little to no impact to them (94% of households in telephone survey, 87% of households in the online survey).

Respondent Sub-Segment Findings (Telephone)

- Those in households of three or more (8%) are slightly more likely to feel impacted, compared to households of two people (5%) and single person households (4%).
- Those who use 7+ garbage tags per year (16%) are most likely to feel there would be an impact on their household, compared to those who use 1-6 garbage tags per year (5%) and those who do not use garbage tags (4%).

Figure 2.1a – Change to Bulky/Large Item collection, impact by survey type

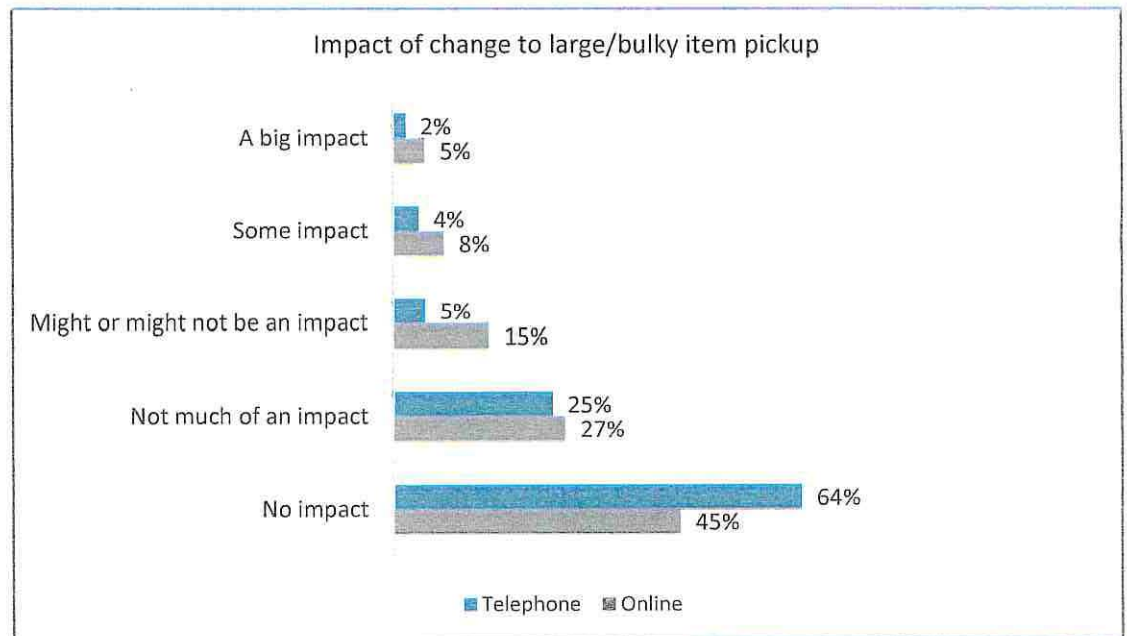


Figure 2.1b – Change to Bulky/Large Item collection, impact by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
A big impact	2	--	7%	--	2%	--	1%	--	1%	4%	--	2%	1%
Some impact	4	1%	8%	3%	7%	2%	3%	7%	5%	3%	1%	3%	4%
Might or might not be an impact	5	5%	4%	5%	7%	8%	6%	7%	4%	3%	--	11%	4%
Not much of an impact	25	23%	21%	30%	33%	21%	19%	25%	27%	30%	11%	23%	19%
No impact	64	71%	60%	62%	51%	69%	71%	61%	63%	60%	88%	61%	72%

2.2 Appliances/Scrap Metal Collection

Q32 – The second option under consideration would eliminate curbside pickup by Niagara Region of appliances and scrap metal. Currently, residents can go online and schedule a pick up of items at their home. Only 6% of Niagara households are using the curbside collection of appliances and scrap metal service. Also, as much as 60% of these items that are being put out have already been removed by the time crews arrive to pick them up. There would continue to be an opportunity for residents to take the items to a regional drop-off depot, at no charge, or have it picked up by private scrap metal haulers. If Niagara Region was to make this change, what would be the impact on your household? (Base – Full sample)

Figure 2.2a – Change to appliance/scrap metal collection, by survey type

Dropping/stopping the appliance/scrap metal collection program would have some impact on about 1 in 5 households in Niagara region. 17% of households in the telephone survey, and 22% in the online survey feel there would be at least some impact.

83% of households in the telephone survey, and 78% of the households in the online survey, feel there would be little to no impact on their household.

Respondent Sub-Segment Findings (Telephone)

- Those who use 7+ garbage tags per year (23%) are most likely to feel there would be an impact on their household, compared to those who use 1-6 garbage tags per year (18%) and those who do not use garbage tags (14%).
- Those who would need to continue to have their garbage picked up weekly are more likely to find at least some impact (19%) than those who could manage every-other-week collection (12%).

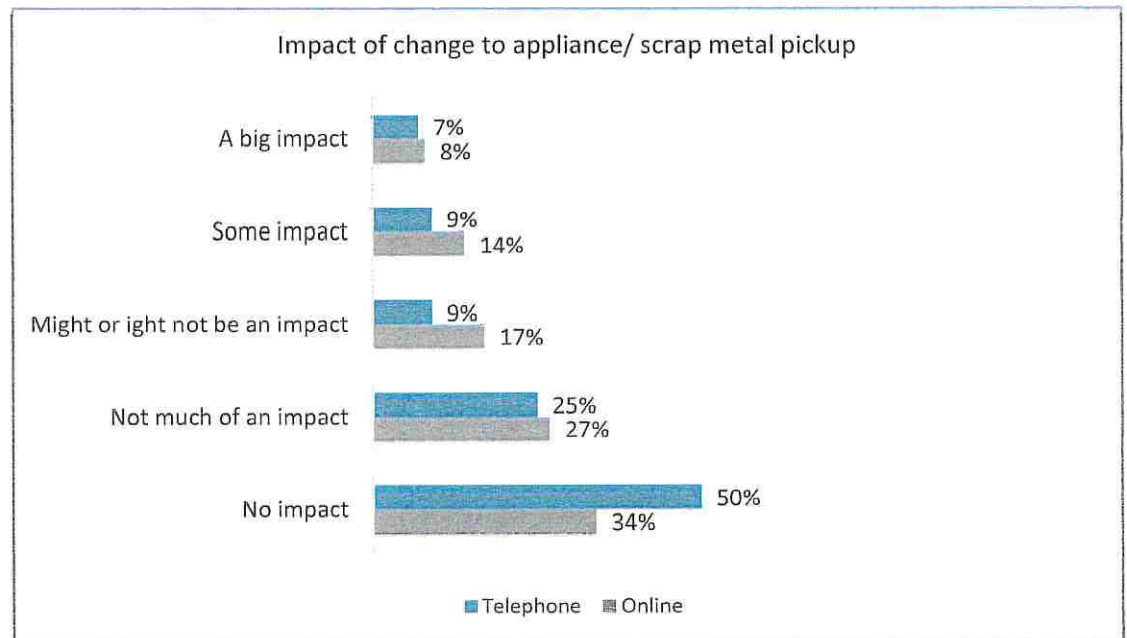


Figure 2.2b – Impact of change to appliance/scrap metal collection, by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
A big impact	7%	--	11%	7%	8%	10%	7%	9%	7%	8%	3%	8%	4%
Some impact	9%	8%	11%	4%	11%	13%	7%	11%	10%	5%	9%	8%	7%
Might or might not be an impact	9%	14%	11%	12%	11%	12%	8%	4%	9%	10%	1%	8%	10%
Not much of an impact	25%	28%	25%	25%	27%	23%	27%	20%	28%	34%	11%	23%	16%
No impact	50%	50%	43%	52%	43%	42%	51%	56%	46%	43%	76%	53%	63%

2.3 Clear Bags

2.3.1 Support for clear bags

Q33 – A third option under consideration is the mandatory use of clear garbage bags. Some municipalities in Canada have already made this change. The cost for the clear bags would be about the same as green/black garbage bags. Clear garbage bags will make it easier to see recyclable or organic material that should be placed in the Blue/Grey Box or Green Bin or Hazardous Waste items that should be disposed of safely. A smaller opaque bag, such as a grocery bag, can be placed inside the clear garbage bag for disposing of sensitive or personal items. Would you support a switch to clear garbage bags? (Full Sample)

Household support for the mandatory use of clear bags in the telephone survey was surprisingly a fairly even split. 48% would support (definitely or probably), and 52% do not support.

It's a different picture when looking at the sentiment expressed in the online survey. 27% would support, and 73% oppose.

Respondent Sub-Segment Findings (Telephone)

- Those who would need to continue to have their garbage picked up weekly are more likely to support the use of clear bags (57%) than those who could manage every-other-week collection (40%).

Figure 2.3.1a – Support for mandatory clear garbage bags by survey type

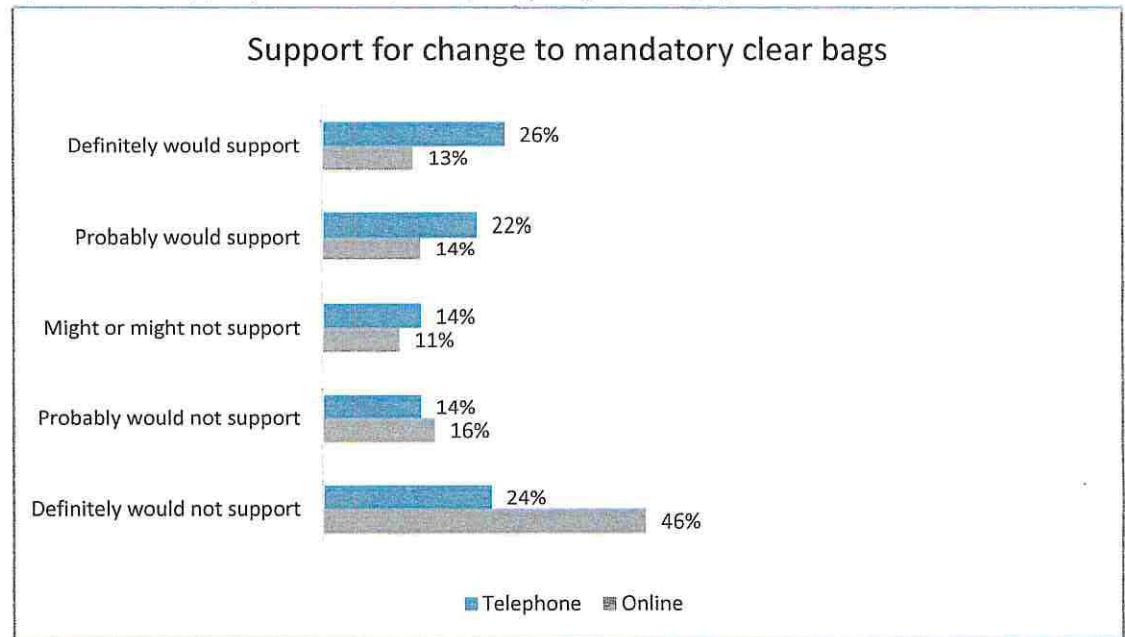


Figure 2.3.1b – Support for mandatory clear garbage bags by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Definitely would support	26%	19%	24%	28%	26%	30%	33%	24%	23%	20%	26%	33%	27%
Probably would support	22%	26%	28%	23%	19%	16%	15%	24%	26%	30%	16%	20%	19%
Might or might not support	14%	17%	14%	12%	13%	19%	16%	19%	15%	16%	8%	13%	11%
Probably would not support	14%	17%	17%	17%	16%	12%	12%	7%	14%	8%	13%	15%	12%
Definitely would not support	24%	21%	17%	20%	26%	23%	24%	26%	22%	26%	37%	19%	31%

2.3.2 Why support/not support?

Q34 – Why do you say that (support/not support clear bags)?

(Full Sample)

	Total	Support clear bags	Oppose clear bags
Keeps unwanted items from landfill	28%	51%	6%
Encourages use of Blue/Grey boxes and Green Bins	25%	48%	5%
Concerned about invasion of privacy	25%	8%	40%
Don't want my neighbours seeing my garbage	14%	3%	24%
Concerned about strength of clear bags	5%	2%	8%
We do not need "garbage police"	5%	1%	8%
Added cost/more effort	4%	1%	8%
Neutral/indifferent (General)	4%	6%	3%
We only use small grocery bags	3%	1%	5%
Stupid/no need (General)	2%	--	3%
Safer/better for waste management people	1%	3%	--

NOTE: All other responses are less than one percent total

"Clear bags tend to cost more money and are not as readily available. I also think having them curbside looks gross vs a black garbage bag. That being said I can understand why this idea could potentially reduce the amount of unacceptable items..."

"I just don't buy garbage bags so that would be an extra expense for us. Otherwise I am on board, we have nothing to hide..."

"Taking the trouble to separately sort embarrassing or secure sensitive material is annoying..."

"Clear bags are more expensive for one. The world doesn't need to see my garbage. Are you going to refuse pick up if I have recyclables in my trash? What about recycling that can't be cleaned like pizza boxes? Teaching what can be recycled and what can't would be far better..."

"If it becomes mandatory I will of course comply but personal items aside, I am not a fan of having my neighbours being able to see what I purchase, eat or throw out. Items come into my house concealed in shopping bags and that privacy with them going out is just as important to me..."

2.4 Every Other Week Garbage Collection

2.4.1 Managing every-other-week collection

Q35 – In Niagara Region an average of 50% of every garbage bag is food waste. A fourth option under consideration, that is already in practice in many other municipalities which encourages residents to use their Green Bin, is to pick up garbage every-other-week, but continue to collect unlimited Blue/Grey Boxes and Green Bins every week. There would be no change or reduction in the garbage container limit, but there would be less frequent pickup. With collection every-other-week, you would be allowed two garbage bags/containers. Based on your household’s waste practices, would you be able to manage? (Full Sample)

Residents were split on their feelings about garbage collection every-other-week, with slightly more leaning towards continuing their weekly collection.

46% of the telephone survey, and 41% of those in the online survey could manage every-other-week collection.

Figure 2.4.1a – Ability to manage Every Other Week garbage collection by survey type

	Telephone (n= 1,253)	Online (n=6,369)
Be able to manage EOW collection	46%	43%
Need to continue weekly collection	54%	57%

	Niagara Region		Waterloo Region ³	
	Telephone (n=1,253)	LDR Online (n=6,639)	Telephone (n=511)	Online (n=7,087)
Be able to manage garbage collection every-other-week	46%	43%	50%	36%
Need to continue having your garbage picked up weekly	54%	57%	50%	64%

³ Region of Waterloo Waste Survey, Metroline Research Group Inc., 2014

Respondent Sub-Segment Findings (Telephone)

- Residents 65+ years are more likely to be able to manage every-other-week collection (51%), compared to those 45-64 years (45%) and those 18-44 years (41%).
- Those in single person households (62%) are more likely to be able to manage every-other-week collection than those in two person households (50%), and those in households of three or more (37%).
- Households with no one using diapers are more likely to be able to manage every-other-week collection (47%) than those with someone in diapers (31%).
- Those who do not use garbage bag tags in an average year are more likely to be able to manage every-other-week collection (52%) than those who use 1-6 garbage tags (41%) and those who use 7+ garbage tags (24%).
- Those who participate in organics collection are more likely to be able to manage every-other-week collection (50%) compared to those who are not currently participating in organics collection (37%).
- Those who support mandatory use of clear bags (55%) are more likely to be able to manage every-other-week collection (55%) than those who oppose mandatory clear bags (38%).
- Those who currently put out more garbage are less likely to say they could manage every-other-week collection

Figure 2.4.1b – Ability to manage every-other-week garbage collection by typical garbage set out

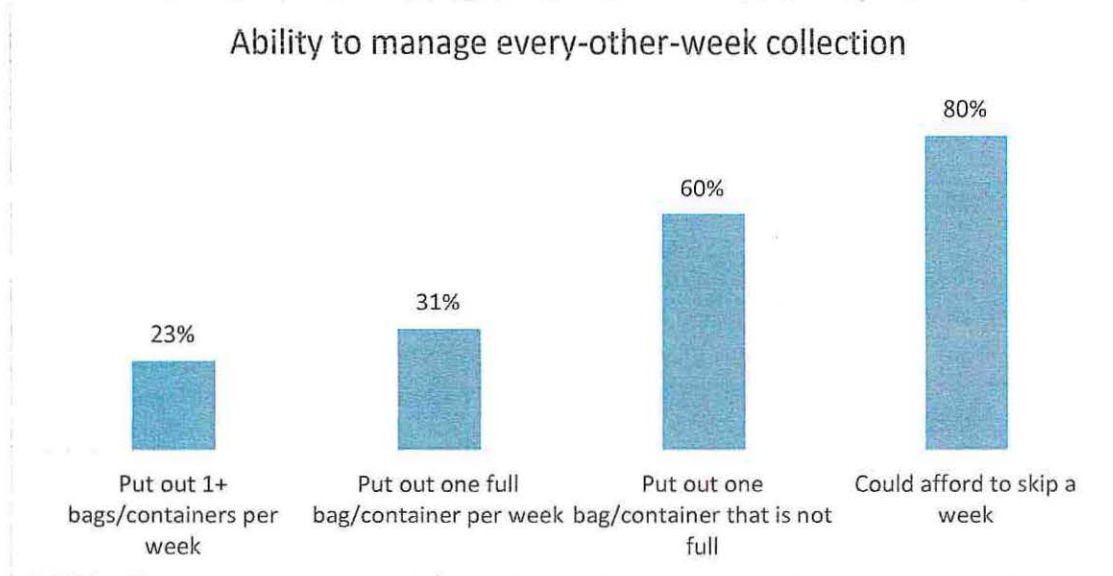


Figure 2.4.1b – Ability to manage Every Other Week garbage collection by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Be able to manage EOW collection	46%	52%	48%	52%	36%	50%	52%	40%	50%	47%	40%	49%	38%
Need to continue weekly collection	54%	48%	52%	48%	64%	50%	48%	60%	50%	53%	60%	51%	62%

2.4.2 Impact of every-other-week collection

Q36 – If Niagara Region collected garbage bags every-other-week, but collected your Blue/Grey Boxes and Green Bins every week, what would be the impact on your household? (Full Sample)

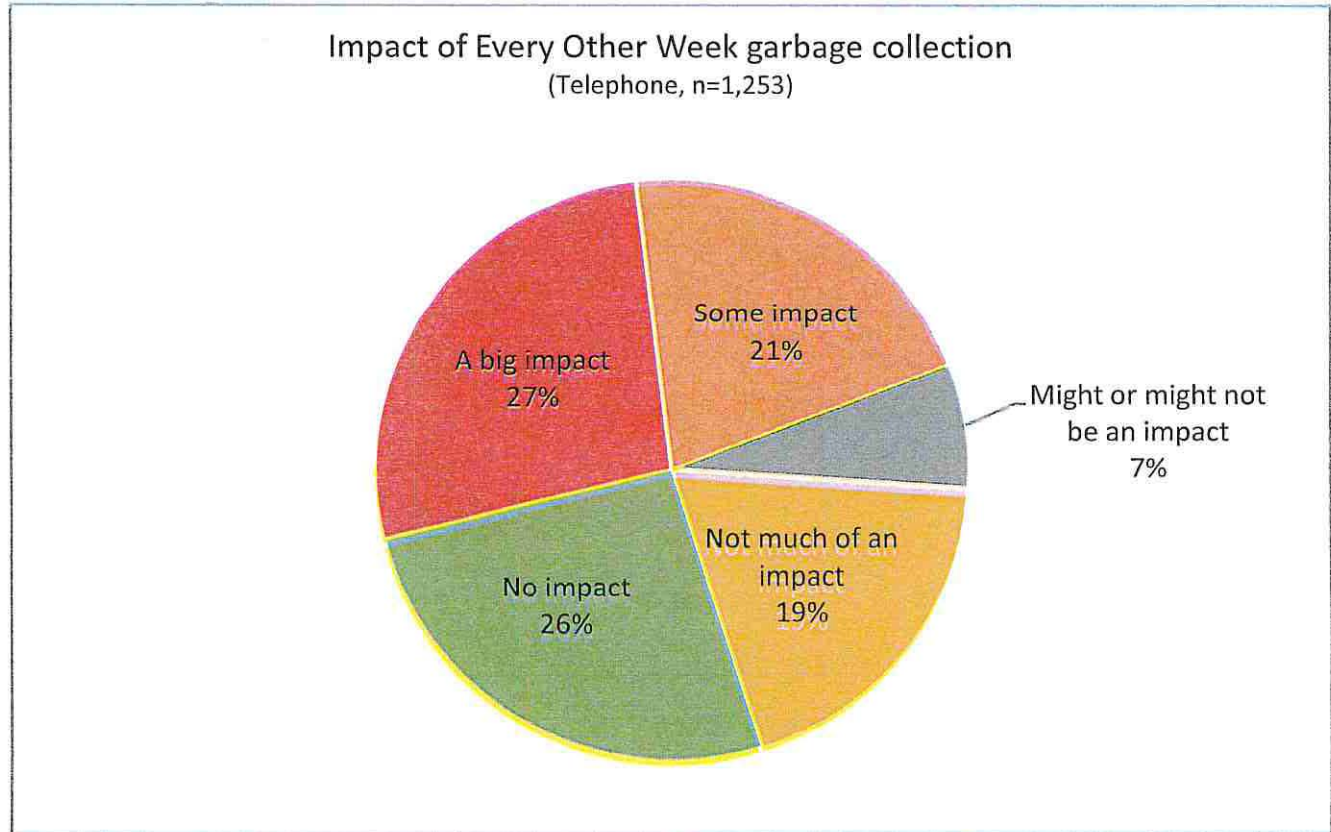
Figure 2.4.1a – Impact of Every Other Week garbage collection (Telephone)

In the telephone survey, just under half of residents (48%) feel there would be at least “some” impact on their household if Niagara Region switched to every-other-week garbage collection (while continuing to collect blue/grey boxes and green bins weekly).

A slight majority (52%) feel there would be little to no impact to their household.

Respondent Sub-Segment Findings (Telephone)

- Those in households of three or more (62%) are more likely to say there would be a big/some impact, compared to households of two people (40%) and single person households (33%).
- Those 18-44 years (59%) are more likely to say there would be a big/some impact, compared to those 45-64 years (48%) and those 18-44 years (41%).
- Those using diapers (70%) are more likely to say there will be an impact, compared to households with no diapers (47%).



- Those using 7+ garbage bag tags per year (76%) are more likely to say there will be an impact, compared to those using 1-6 garbage tags (55%) and those not using garbage tags (41%).
- Those not participating in the green bin/organics collection are more likely to say there will be an impact (57%) than those who are participating (45%).

Figure 2.4.1b – Impact of Every Other Week garbage collection

	Niagara Region		Hamilton ⁴		Waterloo Region ⁵	
	Telephone (n=1,253)	Online (n=6,639)	Telephone (n=800)	Online (n=1,468)	Telephone (n=511)	Online (n=7,087)
A big impact	27%	37%	34%	44%	25%	18%
Some impact	21%	21%	20%	19%	29%	24%
Might or might not be an impact	7%	9%	6%	8%	7%	10%
Not much of an impact	19%	17%	18%	13%	22%	24%
No impact	26%	16%	22%	16%	17%	24%
Impact Ratio (Big/Some vs. Not much/no impact)	+3	+25	+14	+34	+15	-6

While 48% of Niagara region resident indicate every-other-week collection would have some impact on their household, these numbers are lower than the 54% of residents in Hamilton and Waterloo Region who indicated there would be an impact on their household.

⁴ City of Hamilton Waste Management Services Public Engagement Survey – Metroline Research Group, 2016

⁵ Region of Waterloo Waste Survey, Metroline Research Group Inc., 2014

Figure 2.4.1c – Impact of Every Other Week garbage collection by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
A big impact	27%	19%	32%	16%	38%	15%	18%	27%	25%	26%	31%	28%	35%
Some impact	21%	23%	19%	23%	19%	31%	23%	24%	20%	26%	23%	20%	16%
Might or might not be an impact	7%	13%	--	5%	7%	9%	4%	5%	8%	7%	3%	8%	10%
Not much of an impact	19%	14%	21%	21%	22%	15%	16%	23%	19%	23%	13%	18%	18%
No impact	26%	31%	28%	35%	14%	30%	39%	21%	28%	18%	30%	26%	21%
Impact Ratio	+3												

2.4.3 Why is there an impact

Q37 – Why do you say that? (Base - Asked of those who say there would be a big/some impact)

Those who feel there would be a “big impact” or “some impact” were asked for the primary reasons why (unaided, this list was not provided).

The biggest barrier is the smell, especially in the summer time (63%), significantly higher than all other mentions.

Keeping animals out of the garbage was the second barrier, at 39%.

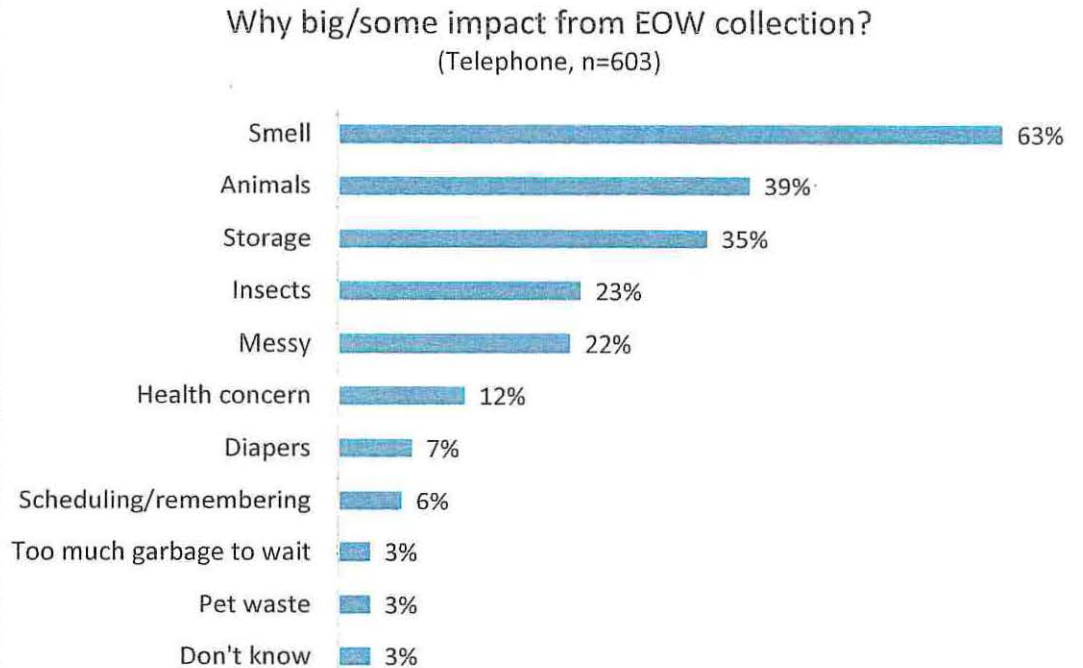
Finding space to store the garbage for the extra week was third, at 35%.

“The stench would be absolutely sickening in the summer, and it would also be a big draw for flies and rats and we are overrun with them already - both of which could be a health issue. Instead of punishing those of us that recycle and try to keep garbage at a minimum try increasing the cost of the bag tags substantially - if the price is high enough they’ll learn to recycle...”

“We produce a full green bin and full garbage every week for a family of 4. Bi-weekly garbage would result in us having 2 bags of garbage bi-weekly. We do not have storage space for this extra bag. We already have a mice problem in our neighbourhood and we are concerned that it would increase if we are keeping bags of garbage for longer. Our garbage contains soiled diapers and holding them longer would greatly increase odour issues...”

“Where am I supposed to keep this garbage for an extra week. If I leave it outside animals will get it, if I leave it in my house it will smell and I will have flies in my house...”

Figure 2.4.3a – Why big/some impact of EOW collection? (Telephone)



2.5 Making A Choice

Q38 - If you had to choose between mandatory use of clear garbage bags, every-other-week garbage collection, or the use of both, which would you choose? (Full Sample)

In the telephone survey, residents could not see the option for “neither”, and our interviewers worked to force a choice from the other three. In the online survey, this was visible after the first day or two of fieldwork, and as a result was selected more often.

In the telephone survey, between the two, there was a slight preference for clear garbage bags over every-other-week, but not dramatically so. In the online survey, residents who made a choice decided on every-other-week collection over clear bags by a margin of about 2:1.

Figure 2.5a – Choice between EOW collection and/or clear garbage bags by survey type

	Telephone (n=1,253)	Online (n=6,639)
Clear garbage bags	33%	17%
EOW garbage collection	27%	33%
Both clear garbage bags and EOW garbage collection	21%	12%
Neither **	19%	38%

Figure 2.5b – Choice between EOW collection and/or clear garbage bags by municipality

	Total (n=1,253)	Fort Erie	Grimsby	Lincoln	Niag. Falls	NOTL	Pelham	Pt. Colb.	St. Cath.	Thor.	Wain- fleet.	Welland	West Lincoln
Clear garbage bags	33%	26%	33%	31%	37%	36%	26%	40%	33%	31%	33%	36%	37%
EOW garbage collection	27%	31%	24%	33%	22%	22%	34%	21%	30%	42%	21%	20%	20%
Both clear garbage bags and EOW garbage collection	21%	25%	24%	20%	13%	30%	19%	24%	20%	16%	19%	25%	22%
Neither	19%	18%	19%	16%	28%	12%	21%	15%	17%	11%	27%	19%	21%

Report Number: 2019- 12

Date: February 11, 2019

SUBJECT: Amendment to the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains Report

1. PURPOSE

This report, prepared by Alana Vander Veen, Drainage Superintendent has been authorized by Chris Lee, Director of Engineering & Operations in response to actions by the Town of Fort Erie. The purpose of this report is to provide Council with an update on the activities of the Town of Fort Erie, requisite actions, and project summation and reasons of the amendment for the Zavitz Municipal Drain Engineer's Report, of which a portion of the Zavitz and the Sherkston North and East & West Trail Branch Drains, are located in Port Colborne.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES

In brief, a detailed summation of the Zavitz Municipal Drain history can be found in Report No. 2017-156. (See attached)

In summary:

- Wiebe Engineering appointed circa 2005 completed minimal work on the report before entering into receivership/bankruptcy in 2008, forcing the City to obtain a new Engineer;
- Paul Smeltzer, P. Eng of AMEC Earth and Environment Limited was appointed on April 11, 2011, however due to a change in staff, the Engineering firm presented Paul Marsh, P. Eng to undertake finalizing and adoption of the new report;
- A tender was issued by the Town of Fort Erie to complete the construction as per the report and Anthony's Excavating Central Inc. was awarded the project;
- During construction, errors within the report were noted, within the Port Colborne upstream end of the drain, with respect to the working side, in addition to a design change that was made on the West Trail branch in order to minimize the depth along the Friendship Trail. Lastly, a request from a property owner to upsize a culvert that proved to be inadequate in size to handle the first heavy rains and snow melt;
- Due to these concerns, staff contacted the Tribunal Coordinator for the Agriculture, Food and Rural Affairs, Appeal Tribunal on how to proceed with making changes to the new report;

3) STAFF COMMENTS AND DISCUSSIONS

The directions from the Tribunal Coordinator stated that the Town and the City were to have the engineer of record make the corrections to the report under a Section 58(4) of the Drainage Act R.S.O. 1990 which allows the Engineer of record to complete an addendum report.

With AMEC Earth and Environment Limited, now Wood Group, contact was made with confirmation that Wood Group was unable to complete the addendum required due to insufficient staff.

Again, contact was made with the Tribunal Coordinator and further instructions were given by them to contact Paul Marsh P. Eng, who was Engineer of record, to complete the what was required, to fulfill the requirements of the Drainage Act R.S.O. 1990.

Paul Marsh P. Eng who now works for EWA Engineering Inc. examined the changes and has agreed to fulfill the requirements.

4) OPTIONS AND FINANCIAL CONSIDERATIONS

a) Do nothing.

The City is mandated by the Drainage Act R.S.O. 1990 to ensure that Municipal Drain Reports are kept up to date for future maintenance. Doing nothing is not an option.

b) Other Options

An up to date report provides for an effective drain maintenance and roadside ditching program, which in turn will reduce overall costs, providing ratepayers with a reasonable level of service. The approval of this report and enactment of its corresponding by-law will enable the City of Port Colborne to then finalize this drainage process and, once completed, enable the collection of assessments due to the municipality, for the preparation of the engineer's report and construction of the Zavitz, Sherkston North and East & West Trail Branch Drains upon the passing of its final by-law for billing.

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

Municipal Drain Maintenance Strategic Planning is currently in progress. This project is in compliance with all City legislative requirements.

6) ATTACHMENTS

Appendix A - Report No. 2017-156, Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains.

Appendix B - Plan view of the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains.

Appendix C - Town of Fort Erie's By-Law 144-2018 Appointing Paul Marsh P. Eng of EWA Engineering Inc.

Appendix D - Prepared Addendum Report by Paul Marsh P. Eng of EWA Report Prepared for the Copy of October 31, 2016 Engineer's Report for the Zavitz Drain.

7) RECOMMENDATION

That staff be directed to prepare a by-law appointing Paul Marsh P. Eng of EWA Engineering Inc. to comply with Section 8, Chapter D. 17 of the Drainage Act R.S.O. 1990, as such a by-law will allow us to fulfill the requirement of Section 58(4), Chapter D. 17 of the Drainage Act R.S.O. 1990, as recommended by the Tribunal Coordinator; and

That the Mayor and City Clerk be directed to execute the appropriate by-law.

8) SIGNATURES

Prepared on February 1, 2019

Reviewed by:



Alana Vander Veen
Drainage Superintendent



Chris Lee
Director, Engineering & Operations

Reviewed and respectfully submitted by:

Reviewed by:



C. Scott Luey
Chief Administrative Officer



Peter Senese
Director of Community & Corporate Services



**Engineering & Operations Department
Engineering Division**

Report Number: 2017- 156

Date: October 10, 2017

SUBJECT: Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains

1. PURPOSE

This report, prepared by Henri Bennemeer, Drainage Superintendent has been authorized by Chris Lee, Director of Engineering & Operations in response to actions by the Town of Fort Erie. The purpose of this report is to provide Council with an update on the activities of the Town of Fort Erie, requisite actions, and project summation through to the tender stage, regarding the Zavitz Municipal Drain Engineer's Report, of which a portion of the Zavitz and the Sherkston North and East & West Trail Branch Drains, are located in Port Colborne.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES

A brief, point form outline of the history of the Zavitz Municipal Drain is presented in Section 1.3, pages 2 through 8 of the engineer's report, contained in the attachment section of this report. Staff compiled a more detailed history of the Zavitz and Branch Municipal Drains (see plan view attached), for future consideration and for Municipal record. Background highlights, derived from various Engineering & Operations Reports to Council, are outlined as follows.

Report No. 2006-14 facilitated Council's initial appointment of an engineer and preparation of a new engineer's report for the Zavitz Drain, in collaboration with the Town of Fort Erie. Report No. 2010-43 provided a brief history and status update of the Baer Drain and associated Schooley, Zavitz, Outlet and Beaver Creek Drains and facilitated Council's appointment of a member of Port Colborne Council to the Baer Municipal Drain Court of Revision.

Report No. 2011-20 revealed that Port Colborne properties were not in the watershed of the Baer Drain and provided extensive background research back to 1890 as to why, necessitating a Town Fort Erie re-write of the Baer Engineer's Report. The report also provided the rationale for an expanded scope (additional branch drains/road authority petitions) for the Zavitz Drain (Port Colborne portion) related to the Friendship Trail and Sherkston Hamlet Storm Water Management (SWM) plan, facilitating the appointment of an engineer for the preparation of a report thereof and associated Drainage Act R.S.O. 1990 clerical matters and direction to staff.

Report 2012-15 provided a project update and description/development of the Sherkston Hamlet SWM plan/branch drain(s) scheme and the procedure for a joint/collaborative report for the Zavitz Municipal Drain, in which the City of Port Colborne turned over the proceedings under the Drainage Act R.S.O. 1990 to the Town of Fort Erie in order to have one report prepared, thus providing the most cost effective and most prudent way for two municipalities to proceed on a common/joint watershed municipal drain project.

Report 2013-31 provided Council with a final version of the Engineer's Zavitz Drain Report along with staff's statistical/financial analysis and concerns regarding assessment methodology pertaining to the engineer's findings and recommendations in the report. Report 2014-6 facilitated Council's appointment of a member of Port Colborne Council to the Zavitz Municipal Drain Court of Revision.

In summation, initial interest in the Zavitz Drain came by way of the Town of Fort Erie who initiated this process. This is due, in part, to a circa 2004 request/petition for maintenance of the Schooley, Baer, Zavitz & Outlet Drains and concerns over a circa 1979 Drainage Tribunal order regarding the Outlet Drain and the potential impact of the Schooley Drain as a result of the pending transfer/download of Point Abino Road from the Region.

At that time, the maintenance provisions under the then current reports for these drains were deemed outdated and in need of new reports. Subsequently Wiebe Engineering Group Ltd was appointed circa 2005 to prepare one engineer's report for all four drains, with Port Colborne having to follow behind with a negotiated, expanded scope for their portion of the Zavitz Drain. This is chronicled in Fort Erie Reports IS-61-04, IS-26-05 & IS-19-06 and Port Colborne Report E&O 2006-14.

In January of 2008, the Town of Fort Erie was informed that Wiebe Engineering Group Ltd. was about to enter into receivership/bankruptcy proceedings. As a result, Fort Erie elected to have three new reports prepared, one each for the Schooley, the Baer and the Zavitz and Outlet Drains by various engineering firms. What is most disconcerting about this plan of action is the fact (uncovered during the Zavitz Tribunal Hearing of August 5, 2015) that Wiebe had virtually completed (marked as a draft) their report on the Schooley, Baer, Zavitz and Outlet Drains in July of 2006.

Subsequently, the Schooley Drain report was commissioned in March of 2008, completed in February 2010 and adopted by Fort Erie By-Law 83-10. The Baer Drain report was commissioned in May 2008 and completed in February 2011, after Port Colborne's Drainage Superintendent revealed an error (Port Colborne properties not in watershed) in the Engineer's April 2010 Report and after the September 2010 resubmission to the C.O.R. was set aside by the Drainage Tribunal (report lacking Engineer's seal & signature), and ultimately adopted by Fort Erie By-Law 82-10. The aforementioned is chronicled in Fort Erie Reports IS-09-08, IS-20-08, IS-31-10 & IS-32-10 and Port Colborne Reports E&O 2010-43 & 2011-20.

With respect to the Zavitz and Outlet Drains, on or about August of 2010, the Town of Fort Erie elected, once again, to have separate reports prepared for each drain. In this case, separate engineering firms were selected. As a result of the RFP selection process, in October of 2010, AMEC Earth & Environmental was appointed to prepare an Engineer's Report for the Zavitz Drain. Similar to that which was experienced at the time of the Wiebe appointment, the Town of Fort Erie neglected to include the Port Colborne portion of the Zavitz Drain, as part of the scope of work in their Engineering Services agreement with AMEC Earth & Environmental Ltd. Subsequently, Port Colborne staff were successful in negotiating a change in the scope of work, including some additional branch drains for the Sherkston Hamlet SWM, along with the requisite engineering fees and a process to facilitate one Engineer's Report for a drain in common, in the case of a downstream, initiating municipality.

After numerous peer reviews, design issues, report re-writes, appeals to the Court of Revision & Ontario Ministry of Agriculture, Food & Rural Affairs (OMAFRA) Appeals Tribunal, many Tribunal hearings, the Engineer's Report was finalized in October 2016 and adopted by Fort Erie By-Law 16-2014, bringing us to the current, construction tender stage in the project.

Appeal results worth noting however, are staff's success in having Wiebe Engineering fees assigned to the Zavitz Drain reduced from \$21,240 to \$11,761 and AMEC Engineering fees assigned to the Port Colborne portion of the Zavitz Drain reduced from \$52,076.08 to \$9,120.33, a significant savings for watershed ratepayers. As for the Sherkston North and East & West Trail Branch Drains, the Tribunal ruled that the engineering cost and assessment schedules were fair and equitable. The aforementioned, other than the appeals process, is chronicled in Fort Erie Reports IS-49-10, IS-17-12, IS-26-2013, IS-38-2013 & IS-01-2014 and Port Colborne Reports E&O 2011-20, 2012-15, 2013-31 & 2014-6.

The Outlet and Beaver Creek Drains, which have a significant impact on the Zavitz Drain, will be the subject of a future report to Council.

3) STAFF COMMENTS AND DISCUSSIONS

As stated above, staff is now at the tender stage for the Zavitz drainage works. In conformance with the process for one Engineer's Report for common watersheds between two municipalities laid out at the onset of the project, Town of Fort Erie staff in collaboration with Port Colborne staff, prepared tender documents which closed on August 23, 2017. The results as follows, are considered fair and equitable (see also attached FE Report No. IS-32-2017 for more details).

Submitted Tenders		
Contractor	Tender Price (including 13% HST)	Tender Price (net of non-rebatable taxes)
Anthony's Excavating Central Inc.	\$ 235,751.01	\$ 212,301.08
C.R.L. Campbell Construction & Drainage Ltd.	\$ 377,749.16	\$ 340,174.82
Geo. Barnes and Sons Limited	\$ 416,991.11	\$ 375,513.41

The Town of Fort Erie is the approving authority for the tender amount. The total tender amount is for works in both municipalities and a more detailed cost break down including engineering, contract administration and grants, will be reported at the time of the levy by-law, upon completion of the project. The low bidder, Anthony's Excavating Central Inc., is an experienced contractor within the Niagara region and has completed similar contracts satisfactorily for the City of Port Colborne.

According to the Drainage Act R.S.O. 1990, upon completion of all appeals, the initiating municipality is the only municipality that is required to pass a by-law. In this particular case for the Zavitz Drain, the October 2016 report process has been more atypical and therefore requires that the City enact its own by-law for the following reasons:

- a) To enable the City of Port Colborne the ability to bill the watershed as per the schedules listed in the attached report;
- b) The collaborative process which provided for the upstream (Port Colborne) portion of the Zavitz Drain to be included in a downstream (Fort Erie) municipality's report;
- c) The Sherkston North and East & West Trail Branch Drains are drains/watersheds entirely within the confines of the City of Port Colborne's legislative jurisdiction.

4) OPTIONS AND FINANCIAL CONSIDERATIONS

a) Do nothing.

The City is mandated by the Drainage Act to ensure that Municipal Drain Reports are kept up to date for future maintenance.

According to the Drainage Act R.S.O. 1990, upon completion of all appeals, the initiating municipality is the only municipality required to pass a by-law, therefore, the Town of Fort Erie is the approving authority for the tender amount.

Doing nothing is not an option.

b) Other Options

An up to date report provides for an effective drain maintenance and roadside ditching program, which in turn will reduce overall costs, providing ratepayers with a reasonable level of service. The enactment of this by-law also facilitates the collection of assessments due to the municipality, for the preparation of the engineer's report and construction of the Zavitz, Sherkston North and East & West Trail Branch Drains.

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

Municipal Drain Maintenance Strategic Planning is currently in progress. This project is in compliance with all City legislative requirements.

6) ATTACHMENTS

Copy of October 31, 2016 Engineer's Report for the Zavitz Drain.

Plan view of the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains and associated Schooley, Baer, Outlet & Beaver Creek Drains.

Copy of Town of Fort Erie Infrastructure Services Report IS-32-2017 Award of Tender for Zavitz Municipal Drain Construction.

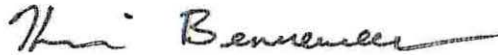
7) RECOMMENDATION

That staff be directed to prepare a by-law adopting the Zavitz Drain Engineer's Report, dated October 31, 2016, prepared by Paul Marsh, P. Eng. of AMEC Foster Wheeler, prepared under Sections 4 & 78, Chapter D.17 of the Drainage Act R.S.O. 1990 as such by-law will provide local status regarding the Port Colborne portion of the Zavitz Drain and the Sherkston North and East & West Trail Branch Drains.

That the Mayor and City Clerk be directed to execute the appropriate by-law.

8) SIGNATURES

Prepared on September 29, 2017



Henri Bennemeer
Drainage Superintendent

Reviewed by:



Chris Lee
Director, Engineering & Operations

Reviewed and respectfully submitted by:

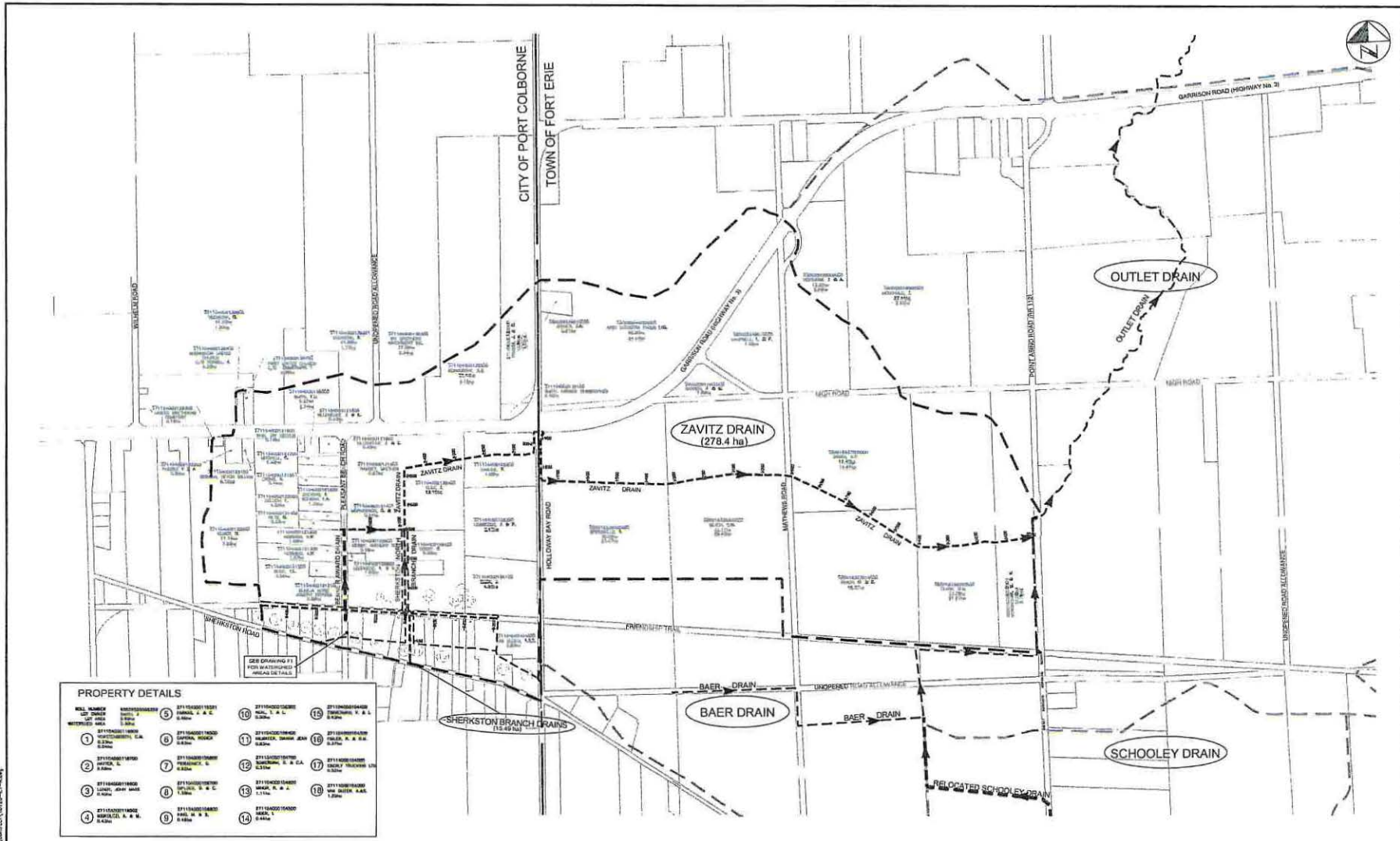


C. Scott Luey
Chief Administrative Officer

Reviewed by:



Peter Senese
Director of Community & Corporate
Services



PROPERTY DETAILS			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

No.	DATE	BY	REVISIONS	MAN	CAD
1	2011	LV	ISSUED TO WATERS FOR REVIEW		
2	2011	LV	ISSUED FOR CITY REVIEW		
3	05/05/13	SK	REVISED PER CITY COMMENTS		
4	07/06/14	SK	REVISED FOR COURT OF SESSION		

APPROVALS			

Design	L.V.	Checked	P.D.S.
Drawn	A.K.	Checked	L.V.
Scale	1:6000		
Date	APRIL 2014		



ZAVITZ DRAIN
TOWN OF FORT ERIE
CITY OF PORT COLBORNE

ZAVITZ DRAIN AND SHERKSTON
NORTH BRANCH DRAIN, EAST &
WEST TRAIL BRANCH DRAINS
WATERSHED



Contract No.
Consultant File No.
110120
Drawing No.
E-1A



The Municipal Corporation of the Town of Fort Erie

By-law No. 144-2018

Being a By-law to Appoint a Drainage Engineer and Execute an Agreement with EWA Engineering Inc. for the Preparation of an Amended Engineer's Report for the Zavitz Municipal Drain

Whereas Report No. IS-49-10 was considered and approved at the Council-in-Committee Meeting held October 4, 2010 to appoint AMEC Earth and Environmental Limited as the Drainage Engineer for the preparation of a new Engineer's Report for the Zavitz Municipal Drain in the amount of \$24,990 (including 13% h.s.t.); and

Whereas By-law No. 119-10 was passed by the Municipal Council of the Town of Fort Erie on the 12th day of October, 2010 to appoint a Drainage Engineer for the preparation of a new Engineer's Report and to execute an agreement with AMEC Earth and Environmental Limited for professional engineering services for the Zavitz Municipal Drain; and

Whereas Report No. IS-45-2018 was considered and approved at the Council-in-Committee Meeting held November 13, 2018 to appoint a new Drainage Engineer for the Zavitz Municipal Drain; and

Whereas it is deemed necessary to appoint EWA Engineering Inc. as the Drainage Engineer for the preparation of the Amended Engineer's Report for the Zavitz Municipal Drain;

Now therefore the Municipal Council of The Corporation of theTown of Fort Erie enacts as follows:

1. **That** EWA Engineering Inc. is appointed as the Drainage Engineer for the preparation of an Amended Engineer's Report for the Zavitz Municipal Drain.
2. **That** the entry into and execution of an agreement with EWA Engineering Inc., in a form satisfactory to the Director, Infrastructure Services and the Town Solicitor, is authorized and approved.
3. **That** the Mayor and Clerk are authorized and directed to execute the agreement with EWA Engineering Inc. for the preparation of an Amended Engineer's Report for the Zavitz Municipal Drain and to affix the corporate seal thereto.

4. That the Clerk of the Town is authorized to effect any minor modifications, corrections or omissions, solely of an administrative, numerical, grammatical, semantical or descriptive nature to this by-law or its schedules after the passage of this by-law.

Read a first, second and third time and finally passed this 19th day of November, 2018.



Mayor



Clerk

I, Carol Schofield, the Clerk, of The Corporation of the Town of Fort Erie certifies the foregoing to be a true copy of By-law No. 144-2018 of the said Town. Given under my hand and the seal of the said Corporation, this _____ day of _____, 20____

January 9, 2019

Attention: Mr. Dave Maiden
Drainage Superintendent
Town of Fort Erie
Town Hall, 1 Municipal Centre Drive
Fort Erie, ON, L2A 2S6
905 871-1600 Ext. 2405
<DMaiden@forterie.ca>
Copy to: Ms. Alana Vander Veen,
Drainage Superintendent, City of Port Colborne

Dear Mr. Maiden:

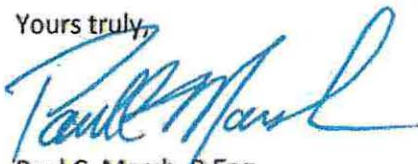
Please find our report amending the original Zavitz Drain Report prepared by Amec Foster Wheeler and sealed by myself. These changes to the report were identified during constructions as follows:

- Increase in culvert capacity for the Zavitz drain located on the Damude Property identified as Roll No. 271104000105300.
- A revision in the Drain grade line on the West Trail Branch Drain adjacent to the Friendship Trail.
- Changes to the working easement and allowance calculations for the Clee and Cosby properties.

These changes are located in the City of Port Colborne portion of the Zavitz Drain works and are brought forward for consideration under Section 58 (4) of the Drainage Act, which is to approve changes in the drainage design and drainage schedule before final drain commissioning into service and after the report adoption by Bylaw.

For the execution of this work, I have attended the site, met with Mr. Clee and performed a technical review of the information available. The amended portions of the report follow this letter.

Yours truly,



Paul C. Marsh, P.Eng.
Principal Engineer
EWA Engineering Inc.
pcmarsh@ewaeng.com

1 Introduction

The Town of Fort Erie appointed Mr. Paul Marsh, P.Eng. of EWA Engineering as drainage engineer for the Zavitz Drain by Council bylaw.

1.1 Background

The Zavitz Drain Report was originally prepared by the appointed engineering firm, Amec Foster Wheeler and sealed by Paul Marsh, P.Eng. as part of the Drainage Tribunal hearings in 2016. Construction commenced in 2018.

From the original drain report, there have been three significant changes made to the original design.

1. Mr. Damude requested that a larger culvert was required on his property than the design replacement culvert sized as 500mm circular CSP.
2. Port Colborne Acting Drainage Superintendent Ms. Alana Vander Veen revised the drain grade line for the West Trail Drain to prevent the drain from being too deep adjacent to the Friendship Trail. This affected the proposed relaying of the culvert crossing Pleasant Beach Road.
3. After 140m of trees were cleared from the Clee property on the North side of the Zavitz Drain, from a total length of 193.3m, Mr. Clee requested that construction be halted. The drainage report provided an allowance to Mr. Clee (North side of the drain) under Section 30 but directed work to be done from the South side where an allowance for work was not granted to Mr. Cosby.

2 Study Approach

Information relevant to the construction notes and changes was provided to EWA Engineering for review and consideration.

A site visit was conducted on November 14, 2018 and the following activities were performed:

1. A visual inspection of the works along the Friendship Trail was performed.
2. A survey of drainage swale cross-section was collected in three locations.
3. It was identified that GPS survey data of the West trail, East Trail was available and the City of Port Colborne would provide the information.
4. A meeting with Mr. Clee was held and a walking tour of his property was performed along with a discussion of potential options to proceed.

EWA reviewed the hydrologic modelling information prepared by Amec Foster Wheeler as part of the original design work completed for the Zavitz drain. Additional calculations and analysis were performed, which are included in the Appendix to this report.

2.1 Previous Reports and Studies

Original Computer Aided Design (CAD) files were not made available for the project by Amec Foster Wheeler (now the Wood Group).

Data from NPCA was already in the possession of EWA Engineering for a related project that also covered the Port Colborne portion of the Zavitz Drain.

Previous versions of reports and Assessment schedules were provided by the Town of Fort Erie.

Specific information, marked up plans, are included as Attachment A.

3 Methodology

Site data collection to verify construction work along with survey data and review of predictive runoff calculations to confirm design standards is considered a suitable methodology for resolving the changes made to design in the field.

4 Analysis

The following are the three aspects of change from the original design considered for review.

4.1 West Trail Grade Line Changes

The following is the redline Mark up from the Acting Drainage Superintendent Alana Vander Veen for the changes in design grade line.

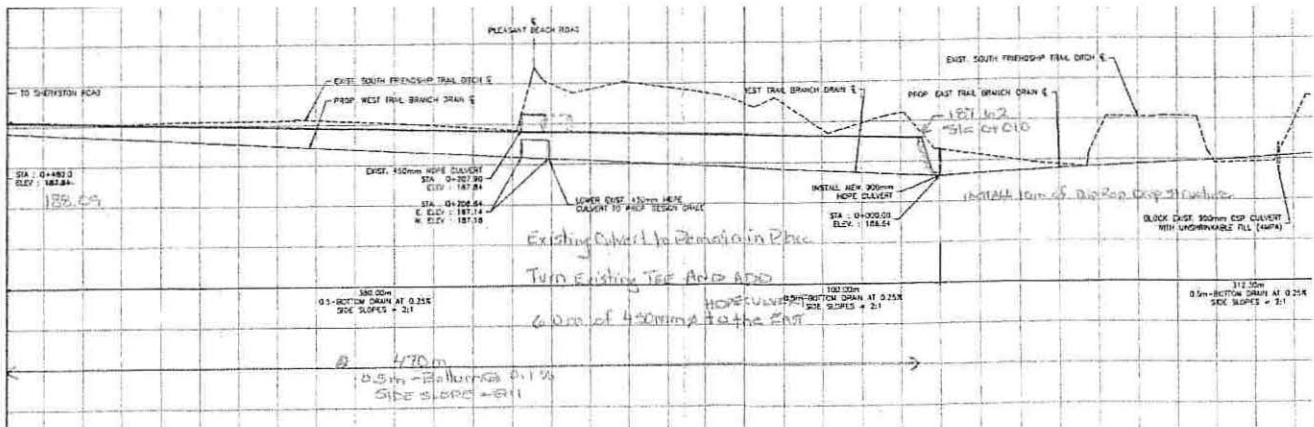


Figure 1 West Trail Design Revisions During Construction

The affected changes shown above are as follows:

1. A rip rap drop structure was introduced at the outlet of the West Trail and before the entrance to the 900mm culvert crossing the Friendship Trail.
2. The proposed grade line of the West Trail was changed from 0.25 % to 0.1%.
3. The culvert was not lowered but extended in place with an extension of the same size and material.

4. No change in the grade line for East Trail were proposed or made.

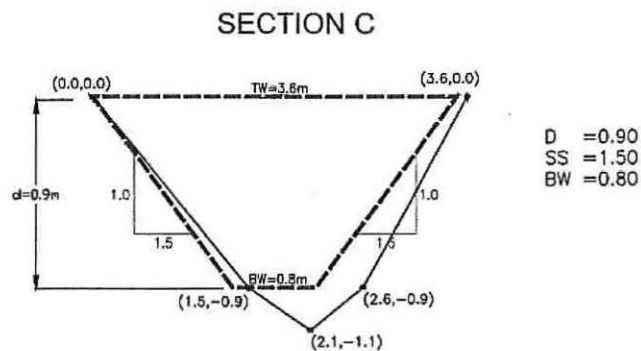
The concern for the changes are related to the potential for failures caused by the following:

- A. A lower grade will reduce the conveyance capacity of the drain without any additional compensatory change such as wider bottom or side slopes.
- B. The extension of the culvert will reduce conveyance capacity and might be below the design standard.
- C. Increase in drain slope at the outlet might lead to erosion of the base grade.

Cross section profiles were collected during the site visit at the following Cross-sections:

4.1.1 West Trail Station 0+230 Section C

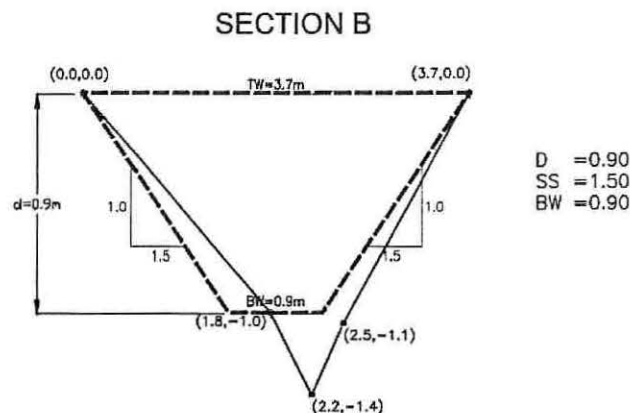
The survey data collected shows the following channel cross section.



Top width bankfull flow at a depth of 0.9m is shown to be 3.6m.

4.1.2 West Trail Station 0+170 Section B

The survey shows the following channel cross section.



4.1.3 West Trail Station 0+030 Section A

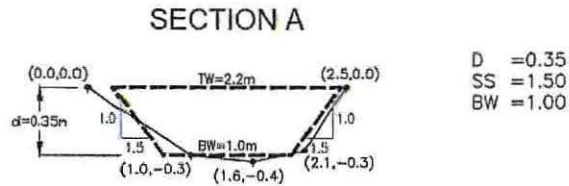


Figure 4 West Trail Station 0+030 Section A

For each cross-section an equivalent trapezoid was used to confirm the design capacity. It's recognized that a potentially slightly larger capacity may exist based on the specific measurements made but that a comparison against trapezoidal design as stated in the original design plan & profile drawings is required for comparison.

The Rational Method was used to predict the channel capacity for a 1:2 year flow of 0.065 cms with a 1:5 year flow of 0.088 using a 1 hour intensity value.

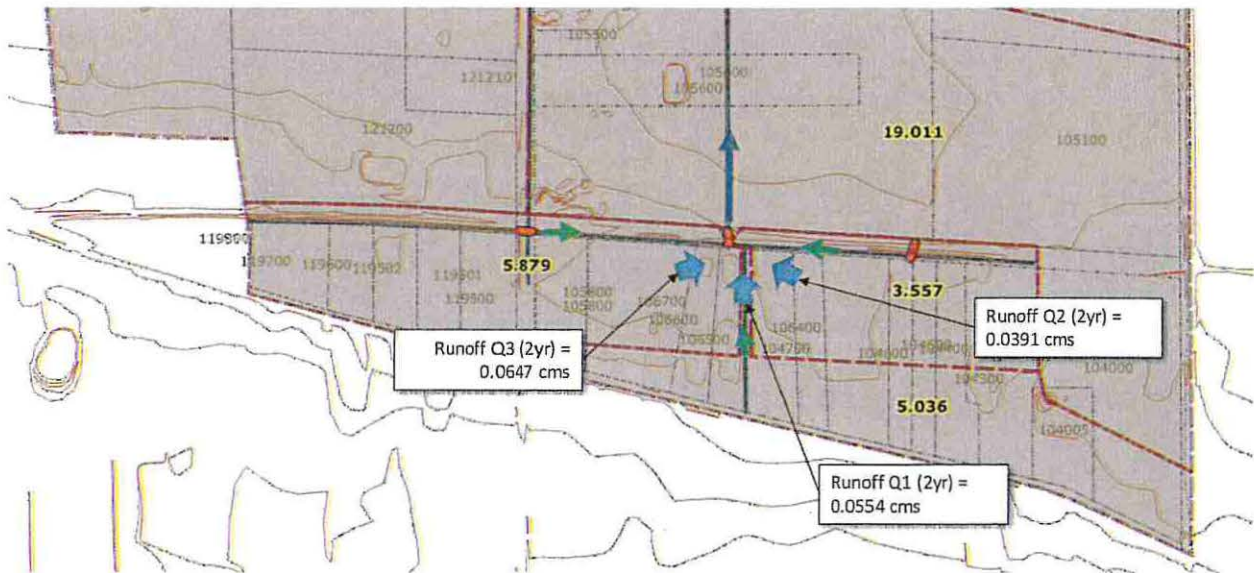


Figure 5 West Trail Catchment Areas

The capacity of the equivalent trapezoidal channels was calculated to be as follows:

Table 1 West Trail Channel Capacity

Channel ID	Length (m)	Slope, (m/m)	Manning n coeff	Bottom Width, BW (m)	Depth, D (m)	Bank Slope, (m)	Q, (m ³ /s)
Sect - A		0.0019	0.022	1	0.35	1.5	0.404
Sect - B		0.0019	0.022	0.8	1	1.5	2.955
Sect - C		0.0007	0.022	1.1	0.9	1.5	1.687

The slope was determined based on the GPS survey data, collected post construction by City of Port Colborne, for the crossing inverts and for the base grade points. The survey showed the base grade points are not graded correctly and will need to be revised to grade positively towards the outlet.

The grade lines used in the calculation are shown in the following figure.

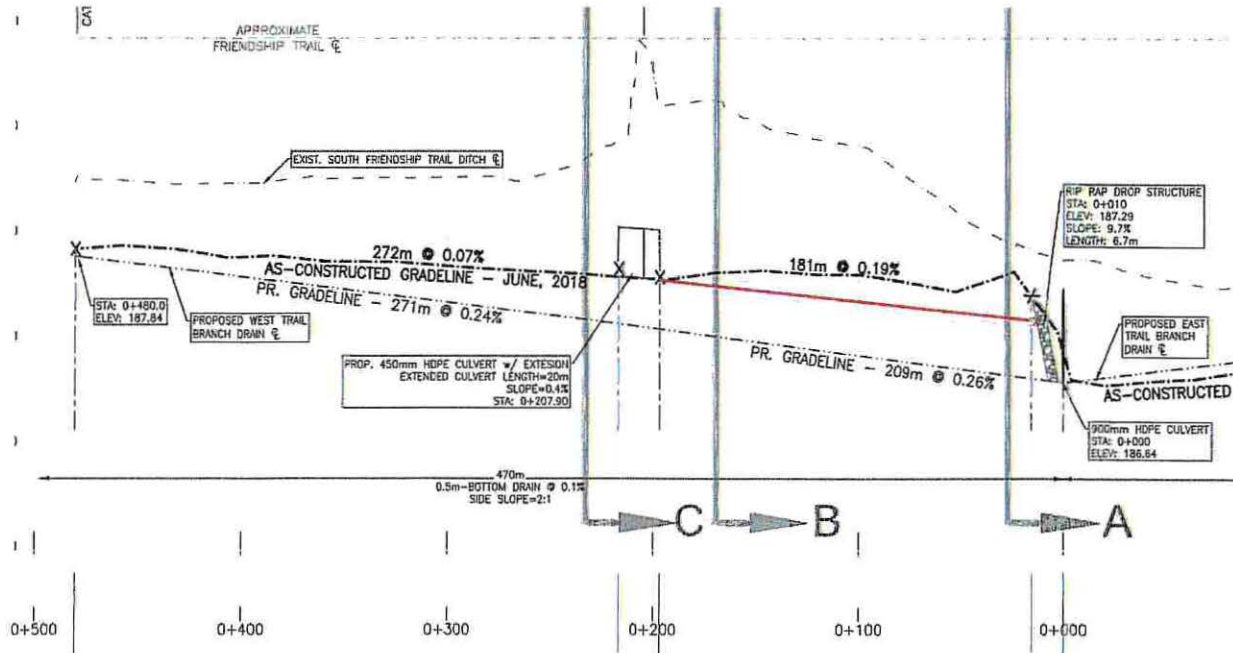


Figure 6 West Trail Revised Design Grade Lines

From this we can conclude that the drain as constructed has adequate capacity for the predicted runoff from the Rational method. However, the lower section of the West Trail East of the Pleasant Beach Road requires re-grading to match the design. During the site visit water was seen to be ponding in this section. This indicates that the bottom of the ditch should be regraded to better match the design shown in Figure 6 West Trail Revised Design Grade Lines as the red arrow.

Calculations are included as Attachment B.

4.2 Zavitz Drain Culvert Size Changes

Original Report contained like for like culvert replacements with two 500mm CSP culverts being required on two properties; Damude and Clee.

Review of the previous SWMHymo modelling work completed for the Zavitz Drain shows that runoff computations for the 1:2 year storm were analyzed and reported as 6 hour SCS storm runoff of 1.608 cms (revised to 1.560). The CN value used was 75, perhaps slightly on the high side for such a flat area that is largely forested or scrub large rural / urban fringe lot sizes with large lawn coverage.

Time to peak reported as 12.16 hours but with a run-time warning that the time step value used was too large and may affect time to peak results.

The SWMHYMO file; ZavFinal.out reported the following results:

- 1.253 based on a CN of 73.50 (which is considered more appropriate)
- Time to peak of 12.33 hrs with the same warnings.

Comparison with Rational Method calculations to benchmark runoff results resulted in a peak flow predicted value of 0.944 cms based on a runoff coefficient of 0.17, which is suitable for rural lot area with grades less than 2%. (local grades are actually less than 0.2%)

Culvert design capacity of 1 cms is considered the design requirement for the two private crossings. The free flow capacity of the existing and design 500mm CSP culverts is given as 0.3 cms, too low in comparison with the design capacity.

A comparison of upstream and downstream and downstream channel capacity shows that the channels as constructed through the land area upstream of the culverts are low in capacity.

The calculation record is included in Attachment C.

4.3 Zavitz Drain Work Zone Changes

A review of the Allowances for the property shows that two allowances were considered:

- A Section 29 allowance that is paid for permanent or long term negative impacts to land use. Typically associated with permanent easements in favour of maintenance or degradation of soil capability from soil spreading.
- A Section 30 allowance that is paid for construction impacts to use, such as crop disturbances or ornamental trees. This is a one time payment for negative impact of construction.

From the original report, For the Zavitz Drain, page 43 Section 8.2.

"No allowances have been granted under Chapter D.17 Section 29 as the work anticipated does not meet the requirements as set out in Chapter D.17, Section 29."

"The allowances paid under the Drainage Act, Chapter D.17, Section 30 (note changed from original text) are based on a value of \$1,000 per hectare for wooded areas, \$2,000 per hectare for cultivated lands and \$5,000 per hectare for the lands that are mostly residential and being in use."

For the Sherkston North Branch, there were Section 29 allowances made but none were recorded for the Zavitz Drain.

From the Assessment summary in the report, page 43.

Town of Fort Erie
Zavitz Drain Report Amendment

Roll No.	Property Owner Name	Chapter D.17, Section 29	Chapter D.17, Section 30	Total
Zavitz Drain – Fort Erie				
20018339000000	Spironello, A.	--	\$ 880	\$ 880
20018338000000	Beach, C.M.	--	\$ 827	\$ 827
20118337000000	Green, K.R.	--	\$ 533	\$ 533
20018337010000	Beach, D. & C.	--	\$ 474	\$ 474
20018336000000	Clark, D.M.	--	\$ 551	\$ 551
20018335000000	Woronchak, M. & N.	--	\$ 280	\$ 280
Total Allowances – Fort Erie				\$ 3,543
Zavitz Drain – Port Colborne				
271104000105400	Cosby, D.	--	\$ 406	\$ 406
271104000138400	Clee, J.	--	\$ 1,294	\$ 1,294
271104000105300	Damude, R.	--	\$ 307	\$ 307
Total Allowances – Port Colborne				\$ 2,008
Total Allowances – Zavitz Drain				\$ 5,551

Project No: TP110120 / TP110120A

Page 43

Figure 7 Original Report Assessment Allowances

The section 30 allowance for Property 138400 was \$1,294 and based on the following:

- A calculated working space allowance of 10m Right Width and 610.3m Length for a total impacted area of 0.610 Ha and a calculated value of \$1,221.
- A channel allowance for the increase in drain top width from 2.1m to 2.5m Right and 2.5m from 2.2m Left; Width and 610.3m length Right and 417.0m Left for a total impacted area of 0.024Ha and 0.013Ha with a value of \$74.

The Section 30 allowance for Property 105400 was \$406 and based on the following:

- A calculated working allowance of 10m Left Width for a distance of 193.3m for a total impacted area of 0.193 Ha and a calculated value of \$387.
- A channel allowance for the increase in top with from 2.0 to 2.5 for a distance of 193.3m and an impacted area of 0.0.10 Ha with a value of \$19.

From page 32 of the Drain Report,

271104000138400 Clee, J. R. (both sides)	STA 2+268.2 to STA 2+685.2 Clean out approximately 417.0 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Remove existing culvert and replace with new 500mm CSP culvert at STA 2+601.8 to be installed. Spoil to be levelled adjacent to the drain (see Section 6.5). Work to be undertaken from north and west side of drain.
271104000138400 Clee, J. R. (north side) and 271104000105400 Cosby, D. (south side)	STA 2+685.2 to STA 2+878.5 Clean out approximately 193.3 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Spoil to be levelled adjacent to the drain (see Section 6.5). Work to be undertaken from south side of drain

Shows that the plan of work was for the grade line restoration and spoil was to be removed from the South side of the drain for the last 193.3m of the drain East of the Pleasant Beach Road.

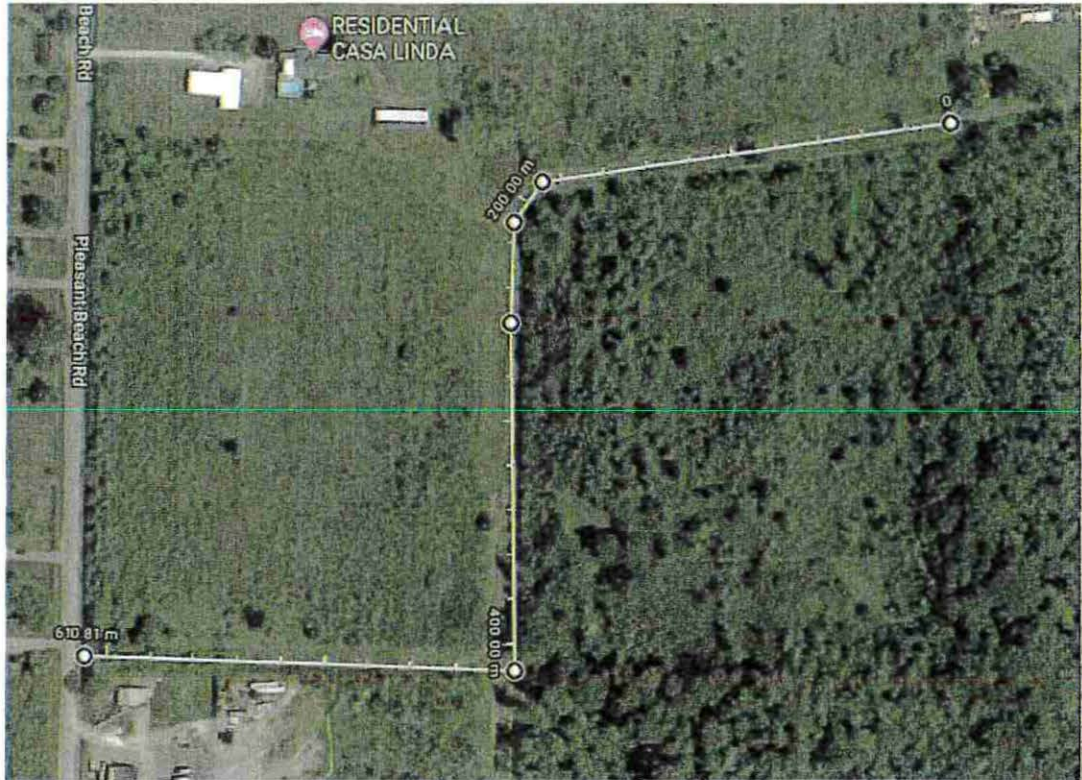


Figure 8 Drain Length for Allowance Calculation

This image from Google maps shows a measurement of the drain allowance for Section 30 calculation for the Clee Property 138400 was calculated based on 610m of length, which is the entire length of property adjacent to the North, West and North of the drain as an allowance for clearing and cleaning.

From the 1979 Report prepared by CJ Clarke Consulting Engineers,

“This drain was last cleaned out in conjunction with the repair the Baer Drain under the 1957 report ...”

“Allowances for damages to lands and crops (if any) under Section 30 of the Drainage Act are as follows: ...”

ZAVITZ DRAIN: City of Port Colborne Allowances

<u>Owner</u>	<u>Con.</u>	<u>Lot or Part</u>	<u>Allowance</u>
Robert Jane	1	1	\$ 35.00
Jos. Clee	1	2	\$ 85.00

There were no allowances granted for work on the now Cosby property.

From the 1947 Report,

"We recommend that the Zavitz Drain be constructed at the location shown colored in red on the Flat Plan attached to and part of this report and that it be constructed to the bottom widths, side slopes and grade lines as shown on our Profile attached to and part of this report."

"ALLOWANCE FOR DAMAGE TO LANDS & CROPS & DISPOSAL OF MATERIAL" (predates the revised Drainage Act of 1974).

ALLOWANCE FOR DAMAGE TO LANDS & CROPS & DISPOSAL OF MATERIAL

Els Zavitz	15.00	
Geo. Beckstead	5.00	
W. A. Schoenburn	15.00	
		35.00

Note: the Clee property was formerly the Zavitz property. The Cosby property was formerly the Mathes property, which did not receive an allowance.

No assessment for damages were planned for work on the South side of the drain in either the 1947 report or in the 1979 report. This establishes that historically the drain has always been cleaned from the North and West sides of the drain.

From OMAFRA Publication 852, "A Guide for Engineers working under the Drainage Act in Ontario, published 2018, Queen's Printer for Ontario, Toronto, Ontario

Page 55,

"When a drain is constructed, the municipality acquires a right-of-way or easement along the drain. If property owners plant trees within this right-of-way without permission, allowances are typically not provided for Section 78 reports."

Generally, this recognizes that a municipality reserves the access privilege to perform future works from the easement without incurring undo costs that affect other ratepayers within the drain watershed.

From the site visit that was conducted on November 14, 2018, the stumps left behind by the cutting of trees on the North Side of the Drain appeared to show that the trees were planted into the spoil bank from the previous drain cleaning. This indicates, as per the Drain allowance, that work was undertaken from the North side of the Drain and the landowner subsequently planted trees adjacent to the Drain.



Figure 9 View of South Bank Zavitz Drain looking East

This image from Google Maps shows the extent of the drain already cleared on the North Side.



Figure 10 140m of the North Side of Zavitz Drained Already Cleared

The remaining drain to be cleared is 193.3m of original distance to be cleared minus the distance already cleared, 140m is 53.3m. This is the area adjacent to the existing house and the septic tank located at the North East Corner of the house. The view of the drain from the roadway shows the distance between the drain, the house and the septic tank.



Figure 11 Zavitz Drain from Pleasant Beach Road looking East

A tree restoration plan was presented to Mr. Clee on or about November 26, 2018 and the owner refused to accept the plan by email dated, December 21, 2018.

Summary:

1. The Spruce trees were planted by Mr. Clee into the spoil pile from the previous drain clearing and in the way of future drain cleaning efforts.
2. The report incorrectly stated the drain was to be cleared from the South side when the allowance was calculated for the North side and South Side.
3. The north side has already been cleared for a distance of approximately 140m of the allowed 193.3m. The remaining 50m is in conflict with the existing house and septic tank and tile bed.
4. A proposal was presented to Mr. Clee to complete the remaining work to conduct drain maintenance from the North side preserving as many trees as possible along with a tree restoration plan, showing trees to be planted outside of a 10m buffer distance from the drain, which he did not accept.

4.4 Additional Zavitz Drain Changes not already noted

The original design had a rock check dam (OPSD 219.210) shown on the plan & profile at Station 2+037.4. The details page included OPSD 219.211, which is a temporary Rock Flow Check dam for a flat bottom ditch.

As the design called for a flat bottom ditch, the call out text should have referenced OPSD 219.211. Since the temporary placement was intended to be during construction and removed later, it is no longer shown on the drawings composed as a record of construction.

5 Recommendations

5.1 West Trail Grade Line Changes

The revised grade line change along with constructed channels have adequate capacity to meet the predicted design flow. The actual Grade line constructed to the East of Pleasant Beach Rd. to date is not as per the revised design grade line and should be addressed through construction regrading.

Revised drawings indicating the changes are included as Attachment E. A view of the constructed drain is presented in the following figure.

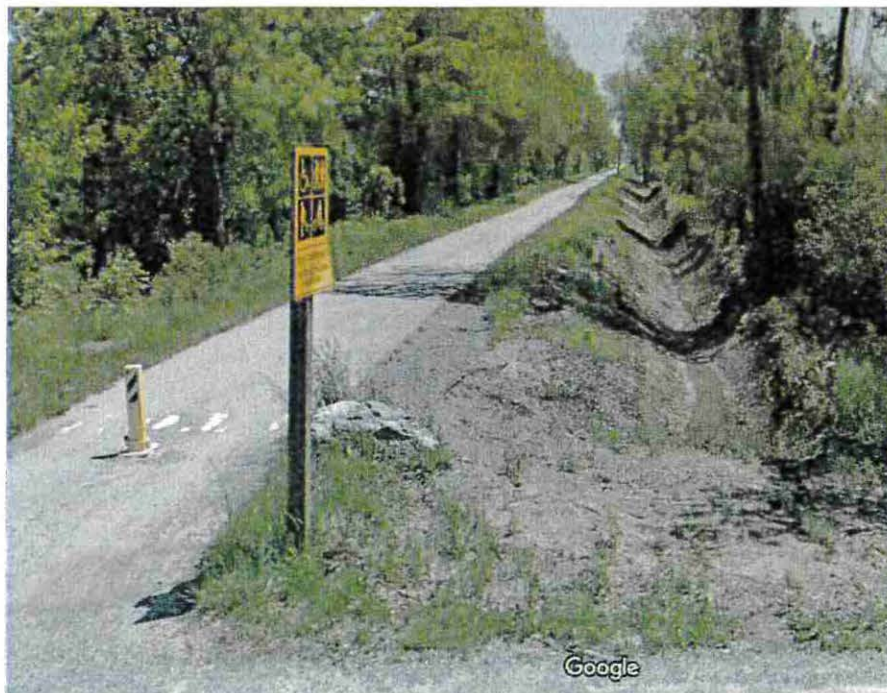


Figure 12 Zavitz West Trail Branch Drain post construction looking East

There are no changes indicated for the assessment schedule based on the construction changes to the grade line.

5.2 Zavitz Culvert Sizes

It is recommended that the culvert located on the Damude property be upsized to the minimum Corrugated Steel Pipe Arch CSPA 910x660

The benefit of upsizing the culvert on the Clee property is not as clear as the upstream drain channel capacity is limited; however, the culvert may also be upsized to the CSPA 910x660.

The actual culvert costs will be assessed using the same basis as the original assessment schedule.

5.3 Zavitz Work Zone and Section 30 Allowance for Property ARN 271104000138400

Replace the description on page 32 of the report with the following text.

271104000138400 Clee, J. R. (north side) and 271104000105400 Cosby, D. (south side)	STA 2+685.2 to STA 2+878.5 Clean out approximately 193.3 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Spoil to be levelled adjacent to the drain (see <i>Section 6.5</i>). Work to be undertaken from North side of drain.
--	---

The Assessment schedule is changed to remove the allowance credit from Mr. Cosby. This change affects all the other calculated assessments by redistributing costs as shown in the following Assessment Schedule shown in Attachment E.

The Revised Allowance will impact two property owners directly and all property owners indirectly. The removal of the allowance for work zone from the Cosby property reduces the total allowance for that property. The allowance for the Clee property remains unchanged.

Engineer's Seal:

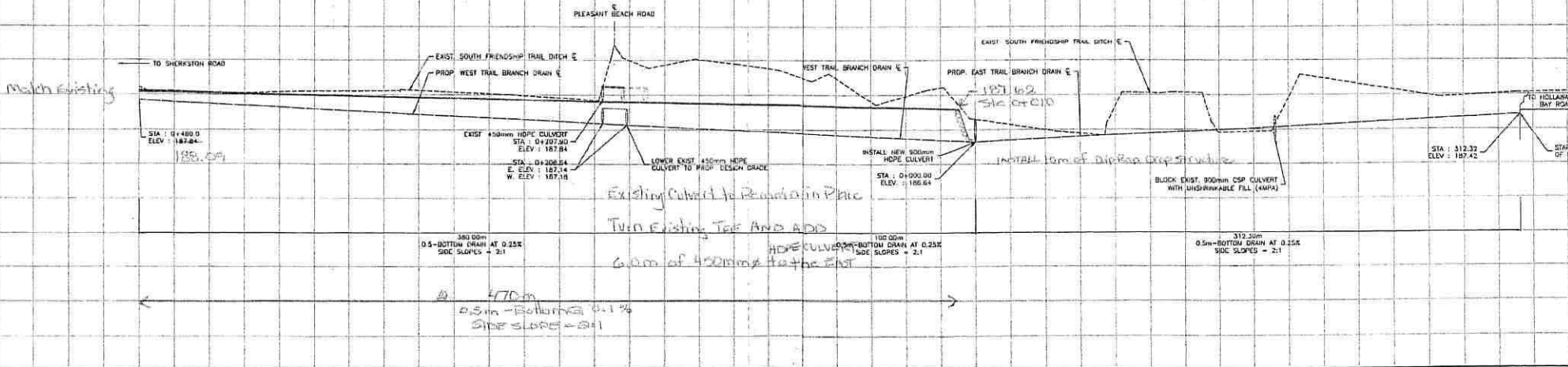
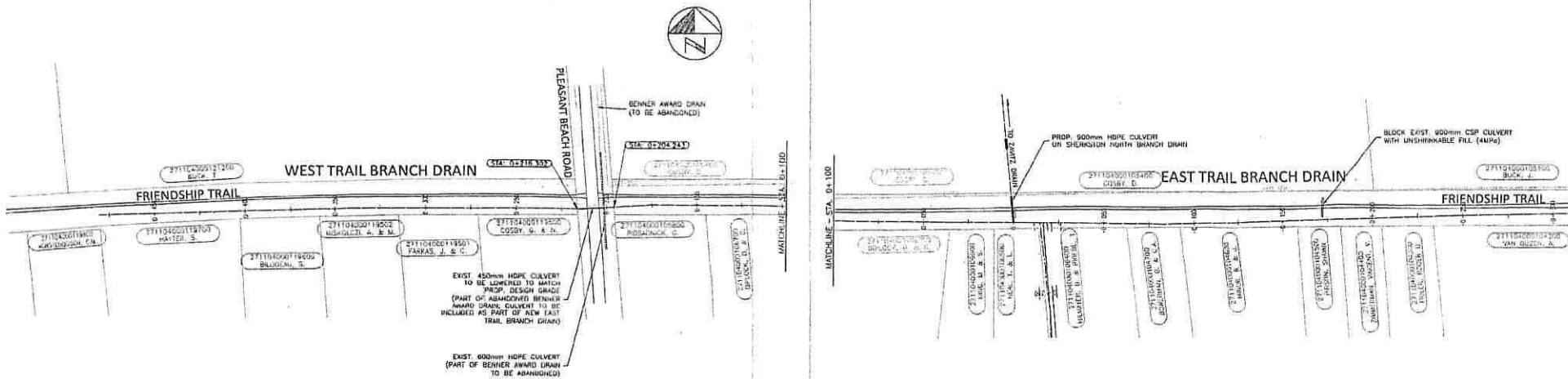
Paul C. Marsh, P.Eng.
Principal Engineer
EWA Engineering Inc.
pcmarsh@ewaeng.com



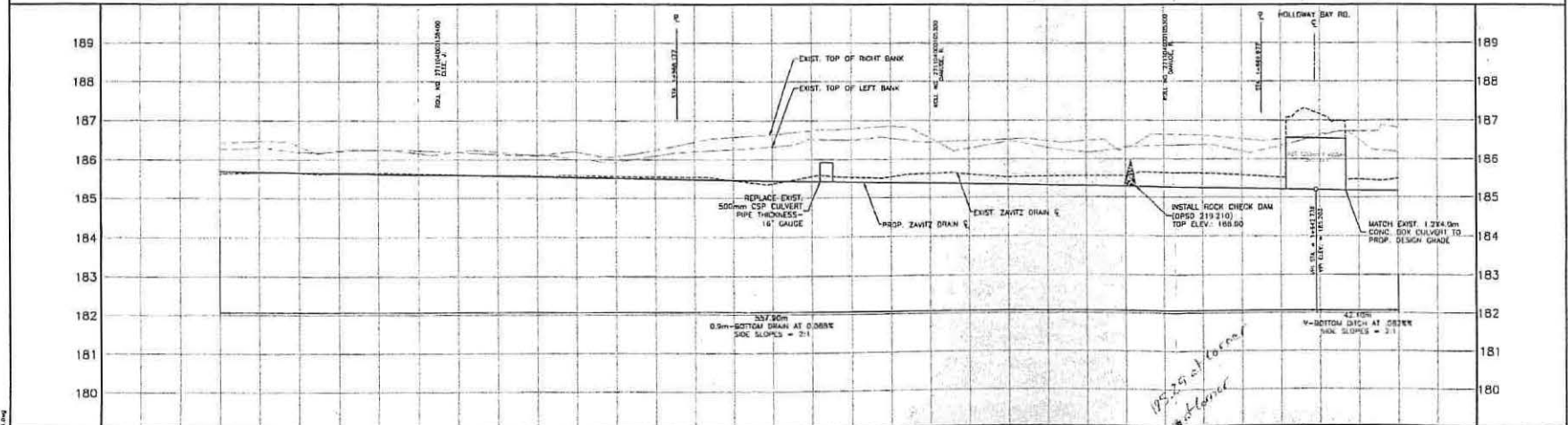
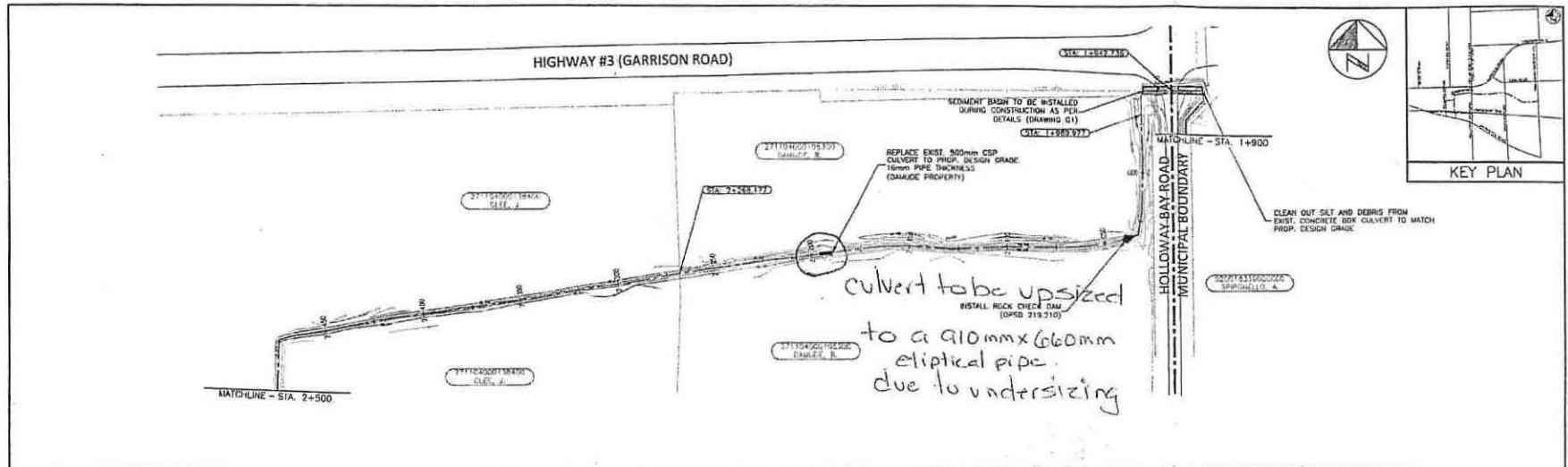
List of Attachments:

- A. First Attachment: Documents related to request for Section 58 (4) to Tribunal.
- B. Calculations to assess West Trail Drain Capacity.
- C. Calculations to assess Zavitz Culvert Capacity
- D. Tree Restoration Plan presented to Mr. Clee.
- E. Revised Design Drawings and Assessment Schedule.

Attachment A: Reference Mark up Plans



0+450 187.765	0+455 177.800	0+460 187.515	0+465 187.370	0+470 187.225	0+475 187.180	0+480 187.035	0+485 186.890	0+490 186.745	0+495 186.600	0+500 186.455	0+505 186.310	0+510 186.165	0+515 186.020	0+520 185.875	0+525 185.730	0+530 185.585	0+535 185.440	0+540 185.295	0+545 185.150	0+550 185.005
Design L.V. Checked P.O.S.	Drawn D.K. Checked L.V.			ZAVITZ DRAIN TOWN OF FORT ERIE CITY OF PORT COLBORNE		ZAVITZ DRAIN PLAN AND P EAST & WEST TRAIL B		Design L.V. Checked P.O.S.	Drawn D.K. Checked L.V.			ZAVITZ DRAIN TOWN OF FORT ERIE CITY OF PORT COLBORNE		Design L.V. Checked P.O.S.	Drawn D.K. Checked L.V.			Design L.V. Checked P.O.S.	Drawn D.K. Checked L.V.	Date
Scale Horiz. 1:2000 Vert. 1:400	Date OCTOBER 2013							Scale Horiz. 1:2000 Vert. 1:400	Date OCTOBER 2013					Scale Horiz. 1:2000 Vert. 1:400	Date OCTOBER 2013			Scale Horiz. 1:2000 Vert. 1:400	Date OCTOBER 2013	



CHANGING/ PROPOSED P. ELEVATION	2+500 185.984	2+450 185.050	2+400 185.000	2+350 185.262	2+300 185.518	2+250 185.474	2+200 185.430 185.386 185.342	2+150 185.306	2+100 185.341	2+050 185.257 2+037.4 185.257	2+000 185.253	1+950 185.209	1+900 185.165
1. 01/17/11	M.R.	REVISED PER TRIBUNAL ORDERS											
2. 02/04/11	O.S.	REVISED PER COURT OF REVIEW											
3. 04/07/11	L.V.	COUNCIL CONSIDERATION											
4. 07/05/11	D.K.	REVISED PER CITY COMMENTS											
5. 07/07/11	O.R.	REVISED PER TOWN COMMENTS											
2. 07/07/11	O.R.	ISSUED FOR REVIEW											
1. 07/07/11	O.R.	ISSUED FOR WHEELER REVIEW											
No.	DATE	BY	REVISIONS	MAN/CAD									

Design L.V. Checked P.O.S.
 Drawn D.K. Checked L.V.
 Scale Horiz. 1:2000
 Vert. 1:400
 Date OCTOBER 2013

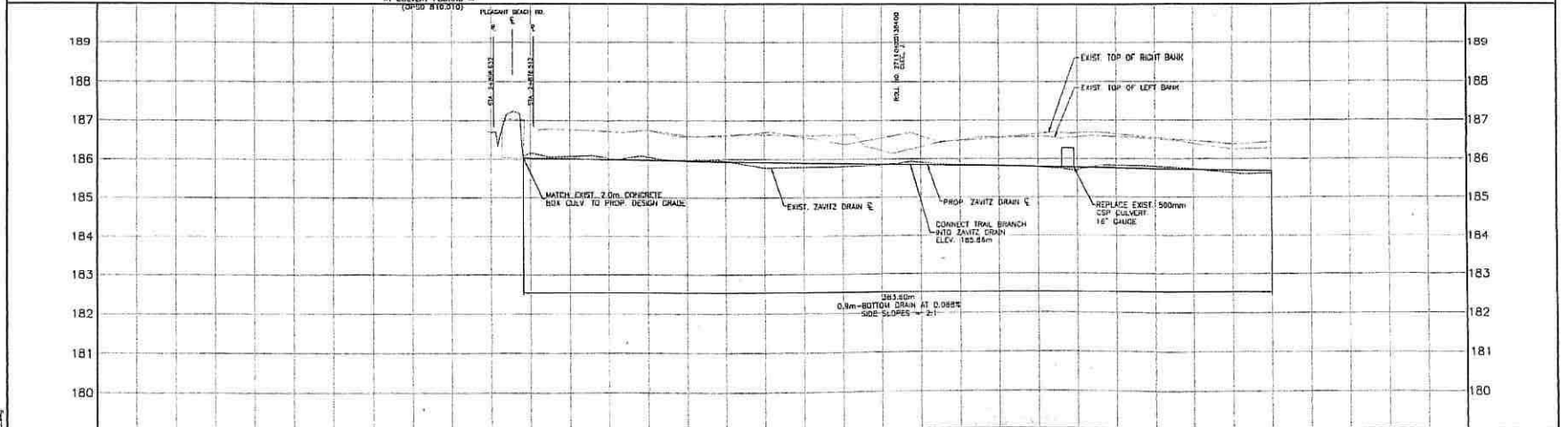
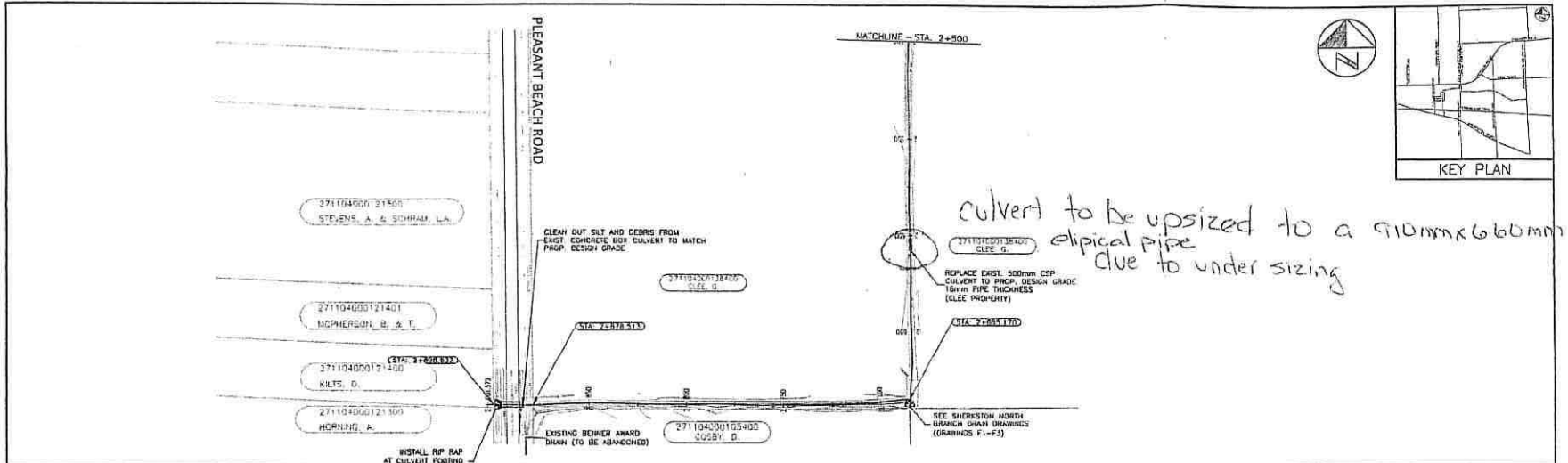


ZAVITZ DRAIN
 TOWN OF FORT ERIE
 CITY OF PORT COLBORNE

ZAVITZ DRAIN
 PLAN AND PROFILE
 STA 1+900 TO STA 2+500



Contract No.
 Consultant File No.
 110120
 Drawing No.
 E-2D



CHAINAGE/ PROPOSED ELEVATION	2+583.511 186.030	2+650 186.002	2+800 185.558	2+750 185.914	2+700 185.970	2+650 185.826	2+600 185.782	2+550 185.738	2+500 185.594
7. 01/22/13	M.K.	REVISED PER INDIVIDUAL ORDERS							
6. 07/24/14	D.K.	REVISED PER COURT OF REVIEW							
5. 04/07/13	L.V.	COUNCIL CONSIDERATION							
4. 07/25/13	D.K.	REVISED PER CITY COMMENTS							
3. 01/10/13	D.K.	REVISED PER TOWN COMMENTS							
2. 07/10/13	D.K.	ISSUED FOR REVIEW							
1. 07/19/13	D.K.	ISSUED FOR UTILITIES REVIEW							
NO.	DATE	BY	REVISIONS	MAN	CAD				

		ZAVITZ DRAIN TOWN OF FORT ERIE CITY OF PORT COLBORNE	ZAVITZ DRAIN PLAN AND PROFILE STA 2+500 TO STA 2+901.759		Control No.
					Consultant File No. 110120
No. DATE BY REVISIONS MAN CAD					Drawing No. E-2E

Attachment B: West Trail Calculations

Zavitv Drain - West Trail and East Trail Branch Drain Capacity Checks.

Data is provided from As Constructed Survey conducted by CoPC, June 2018 and from Site Insp. Measurements, Nov 14, 2018

Catchment		Rainfall intensity, (mm/hr)										Rational Q=0.00278CIA							
ID	Subcatch	Area (Ha)	Runoff Coeff.	Catchment Soils	Catchment Length, m	Catchment Grade	Conc time Tc (min)						Peak Design Flow, Q (cms)						
							2 Yr	5 Yr	10 Yr	25 Yr	50 Yr	100 Yr	2 Yr	5 Yr	10 Yr	25 Yr	50 Yr	100 Yr	
Z_EastTr		3.557	0.17	Clay (2%)	300	0.05	23.3	31.8	37.4	44.5	49.8	55.0	0.039	0.053	0.063	0.075	0.084	0.092	0.03914
Z_Sherk1		5.036	0.17	Clay (2%)	250	0.05	23.3	31.8	37.4	44.5	49.8	55.0	0.055	0.076	0.089	0.106	0.119	0.131	0.05541
Z_WestTr		5.879	0.17	Clay (2%)	350	0.05	23.3	31.8	37.4	44.5	49.8	55.0	0.065	0.088	0.104	0.124	0.138	0.153	0.06474
	Upper_Z_WestTrail	3.22	0.17	Clay (2%)	250	0.02	23.3	31.8	37.4	44.5	49.8	55.0	0.035	0.048	0.057	0.068	0.076	0.084	0.04839
	Above Holloway Bay Rd.	85.73	0.17	Clay (2%)	1250	0.02	23.3	31.8	37.4	44.5	49.8	55.0	0.944	1.288	1.515	1.803	2.018	2.228	0.94402

Channel ID	Length (m)	Slope (m/m)	Manning n coeff	Bottom			Q, (m3/s)	Top Width, (m)	V, (m/s)	Design Ratio
				Width BW (m)	Depth, D (m)	Bank Slope, (m)				
	312	0.0025	0.022	0.5	0.4	1.5	0.372	1.7	0.845	9.5
Sect - A		0.0019	0.022	1	0.35	1.5	0.404	2.05	0.757	6.2
Sect - B		0.0019	0.022	0.8	1	1.5	2.955	3.8	1.285	45.6
Sect - C		0.0007	0.022	1.1	0.9	1.5	1.687	3.8	0.765	26.1
450 HDPE	20	0.004	0.018				0.130		0.819	2.7
500 CSP	6	0.002	0.024				0.091		0.466	0.10

Attachment C: Culvert Calculations

Calculation Record

Project:	Zavitz Drain Section 58 (4) Revisions	Date:	November 7, 2018
Project #:	18-9999 Zavitz Drain	Prepared by:	P.Marsh, P.Eng.
Phase:	Z	PM:	P.Marsh, P.Eng.
Task:			
WBS item #:			

Calculation:	Check Size of Two Culverts West of Hollobay Road	
Purpose:	Check the design capacity of the existing two 500mm CSP culverts replaced with same size as per design. <ul style="list-style-type: none"> • Culvert #1 located on property 105300 @ STA 2+190 • Culvert #2 located on property 138400 @ STA 2+610 	
Deliverables:	Description of Deliverables	
	1. Calculation memo of culvert size check. 2. Culvert size recommendation	
Requirements	Review original design work by Amec where available.	

1 Requirements

The culverts serve private property crossings. Design standard requirements are set at 1:2 year design storm interval.

2 Methodology

Design Storm

The design storm is provided on the attached pages from the Federal Meteorological database for the Port Colborne station.

The 1:2 year design storm is shown with an Intensity of 23.3 mm/hr and 24 hr volume of 49.8 mm. The 24 hour intensity is provided as 2.1 mm/hr

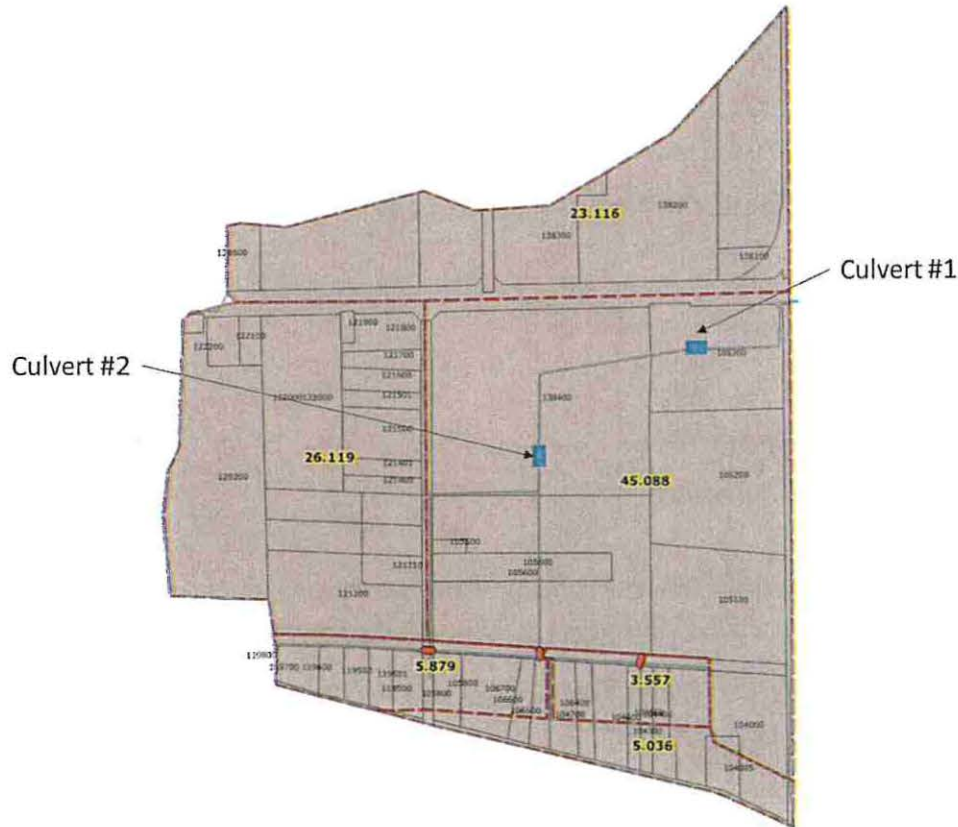
Software:

Original Analysis was undertaken with SWMHYMO-99 (ver. 4.02). The design storm used was the SCS storm with a 6 hr, 12 hr and 24 hr duration.

3 Background

Basin Profile

The area is shown in the following figure.



References

The following documents are attached:

1. Original Plan & Profile Drawings (E-2D and E-2E) by Amec Foster Wheeler, sealed by P.Marsh, P.Eng. as drainage engineer.
2. Amec SWMHYMO input and output files – ZavFinal.out
3. Port Colborne IDF data file.
4. Amec SWMHYMO model results
5. Culvert Design Capacity Charts from "Handbook of Steel Drainage & Highway Construction Products", American Iron and Steel Institute, 1984
https://www.cspi.ca/sites/default/files/download/handbook_chapter04.pdf
6. H7-8 culvert Analysis Report

Available Data

The Plan & Profile drawings were not available from Amec Foster Wheeler, now Wood Group Plc. Instead, files were acquired from both City of Port Colborne and Town of Fort Erie to recreate the plan & profile and to validate the sub-catchment areas.

The subcatchment area that corresponds to the SWMHYMO area 1 was measured in GIS to be 85.7 Ha instead of the given value of 82.2 Ha. However, this is well within the range tolerance for subwatershed delineation.

5. Results

The resulting SWMHYMO for Area 1 West of Hollobay is shown to be as follows.

Zavitz Catchment Area 1

SCS Design Storm	Peak Flow (cms)	2 Year Time to Peak (hrs)	Runoff Vol, (mm)
24 Hour	1.253	12.333	13.808

Culvert #1 and Culvert #2 were given as 500mm CSP culverts of approximate length of 6m. Culvert slope was not shown on the plan but the overall drain gradeline was shown as 0.0088 m/m (0.88%)

The Design Approved culvert capacity nomograph shows a calculated capacity as follows:

Design Category	Result	500mm Culvert
Outlet Condition	0.3 cms	D = 500mm, HW/D = 2 (3) projecting from fill
Inlet condition	0.45 cms	Entrance, K = .9 H = 1m, depth = 1.5m
Pipe full flow, Manning Formula	0.35 cms	Android Flow Calculator

Culvert #2 installed view



Figure 1 Clee Crossing Culvert looking South

It was suggested that a larger culvert capacity be used such as CSP pipe arch culvert 910mm x 660mm

Design Category	Result	910 x 660 CSPA
Outlet Condition	0.65 cms	Size = 910x 660, HW/D = 2 (3) projecting from fill
Inlet condition	1 cms	Entrance, K = .9 H = 1m, depth = 1.5m

This indicates that the original culvert selected is undersized with a lower capacity than the design standard.

4 Validation

The Rational Method was used to confirm the runoff peak prediction.

A = 82.2 ha

C = 0.17 for row crop and pasture land

I = 23.3 mm/hr for a 1 hr storm with a 1:2 year return period.

Produces a predicted peak runoff flow, Q of 0.944 cms

Using the 24 hour 1:2 year intensity of I = 3.6 mm/hr

Produces a predicted peak runoff flow, Q of 0.25 cms

Airport formula for time of concentration.

C = 0.3

L = 450m

S = 0.01 m/m

K = 0.69

Tc = 54.3 min

It is concluded that the 1 hour duration for intensity is suitable for a peak flow calculation using the Rational Method. This results in a predicted flow consistent with the SWMHYMO-99 result.

Runoff Method	Peak Flow, cms
SWMHYMO	1.253
Rational Method	0.944

Existing 500mm CSP capacity = 0.45 cms

Prop. 910x660 CSPA capacity = 1.0 cms

It is concluded that the existing culverts are undersized for the predicted 2 year design flow.

Consideration was given to the design capacity of the upstream and downstream channels.

Two sections were considered:

- Section 1 @ STA 2+100
- Section 2 @ STA 2+358

Section 1 had the following parameters based on the Plan & Profile drawing:

Bottom width = 0.9m
 Slope = 0.088%
 Side slope = 2:1
 n = 0.026
 Bank full flow, depth = 186.5 – 185.3 = 1.2m

Section 2 had the following parameters based on the Plan & Profile drawing:

Bottom width = 0.9m
 Slope = 0.088%
 Side slope = 2:1
 n = 0.026
 Bank full flow, depth = 186.3 – 185.55 = 0.75m

Note: Based on the site visit from November 14, 2018, a smaller bank than shown on the drawings was observed upstream of Culvert #2 (Clee). The bank would be no greater than 0.65 with only 150mm of cover over the top of the placed culvert.

Using Mannings formula for a Trapezoidal channel results in the following bank full capacities:

Section	Flow, Q cms n = 0.026	Velocity, m/s
Section 1 @ STA 2+100	3.327	0.840
Section 2 @ STA 2+358		

	0.849	0.594
--	-------	-------

From this we can conclude that the channel capacity below Culvert 1 is above the 1:2 year storm and the channel capacity above culvert 1 is below the predicted peak flow of the 1:2 year storm runoff flow.

6 Summary:

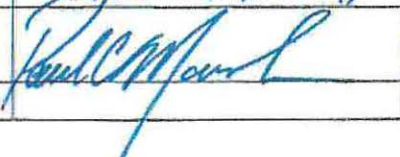
The culverts shown in the original design were identified as a like for like replacement. Comparison with the modelling done previously and validation against other methods of prediction indicate that a larger capacity culvert is required to meet the 1:2 year design standard.

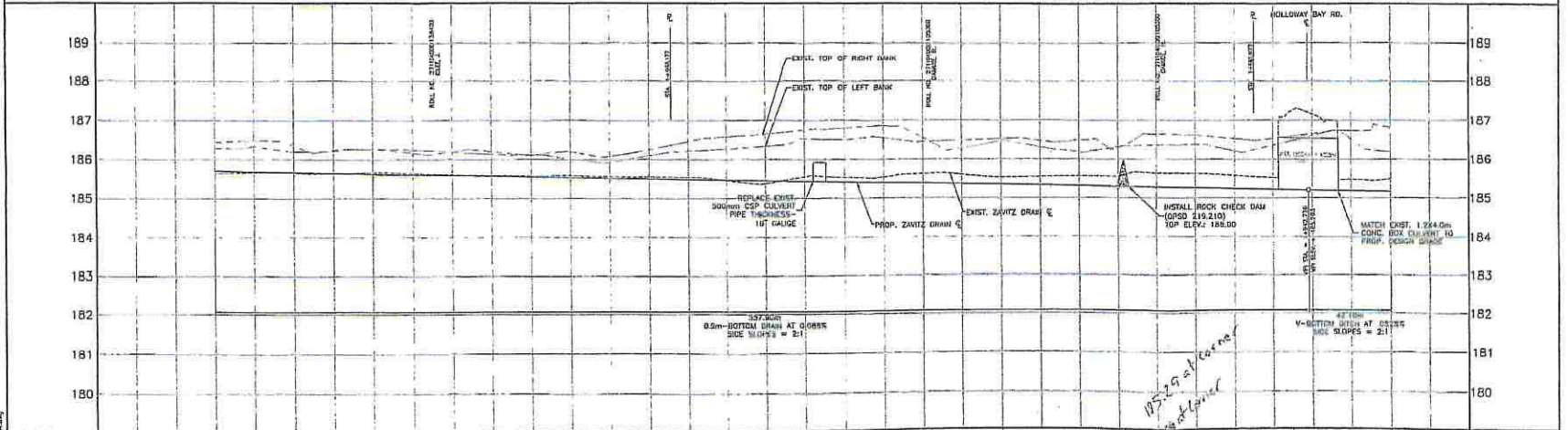
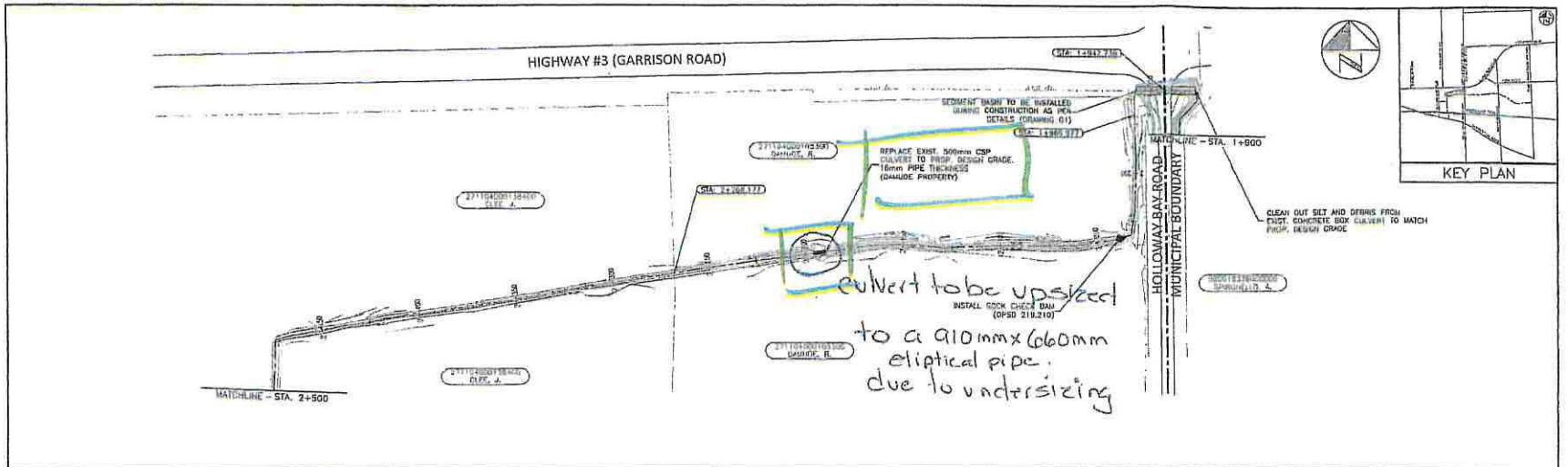
The calculated design flow rate for the drain for the 1: 2 year design storm event is 1.2 cms. However the channel above Culvert 2 (Clee) is also identified and being below the 1:2 year capacity and based on the surrounding land form, a larger culvert install in this location is not required.

It is recognized that the existing gradeline for the proposed drain is very low as 0.088% or 0.00088 m/ m (0.88m per 1000m).

Based on the calculations herein and modelling provided by the previous consultant, it is recommended that a minimum size CSPA be considered as 910x660 and that a HDPE double wall culvert with a smooth inner wall of a diameter not less than a nominal 525mm would meet design flow values.

I have reviewed the calculation procedure and verified the results.

Print Name:	PAUL C. MARSH, P.ENG	
Signature:		Date: December 21, 2018



CHANGING/PROPOSED ELEVATION	2+500 185.654	2+450 185.650	2+400 185.656	2+350 185.562	2+300 185.518	2+250 185.474	2+200 185.430 2+150.26 185.420	2+150 185.366	2+100 185.341	2+050 185.297 2+002.6 185.267	2+000 185.253	1+950 185.209	1+900 185.166
7. 09/12/15	M.K.	ISSUED PER TOWNSHIP ORDERS											
8. 07/27/14	D.K.	REVISED PER TOWN OF BRIDGE											
3. 04/07/11	L.V.	ISSUED FOR CONSIDERATION											
4. 07/25/13	D.K.	REVISED PER CITY COMMENTS											
5. 04/07/11	D.K.	REVISED PER TOWN COMMENTS											
2. 04/07/11	D.K.	ISSUED FOR REVIEW											
1. 07/19/12	D.K.	ISSUED FOR UTILITIES REVIEW											
No.	DATE	BY	REVISIONS	MAN CAD									

Design L.V. Checked P.D.S.
 Drawn D.K. Checked L.V.
 Scale Horiz. 1:2000
 Vert. 1:400
 Date OCTOBER 2013

ZAVITZ DRAIN
 TOWN OF FORT ERIE
 CITY OF PORT COLBORNE

ZAVITZ DRAIN
 PLAN AND PROFILE
 STA 1+900 TO STA 2+500

amec
 foster
 wheeler

Contract No.
 Consultant File No.
 110120
 Drawing No.
 E-2D


```

=====
SSSSS W W M M H H Y Y M M 000 999 999 =====
S W W W MM MM H H Y Y MM MM 0 0 9 9 9 9
SSSSS W W W M M M H H H H Y M M M 0 0 ## 9 9 9 9 Ver. 4.02
S W W M M H H Y M M 0 0 9999 9999 July 1999
SSSSS W W M M H H Y M M 000 9 9 =====
9 9 9 9 # 3569108
StormWater Management HYdrologic Model 999 999 =====

```

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*****
***** SWMHYMO-99 Ver/4.02 *****
***** A single event and continuous hydrologic simulation model *****
***** based on the principles of HYMO and its successors *****
***** OTTHYMO-83 and OTTHYMO-89. *****
***** Distributed by: J.F. Sabourin and Associates Inc. *****
***** Ottawa, Ontario: (613) 727-5199 *****
***** Gatineau, Quebec: (819) 243-6858 *****
***** E-Mail: swmhymo@jfsa.Com *****
*****

```

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+++++++
+++++++ Licensed user: Philips Engineering Ltd ++++++
+++++++ Burlington SERIAL#:3569108 ++++++
+++++++

```

```

*****
***** ++++++ PROGRAM ARRAY DIMENSIONS ++++++ *****
***** Maximum value for ID numbers : 10 *****
***** Max. number of rainfall points: 15000 *****
***** Max. number of flow points : 15000 *****
*****

```

```

***** D E T A I L E D O U T P U T *****
*****
* DATE: 2011-09-07 TIME: 13:45:01 RUN COUNTER: 000032 *
*****
* Input filename: P:\Work\110120\Water\SWMHYMO\ZavFinal.dat *
* Output filename: P:\Work\110120\Water\SWMHYMO\ZavFinal.out *
* Summary filename: P:\Work\110120\Water\SWMHYMO\ZavFinal.sum *
* User comments: *
* 1: _____ *
* 2: _____ *
* 3: _____ *
*****

```

ZavFinal.out

001:0001-----

```

*#*****
*# Project Name: [Zavitz Municipal Drain]    Project Number: [110120]
*# Date       : 12-21-2010
*# Modeller   : [TRW]
*# Company    : AMEC
*# License #  : 3569108
*#*****
  
```

```

-----
| START                | Project dir.: P:\Work\110120\Water\SWMHYMO\
-----
Rainfall dir.: P:\Work\110120\Water\SWMHYMO\
  
```

```

TZERO = .00 hrs on      0
METOUT= 2 (output = METRIC)
NRUN   = 001
NSTORM= 1
        # 1=PC_SCS24.002
  
```

001:0002-----

```

-----
| READ STORM          | Filename: P:\Work\110120\Water\SWMHYMO\PC_SCS24.00
| Ptotal= 48.13 mm   | Comments: THE SCS 24 HOUR DESIGN STORM ==> 2 YEA
-----
  
```

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
.17	.530	6.17	.960	12.17	6.930	18.17	.870
.33	.530	6.33	.960	12.33	6.930	18.33	.870
.50	.530	6.50	.960	12.50	6.930	18.50	.870
.67	.530	6.67	.960	12.67	3.560	18.67	.870
.83	.530	6.83	.960	12.83	3.560	18.83	.870
1.00	.530	7.00	.960	13.00	3.560	19.00	.870
1.17	.530	7.17	.960	13.17	.670	19.17	.870
1.33	.530	7.33	.960	13.33	.670	19.33	.870
1.50	.530	7.50	.960	13.50	.670	19.50	.870
1.67	.530	7.67	.960	13.67	3.940	19.67	.870
1.83	.530	7.83	.960	13.83	3.940	19.83	.870
2.00	.530	8.00	.960	14.00	3.940	20.00	.870
2.17	.630	8.17	1.300	14.17	1.440	20.17	.580
2.33	.630	8.33	1.300	14.33	1.440	20.33	.580
2.50	.630	8.50	1.300	14.50	1.440	20.50	.580
2.67	.630	8.67	1.300	14.67	1.440	20.67	.580
2.83	.630	8.83	1.300	14.83	1.440	20.83	.580
3.00	.630	9.00	1.300	15.00	1.440	21.00	.580
3.17	.630	9.17	1.540	15.17	1.440	21.17	.580
3.33	.630	9.33	1.540	15.33	1.440	21.33	.580
3.50	.630	9.50	1.540	15.50	1.440	21.50	.580

ZavFinal.out

3.67	.630	9.67	1.730	15.67	1.440	21.67	.580
3.83	.630	9.83	1.730	15.83	1.440	21.83	.580
4.00	.630	10.00	1.730	16.00	1.440	22.00	.580
4.17	.770	10.17	2.210	16.17	.870	22.17	.580
4.33	.770	10.33	2.210	16.33	.870	22.33	.580
4.50	.770	10.50	2.210	16.50	.870	22.50	.580
4.67	.770	10.67	2.980	16.67	.870	22.67	.580
4.83	.770	10.83	2.980	16.83	.870	22.83	.580
5.00	.770	11.00	2.980	17.00	.870	23.00	.580
5.17	.770	11.17	4.620	17.17	.870	23.17	.580
5.33	.770	11.33	4.620	17.33	.870	23.33	.580
5.50	.770	11.50	4.620	17.50	.870	23.50	.580
5.67	.770	11.67	20.010	17.67	.870	23.67	.580
5.83	.770	11.83	36.560	17.83	.870	23.83	.580
6.00	.770	12.00	53.100	18.00	.870	24.00	.580

 001:0003-----

* * * * *

ZAVITZ MUNICIPAL DRAIN

* * * * *

**** RURAL CATCHMENT AREA 1 - Hydrologic Value for Zavitz Drain west of Holloway

 | CALIB NASHYD | Area (ha)= 82.20 Curve Number (CN)=73.50
 | 01:Catchm DT=10.00 | Ia (mm)= 5.000 # of Linear Res.(N)= 2.00

 U.H. Tp(hrs)= .400

Unit Hyd Qpeak (cms)= 5.334

PEAK FLOW (cms)= 1.253 (i)

TIME TO PEAK (hrs)= 12.333

RUNOFF VOLUME (mm)= 13.808

TOTAL RAINFALL (mm)= 48.128

RUNOFF COEFFICIENT = .287

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 001:0004-----

**** RURAL CATCHMENT AREA 2

 | CALIB NASHYD | Area (ha)= 52.80 Curve Number (CN)=76.00
 | 02:Catchm DT=10.00 | Ia (mm)= 5.000 # of Linear Res.(N)= 2.00

 U.H. Tp(hrs)= .360

Unit Hyd Qpeak (cms)= 3.807

ZavFinal.out

PEAK FLOW (cms)= .960 (i)
 TIME TO PEAK (hrs)= 12.167
 RUNOFF VOLUME (mm)= 15.081
 TOTAL RAINFALL (mm)= 48.128
 RUNOFF COEFFICIENT = .313

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 001:0005-----

**** RURAL CATCHMENT AREA 3

CALIB NASHYD		Area	(ha)=	51.54	Curve Number	(CN)=73.50
03:Catchm DT=10.00		Ia	(mm)=	5.000	# of Linear Res.(N)=	2.00
-----		U.H. Tp(hrs)=		.350		

Unit Hyd Qpeak (cms)= 3.822

PEAK FLOW (cms)= .870 (i)
 TIME TO PEAK (hrs)= 12.167
 RUNOFF VOLUME (mm)= 13.808
 TOTAL RAINFALL (mm)= 48.128
 RUNOFF COEFFICIENT = .287

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 001:0006-----

**** Hydrologic Value for Holloway Bay Road to Matthews Road

ADD HYD (Hydro1)	ID: NHYD	AREA	QPEAK	TPEAK	R.V.	DWF
-----		(ha)	(cms)	(hrs)	(mm)	(cms)
	ID1 01:Catchm	82.20	1.253	12.33	13.81	.000
	+ID2 02:Catchm	52.80	.960	12.17	15.08	.000
	+ID3 03:Catchm	51.54	.870	12.17	13.81	.000
	=====					
	SUM 09:Hydro1	186.54	3.061	12.17	14.17	.000

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 001:0007-----

**** RURAL CATCHMENT AREA 4

CALIB NASHYD		Area	(ha)=	21.67	Curve Number	(CN)=71.00
04:Catchm DT=10.00		Ia	(mm)=	5.000	# of Linear Res.(N)=	2.00
-----		U.H. Tp(hrs)=		.240		

Unit Hyd Qpeak (cms)= 2.344

PEAK FLOW (cms)= .439 (i)
 TIME TO PEAK (hrs)= 12.000
 RUNOFF VOLUME (mm)= 12.664
 TOTAL RAINFALL (mm)= 48.128
 RUNOFF COEFFICIENT = .263

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

*** WARNING: Time step is too large for value of TP.
 R.V. may be ok. Peak flow could be off.

 001:0008-----

**** RURAL CATCHMENT AREA 5

CALIB NASHYD	Area (ha)=	68.71	Curve Number (CN)=	73.50
05:Catchm DT=10.00	Ia (mm)=	5.000	# of Linear Res.(N)=	2.00
	U.H. Tp(hrs)=	.360		

Unit Hyd Qpeak (cms)= 4.954

PEAK FLOW (cms)= 1.133 (i)
 TIME TO PEAK (hrs)= 12.167
 RUNOFF VOLUME (mm)= 13.808
 TOTAL RAINFALL (mm)= 48.128
 RUNOFF COEFFICIENT = .287

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

 001:0009-----

**** Hydrologic Value for Zavitz Drain east of Matthews Road

ADD HYD (Hydro1)	ID: NHYD	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	DWF (cms)
ID1 09:Hydro1		186.54	3.061	12.17	14.17	.000
+ID2 04:Catchm		21.67	.439	12.00	12.66	.000
+ID3 05:Catchm		68.71	1.133	12.17	13.81	.000
=====						
SUM 08:Hydro1		276.92	4.622	12.17	13.96	.000

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

 001:0010-----

*
* BRANCH DRAIN
*

**** RURAL CATCHMENT AREA 1 - Hydrologic Value for Branch Drain

Table with 4 columns: Parameter, Value, Unit, and Additional Info. Rows include CALIB NASHYD, 01:Branch DT=10.00, Area (ha)= 14.24, Curve Number (CN)=75.00, Ia (mm)= 5.000, # of Linear Res.(N)= 2.00, and U.H. Tp(hrs)= .220.

Unit Hyd Qpeak (cms)= 1.681

PEAK FLOW (cms)= .366 (i)
TIME TO PEAK (hrs)= 12.000
RUNOFF VOLUME (mm)= 14.555
TOTAL RAINFALL (mm)= 48.128
RUNOFF COEFFICIENT = .302

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

*** WARNING: Time step is too large for value of TP.
R.V. may be ok. Peak flow could be off.

001:0011

FINISH

WARNINGS / ERRORS / NOTES

001:0007 CALIB NASHYD

*** WARNING: Time step is too large for value of TP.
R.V. may be ok. Peak flow could be off.

001:0010 CALIB NASHYD

*** WARNING: Time step is too large for value of TP.
R.V. may be ok. Peak flow could be off.

Simulation ended on 2011-09-07 at 13:45:01

=====

Short Duration Rainfall Intensity-Duration-Frequency Data
 Données sur l'intensité, la durée et la fréquence des chutes
 de pluie de courte durée

Gumbel - Method of moments/Méthode des moments

2014/12/21

```

=====
PORT COLBORNE                                ON          6136606
Latitude: 42 53'N   Longitude: 79 15'W   Elevation/Altitude: 175      m
Years/Années : 1964 - 2007                # Years/Années : 37
=====
    
```

Table 1 : Annual Maximum (mm)/Maximum annuel (mm)

Year Année	5 min	10 min	15 min	30 min	1 h	2 h	6 h	12 h	24 h
1964	8.6	13.2	14.7	28.4	34.3	45.5	56.9	56.9	64.3
1965	5.8	6.3	8.9	13.7	19.8	26.4	33.0	33.0	42.4
1966	6.9	10.7	10.7	10.7	14.0	15.0	22.1	26.2	26.7
1967	7.6	12.2	17.0	26.2	26.7	26.7	26.7	36.1	59.9
1968	8.1	14.5	16.8	19.8	26.9	42.4	81.3	101.3	112.5
1969	6.9	10.2	12.4	12.7	19.8	22.6	32.0	37.3	43.2
1970	8.4	10.9	12.2	16.0	19.3	20.3	26.4	33.3	39.6
1971	8.1	12.4	15.0	21.8	24.6	25.7	26.7	29.5	30.5
1972	5.8	9.4	13.7	17.3	23.4	23.4	27.4	33.8	36.8
1973	7.6	12.7	17.3	25.4	36.6	37.6	39.4	39.9	40.4
1974	6.9	7.9	8.6	11.7	15.2	25.7	29.7	29.7	33.0
1975	12.7	20.3	24.6	31.7	32.0	32.0	32.5	33.5	33.5
1976	4.8	7.9	9.1	11.4	19.0	23.9	23.9	38.1	47.2
1977	12.2	14.5	16.6	33.3	37.6	37.6	42.2	48.0	51.3
1978	6.9	8.8	11.1	15.5	25.7	31.6	35.5	42.0	42.0
1979	8.0	11.4	16.2	26.0	34.2	47.6	80.6	116.4	123.0
1980	11.1	14.8	15.3	17.0	25.5	32.8	33.8	41.9	44.4
1981	8.2	9.6	9.6	11.6	14.4	25.7	32.9	37.2	44.6
1983	8.0	10.5	15.2	27.4	29.3	32.0	44.2	46.5	56.3
1984	9.8	15.0	18.0	26.9	28.9	30.7	30.8	51.8	54.2

idf_v2-3_2014_12_21_613_ON_6136606_PORT_COLBORNE

1985	7.6	9.5	10.5	12.5	16.2	17.2	23.7	38.9	54.2
1986	12.4	18.4	21.2	24.7	26.5	30.6	35.1	43.0	46.6
1987	8.1	13.0	15.3	21.9	34.8	46.4	56.5	56.5	69.4
1988	8.0	11.3	12.9	14.7	17.0	20.0	22.7	42.7	47.2
1989	8.7	9.9	10.5	10.8	17.9	20.5	20.7	24.2	27.6
1990	7.2	9.0	13.1	21.8	28.0	32.8	35.9	44.9	50.4
1991	14.2	20.0	29.0	34.0	60.0	64.2	65.0	65.0	65.3
1992	6.0	10.4	13.5	20.4	28.4	30.3	32.3	42.9	46.0
1993	6.7	7.5	8.3	12.1	17.6	24.6	42.3	43.8	46.9
1994	7.2	8.5	11.5	14.3	18.3	24.4	50.4	74.6	86.9
1996	7.6	11.1	14.1	25.7	30.8	34.6	36.0	36.0	40.6
1997	7.6	9.6	12.3	15.5	17.6	23.2	45.8	54.2	58.2
1998	3.6	3.9	4.4	5.5	7.1	10.5	18.2	26.2	46.5
1999	9.4	14.1	16.6	20.7	22.2	29.7	38.5	45.0	49.2
2000	6.8	7.4	7.4	8.3	8.5	13.5	24.3	30.3	41.0
2005	7.0	9.6	11.6	18.9	30.9	41.8	83.2	100.9	104.5
2006	8.4	10.8	13.7	22.2	29.6	31.2	33.4	44.0	64.5
2007	10.4	16.8	18.8	25.5	28.2	28.2	28.4	-99.9	56.0

# Yrs. Années	38	38	38	38	38	38	38	37	38
Mean Moyenne	8.1	11.4	13.9	19.3	24.9	29.7	38.2	46.6	53.3
Std. Dev. Écart-type	2.2	3.6	4.7	7.3	9.6	10.5	16.6	20.9	21.6
Skew. Dissymétrie	0.91	0.70	0.96	0.22	1.10	0.97	1.53	2.03	1.81
Kurtosis	4.46	3.83	5.32	2.40	6.69	5.12	5.02	7.16	6.52

*-99.9 Indicates Missing Data/Données manquantes

Warning: annual maximum amount greater than 100-yr return period amount
 Avertissement : la quantité maximale annuelle excède la quantité
 pour une période de retour de 100 ans

Year/Année	Duration/Durée	Data/Données	100-yr/ans
1979	12 h	116.4	112.3
1979	24 h	123.0	121.1
1991	15 min	29.0	28.6
1991	1 h	60.0	55.0
1991	2 h	64.2	62.7

Table 2a : Return Period Rainfall Amounts (mm)
 Quantité de pluie (mm) par période de retour

Duration/Durée	idf_v2-3_2014_12_21_613_ON_6136606_PORT_COLBORNE						#Years Années
	2	5	10	25	50	100	
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	
5 min	7.8	9.7	11.0	12.6	13.7	14.9	38
10 min	10.8	14.0	16.1	18.7	20.7	22.7	38
15 min	13.1	17.3	20.0	23.5	26.0	28.6	38
30 min	18.1	24.5	28.8	34.1	38.1	42.1	38
1 h	23.3	31.8	37.4	44.5	49.8	55.0	38
2 h	28.0	37.3	43.4	51.2	57.0	62.7	38
6 h	35.4	50.1	59.8	72.0	81.1	90.1	38
12 h	43.2	61.7	73.9	89.4	100.9	112.3	37
24 h	49.8	68.9	81.5	97.5	109.3	121.1	38

Table 2b :

Return Period Rainfall Rates (mm/h) - 95% Confidence limits
 Intensité de la pluie (mm/h) par période de retour - Limites de confiance de 95%

Duration/Durée							#Years Années
	2	5	10	25	50	100	
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	
5 min	93.4	116.3	131.5	150.7	164.9	179.0	38
	+/- 7.6	+/- 12.8	+/- 17.2	+/- 23.2	+/- 27.8	+/- 32.4	38
10 min	65.0	84.0	96.6	112.4	124.2	135.9	38
	+/- 6.3	+/- 10.6	+/- 14.3	+/- 19.2	+/- 23.0	+/- 26.8	38
15 min	52.5	69.0	80.0	93.9	104.2	114.4	38
	+/- 5.5	+/- 9.2	+/- 12.5	+/- 16.8	+/- 20.1	+/- 23.4	38
30 min	36.2	49.1	57.6	68.3	76.2	84.1	38
	+/- 4.2	+/- 7.1	+/- 9.6	+/- 13.0	+/- 15.5	+/- 18.1	38
1 h	23.3	31.8	37.4	44.5	49.8	55.0	38
	+/- 2.8	+/- 4.7	+/- 6.4	+/- 8.6	+/- 10.3	+/- 12.0	38
2 h	14.0	18.6	21.7	25.6	28.5	31.4	38
	+/- 1.5	+/- 2.6	+/- 3.5	+/- 4.7	+/- 5.6	+/- 6.6	38
6 h	5.9	8.3	10.0	12.0	13.5	15.0	38
	+/- 0.8	+/- 1.4	+/- 1.8	+/- 2.5	+/- 3.0	+/- 3.4	38
12 h	3.6	5.1	6.2	7.5	8.4	9.4	37
	+/- 0.5	+/- 0.9	+/- 1.2	+/- 1.6	+/- 1.9	+/- 2.2	37
24 h	2.1	2.9	3.4	4.1	4.6	5.0	38
	+/- 0.3	+/- 0.4	+/- 0.6	+/- 0.8	+/- 1.0	+/- 1.1	38

Table 3 : Interpolation Equation / Équation d'interpolation: $R = A \cdot T^B$

R = Interpolated Rainfall rate (mm/h)/Intensité interpolée de la pluie (mm/h)
 RR = Rainfall rate (mm/h) / Intensité de la pluie (mm/h)

T = Rainfall duration (h) / Durée de la pluie (h)

Statistics/Statistiques	2	5	10	25	50	100
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans
Mean of RR/Moyenne de RR	32.9	42.8	49.4	57.7	63.8	69.9
Std. Dev. /Écart-type (RR)	31.8	39.9	45.3	52.2	57.2	62.3
Std. Error/Erreur-type	6.6	9.6	11.7	14.3	16.3	18.2
Coefficient (A)	20.2	27.1	31.7	37.4	41.6	45.9
Exponent/Exposant (B)	-0.680	-0.661	-0.653	-0.645	-0.641	-0.638
Mean % Error/% erreur moyenne	8.3	9.1	9.5	10.0	10.3	10.5

ZAVITZ MUNICIPAL DRAIN CALIBRATION

Zavitz Catchment Area 1																		
SCS Design Storm	2 Year			5 Year			10 Year			25 Year			50 Year			100 Year		
	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)
6 Hour	1.608	3.333	11.804	2.873	3.167	20.692	3.825	3.167	27.257	5.105	3.167	36.018	6.103	3.167	42.822	7.120	3.167	49.740
12 Hour	1.966	6.167	16.376	3.506	6.167	28.620	4.626	6.167	37.449	6.123	6.167	49.224	7.285	6.167	58.375	8.450	6.167	67.550
24 Hour	2.106	12.167	20.570	3.565	12.167	34.206	4.608	12.167	43.900	5.990	12.167	56.736	7.047	12.167	66.586	8.116	12.167	76.530

Hydrologic Area 2 (Catchment Areas 1, 2 & 3)																		
SCS Design Storm	2 Year			5 Year			10 Year			25 Year			50 Year			100 Year		
	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)
6 Hour	3.879	3.170	11.810	6.955	3.170	20.700	9.250	3.170	27.260	12.331	3.170	36.020	14.731	3.170	42.830	17.177	3.170	49.750
12 Hour	4.746	6.170	16.380	8.446	6.170	28.630	11.134	6.170	37.460	14.722	6.170	49.230	17.505	6.170	58.380	20.295	6.170	67.560
24 Hour	5.068	12.170	20.580	8.567	12.170	34.210	11.064	12.170	43.910	14.371	12.170	56.740	16.898	12.170	66.590	19.452	12.170	76.540

Hydrologic Area 3 (Catchment Areas 1, 2, 3, 4 & 5)																		
SCS Design Storm	2 Year			5 Year			10 Year			25 Year			50 Year			100 Year		
	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)	Peak Flow (cms)	Time to Peak (hrs)	Runoff Vol. (mm)
6 Hour	5.845	3.170	11.630	10.490	3.170	20.430	13.960	3.170	26.930	18.622	3.170	35.620	22.258	3.170	42.380	25.995	3.170	49.250
12 Hour	7.140	6.170	16.150	12.722	6.170	28.280	16.784	6.170	37.040	22.212	6.170	48.740	26.426	6.170	57.830	30.653	6.170	66.960
24 Hour	7.615	12.170	20.300	12.892	12.170	33.820	16.664	12.170	43.450	21.667	12.170	56.200	25.492	12.170	66.000	29.361	12.170	75.900

CATCHMENT AREA 1 Zavitz Drain West of Holloway
 AREA = 82.20 Ha

$Q = CIA$

$C = 0.3$ Row Crops (0-5%)

$I = 23.3$ 2 year 1 hour IDF Port Colborne

$A = 82.2$

$Q = 1.59$ cms.



an economical
 result for the
 condition desired.
 is the allowable,
 headwater depth,
 corrugated steel
). A smaller size
 is economical to
 results. Check
 Structural Plate Pipe
 listed in Table 4-10
 with the correct
 of the Federal
 963.

ial inlet designs.
 ensive data²⁵ on
 has not been as
 arently is respon-



ing concrete head

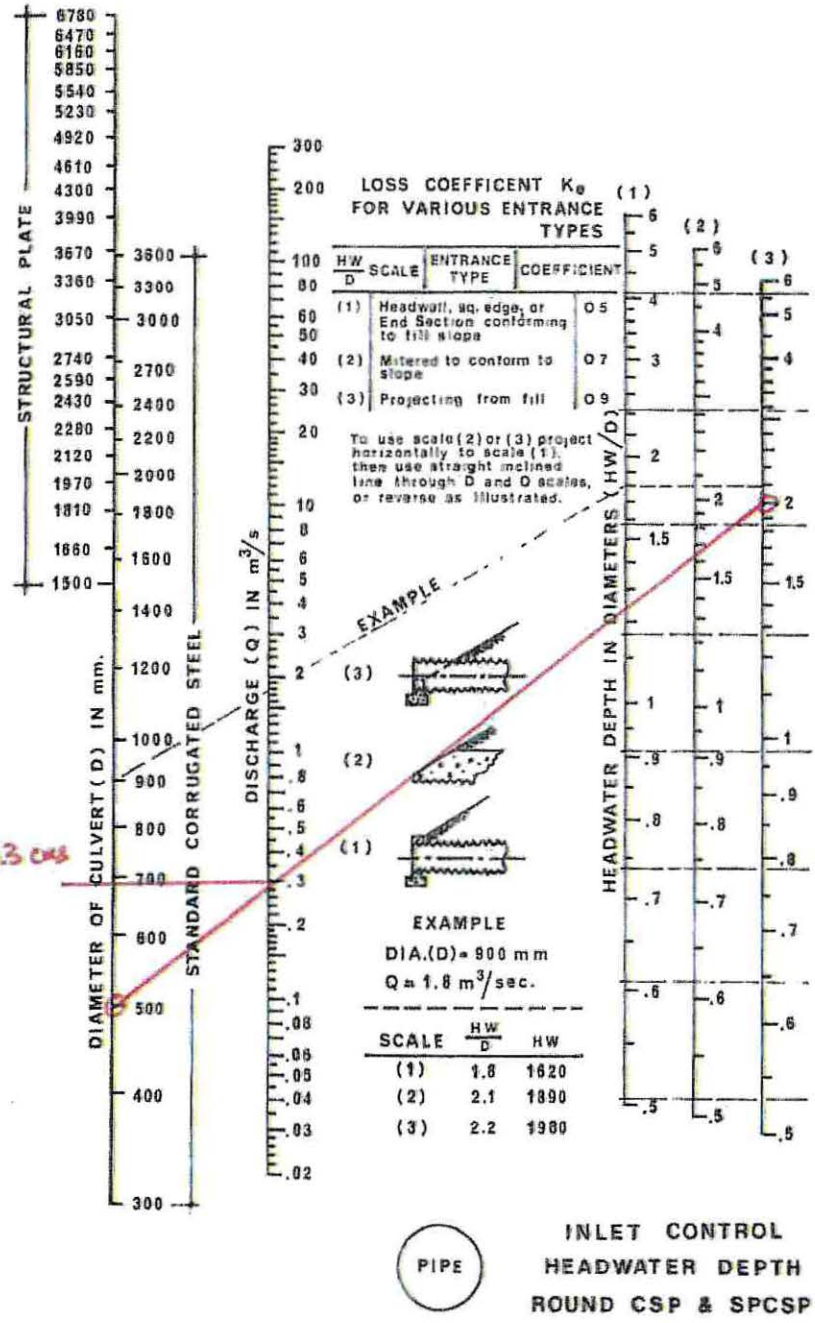


Figure 4-29 Inlet control nomograph for corrugated steel pipe culverts. The manufacturers recommend keeping HW/D to a maximum of 1.5 and preferably to no more than 1.0. Data is derived from nomographs published by the Bureau of Public Roads.⁹

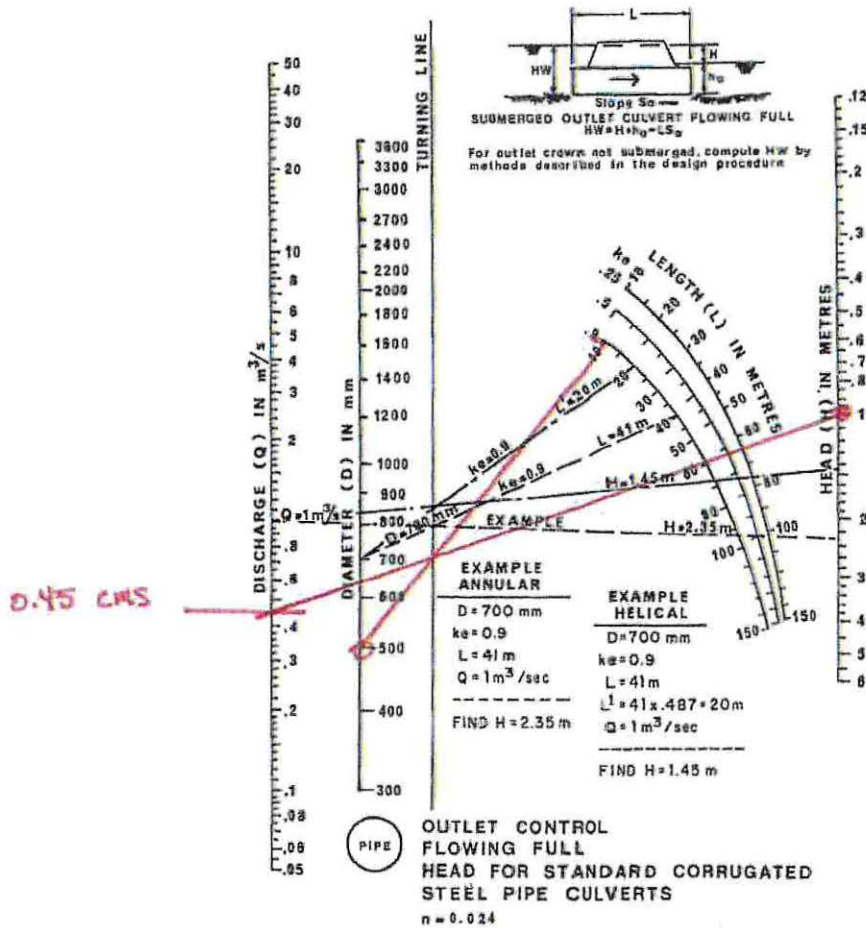


Figure 4-34 Outlet Control. Head for corrugated steel pipe culvert with submerged outlet and culvert flowing full. See note under sketch at top. Data is derived from nomographs published by the Bureau of Public Roads.

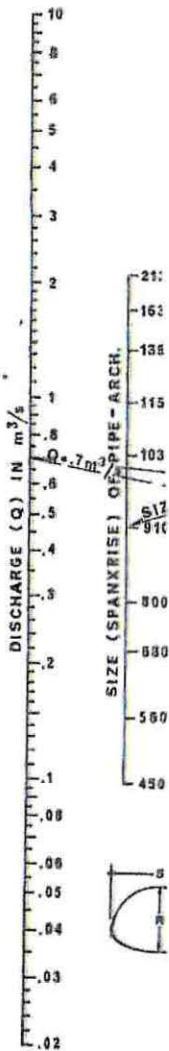


Figure 4-35 Outlet Control submerged outlet and flowing full by the Bureau of Public Roads.

Table 4-11 Length Adjustment for Improved Hydraulics

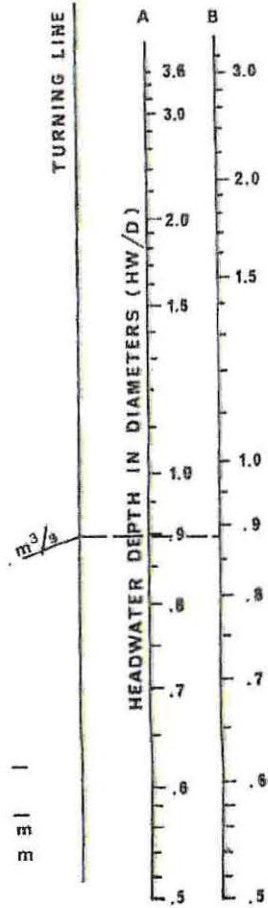
Pipe Diameter, mm	Roughness Factor n^* for Helical Corr.*	Length Adjustment Factor $\left(\frac{n^*}{n}\right)^2$
300	0.011	0.21
600	0.016	0.44
900	0.019	0.61
1200	0.020	0.70

*Other values of roughness, n , are applicable to paved pipe, lined pipe and pipe with 76 x 25 corrugations. See Table 4-9. To use the above chart for these types of pipe and pipe-arches, use "adjusted length factors" computed per equation 14, page 179.



Figure 4-36 Pipe-arch culvert

ANCE
RE
1
3



PTH
H BEVELLED RING

0.65

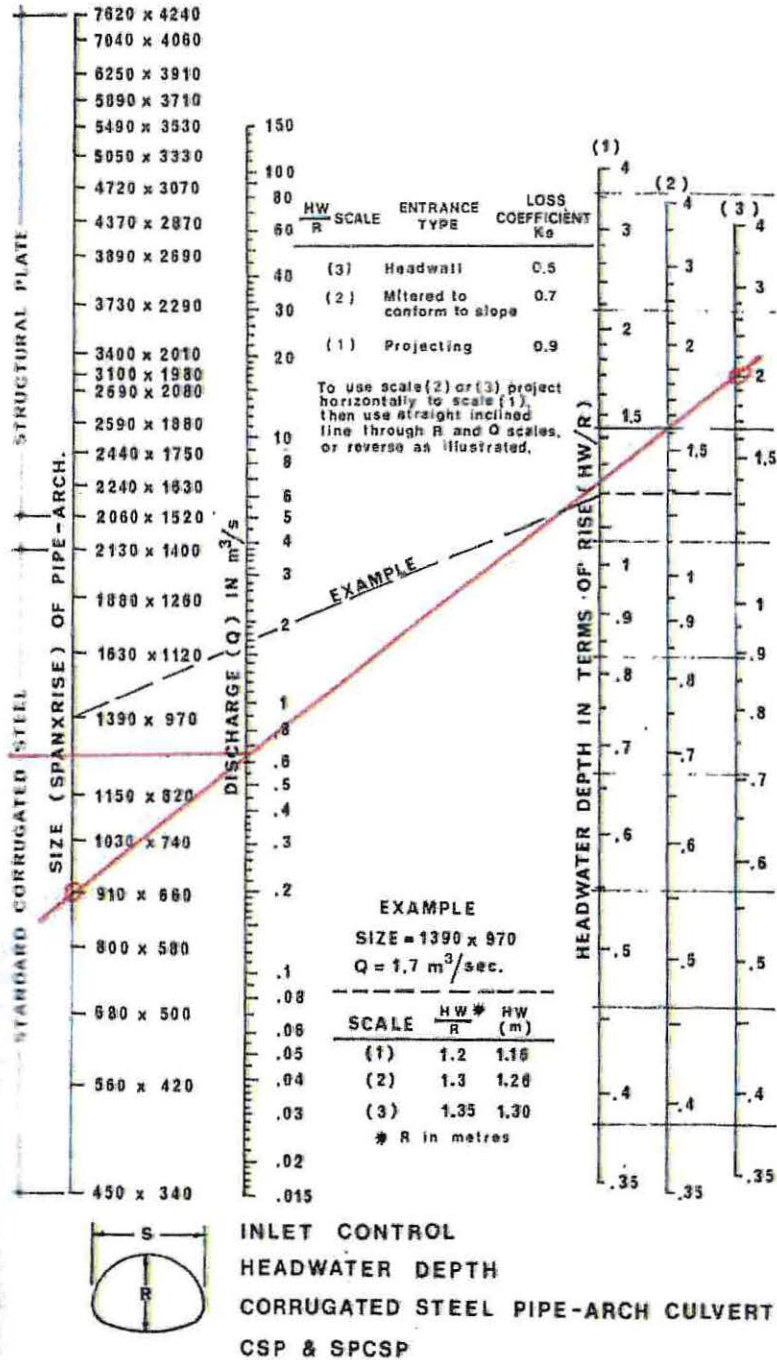
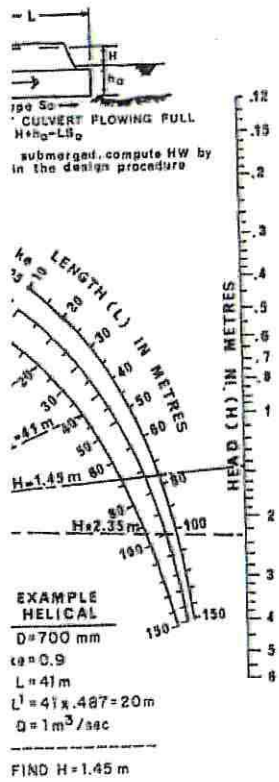


Figure 4-31 Inlet control and headwater depths for corrugated steel pipe-arch culverts. Headwater depth should be kept low because pipe-arches generally are used where headroom is limited. Data is derived from nomographs published by the Bureau of Public Roads.

ilar pipe culverts with beveled
the Bureau of Public Roads



STANDARD CORRUGATED
 METAL ARCHES

Standard steel pipe culvert with sub-
 structure under sketch at top. Data from
 Bureau of Public Roads.

Improved Hydraulics

Length Adjustment Factor
$\left(\frac{n'}{n}\right)^2$
0.21
0.44
0.61
0.70

For pipe, lined pipe and pipe with 76 x 25
 for the types of pipe and pipe-arches, use "a"

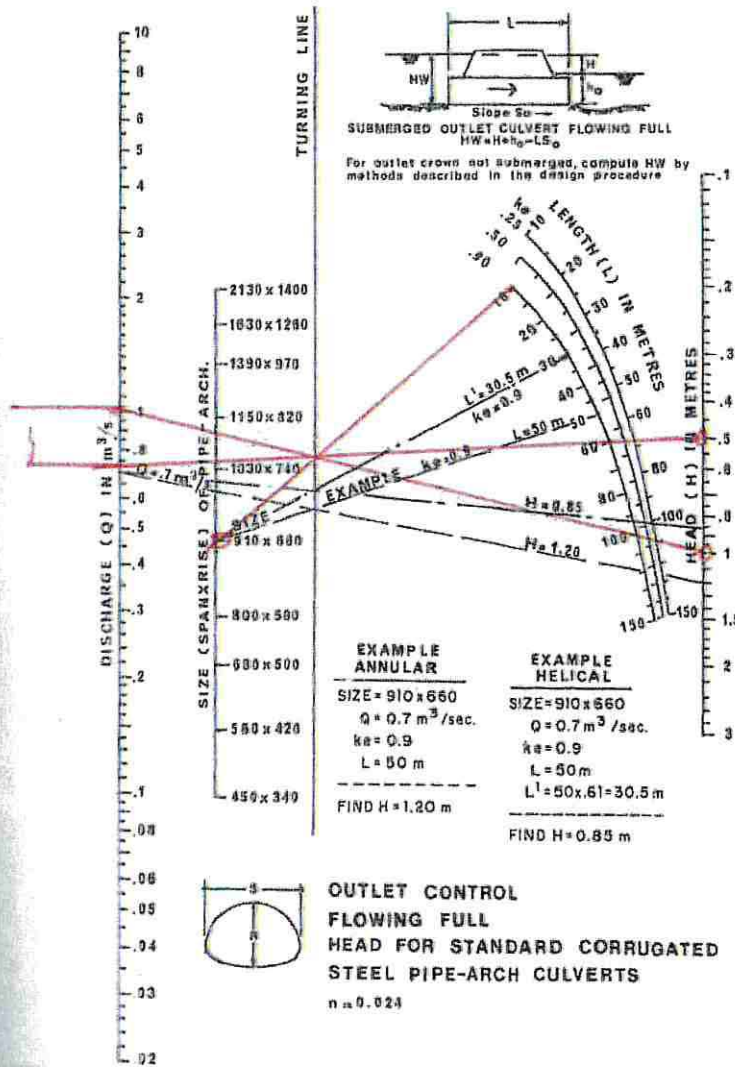


Figure 4-35 Outlet Control. Head for corrugated steel pipe-arch culvert with submerged outlet and flowing full. Data is derived from nomographs published by the Bureau of Public Roads.

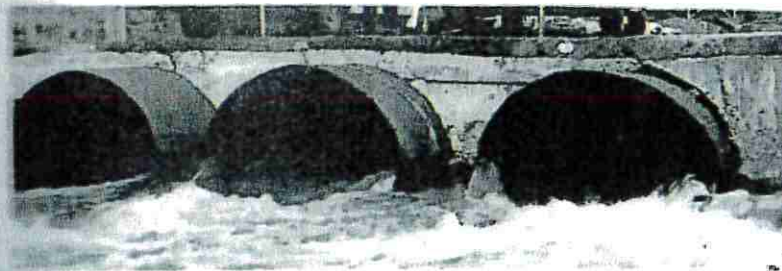


Figure 4-36 Pipe-arch culvert under limited headroom conditions

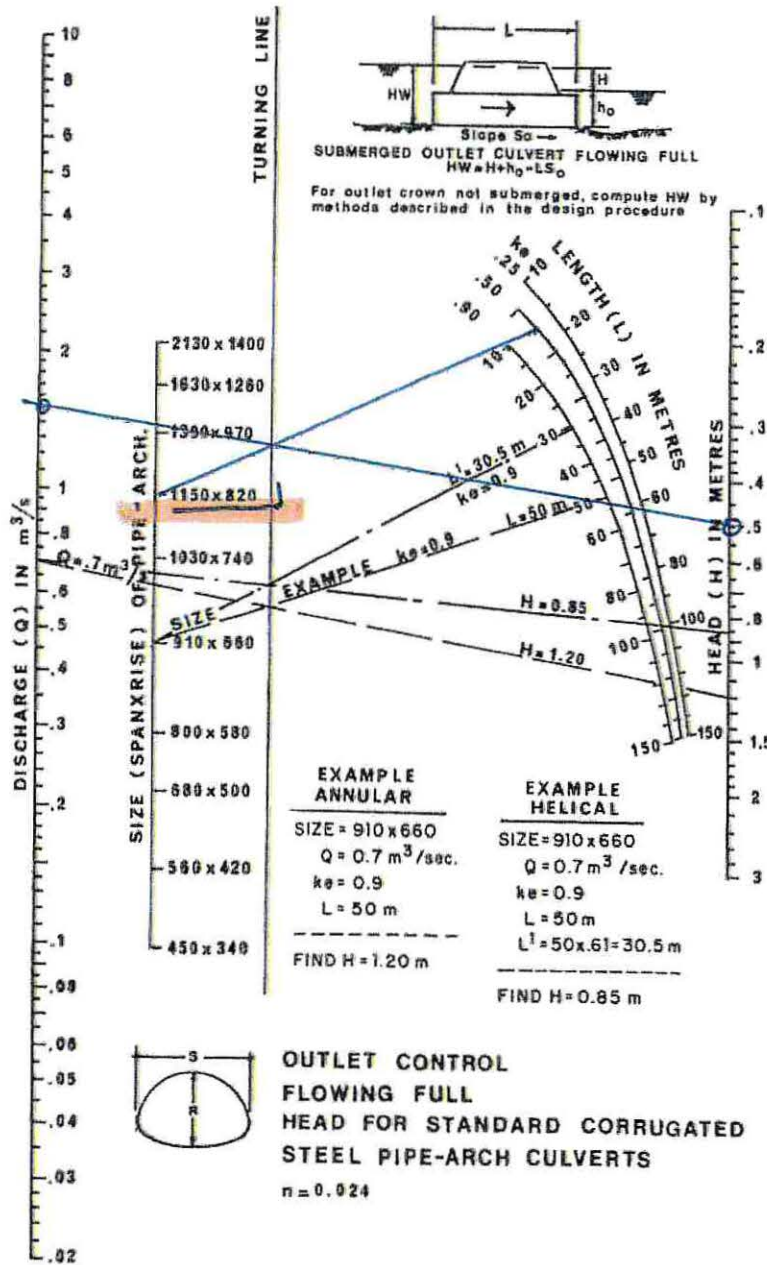


Figure 4.19 Head for corrugated steel pipe-arch flowing full under outlet control.

HY-8 Culvert Analysis Report

Crossing Discharge Data

Discharge Selection Method: Specify Minimum, Design, and Maximum Flow

Minimum Flow: 12.3601 cfs

Design Flow: 35.3147 cfs

Maximum Flow: 70.6293 cfs

Table 1 - Summary of Culvert Flows at Crossing: Zavitz Drain - Port Colborne 2+200

Headwater Elevation (m)	Total Discharge (cms)	Damude Culvert - existing Discharge (cms)	Roadway Discharge (cms)	Iterations
186.48	0.35	0.35	0.00	1
186.77	0.51	0.42	0.09	6
186.79	0.68	0.43	0.25	5
186.81	0.84	0.43	0.41	4
186.82	1.00	0.43	0.56	4
186.84	1.17	0.44	0.74	4
186.85	1.34	0.44	0.90	3
186.86	1.50	0.44	1.06	3
186.87	1.67	0.44	1.22	3
186.88	1.83	0.45	1.39	3
186.89	2.00	0.45	1.55	3
186.75	0.42	0.42	0.00	Overtopping

Rating Curve Plot for Crossing: Zavitz Drain - Port Colborne 2+200

Total Rating Curve

Crossing: Zavitz Drain - Port Colborne 2+200

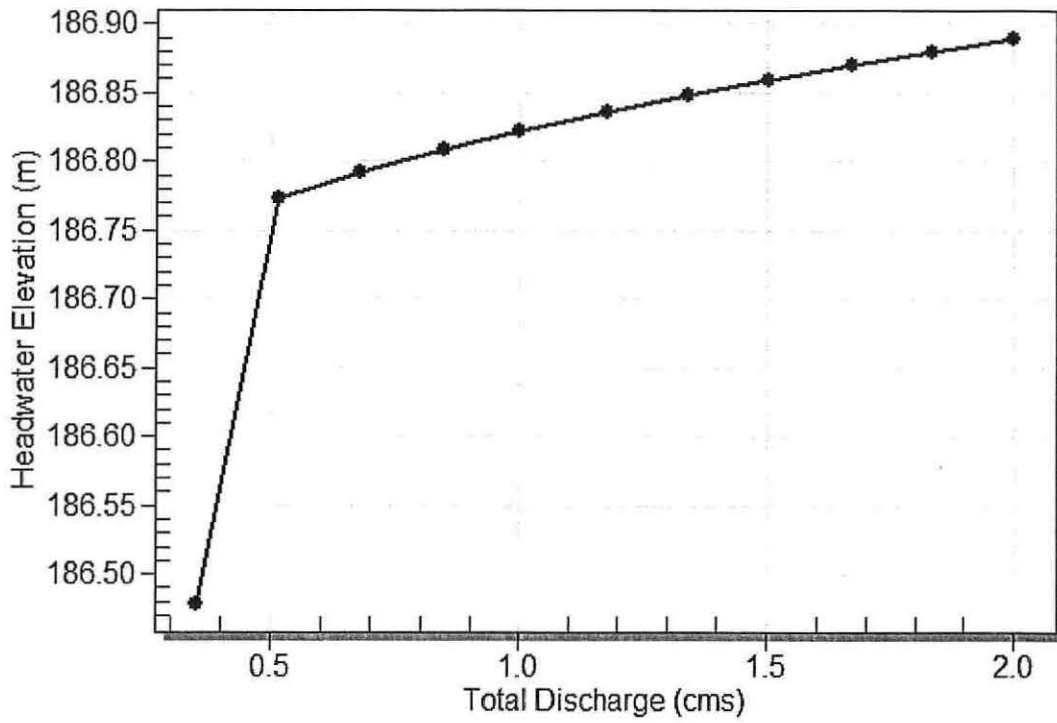


Table 2 - Culvert Summary Table: Damude Culvert - existing

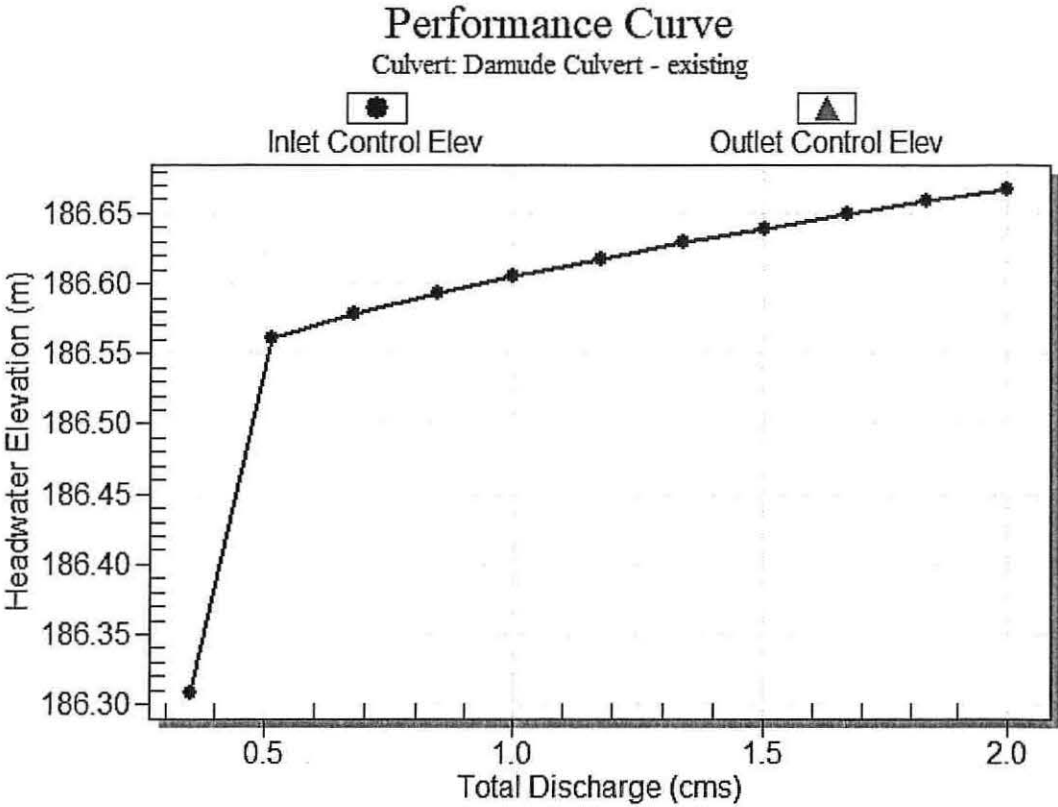
Total Discharge (cms)	Culvert Discharge (cms)	Headwater Elevation (m)	Inlet Control Depth (m)	Outlet Control Depth (m)	Flow Type	Normal Depth (m)	Critical Depth (m)	Outlet Depth (m)	Tailwater Depth (m)	Outlet Velocity (m/s)	Tailwater Velocity (m/s)
0.35	0.35	186.48	0.878	1.049	7-M2c	0.500	0.404	0.404	0.397	2.060	0.520
0.51	0.42	186.77	1.131	1.355	7-M2t	0.500	0.437	0.481	0.481	2.176	0.576
0.68	0.43	186.79	1.149	1.438	4-FFf	0.500	0.438	0.500	0.549	2.171	0.619
0.84	0.43	186.81	1.164	1.513	4-FFf	0.500	0.440	0.500	0.609	2.190	0.655
1.00	0.43	186.82	1.175	1.575	4-FFf	0.500	0.441	0.500	0.659	2.205	0.684
1.17	0.44	186.84	1.188	1.640	4-FFf	0.500	0.442	0.500	0.710	2.220	0.713
1.34	0.44	186.85	1.199	1.696	4-FFf	0.500	0.443	0.500	0.754	2.235	0.738
1.50	0.44	186.86	1.209	1.747	4-FFf	0.500	0.444	0.500	0.795	2.246	0.760
1.67	0.44	186.87	1.219	1.797	4-FFf	0.500	0.445	0.500	0.834	2.260	0.780
1.83	0.45	186.88	1.229	1.843	4-FFf	0.500	0.445	0.500	0.870	2.271	0.799
2.00	0.45	186.89	1.238	1.886	4-FFf	0.500	0.446	0.500	0.904	2.281	0.817

Straight Culvert

Inlet Elevation (invert): 185.43 m, Outlet Elevation (invert): 185.42 m

Culvert Length: 10.24 m, Culvert Slope: 0.0010

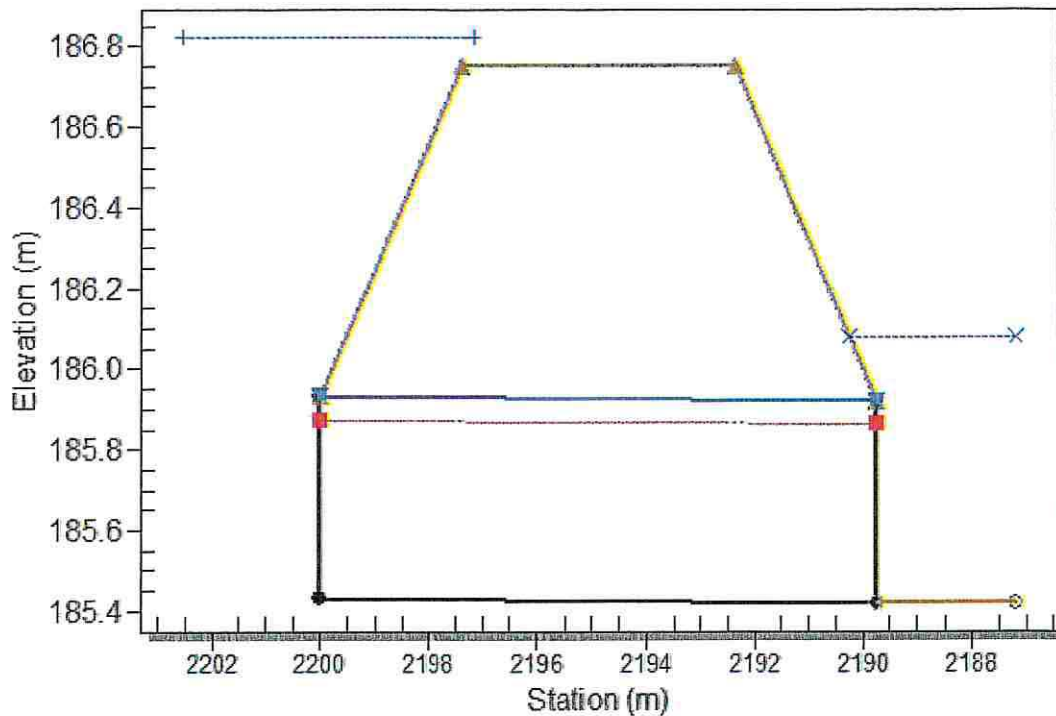
Culvert Performance Curve Plot: Damude Culvert - existing



Water Surface Profile Plot for Culvert: Damude Culvert - existing

Crossing - Zavitz Drain - Port Colborne 2+200, Design Discharge - 1.00 cms

Culvert - Damude Culvert - existing, Culvert Discharge - 0.43 cms



Site Data - Damude Culvert - existing

Site Data Option: Culvert Invert Data

Inlet Station: 2200.00 m

Inlet Elevation: 185.43 m

Outlet Station: 2189.76 m

Outlet Elevation: 185.42 m

Number of Barrels: 1

Culvert Data Summary - Damude Culvert - existing

Barrel Shape: Circular

Barrel Diameter: 500.00 mm

Barrel Material: Corrugated Steel

Embedment: 0.00 mm

Barrel Manning's n: 0.0240

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting

Inlet Depression: None

Table 3 - Downstream Channel Rating Curve (Crossing: Zavitz Drain - Port Colborne

Flow (cms)	Water Surface Elev (m)	Depth (m)	Velocity (m/s)	Shear (Pa)	Froude Number
0.35	185.82	0.40	0.52	3.51	0.32
0.51	185.90	0.48	0.58	4.24	0.33
0.68	185.97	0.55	0.62	4.85	0.33
0.84	186.03	0.61	0.66	5.37	0.34
1.00	186.08	0.66	0.68	5.81	0.34
1.17	186.13	0.71	0.71	6.26	0.34
1.34	186.17	0.75	0.74	6.65	0.35
1.50	186.22	0.80	0.76	7.02	0.35
1.67	186.25	0.83	0.78	7.36	0.35
1.83	186.29	0.87	0.80	7.67	0.35
2.00	186.32	0.90	0.82	7.98	0.35

2+200)**Tailwater Channel Data - Zavitz Drain - Port Colborne 2+200**

Tailwater Channel Option: Trapezoidal Channel

Bottom Width: 0.90 m

Side Slope (H:V): 2.00 (_:1)

Channel Slope: 0.0009

Channel Manning's n: 0.0230

Channel Invert Elevation: 185.42 m

Roadway Data for Crossing: Zavitz Drain - Port Colborne 2+200

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 20.00 m

Crest Elevation: 186.75 m

Roadway Surface: Gravel

Roadway Top Width: 5.00 m

Crossing Discharge Data

Discharge Selection Method: Specify Minimum, Design, and Maximum Flow

Minimum Flow: 12.3601 cfs

Design Flow: 35.3147 cfs

Maximum Flow: 70.6293 cfs

Table 4 - Summary of Culvert Flows at Crossing: Zavitz Drain - Port Colborne revised

Headwater Elevation (m)	Total Discharge (cms)	Damude Culvert - alternate Discharge (cms)	Roadway Discharge (cms)	Iterations
185.98	0.35	0.35	0.00	1
186.15	0.51	0.51	0.00	1
186.37	0.68	0.68	0.00	1
186.64	0.84	0.84	0.00	1
186.77	1.00	0.92	0.08	16
186.79	1.17	0.93	0.25	6
186.81	1.34	0.94	0.40	4
186.82	1.50	0.94	0.56	4
186.84	1.67	0.95	0.72	4
186.85	1.83	0.96	0.88	3
186.86	2.00	0.96	1.04	3
186.75	0.90	0.90	0.00	Overtopping

Rating Curve Plot for Crossing: Zavitz Drain - Port Colborne revised

Total Rating Curve

Crossing: Zavitz Drain - Port Colborne revised

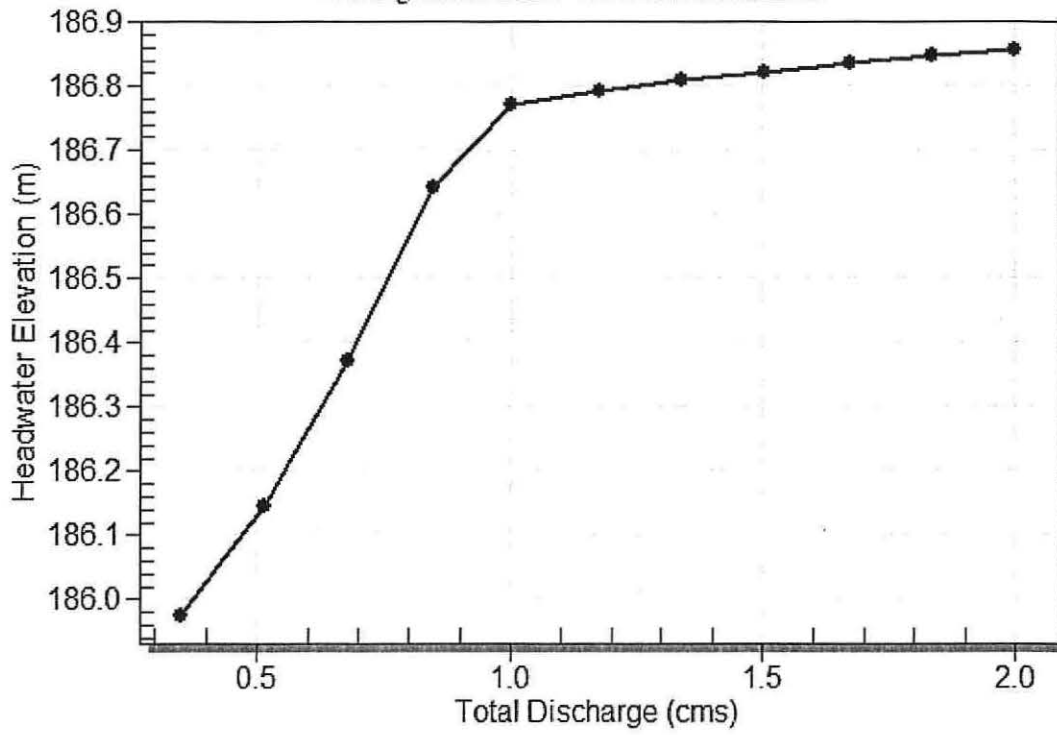


Table 5 - Culvert Summary Table: Damude Culvert - alternate

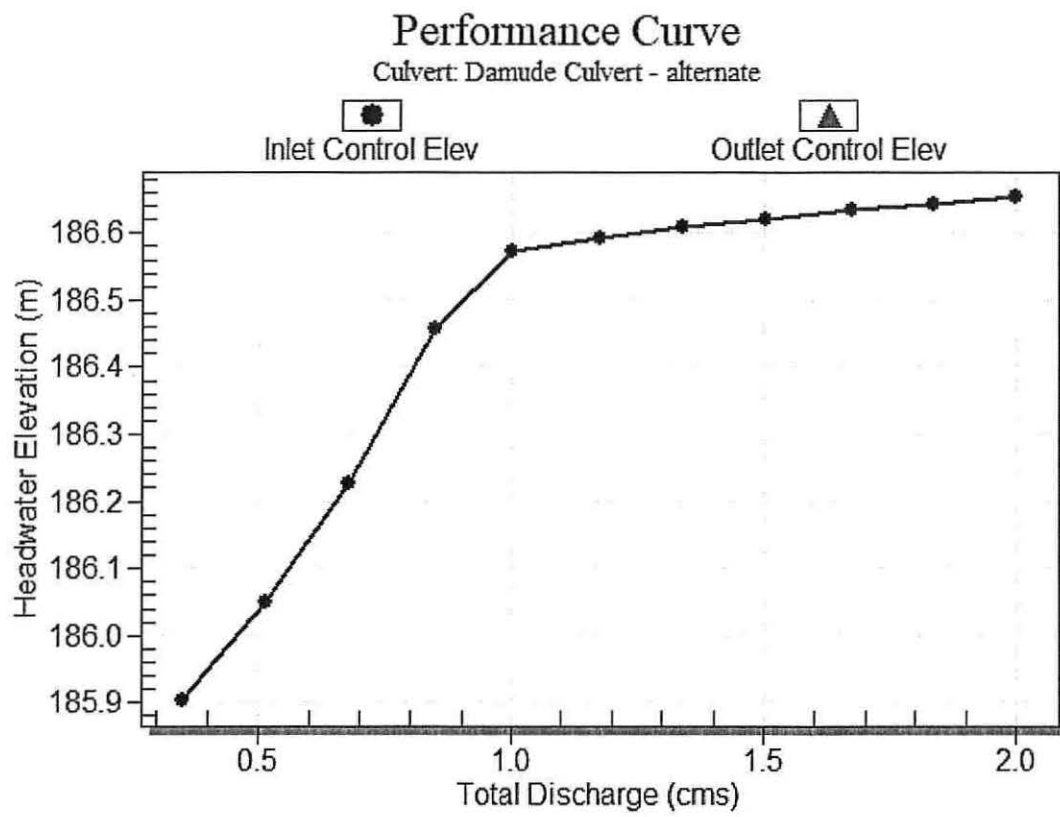
Total Discharge (cms)	Culvert Discharge (cms)	Headwater Elevation (m)	Inlet Control Depth (m)	Outlet Control Depth (m)	Flow Type	Normal Depth (m)	Critical Depth (m)	Outlet Depth (m)	Tailwater Depth (m)	Outlet Velocity (m/s)	Tailwater Velocity (m/s)
0.35	0.35	185.98	0.473	0.546	3-M2t	0.610	0.283	0.397	0.397	1.105	0.520
0.51	0.51	186.15	0.621	0.716	3-M2t	0.610	0.350	0.481	0.481	1.371	0.576
0.68	0.68	186.37	0.798	0.942	7-M2t	0.610	0.411	0.549	0.549	1.644	0.619
0.84	0.84	186.64	1.027	1.211	7-M2t	0.610	0.462	0.609	0.609	1.956	0.655
1.00	0.92	186.77	1.144	1.367	4-FFf	0.610	0.482	0.610	0.659	2.119	0.684
1.17	0.93	186.79	1.164	1.436	4-FFf	0.610	0.485	0.610	0.710	2.146	0.713
1.34	0.94	186.81	1.178	1.494	4-FFf	0.610	0.487	0.610	0.754	2.165	0.738
1.50	0.94	186.82	1.192	1.547	4-FFf	0.610	0.489	0.610	0.795	2.182	0.760
1.67	0.95	186.84	1.203	1.596	4-FFf	0.610	0.491	0.610	0.834	2.198	0.780
1.83	0.96	186.85	1.214	1.642	4-FFf	0.610	0.492	0.610	0.870	2.212	0.799
2.00	0.96	186.86	1.225	1.685	4-FFf	0.610	0.494	0.610	0.904	2.225	0.817

Straight Culvert

Inlet Elevation (invert): 185.43 m, Outlet Elevation (invert): 185.42 m

Culvert Length: 10.24 m, Culvert Slope: 0.0010

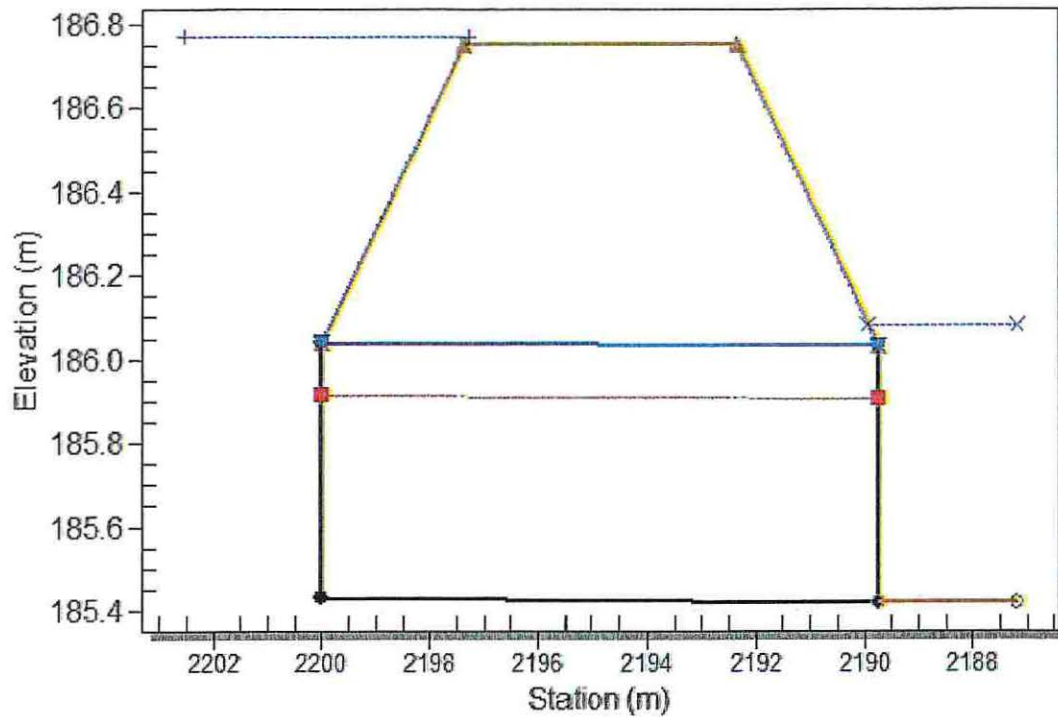
Culvert Performance Curve Plot: Damude Culvert - alternate



Water Surface Profile Plot for Culvert: Damude Culvert - alternate

Crossing - Zavitz Drain - Port Colborne revised, Design Discharge - 1.00 cms

Culvert - Damude Culvert - alternate, Culvert Discharge - 0.92 cms



Site Data - Damude Culvert - alternate

Site Data Option: Culvert Invert Data

Inlet Station: 2200.00 m

Inlet Elevation: 185.43 m

Outlet Station: 2189.76 m

Outlet Elevation: 185.42 m

Number of Barrels: 1

Culvert Data Summary - Damude Culvert - alternate

Barrel Shape: Pipe Arch

Barrel Span: 889.00 mm

Barrel Rise: 609.60 mm

Barrel Material: Steel or Aluminum

Embedment: 0.00 mm

Barrel Manning's n: 0.0250

Culvert Type: Straight

Inlet Configuration: Projecting

Inlet Depression: None

Table 6 - Downstream Channel Rating Curve (Crossing: Zavitz Drain - Port Colborne

Flow (cms)	Water Surface Elev (m)	Depth (m)	Velocity (m/s)	Shear (Pa)	Froude Number
0.35	185.82	0.40	0.52	3.51	0.32
0.51	185.90	0.48	0.58	4.24	0.33
0.68	185.97	0.55	0.62	4.85	0.33
0.84	186.03	0.61	0.66	5.37	0.34
1.00	186.08	0.66	0.68	5.81	0.34
1.17	186.13	0.71	0.71	6.26	0.34
1.34	186.17	0.75	0.74	6.65	0.35
1.50	186.22	0.80	0.76	7.02	0.35
1.67	186.25	0.83	0.78	7.36	0.35
1.83	186.29	0.87	0.80	7.67	0.35
2.00	186.32	0.90	0.82	7.98	0.35

revised)

Tailwater Channel Data - Zavitz Drain - Port Colborne revised

Tailwater Channel Option: Trapezoidal Channel

Bottom Width: 0.90 m

Side Slope (H:V): 2.00 (_:1)

Channel Slope: 0.0009

Channel Manning's n: 0.0230

Channel Invert Elevation: 185.42 m

Roadway Data for Crossing: Zavitz Drain - Port Colborne revised

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 20.00 m

Crest Elevation: 186.75 m

Roadway Surface: Gravel

Roadway Top Width: 5.00 m

Crossing Discharge Data

Discharge Selection Method: Specify Minimum, Design, and Maximum Flow

Minimum Flow: 12.3601 cfs

Design Flow: 35.3147 cfs

Maximum Flow: 70.6293 cfs

Table 7 - Summary of Culvert Flows at Crossing: Zavitz Drain - Port Colborne 2+600

Headwater Elevation (m)	Total Discharge (cms)	Clee Culvert - existing Discharge (cms)	Roadway Discharge (cms)	Iterations
186.51	0.35	0.30	0.05	13
186.54	0.51	0.31	0.20	6
186.55	0.68	0.31	0.36	5
186.57	0.84	0.32	0.52	4
186.58	1.00	0.32	0.67	4
186.59	1.17	0.33	0.85	4
186.61	1.34	0.33	1.01	4
186.62	1.50	0.34	1.17	3
186.63	1.67	0.34	1.33	4
186.66	1.83	0.35	1.49	6
186.69	2.00	0.36	1.65	4
186.50	0.29	0.29	0.00	Overtopping

Rating Curve Plot for Crossing: Zavitz Drain - Port Colborne 2+600

Total Rating Curve

Crossing: Zavitz Drain - Port Colborne 2+600

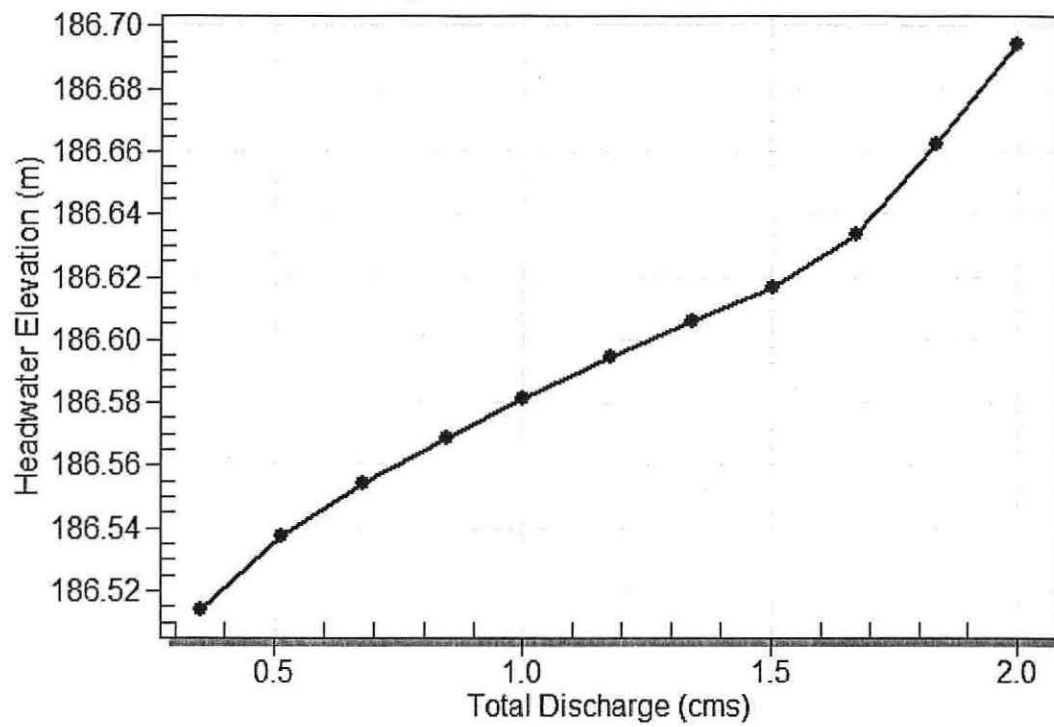


Table 8 - Culvert Summary Table: Clee Culvert - existing

Total Discharge (cms)	Culvert Discharge (cms)	Headwater Elevation (m)	Inlet Control Depth (m)	Outlet Control Depth (m)	Flow Type	Normal Depth (m)	Critical Depth (m)	Outlet Depth (m)	Tailwater Depth (m)	Outlet Velocity (m/s)	Tailwater Velocity (m/s)
0.35	0.30	186.51	0.731	0.724	7-H2t	-0.305	0.374	0.397	0.397	1.740	0.520
0.51	0.31	186.54	0.754	0.737	7-H2t	-0.305	0.379	0.481	0.481	1.566	0.576
0.68	0.31	186.55	0.771	0.936	4-FFf	-0.305	0.383	0.500	0.549	1.597	0.619
0.84	0.32	186.57	0.786	1.008	4-FFf	-0.305	0.386	0.500	0.609	1.624	0.655
1.00	0.32	186.58	0.798	1.069	4-FFf	-0.305	0.389	0.500	0.659	1.646	0.684
1.17	0.33	186.59	0.811	1.132	4-FFf	-0.305	0.392	0.500	0.710	1.669	0.713
1.34	0.33	186.61	0.823	1.186	4-FFf	-0.305	0.394	0.500	0.754	1.689	0.738
1.50	0.34	186.62	0.833	1.237	4-FFf	-0.305	0.396	0.500	0.795	1.707	0.760
1.67	0.34	186.63	0.851	1.291	4-FFf	-0.305	0.399	0.500	0.834	1.737	0.780
1.83	0.35	186.66	0.879	1.352	4-FFf	-0.305	0.404	0.500	0.870	1.784	0.799
2.00	0.36	186.69	0.911	1.415	4-FFf	-0.305	0.409	0.500	0.904	1.835	0.817

Straight Culvert

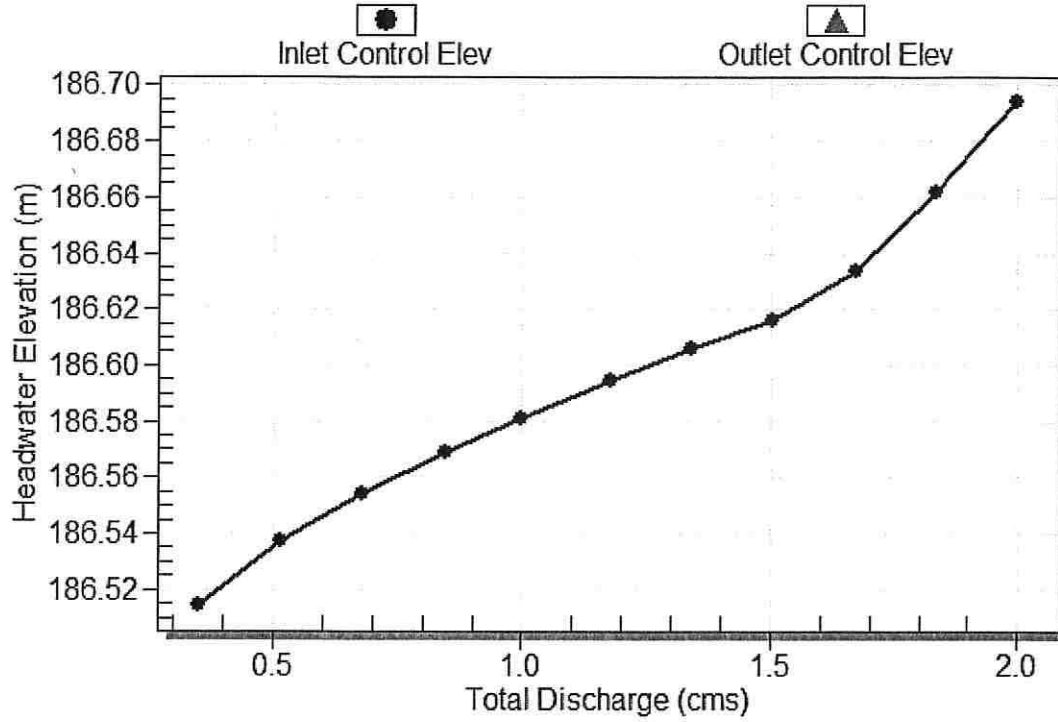
Inlet Elevation (invert): 185.78 m, Outlet Elevation (invert): 185.78 m

Culvert Length: 6.00 m, Culvert Slope: 0.0002

Culvert Performance Curve Plot: Clee Culvert - existing

Performance Curve

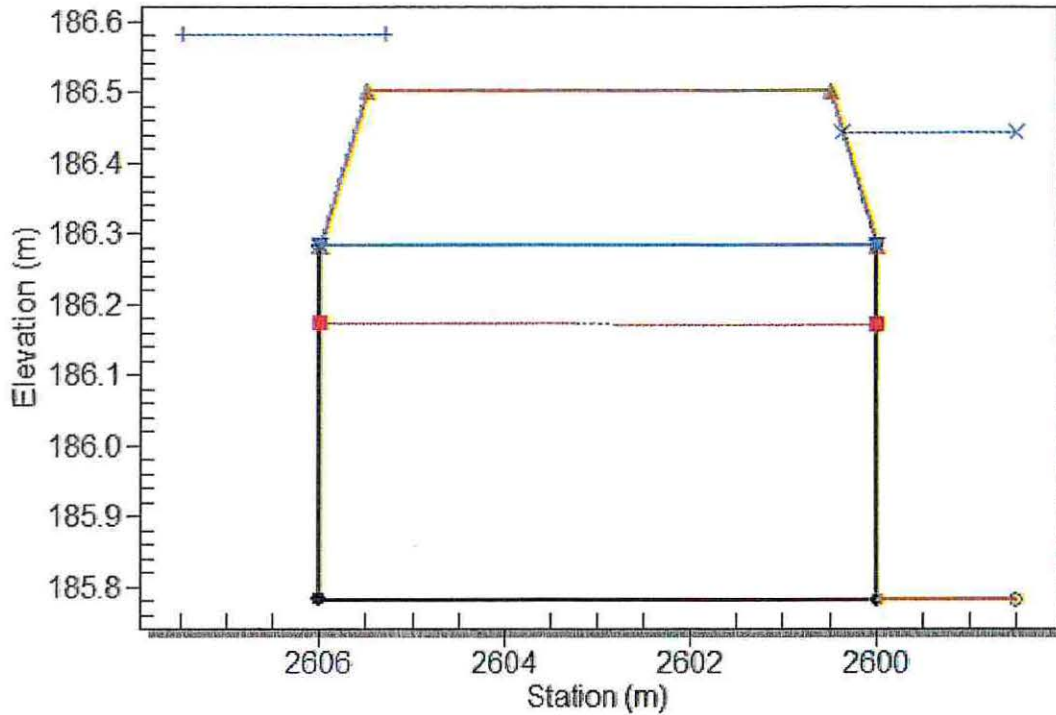
Culvert: Clee Culvert - existing



Water Surface Profile Plot for Culvert: Clee Culvert - existing

Crossing - Zavitz Drain - Port Colborne 2+600, Design Discharge - 1.00 cms

Culvert - Clee Culvert - existing, Culvert Discharge - 0.32 cms



Site Data - Clee Culvert - existing

Site Data Option: Culvert Invert Data

Inlet Station: 2606.00 m

Inlet Elevation: 185.78 m

Outlet Station: 2600.00 m

Outlet Elevation: 185.78 m

Number of Barrels: 1

Culvert Data Summary - Clee Culvert - existing

Barrel Shape: Circular

Barrel Diameter: 500.00 mm

Barrel Material: Corrugated Steel

Embedment: 0.00 mm

Barrel Manning's n: 0.0240

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting

Inlet Depression: None

Table 9 - Downstream Channel Rating Curve (Crossing: Zavitz Drain - Port Colborne

Flow (cms)	Water Surface Elev (m)	Depth (m)	Velocity (m/s)	Shear (Pa)	Froude Number
0.35	186.18	0.40	0.52	3.51	0.32
0.51	186.26	0.48	0.58	4.24	0.33
0.68	186.33	0.55	0.62	4.85	0.33
0.84	186.39	0.61	0.66	5.37	0.34
1.00	186.44	0.66	0.68	5.81	0.34
1.17	186.49	0.71	0.71	6.26	0.34
1.34	186.54	0.75	0.74	6.65	0.35
1.50	186.58	0.80	0.76	7.02	0.35
1.67	186.62	0.83	0.78	7.36	0.35
1.83	186.65	0.87	0.80	7.67	0.35
2.00	186.69	0.90	0.82	7.98	0.35

2+600)**Tailwater Channel Data - Zavitz Drain - Port Colborne 2+600**

Tailwater Channel Option: Trapezoidal Channel

Bottom Width: 0.90 m

Side Slope (H:V): 2.00 (2:1)

Channel Slope: 0.0009

Channel Manning's n: 0.0230

Channel Invert Elevation: 185.78 m

Roadway Data for Crossing: Zavitz Drain - Port Colborne 2+600

Roadway Profile Shape: Constant Roadway Elevation

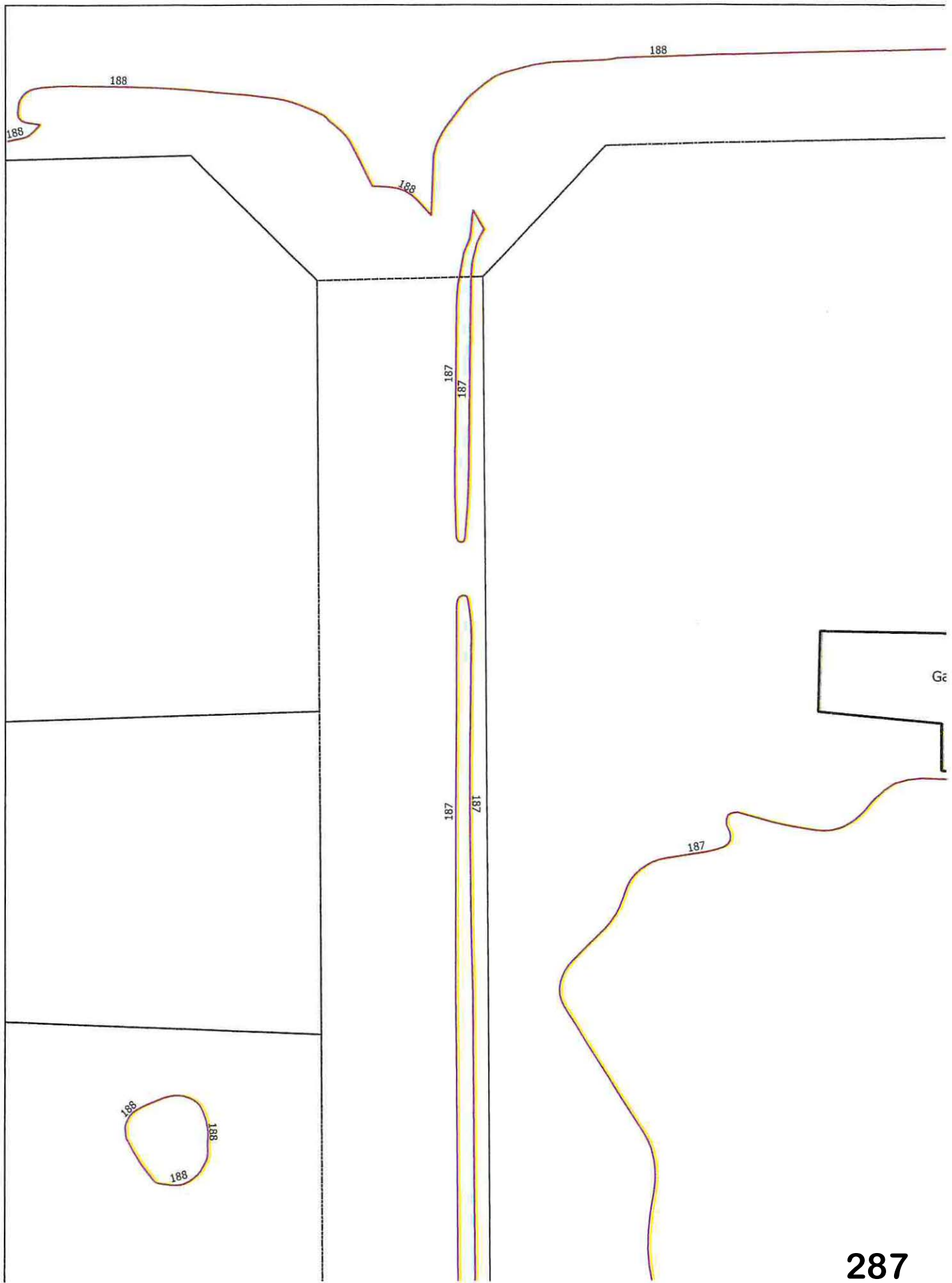
Crest Length: 20.00 m

Crest Elevation: 186.50 m

Roadway Surface: Gravel

Roadway Top Width: 5.00 m

Attachment D: Tree Restoration Plan



Attachment E: Revised Assessment

ZAVITZ MUNICIPAL DRAIN
TOWN OF FORT ERIE & CITY OF PORT COLBORNE
Regional Municipality of Niagara

ALLOWANCE CALCULATIONS - ZAVITZ DRAIN

Property Roll No.	Con.	Lot	Landowner Name	Property Value (\$/ha)	Abutting Length				Channel Left				Channel Right				Channel Allowances		Working Space				Total Allowances					
					Left		Right		Existing Top Width	Proposed Top Width	Length (m)	Area (ha)	Existing Top Width	Proposed Top Width	Length (m)	Area (ha)	Sec 29 100%	Sec 30 100%	Left Width	Right Width	Left Area (ha)	Right Area (ha)	Sec 29 100%	Sec 30 100%	Sec 29 (\$)	Sec 30 (\$)		
					From Sta	To Sta	From Sta	To Sta																				
Landowners In the City of Port Colborne																												
271104000119800			VORSTENBOSCH, C.M.	\$ -																								
271104000119700			HAYTER, S.	\$ -																								
271104000119600			LUNDY, JOHN MARK	\$ -																								
271104000119502			MISKOLCZI, A. & M.	\$ -																								
271104000119501			FARKAS, J. & C.	\$ -																								
271104000119500			CAPTAN, RODICA	\$ -																								
271104000105800			PIDSADNICK, G.	\$ -																								
271104000106700			DIPLOCK, D. & C.	\$ -																								
271104000106600			KING, M. & S.	\$ -																								
271104000106500			NEAL, T. & L.	\$ -																								
271104000106400			HILMAYER, D. & PRIEBE, T.	\$ -																								
271104000104700			BOWERMAN, G. & C.A.	\$ -																								
271104000104600			MINOR, R. & J.	\$ -																								
271104000104500			SIDER, I.	\$ -																								
271104000104400			ZIMMERMAN, V. & I.	\$ -																								
271104000104300			FIDLER, R. & D.M.	\$ -																								
271104000122300			UNITED BRETHREN CEMETARY	\$ -																								
271104000138900			SHERKSTON UNITED CHURCH	\$ -																								
271104000138700			FIRST UNITED CHURCH	\$ -																								
271104000138301			VEENSTRA, D.	\$ -																								
271104000138500			SMITH, T.M.	\$ -																								
271104000138600			VEENSTRA, A. & D.	\$ -																								
271104000138300			SIX BROTHERS INVESTMENTS	\$ -																								
271104000138200			KENWORTHY, R. & P.	\$ -																								
271104000138000			FRASER, J. & C.	\$ -																								
271104000122200			PARISEE, T. & A.	\$ -																								
271104000122100			GERMAIN, DEVON WILLIAM	\$ -																								
271104000120200			ELMER, D.	\$ -																								
271104000122000			CELUCH, L.	\$ -																								
271104000121900			BAIN JAY ARTHUR	\$ -																								
271104000121400			KILTS, D.	\$ -																								
271104000121300			HORNING, A. & W.	\$ -																								
271104000121302			HORNING, A. & W.	\$ -																								
271104000121200			BUCK, T.	\$ -																								
271104000121805			VILLENEUVE, J. & E.	\$ -																								
271104000121800			VILLENEUVE, J. & E.	\$ -																								
271104000121700			MITCHELL, C.	\$ -																								
271104000121600			RAMSEY, MATTHEW	\$ -																								
271104000121501			LYONS, R.	\$ -																								
271104000121500			STEVENS, A. & L.	\$ -																								
271104000121401			MCPHERSON, B. & T.	\$ -																								
271104000105500			NEWBY, ANTHONY TODD	\$ -																								
271104000105400			COSBY, D.	\$ -																								
271104000105400			COSBY, D.	\$ 2,000	2685.2	2878.5		2.0	2.5	193.3	0.010																	
271104000105600			LOCHHEAD, A. & K.	\$ -																								
271104000105600			LOCHHEAD, A. & K.	\$ -																								
271104000121210			BUGEJA, M. & A.	\$ -																								
271104000138400			CLEE, G.	\$ 2,000	2268.2	2678.5	2268.2	2678.5	2.2	2.5	417.0	0.013	2.1	2.5	610.3	0.024	5	74		10.0		0.010	5	1,221	5	1,294		
271104000105300			DAMUDE, R.	\$ 1,000	1967.0	2268.2	1967.0	2268.2	2.5	2.6	301.2	0.003	2.5	2.6	301.2	0.003	5	6		10.0		0.301	5	301	5	307		
271104000105200			LOBBEZOO, J. & P.	\$ -																								
271104000105100			BUCK, J.	\$ -																								
271104000104000			VAN DUZEN, A. & S.	\$ -																								
271104000104000			VAN DUZEN, A. & S.	\$ -																								
271104000104200			VAN DUZEN, A. & S.	\$ -																								
271104000104200			VAN DUZEN, A. & S.	\$ -																								
271104000104005			EBERLY TRUCKING LTD.	\$ -																								
271104000104005			EBERLY TRUCKING LTD.	\$ -																								
271104000138100			SMITH, ANDREW CHRISTOPHE	\$ -																								
TOTAL - Landowners In the City of Port Colborne																												
											911.6	0.025			911.6	0.027	5	98			0.012	5	1,622	5	1,621			
City of Port Colborne Road Allowances																												
Pleasant Beach Road																												
Pleasant Beach Road (for Branch Drains)																												
Sherkston Road																												
Holloway Bay Road (South of Highway 3)																												
Holloway Bay Road (South of Highway 3) (for Branch Drains)																												
Holloway Bay Road (North of Highway 3)																												
Unopened Road Allowance (Zavitz Rd) between Roll #271104000138301 & #271104000138302																												
TOTAL- City of Port Colborne Road Allowances																												
											5	5			5	5					5	5		5	5			

ZAVITZ MUNICIPAL DRAIN
TOWN OF FORT ERIE & CITY OF PORT COLBORNE
Regional Municipality of Niagara

ALLOWANCE CALCULATIONS - ZAVITZ DRAIN

Property Roll No.	Con.	Lot	Landowner Name	Property Value (\$/ha)	Abutting Length				Channel Left				Channel Right				Channel Allowances		Working Space				Working Space Allow		Total Allowances	
					Left		Right		Existing Top Width	Proposed Top Width	Length (m)	Area (ha)	Existing Top Width	Proposed Top Width	Length (m)	Area (ha)	Sec 29 100%	Sec 30 100%	Left Width	Right Width	Left Area (ha)	Right Area (ha)	Sec 29	Sec 30	Sec 29 (\$)	Sec 30 (\$)
					From Sta	To Sta	From Sta	To Sta																		
Provincial Road Allowances In Port Colborne																										
Highway 3					1942.7	1967.0	1942.7	1967.0			24.3			24.3	\$ -	\$ -					\$ -	\$ -	\$ -	\$ -		
TOTAL: Provincial Road Allowances In Port Colborne										24.3			24.3	\$ -	\$ -					\$ -	\$ -	\$ -	\$ -			
Other Lands In Port Colborne																										
Friendship Trail - West of Pleasant Beach Road														\$ -	\$ -					\$ -	\$ -	\$ -	\$ -			
Friendship Trail - Pleasant Beach Road to 205m east of Pleasant Beach Road														\$ -	\$ -					\$ -	\$ -	\$ -	\$ -			
Friendship Trail - 145m west of Holloway Bay Road to 205m east of Pleasant Beach Road														\$ -	\$ -					\$ -	\$ -	\$ -	\$ -			
TOTAL: Other Lands In Port Colborne														\$ -	\$ -					\$ -	\$ -	\$ -	\$ -			
SUBTOTAL: Lands and Roads in the City of Port Colborne										935.8	0.026		935.8	0.027	\$ -	\$ 99				0.912	\$ -	\$ 1,522	\$ -	\$ 1,621		
Landowners in the Town of Fort Erie																										
20025038010000 GRIMES, D.A.					\$ -										\$ -	\$ -					\$ -	\$ -	\$ -	\$ -		
20025040000000 ANDY VEENSTRA FARMS LTD.					\$ -										\$ -	\$ -					\$ -	\$ -	\$ -	\$ -		
20018339000000 SPIRONELLO, A.					\$ 2,000	1326.2	1756.0	1326.2	1905.7	3.0	3.1	429.8	0.004	3.0	3.1	579.5	0.006	\$ 20	\$ 20	10.0	0.430	\$ -	\$ 860	\$ 20	\$ 880	
20018338000000 BEACH, C.M.					\$ 2,000	921.0	1326.2	921.0	1326.2	2.9	3.0	405.2	0.004	2.9	3.0	405.2	0.004	\$ 16	\$ 16	10.0	0.405	\$ -	\$ 810	\$ 16	\$ 827	
20025041000000 BARRON, J. & M.					\$ -													\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	
20025040010000 CAMPBELL, J. & J.M.					\$ -													\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	
20025035000000 VENTURINI, J. & A.					\$ -													\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	
20025018000000 MCDONALD, J.					\$ -													\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	
20018337000000 GREEN, K.R.					\$ 2,000	639.3	900.5	639.3	900.5	3.0	3.1	261.2	0.003	3.0	3.1	261.2	0.003	\$ 10	\$ 10	10.0	0.261	\$ -	\$ 522	\$ 10	\$ 533	
20018337010000 BEACH, D. & C.					\$ 2,000	407.1	639.3	407.1	639.3	3.5	3.6	232.2	0.002	3.5	3.6	232.2	0.002	\$ 9	\$ 9	10.0	0.232	\$ -	\$ 464	\$ 9	\$ 474	
20018336000000 CLARK, D.M.					\$ 2,000	137.2	407.1	137.2	407.1	2.2	2.4	269.9	0.005	2.3	2.3	269.9	0.005	\$ 11	\$ 11	10.0	0.270	\$ -	\$ 549	\$ 11	\$ 561	
20018335000000 IWORONCHAK, M. & N.					\$ 2,000		137.2		137.2	3.1	3.2	137.2	0.001	3.2	3.3	137.2	0.001	\$ 9	\$ 9	10.0	0.137	\$ -	\$ 294	\$ 9	\$ 303	
TOTAL: Landowners in the Town of Fort Erie										1735.6	0.020		1735.6	0.016	\$ 72	\$ 72		1.736	\$ -	\$ 3,471	\$ 72	\$ 3,543				
Town of Fort Erie Road Allowances																										
Holloway Bay Road (South of Highway 3)					1756.0	1905.7															\$ -	\$ -	\$ -	\$ -		
Holloway Bay Road (North of Highway 3)																						\$ -	\$ -	\$ -	\$ -	
Mathews Road					900.5	921.0	900.5	921.0														\$ -	\$ -	\$ -	\$ -	
Nigh Road																						\$ -	\$ -	\$ -	\$ -	
Unopened Road Allowance between Concession 2 LE & 3 LE, Lot 34																						\$ -	\$ -	\$ -	\$ -	
TOTAL: Town of Fort Erie Road Allowances										170.2			170.2		\$ -	\$ -					\$ -	\$ -	\$ -	\$ -		
Provincial Road Allowances In Fort Erie																										
Highway 3					1905.7	1942.7	1905.7	1942.7			37.0			37.0	\$ -	\$ -					\$ -	\$ -	\$ -	\$ -		
TOTAL: Provincial Road Allowances In Fort Erie										37.0			37.0	\$ -	\$ -							\$ -	\$ -	\$ -	\$ -	
Other Lands In Fort Erie																										
Friendship Trail																					\$ -	\$ -	\$ -	\$ -		
TOTAL: Other Lands In Fort Erie																						\$ -	\$ -	\$ -	\$ -	
SUBTOTAL: Lands and Roads in the Town of Fort Erie										1942.7	0.020		1942.7	0.016	\$ 72	\$ 72		1.736	\$ -	\$ 3,471	\$ 72	\$ 3,543				
TOTAL: Zavitz Municipal Drain										2878.6	0.046		2878.6	0.044	\$ 72	\$ 172		1.7	0.9	\$ -	\$ 4,903	\$ 72	\$ 5,164			
																						Total Allowances				\$ 6,237

ZAVITZ MUNICIPAL DRAIN
TOWN OF FORT ERIE & CITY OF PORT COLBORNE
Regional Municipality of Niagara

ASSESSMENT SCHEDULE BASED ON ESTIMATED COSTS - ZAVITZ DRAIN

LANDOWNER NAME	ADDRESS	PROPERTY ROLL NO.	CON.	LOT	APPROX. AREA AFFECT. (ha)	APPROX. ABUT. LENGTH (m)	TOTAL ALLOW. (\$)	TOTAL BENEFIT (\$)	SPECIAL BENEFIT (\$)	TOTAL OUTLET (\$)	TOTAL ASSESS. (\$)	NET ASSESS. (\$)	
1		2	3	4	5		6	7	8	9	10	11	12
Landowners in the City of Port Colborne													
VORSTENBOSCH, C.M.		271104000119800			0.04		\$ -	\$ -	\$ -	\$ 27	\$ 27	\$ 27	
HAYTER, S.		271104000119700			0.56		\$ -	\$ -	\$ -	\$ 410	\$ 410	\$ 410	
LUNDY, JOHN MARK		271104000119600			0.40		\$ -	\$ -	\$ -	\$ 298	\$ 298	\$ 298	
MISKOLCZI, A. & M.		271104000119502			0.43		\$ -	\$ -	\$ -	\$ 317	\$ 317	\$ 317	
FARKAS, J. & C.		271104000119501			0.47		\$ -	\$ -	\$ -	\$ 344	\$ 344	\$ 344	
CAPITAN, RODICA		271104000119500			0.63		\$ -	\$ -	\$ -	\$ 465	\$ 465	\$ 465	
PIDSADNICK, G.		271104000105800			0.62		\$ -	\$ -	\$ -	\$ 457	\$ 457	\$ 457	
DIPLOCK, D. & C.		271104000106700			1.34		\$ -	\$ -	\$ -	\$ 990	\$ 990	\$ 990	
KING, M. & S.		271104000106600			0.48		\$ -	\$ -	\$ -	\$ 353	\$ 353	\$ 353	
NEAL, T. & L.		271104000106500			0.50		\$ -	\$ -	\$ -	\$ 369	\$ 369	\$ 369	
HILMAYER, D. & PRIEBE, T.		271104000106400			0.83		\$ -	\$ -	\$ -	\$ 610	\$ 610	\$ 610	
BOWERMAN, G. & C.A.		271104000104700			0.50		\$ -	\$ -	\$ -	\$ 372	\$ 372	\$ 372	
MINOR, R. & J.		271104000104600			1.11		\$ -	\$ -	\$ -	\$ 819	\$ 819	\$ 819	
SIDER, I.		271104000104500			0.44		\$ -	\$ -	\$ -	\$ 323	\$ 323	\$ 323	
ZIMMERMAN, V. & I.		271104000104400			0.43		\$ -	\$ -	\$ -	\$ 316	\$ 316	\$ 316	
FIDLER, R. & D.M.		271104000104300			0.37		\$ -	\$ -	\$ -	\$ 270	\$ 270	\$ 270	
UNITED BRETHERN CEMETARY		271104000122300			0.12		\$ -	\$ -	\$ -	\$ 96	\$ 96	\$ 96	
SHERKSTON UNITED CHURCH		271104000138600			0.33		\$ -	\$ -	\$ -	\$ 175	\$ 175	\$ 175	
FIRST UNITED CHURCH		271104000138700			0.39		\$ -	\$ -	\$ -	\$ 206	\$ 206	\$ 206	
VEENSTRA, D.		271104000138301			1.77		\$ -	\$ -	\$ -	\$ 936	\$ 936	\$ 624	*
SMITH, T.M.		271104000138500			2.74		\$ -	\$ -	\$ -	\$ 1,450	\$ 1,450	\$ 966	*
VEENSTRA, A. & D.		271104000138800			1.20		\$ -	\$ -	\$ -	\$ 635	\$ 635	\$ 423	*
SIX BROTHERS INVESTMENTS INC.		271104000138300			2.34		\$ -	\$ -	\$ -	\$ 1,238	\$ 1,238	\$ 1,238	
KENWORHTY, R. & P.		271104000138200			6.15		\$ -	\$ -	\$ -	\$ 3,254	\$ 3,254	\$ 2,169	*
FRASER, J. & C.		271104000138000			4.15		\$ -	\$ -	\$ -	\$ 2,196	\$ 2,196	\$ 1,464	*
PARISEE, T. & A.		271104000122200			0.50		\$ -	\$ -	\$ -	\$ 398	\$ 398	\$ 398	
GERMAIN, DEVON WILLIAM		271104000122100			0.35		\$ -	\$ -	\$ -	\$ 279	\$ 279	\$ 279	
ELMER, D.		271104000120200			7.29		\$ -	\$ -	\$ -	\$ 5,806	\$ 5,806	\$ 3,871	*
CELUCH, L.		271104000122000			4.52		\$ -	\$ -	\$ -	\$ 3,600	\$ 3,600	\$ 2,400	*
BAIN JAY ARTHUR		271104000121900			0.14		\$ -	\$ -	\$ -	\$ 112	\$ 112	\$ 112	
KILTS, D.		271104000121400			0.43		\$ -	\$ -	\$ -	\$ 342	\$ 342	\$ 342	
HORNING, A. & W.		271104000121300			1.57		\$ -	\$ -	\$ -	\$ 1,250	\$ 1,250	\$ 1,250	
HORNING, A. & W.		271104000121302			1.56		\$ -	\$ -	\$ -	\$ 1,243	\$ 1,243	\$ 1,243	
HORNING, A. & W.		MERGED WITH ABOVE					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
BUCK, T.		271104000121200			3.59		\$ -	\$ -	\$ -	\$ 2,767	\$ 2,767	\$ 2,767	
VILLENEUVE, J. & E.		271104000121805			0.43		\$ -	\$ -	\$ -	\$ 342	\$ 342	\$ 342	
VILLENEUVE, J. & E.		271104000121800			0.40		\$ -	\$ -	\$ -	\$ 319	\$ 319	\$ 319	
MITCHELL, C.		271104000121700			0.48		\$ -	\$ -	\$ -	\$ 382	\$ 382	\$ 382	
RAMSEY, MATTHEW		271104000121600			0.57		\$ -	\$ -	\$ -	\$ 454	\$ 454	\$ 454	
LYONS, R.		271104000121501			0.44		\$ -	\$ -	\$ -	\$ 350	\$ 350	\$ 350	
STEVENS, A. & L.		271104000121500			1.32		\$ -	\$ -	\$ -	\$ 1,051	\$ 1,051	\$ 1,051	
MCPHERSON, B. & T.		271104000121401			0.44		\$ -	\$ -	\$ -	\$ 350	\$ 350	\$ 350	
NEWBY, ANTHONY TODD		271104000105500			0.15		\$ -	\$ -	\$ -	\$ 119	\$ 119	\$ 119	
COSBY, D.		271104000105400			0.45		\$ -	\$ -	\$ -	\$ 166	\$ 166	\$ 166	
COSBY, D.		271104000105400			8.60	193.3	\$ 19	\$ 387	\$ -	\$ 4,886	\$ 5,272	\$ 5,253	
LOCHHEAD, A. & K.		271104000105600			0.10		\$ -	\$ -	\$ -	\$ 37	\$ 37	\$ 37	
LOCHHEAD, A. & K.		271104000105600			1.83		\$ -	\$ -	\$ -	\$ 1,209	\$ 1,209	\$ 1,209	
BUGEJA, M. & A.		271104000121210			0.59		\$ -	\$ -	\$ -	\$ 470	\$ 470	\$ 470	
CLEE, G.		271104000138400			13.19	1027.3	\$ 1,294	\$ 2,055	\$ 683	\$ 5,357	\$ 8,094	\$ 6,800	
DAMUDE, R.		271104000105300			4.59	602.4	\$ 307	\$ 1,205	\$ 683	\$ 1,510	\$ 3,398	\$ 3,090	
LOBBEZOO, J. & P.		271104000105200			6.12		\$ -	\$ -	\$ -	\$ 1,716	\$ 1,716	\$ 1,716	
BUCK, J.		271104000105100			4.86		\$ -	\$ -	\$ -	\$ 1,746	\$ 1,746	\$ 1,746	
VAN DUZEN, A. & S.		271104000104000			0.64		\$ -	\$ -	\$ -	\$ 497	\$ 497	\$ 497	
VAN DUZEN, A. & S.		271104000104000			0.38		\$ -	\$ -	\$ -	\$ 206	\$ 206	\$ 206	

Revised: EWA Engineering Inc.
Amec Foster Wheeler

ZAVITZ MUNICIPAL DRAIN
TOWN OF FORT ERIE & CITY OF PORT COLBORNE
Regional Municipality of Niagara

ASSESSMENT SCHEDULE BASED ON ESTIMATED COSTS - ZAVITZ DRAIN

LANDOWNER NAME	ADDRESS	PROPERTY ROLL NO.	CON.	LOT	APPROX. AREA AFFECT. (ha)	APPROX. ABUT. LENGTH (m)	TOTAL ALLOW. (\$)	TOTAL BENEFIT (\$)	SPECIAL BENEFIT (\$)	TOTAL OUTLET (\$)	TOTAL ASSESS. (\$)	NET ASSESS. (\$)	
1		2	3	4	5		6	7	8	9	10	11	12
VAN DUZEN, A. & S.		271104000104200			1.37		\$ -	\$ -	\$ -	\$ 862	\$ 862	\$ 862	
VAN DUZEN, A. & S.		271104000104200			1.68		\$ -	\$ -	\$ -	\$ 795	\$ 795	\$ 795	
EBERLY TRUCKING LTD.		271104000104005			0.55		\$ -	\$ -	\$ -	\$ 331	\$ 331	\$ 331	
EBERLY TRUCKING LTD.		271104000104005			0.05		\$ -	\$ -	\$ -	\$ 27	\$ 27	\$ 27	
SMITH, ANDREW CHRISTOPHER		271104000138100			0.40		\$ -	\$ -	\$ -	\$ 212	\$ 212	\$ 212	
TOTAL : Landowners in the City of Port Colborne					97.83	1823.0	\$ 1,621	\$ 3,646	\$ 1,365	\$ 56,117	\$ 61,128	\$ 53,548	

City of Port Colborne Road Allowances

Pleasant Beach Road					1.22		\$ -	\$ -	\$ -	\$ 3,844	\$ 3,844	\$ 3,844	
Pleasant Beach Road (for Branch Drains)					0.26		\$ -	\$ -	\$ -	\$ 767	\$ 767	\$ 767	
Sherkston Road					1.18		\$ -	\$ -	\$ -	\$ 3,483	\$ 3,483	\$ 3,483	
Holloway Bay Road (South of Highway 3)					0.86		\$ -	\$ -	\$ -	\$ 1,851	\$ 1,851	\$ 1,851	
Holloway Bay Road (South of Highway 3) (for Branch Drains)					0.06		\$ -	\$ -	\$ -	\$ 174	\$ 174	\$ 174	
Holloway Bay Road (North of Highway 3)					0.46		\$ -	\$ -	\$ -	\$ 973	\$ 973	\$ 973	
Unopened Road Allowance (Zavitz Rd) between Roll #271104000138301 & #271104000138300					0.29		\$ -	\$ -	\$ -	\$ 153	\$ 153	\$ 153	
TOTAL : City of Port Colborne Road Allowances					4.32		\$ -	\$ -	\$ -	\$ 11,246	\$ 11,246	\$ 11,246	

Provincial Road Allowances in Port Colborne

Highway 3					5.09	48.6	\$ -	\$ 97	\$ -	\$ 10,869	\$ 10,966	\$ 10,966	
TOTAL : Provincial Road Allowances in Port Colborne					5.09	48.60	\$ -	\$ 97	\$ -	\$ 10,869	\$ 10,966	\$ 10,966	

Other Lands in Port Colborne

Friendship Trail - West of Pleasant Beach Road					0.56		\$ -	\$ -	\$ -	\$ 1,653	\$ 1,653	\$ 1,653	
Friendship Trail - Pleasant Beach Road to 205m east of Pleasant Beach Road					0.39		\$ -	\$ -	\$ -	\$ 1,151	\$ 1,151	\$ 1,151	
Friendship Trail - 145m west of Holloway Bay Road to 205m east of Pleasant Beach Road					0.61		\$ -	\$ -	\$ -	\$ 1,800	\$ 1,800	\$ 1,800	
TOTAL : Other Lands in Port Colborne					1.56		\$ -	\$ -	\$ -	\$ 4,604	\$ 4,604	\$ 4,604	

Special Assessments to Port Colborne

IV. CITY OF PORT COLBORNE (Pleasant Beach Rd)											\$ 223		
TOTAL - Special Assessments to Port Colborne											\$ 223		

SUBTOTAL: Lands and Roads in the City of Port Colborne					108.79	1871.60	\$ 1,621	\$ 3,743	\$ 1,365	\$ 82,836	\$ 88,168	\$ 80,365	
---	--	--	--	--	---------------	----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	--

Landowners in the Town of Fort Erie

GRIMES, D.A.		20025038010000			0.81		\$ -	\$ -	\$ -	\$ 901	\$ 901	\$ 901	
ANDY VEENSTRA FARMS LTD		20025040000000			24.45		\$ -	\$ -	\$ -	\$ 24,626	\$ 24,626	\$ 16,417	*
SPIRONELLO, A.		20018339000000			23.47	1009.3	\$ 900	\$ 2,019	\$ -	\$ 21,912	\$ 23,931	\$ 15,054	*
BEACH, C.M.		20018338000000			25.48	810.4	\$ 843	\$ 1,621	\$ -	\$ 16,585	\$ 18,205	\$ 11,294	*
BARRON, J. & M.		20025041000000			1.69		\$ -	\$ -	\$ -	\$ 509	\$ 509	\$ 509	
CAMPBELL, J & J.M.		20025040010000			7.25		\$ -	\$ -	\$ -	\$ 2,781	\$ 2,781	\$ 2,781	
VENTURINI, J. & A.		20025035000000			6.96		\$ -	\$ -	\$ -	\$ 3,669	\$ 3,669	\$ 2,446	*
MCDONALD, J.		20025018000000			2.22		\$ -	\$ -	\$ -	\$ 577	\$ 577	\$ 385	*
GREEN, K.R.		20018337000000			16.81	522.4	\$ 543	\$ 1,045	\$ -	\$ 6,727	\$ 7,771	\$ 4,638	*
BEACH, D. & C.		20018337010000			18.37	464.4	\$ 483	\$ 929	\$ -	\$ 6,784	\$ 7,713	\$ 4,659	*
CLARK, D.M.		20018336000000			21.91	539.8	\$ 561	\$ 1,080	\$ 2,275	\$ 5,152	\$ 8,507	\$ 5,110	*
WORONCHAK, M. & N.		20018335000000			8.79	274.4	\$ 285	\$ 549	\$ 2,275	\$ 697	\$ 3,521	\$ 2,082	*
TOTAL : Landowners in the Town of Fort Erie					156.21	3620.7	\$ 3,616	\$ 7,241	\$ 4,550	\$ 90,915	\$ 102,711	\$ 66,255	

Town of Fort Erie Road Allowances

Holloway Bay Road (South of Highway 3)					0.46	149.7	\$ -	\$ 299	\$ -	\$ 2,089	\$ 2,389	\$ 2,389	
Holloway Bay Road (North of Highway 3)					0.46		\$ -	\$ -	\$ -	\$ 2,046	\$ 2,046	\$ 2,046	
Mathews Road					2.72	41.0	\$ -	\$ 82	\$ -	\$ 5,788	\$ 5,870	\$ 5,870	
Nigh Road					1.47		\$ -	\$ -	\$ -	\$ 3,128	\$ 3,128	\$ 3,128	
Unopened Road Allowance between Concession 2 LE & 3 LE, Lot 34					1.25		\$ -	\$ -	\$ -	\$ 2,660	\$ 2,660	\$ 2,660	

ZAVITZ MUNICIPAL DRAIN
TOWN OF FORT ERIE & CITY OF PORT COLBORNE
Regional Municipality of Niagara

ASSESSMENT SCHEDULE BASED ON ESTIMATED COSTS - ZAVITZ DRAIN

LANDOWNER NAME	ADDRESS	PROPERTY ROLL NO.	CON.	LOT	APPROX. AREA AFFECT. (ha)	APPROX. ABUT. LENGTH (m)	TOTAL ALLOW. (\$)	TOTAL BENEFIT (\$)	SPECIAL BENEFIT (\$)	TOTAL OUTLET (\$)	TOTAL ASSESS. (\$)	NET ASSESS. (\$)	
1		2	3	4	5		6	7	8	9	10	11	12
TOTAL: Town of Fort Erie Road Allowances					6.36	190.68	\$ -	\$ 381	\$ -	\$ 15,712	\$ 16,094	\$ 16,094	

Provincial Road Allowances in Fort Erie

Highway 3					6.02	74.0	\$ -	\$ 148	\$ -	\$ 27,022	\$ 27,170	\$ 27,170	
TOTAL: Provincial Road Allowances in Fort Erie					6.02	74.00	\$ -	\$ 148	\$ -	\$ 27,022	\$ 27,170	\$ 27,170	

Other Lands in Fort Erie

Friendship Trail					0.43		\$ -	\$ -	\$ -	\$ 907	\$ 907	\$ 907	
TOTAL: Other Lands in Fort Erie					0.43		\$ -	\$ -	\$ -	\$ 907	\$ 907	\$ 907	

Special Assessments to Fort Erie

I. TOWN OF FORT ERIE (Mathews Road)											\$ 1,349		
II. TOWN OF FORT ERIE (East Side of Holloway Bay Rd)											\$ 1,663		
TOTAL - Special Assessments											\$ 3,012		

Special Assessments to Others

III. MINISTRY OF TRANSPORTATION ONTARIO (HIGHWAY 3 ROW)											\$ 681		
V. ENBRIDGE GAS (PLEASANT BEACH ROAD)											\$ 2,758		
TOTAL - Special Assessments											\$ 3,439		

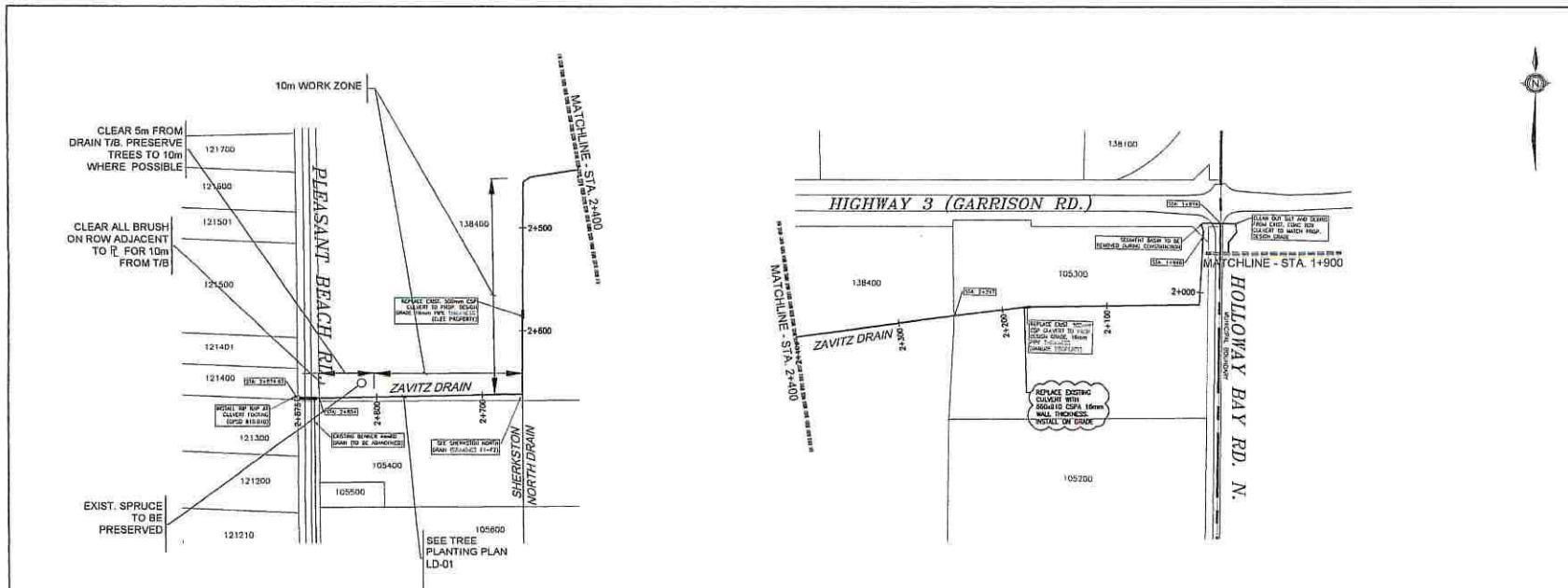
SUBTOTAL: Lands and Roads in the Town of Fort Erie					171.02	3885.40	\$ 3,616	\$ 7,771	\$ 4,550	\$ 134,560	\$ 153,332	\$ 110,425	
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TOTAL: Zavitz Municipal Drain					279.82	5757.00	\$ 5,237	\$ 11,514	\$ 5,915	\$ 217,397	\$ 241,500	\$ 190,790	
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Future Maintenance costs shall be assessed in the same relative proportion as the outlet assessment for each property. \$ 234,826

Description of Information contained in the Assessment Schedule \$ 241,500

- Column 1 Name of Landowner from Assessment Roll maintained by MPAC.
- Column 2 Property Roll Number from Assessment Roll maintained by MPAC.
- Column 3 Township Concession where lands located.
- Column 4 Township Lot where lands located.
- Column 5 Approx. area of land, in hectares, to be drained by Zavitz Municipal Drain.
- Column 6 In accordance with Sections 29 and 30 of the Drainage Act, allowance to be paid to landowner based on value of land lost due to:
 - construction or improvement of drainage works
 - disposal of excavated material
 - damage to trees, lawns, fences, lands and crops
- Column 7 In accordance with Section 22 of the Drainage Act, increased value of land adjacent to the Drain due to improvement to the Drain
- Column 8 In accordance with Section 24 of the Drainage Act, additional work to the drain which has no effect on the functioning of the Drain
- Column 9 In accordance Section 23 of the Drainage Act, increased value of land due to improved outlet for lands to be drained.
- Column 10 Total Assessment is the Sum of Column 7 (Benefit), Column 8 (Special Benefit), and Column 9 (Outlet)
- Column 11 Net Assessment is Column 10 (Total Assessment) less Column 6 (Total Allowance).
- Column 12 * Indicates agricultural land which is potentially eligible for OMAFRA subsidy.
Net Assessment can be calculated by subtracting the OMAFRA subsidy from the Net Assessment.



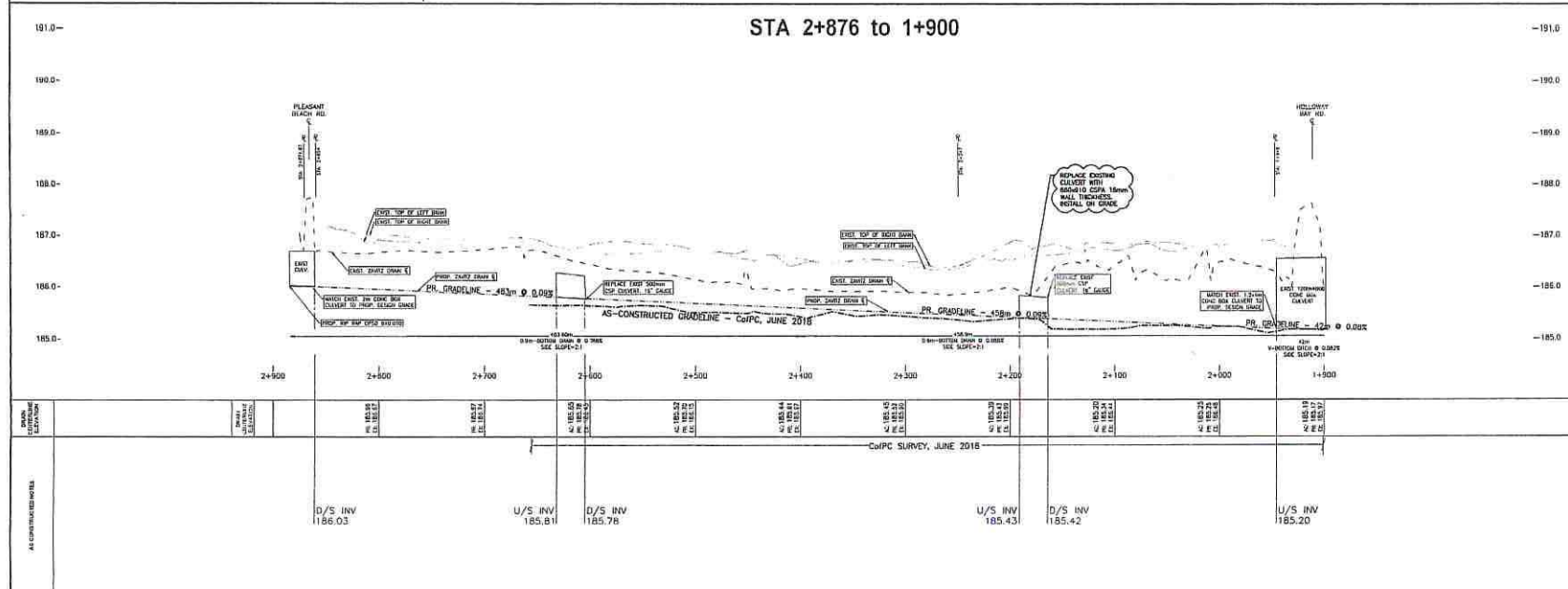
- NOTES:**
1. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED
 2. REMAIN AROUND DRAIN TO BE ABANDONED BY DRAIN REPORT, 20th APR, 2018
 3. AS CONSTRUCTED DATA PROVIDED BY CoPC SURVEY COMPLETED JUNE, 2018 AND SITE INSPECTION FOR X-SECTIONS ON NOV. 14, 2018

- SPATIAL DATA:**
- DTM DATA FROM NIAGARA PENINSULA CONSERVATION AUTHORITY.
 - HORIZONTAL DATUM UTM NAD83-CRS ZONE 17N
 - VERTICAL DATUM EGCS-1988
 - ACCURACY ABSOLUTE HORIZONTAL AND VERTICAL POSITIONAL ACCURACIES OF ± 0.5m
 - CURVE SURVEY ± 3mm

LEGEND

---	EXISTING DRAIN
---	PROPOSED 2018 DRAIN GRADIENT-PA, 2018
---	AS-CONSTRUCTED DRAIN
---	LEFT SURFACE LIMIT
---	RIGHT SURFACE LIMIT
---	EXISTING DRAIN SECTION
---	EXISTING STRUCTURE DETAILS
---	ASSUMED EXISTING STRUCTURE DETAILS
---	FORM SLOPE FROM TOP SURFACE
---	VERT. CURVE
---	DATA FROM HISTORICAL DESIGN GRADIENT
(0.000)	(HORIZONTAL BEG., VERTICAL END.)

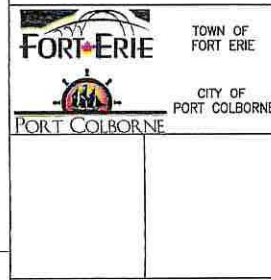
NO.	REVISION DESCRIPTION	DATE
1	REV. 1	11-31-2018



THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL NOTIFY HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE DONE TO THEM.

ZAVITV MUNICIPAL DRAIN PLAN & PROFILES
ZAVITV DRAIN



Paul C. Harsh, P.Eng. Principal Engineer
EWA Engineering Inc.
 24 Hwy 10 West, Port Colborne, Ontario
 905-531-4424 www.ewaeng.com

Automated Engineering Technologies Ltd.

1145 Hwy 10 West, Port Colborne, Ontario L2E 1E3
 905-531-4424 www.automatedeng.com

Drawn by:	Checked by:	Project No.:	Sheet No.:
BAC	---	183985	P1
Designed by:	Date:	Project Scale:	
---	19-Nov-18	1:1	



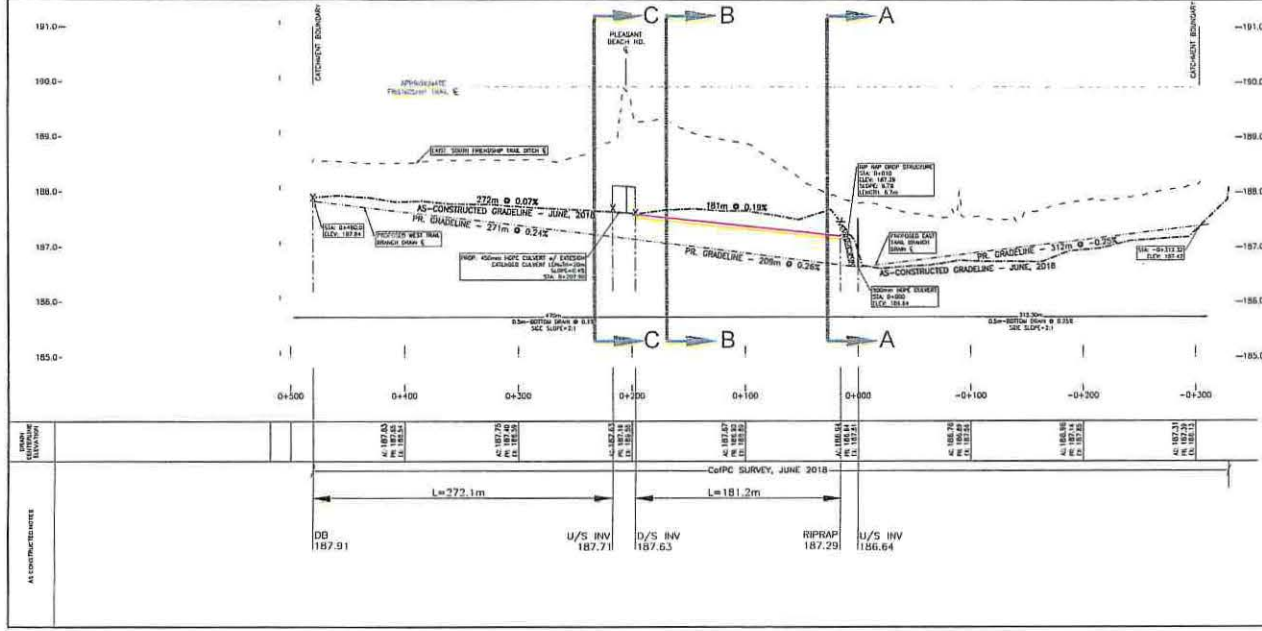
- NOTES:**
1. DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED
 2. REMOVED AMEND DRAW TO BE ABANDONED BY DRAWN REPORT, 24th APR, 2018
 3. AS CONSTRUCTED DATA PROVIDED BY CAPIC SURVEY COMPLETED JUNE 2018 AND SITE INSPECTION FOR 2-SECTIONS ON NOV. 14, 2018

- SPATIAL DATA:**
- DATA FROM REGIONAL FREDERICK COUNTY/STANLEY AUTHORITY
 - HORIZONTAL DATUM: UTM NAD83-CRS ZONE 17M
 - VERTICAL DATUM: CGVD28-1978
 - ACCURACY: ABSOLUTE HORIZONTAL AND VERTICAL POSITIONS, ACCURACY OF ± 0.5m
 - CAPIC GPS SURVEY ± 2mm

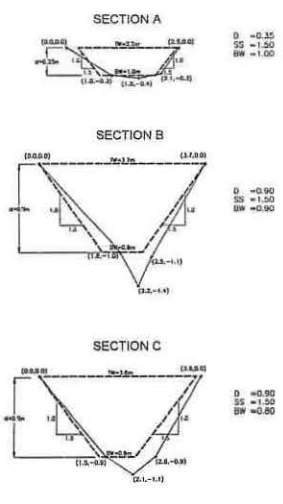
LEGEND

---	EXISTING EARTH E
---	PROPOSED 2018 DRAIN GRADIENT (DMA, 2018)
---	AS-CONSTRUCTED DRAIN E
---	LEFT SURFACE LINE
---	RIGHT SURFACE LINE
---	EXISTING DRAIN SECTION
---	EXISTING STRUCTURE DETAILS
---	ASSUMED EXISTING STRUCTURE DETAILS
---	POLE DATA FROM '06 SURVEY' (NOV. 2015)
---	DATA FROM REGIONAL FREDERICK COUNTY/STANLEY AUTHORITY (HORIZONTAL, VERTICAL, HEAVY)

STA 0+481 to -0+304



X-SECTIONS:
SCALE H=1.50, V=1.25



NOTE: HORIZONTAL AND VERTICAL MEASUREMENTS ARE FROM TOP OF NORTH BANK.

— SURVEY
--- EQUIVALENT TRAPEZOID

NO.	REVISION DESCRIPTION	DATE

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWER, AND OTHER UNDERGROUNDS AND PROPOSED UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONSTRUCT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE DONE TO THEM.

ZAVITZ MUNICIPAL DRAIN PLAN & PROFILES EAST & WEST TRAIL BRANCH DRAINS

TOWN OF FORT ERIE
CITY OF PORT COLBORNE

Paul C. Maritz, P.Eng. Principal Engineer
EWA Engineering Inc.
44 Main Street, Stouffville, Ontario L4R 1R1
905.967.8824 www.ewaeng.com

Automated Engineering Technologies Ltd.

Drawn By:	Checked By:	Project No.:	Sheet No.:

Scale: 1:10000 V=1:40

January 9, 2019

Attention: Mr. Dave Maiden
Drainage Superintendent
Town of Fort Erie
Town Hall, 1 Municipal Centre Drive
Fort Erie, ON, L2A 2S6
905 871-1600 Ext. 2405
<DMaiden@forterie.ca>
Copy to: Ms. Alana Vander Veen,
Drainage Superintendent, City of Port Colborne

Dear Mr. Maiden:

Please find our report amending the original Zavitz Drain Report prepared by Amec Foster Wheeler and sealed by myself. These changes to the report were identified during constructions as follows:

- Increase in culvert capacity for the Zavitz drain located on the Damude Property identified as Roll No. 271104000105300.
- A revision in the Drain grade line on the West Trail Branch Drain adjacent to the Friendship Trail.
- Changes to the working easement and allowance calculations for the Clee and Cosby properties.

These changes are located in the City of Port Colborne portion of the Zavitz Drain works and are brought forward for consideration under Section 58 (4) of the Drainage Act, which is to approve changes in the drainage design and drainage schedule before final drain commissioning into service and after the report adoption by Bylaw.

For the execution of this work, I have attended the site, met with Mr. Clee and performed a technical review of the information available. The amended portions of the report follow this letter.

Yours truly,



Paul C. Marsh, P.Eng.
Principal Engineer
EWA Engineering Inc.
pcmarsh@ewaeng.com

1 Introduction

The Town of Fort Erie appointed Mr. Paul Marsh, P.Eng. of EWA Engineering as drainage engineer for the Zavitz Drain by Council bylaw.

1.1 Background

The Zavitz Drain Report was originally prepared by the appointed engineering firm, Amec Foster Wheeler and sealed by Paul Marsh, P.Eng. as part of the Drainage Tribunal hearings in 2016. Construction commenced in 2018.

From the original drain report, there have been three significant changes made to the original design.

1. Mr. Damude requested that a larger culvert was required on his property than the design replacement culvert sized as 500mm circular CSP.
2. Port Colborne Acting Drainage Superintendent Ms. Alana Vander Veen revised the drain grade line for the West Trail Drain to prevent the drain from being too deep adjacent to the Friendship Trail. This affected the proposed relaying of the culvert crossing Pleasant Beach Road.
3. After 140m of trees were cleared from the Clee property on the North side of the Zavitz Drain, from a total length of 193.3m, Mr. Clee requested that construction be halted. The drainage report provided an allowance to Mr. Clee (North side of the drain) under Section 30 but directed work to be done from the South side where an allowance for work was not granted to Mr. Cosby.

2 Study Approach

Information relevant to the construction notes and changes was provided to EWA Engineering for review and consideration.

A site visit was conducted on November 14, 2018 and the following activities were performed:

1. A visual inspection of the works along the Friendship Trail was performed.
2. A survey of drainage swale cross-section was collected in three locations.
3. It was identified that GPS survey data of the West trail, East Trail was available and the City of Port Colborne would provide the information.
4. A meeting with Mr. Clee was held and a walking tour of his property was performed along with a discussion of potential options to proceed.

EWA reviewed the hydrologic modelling information prepared by Amec Foster Wheeler as part of the original design work completed for the Zavitz drain. Additional calculations and analysis were performed, which are included in the Appendix to this report.

2.1 Previous Reports and Studies

Original Computer Aided Design (CAD) files were not made available for the project by Amec Foster Wheeler (now the Wood Group).

Data from NPCA was already in the possession of EWA Engineering for a related project that also covered the Port Colborne portion of the Zavitz Drain.

Previous versions of reports and Assessment schedules were provided by the Town of Fort Erie.

Specific information, marked up plans, are included as Attachment A.

3 Methodology

Site data collection to verify construction work along with survey data and review of predictive runoff calculations to confirm design standards is considered a suitable methodology for resolving the changes made to design in the field.

4 Analysis

The following are the three aspects of change from the original design considered for review.

4.1 West Trail Grade Line Changes

The following is the redline Mark up from the Acting Drainage Superintendent Alana Vander Veen for the changes in design grade line.

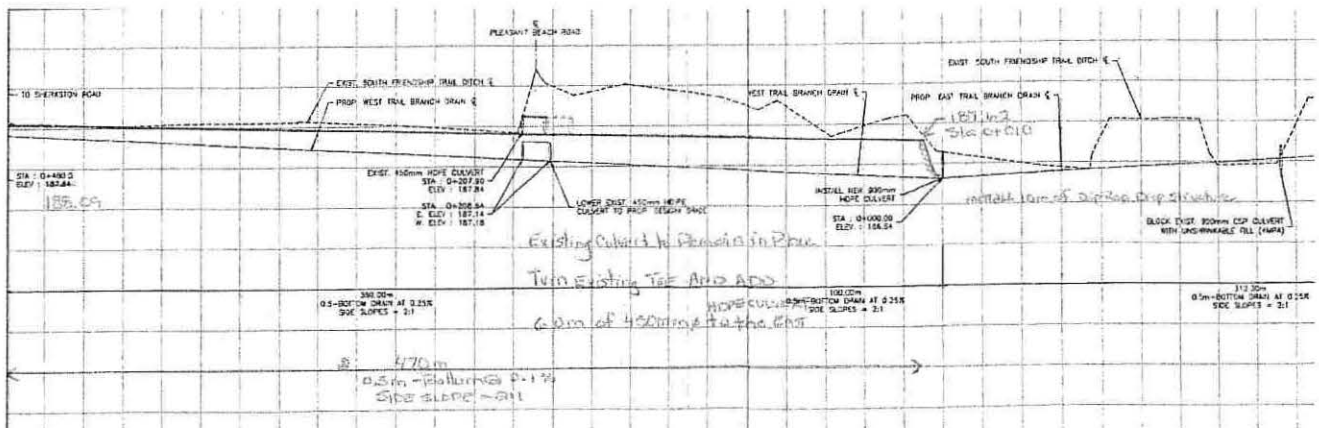


Figure 1 West Trail Design Revisions During Construction

The affected changes shown above are as follows:

1. A rip rap drop structure was introduced at the outlet of the West Trail and before the entrance to the 900mm culvert crossing the Friendship Trail.
2. The proposed grade line of the West Trail was changed from 0.25 % to 0.1%.
3. The culvert was not lowered but extended in place with an extension of the same size and material.

4. No change in the grade line for East Trail were proposed or made.

The concern for the changes are related to the potential for failures caused by the following:

- A. A lower grade will reduce the conveyance capacity of the drain without any additional compensatory change such as wider bottom or side slopes.
- B. The extension of the culvert will reduce conveyance capacity and might be below the design standard.
- C. Increase in drain slope at the outlet might lead to erosion of the base grade.

Cross section profiles were collected during the site visit at the following Cross-sections:

4.1.1 West Trail Station 0+230 Section C

The survey data collected shows the following channel cross section.

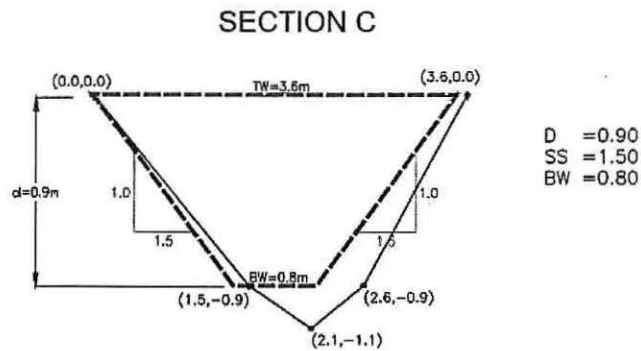


Figure 2 West Trail 0+230 Section C

Top width bankfull flow at a depth of 0.9m is shown to be 3.6m.

4.1.2 West Trail Station 0+170 Section B

The survey shows the following channel cross section.

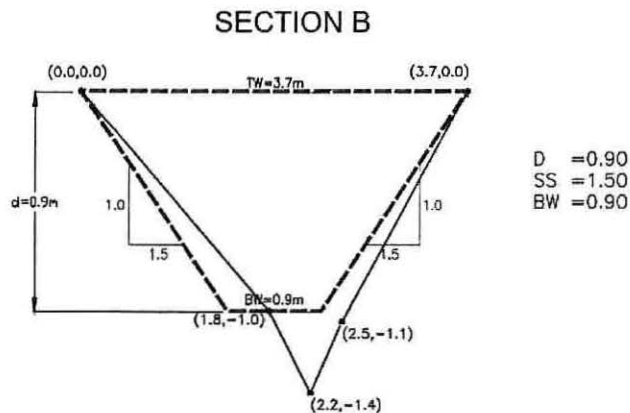


Figure 3 West Trail Station 0+170 Section B

4.1.3 West Trail Station 0+030 Section A

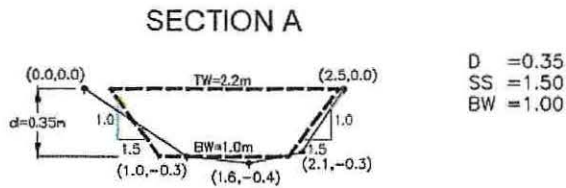


Figure 4 West Trail Station 0+030 Section A

For each cross-section an equivalent trapezoid was used to confirm the design capacity. It's recognized that a potentially slightly larger capacity may exist based on the specific measurements made but that a comparison against trapezoidal design as stated in the original design plan & profile drawings is required for comparison.

The Rational Method was used to predict the channel capacity for a 1:2 year flow of 0.065 cms with a 1:5 year flow of 0.088 using a 1 hour intensity value.

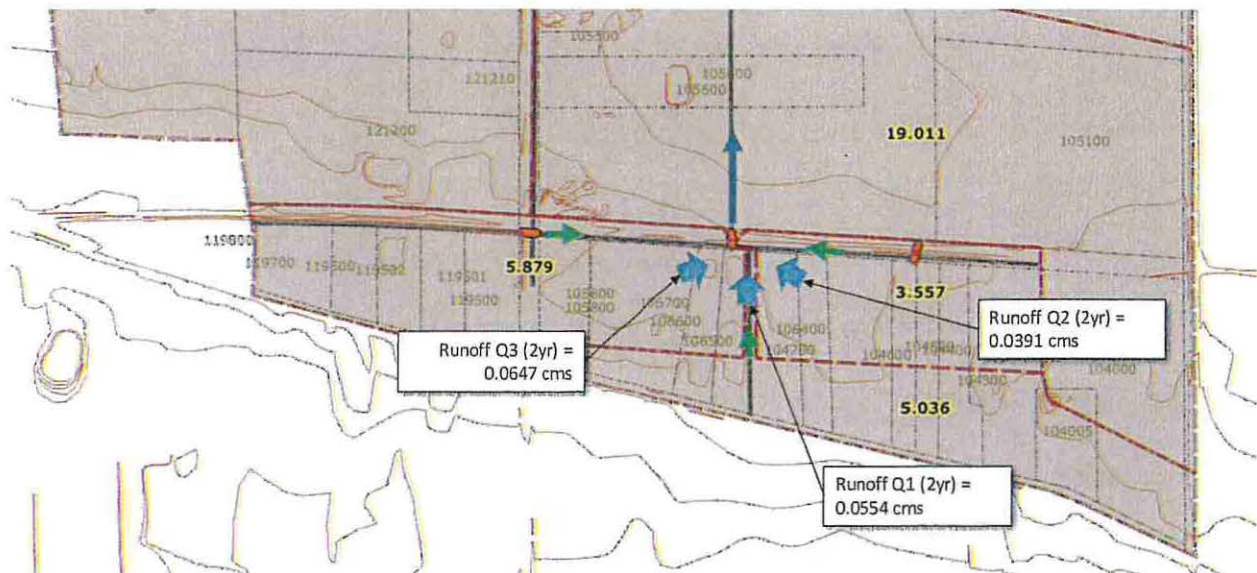


Figure 5 West Trail Catchment Areas

The capacity of the equivalent trapezoidal channels was calculated to be as follows:

Table 1 West Trail Channel Capacity

Channel ID	Length (m)	Slope, (m/m)	Manning n coeff	Bottom Width, BW (m)	Depth, D (m)	Bank Slope, (m)	Q_c (m ³ /s)
Sect - A		0.0019	0.022	1	0.35	1.5	0.404
Sect - B		0.0019	0.022	0.8	1	1.5	2.955
Sect - C		0.0007	0.022	1.1	0.9	1.5	1.687

The slope was determined based on the GPS survey data, collected post construction by City of Port Colborne, for the crossing inverts and for the base grade points. The survey showed the base grade points are not graded correctly and will need to be revised to grade positively towards the outlet.

The grade lines used in the calculation are shown in the following figure.

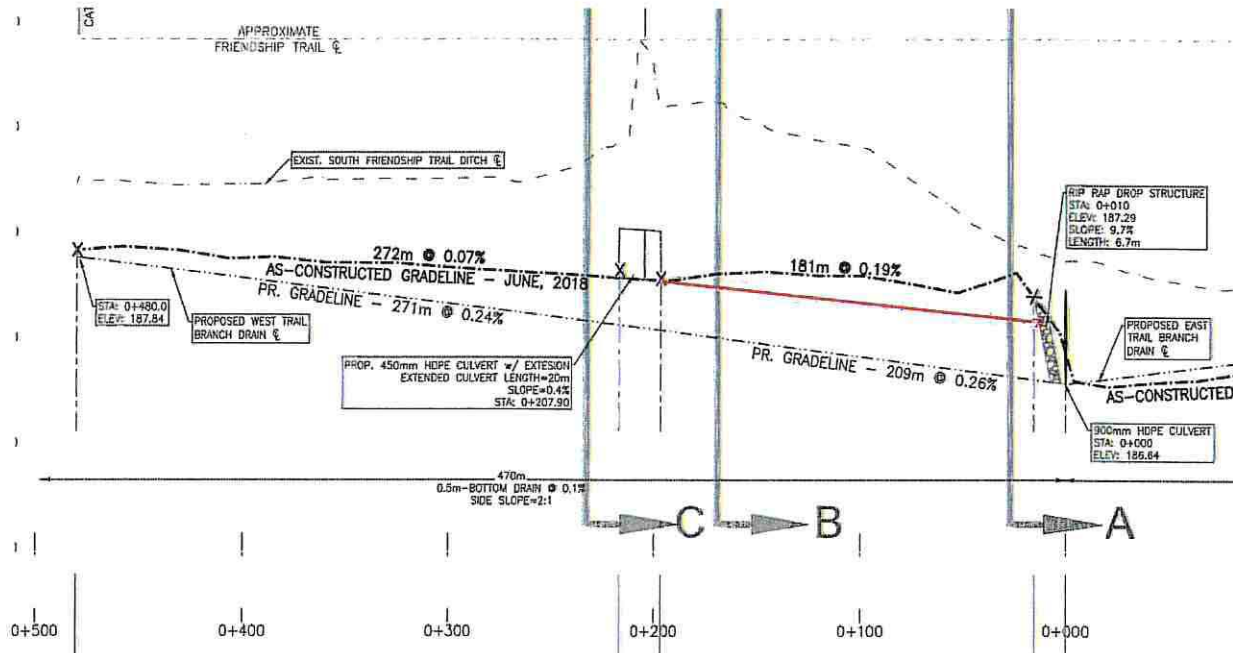


Figure 6 West Trail Revised Design Grade Lines

From this we can conclude that the drain as constructed has adequate capacity for the predicted runoff from the Rational method. However, the lower section of the West Trail East of the Pleasant Beach Road requires re-grading to match the design. During the site visit water was seen to be ponding in this section. This indicates that the bottom of the ditch should be regraded to better match the design shown in Figure 6 West Trail Revised Design Grade Lines as the red arrow.

Calculations are included as Attachment B.

4.2 Zavitz Drain Culvert Size Changes

Original Report contained like for like culvert replacements with two 500mm CSP culverts being required on two properties; Damude and Clee.

Review of the previous SWMHymo modelling work completed for the Zavitz Drain shows that runoff computations for the 1:2 year storm were analyzed and reported as 6 hour SCS storm runoff of 1.608 cms (revised to 1.560). The CN value used was 75, perhaps slightly on the high side for such a flat area that is largely forested or scrub large rural / urban fringe lot sizes with large lawn coverage.

Time to peak reported as 12.16 hours but with a run-time warning that the time step value used was too large and may affect time to peak results.

The SWMHYMO file; ZavFinal.out reported the following results:

- 1.253 based on a CN of 73.50 (which is considered more appropriate)
- Time to peak of 12.33 hrs with the same warnings.

Comparison with Rational Method calculations to benchmark runoff results resulted in a peak flow predicted value of 0.944 cms based on a runoff coefficient of 0.17, which is suitable for rural lot area with grades less than 2%. (local grades are actually less than 0.2%)

Culvert design capacity of 1 cms is considered the design requirement for the two private crossings. The free flow capacity of the existing and design 500mm CSP culverts is given as 0.3 cms, too low in comparison with the design capacity.

A comparison of upstream and downstream and downstream channel capacity shows that the channels as constructed through the land area upstream of the culverts are low in capacity.

The calculation record is included in Attachment C.

4.3 Zavitz Drain Work Zone Changes

A review of the Allowances for the property shows that two allowances were considered:

- A Section 29 allowance that is paid for permanent or long term negative impacts to land use. Typically associated with permanent easements in favour of maintenance or degradation of soil capability from soil spreading.
- A Section 30 allowance that is paid for construction impacts to use, such as crop disturbances or ornamental trees. This is a one time payment for negative impact of construction.

From the original report, For the Zavitz Drain, page 43 Section 8.2.

"No allowances have been granted under Chapter D.17 Section 29 as the work anticipated does not meet the requirements as set out in Chapter D.17, Section 29."

"The allowances paid under the Drainage Act, Chapter D.17, Section 30 (note changed from original text) are based on a value of \$1,000 per hectare for wooded areas, \$2,000 per hectare for cultivated lands and \$5,000 per hectare for the lands that are mostly residential and being in use."

For the Sherkston North Branch, there were Section 29 allowances made but none were recorded for the Zavitz Drain.

From the Assessment summary in the report, page 43.

Town of Fort Erie
Zavitz Drain Report Amendment

Roll No.	Property Owner Name	Chapter D.17, Section 29	Chapter D.17, Section 30	Total
Zavitz Drain – Fort Erie				
20018339000000	Spironello, A.	--	\$ 880	\$ 880
20018338000000	Beach, C.M.	--	\$ 827	\$ 827
20118337000000	Green, K.R.	--	\$ 533	\$ 533
20018337010000	Beach, D. & C.	--	\$ 474	\$ 474
20018336000000	Clark, D.M.	--	\$ 551	\$ 551
20018335000000	Woronchak, M. & N.	--	\$ 280	\$ 280
Total Allowances – Fort Erie				\$ 3,543
Zavitz Drain – Port Colborne				
271104000105400	Cosby, D.	--	\$ 406	\$ 406
271104000138400	Clee, J.	--	\$ 1,294	\$ 1,294
271104000105300	Damude, R.	--	\$ 307	\$ 307
Total Allowances – Port Colborne				\$ 2,008
Total Allowances – Zavitz Drain				\$ 5,551

Project No: TP110120 / TP110120A

Page 43

Figure 7 Original Report Assessment Allowances

The section 30 allowance for Property 138400 was \$1,294 and based on the following:

- A calculated working space allowance of 10m Right Width and 610.3m Length for a total impacted area of 0.610 Ha and a calculated value of \$1,221.
- A channel allowance for the increase in drain top width from 2.1m to 2.5m Right and 2.5m from 2.2m Left; Width and 610.3m length Right and 417.0m Left for a total impacted area of 0.024Ha and 0.013Ha with a value of \$74.

The Section 30 allowance for Property 105400 was \$406 and based on the following:

- A calculated working allowance of 10m Left Width for a distance of 193.3m for a total impacted area of 0.193 Ha and a calculated value of \$387.
- A channel allowance for the increase in top with from 2.0 to 2.5 for a distance of 193.3m and an impacted area of 0.0.10 Ha with a value of \$19.

From page 32 of the Drain Report,

271104000138400 Clee, J. R. (both sides)	STA 2+268.2 to STA 2+685.2 Clean out approximately 417.0 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Remove existing culvert and replace with new 500mm CSP culvert at STA 2+601.8 to be installed. Spoil to be levelled adjacent to the drain (see Section 6.5). Work to be undertaken from north and west side of drain.
271104000138400 Clee, J. R. (north side) and 271104000105400 Cosby, D. (south side)	STA 2+685.2 to STA 2+878.5 Clean out approximately 193.3 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Spoil to be levelled adjacent to the drain (see Section 6.5). Work to be undertaken from south side of drain

Shows that the plan of work was for the grade line restoration and spoil was to be removed from the South side of the drain for the last 193.3m of the drain East of the Pleasant Beach Road.

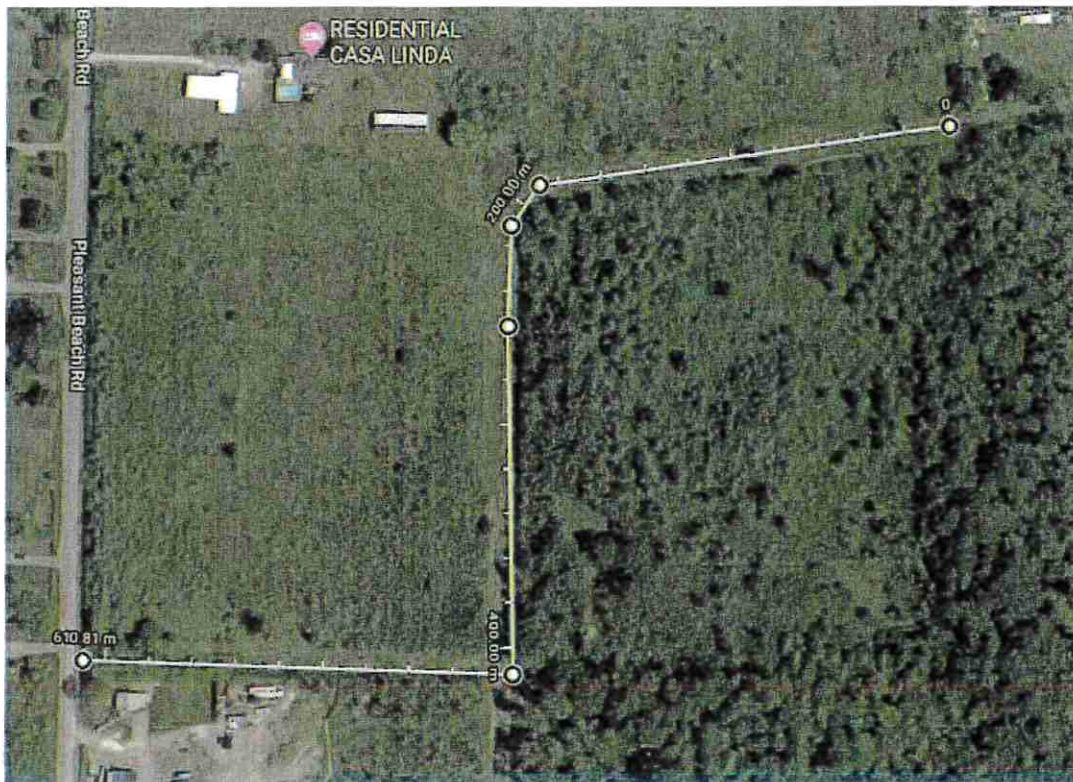


Figure 8 Drain Length for Allowance Calculation

This image from Google maps shows a measurement of the drain allowance for Section 30 calculation for the Clee Property 138400 was calculated based on 610m of length, which is the entire length of property adjacent to the North, West and North of the drain as an allowance for clearing and cleaning.

From the 1979 Report prepared by CJ Clarke Consulting Engineers,

"This drain was last cleaned out in conjunction with the repair the Baer Drain under the 1957 report ..."

"Allowances for damages to lands and crops (if any) under Section 30 of the Drainage Act are as follows: ..."

ZAVITZ DRAIN: City of Port Colborne Allowances

<u>Owner</u>	<u>Con.</u>	<u>Lot or Part</u>	<u>Allowance</u>
Robert Jane	1	1	\$ 35.00
Jos. Clee	1	2	\$ 85.00

There were no allowances granted for work on the now Cosby property.

From the 1947 Report,

"We recommend that the Zavitz Drain be constructed at the location shown colored in red on the Flat Plan attached to and part of this report and that it be constructed to the bottom widths, side slopes and grade lines as shown on our Profile attached to and part of this report."

"ALLOWANCE FOR DAMAGE TO LANDS & CROPS & DISPOSAL OF MATERIAL" (predates the revised Drainage Act of 1974).

ALLOWANCE FOR DAMAGE TO LANDS & CROPS & DISPOSAL OF MATERIAL

Elis Zavitz	15.00	
Geo. Beckstead	5.00	
W. A. Schoenburn	15.00	
		35.00

Note: the Clee property was formerly the Zavitz property. The Cosby property was formerly the Mathes property, which did not receive an allowance.

No assessment for damages were planned for work on the South side of the drain in either the 1947 report or in the 1979 report. This establishes that historically the drain has always been cleaned from the North and West sides of the drain.

From OMAFRA Publication 852, "A Guide for Engineers working under the Drainage Act in Ontario, published 2018, Queen's Printer for Ontario, Toronto, Ontario

Page 55,

"When a drain is constructed, the municipality acquires a right-of-way or easement along the drain. If property owners plant trees within this right-of-way without permission, allowances are typically not provided for Section 78 reports."

Generally, this recognizes that a municipality reserves the access privilege to perform future works from the easement without incurring undo costs that affect other ratepayers within the drain watershed.

From the site visit that was conducted on November 14, 2018, the stumps left behind by the cutting of trees on the North Side of the Drain appeared to show that the trees were planted into the spoil bank from the previous drain cleaning. This indicates, as per the Drain allowance, that work was undertaken from the North side of the Drain and the landowner subsequently planted trees adjacent to the Drain.



Figure 9 View of South Bank Zavitz Drain looking East

This image from Google Maps shows the extent of the drain already cleared on the North Side.



Figure 10 140m of the North Side of Zavitz Drained Already Cleared

The remaining drain to be cleared is 193.3m of original distance to be cleared minus the distance already cleared, 140m is 53.3m. This is the area adjacent to the existing house and the septic tank located at the North East Corner of the house. The view of the drain from the roadway shows the distance between the drain, the house and the septic tank.



Figure 11 Zavitz Drain from Pleasant Beach Road looking East

A tree restoration plan was presented to Mr. Clee on or about November 26, 2018 and the owner refused to accept the plan by email dated, December 21, 2018.

Summary:

1. The Spruce trees were planted by Mr. Clee into the spoil pile from the previous drain clearing and in the way of future drain cleaning efforts.
2. The report incorrectly stated the drain was to be cleared from the South side when the allowance was calculated for the North side and South Side.
3. The north side has already been cleared for a distance of approximately 140m of the allowed 193.3m. The remaining 50m is in conflict with the existing house and septic tank and tile bed.
4. A proposal was presented to Mr. Clee to complete the remaining work to conduct drain maintenance from the North side preserving as many trees as possible along with a tree restoration plan, showing trees to be planted outside of a 10m buffer distance from the drain, which he did not accept.

4.4 Additional Zavitz Drain Changes not already noted

The original design had a rock check dam (OPSD 219.210) shown on the plan & profile at Station 2+037.4. The details page included OPSD 219.211, which is a temporary Rock Flow Check dam for a flat bottom ditch.

As the design called for a flat bottom ditch, the call out text should have referenced OPSD 219.211. Since the temporary placement was intended to be during construction and removed later, it is no longer shown on the drawings composed as a record of construction.

5 Recommendations

5.1 West Trail Grade Line Changes

The revised grade line change along with constructed channels have adequate capacity to meet the predicted design flow. The actual Grade line constructed to the East of Pleasant Beach Rd. to date is not as per the revised design grade line and should be addressed through construction regrading.

Revised drawings indicating the changes are included as Attachment E. A view of the constructed drain is presented in the following figure.



Figure 12 Zavitz West Trail Branch Drain post construction looking East

There are no changes indicated for the assessment schedule based on the construction changes to the grade line.

5.2 Zavitz Culvert Sizes

It is recommended that the culvert located on the Damude property be upsized to the minimum Corrugated Steel Pipe Arch CSPA 910x660

The benefit of upsizing the culvert on the Clee property is not as clear as the upstream drain channel capacity is limited; however, the culvert may also be upsized to the CSPA 910x660.

The actual culvert costs will be assessed using the same basis as the original assessment schedule.

5.3 Zavitz Work Zone and Section 30 Allowance for Property ARN 271104000138400

Replace the description on page 32 of the report with the following text.

271104000138400 Clee, J. R. (north side) and 271104000105400 Cosby, D. (south side)	STA 2+685.2 to STA 2+878.5 Clean out approximately 193.3 m of existing channel to the design grade and dimensions as noted on the enclosed plans, including removal of debris and obstructions. Spoil to be levelled adjacent to the drain (see <i>Section 6.5</i>). Work to be undertaken from North side of drain.
--	---

The Assessment schedule is changed to remove the allowance credit from Mr. Cosby. This change affects all the other calculated assessments by redistributing costs as shown in the following Assessment Schedule shown in Attachment E.

The Revised Allowance will impact two property owners directly and all property owners indirectly. The removal of the allowance for work zone from the Cosby property reduces the total allowance for that property. The allowance for the Clee property remains unchanged.

Engineer's Seal:

Paul C. Marsh, P.Eng.
Principal Engineer
EWA Engineering Inc.
pcmarsh@ewaeng.com



List of Attachments:

- A. First Attachment: Documents related to request for Section 58 (4) to Tribunal.
- B. Calculations to assess West Trail Drain Capacity.
- C. Calculations to assess Zavitz Culvert Capacity
- D. Tree Restoration Plan presented to Mr. Clee.
- E. Revised Design Drawings and Assessment Schedule.

Report Number: 2019-13

Date: February 11, 2019

Subject: Encroachment request 104 Fraser Street

1) PURPOSE

This report was prepared by Sherry Hanson, Manager of By-law Services under the direction of Dan Aquilina, Director of Planning & Development. The purpose of this report is to present Council with an encroachment request from Yvon Mousseau new owner of 104 Fraser Street for an existing carport, deck and stairs located on or overhanging the City's active rail line.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES

The Encroachment application fee has been temporarily waived as per Council directive at the August 8, 2016 Council Meeting. Legal is still working on a formalized policy and By-law and this office will be brought forward for Council approval once received.

Encroachment requirements:

- Complete application form and pay (payment temporarily waived);
- Provide site plan of proposed encroachment;
- Provide \$5 million dollars, liability insurance, The Corporation of the City of Port Colborne as additional insured with a 30-day cancellation certificate;
- Sign and abide by the Encroachment License Agreement;
- \$50 yearly renewal fee (fee temporarily waived) and current insurance.
- Register Encroachment License Agreement on title.

Mr. Mousseau purchased and applied for a building permit to renovate and establish commercial office space in this building. During the application process it was noted that some portions of the building extensions are encroaching on the adjacent active railway land. Therefore, before any building permit can be issued to renovate the building, all encroachment issues need to be addressed.

It is not the practice of the municipality to allow permanent structures, buildings or houses to be erected on City property, however, the carport is a long standing encroachment and the stairs were erected prior without a permit. Mr. Mousseau is trying to obtain and renovate as per the regulations.

The encroachments are minor and Mr. Mousseau has retained Lanthier and Gilmore to provide an accurate measurement and drawing of the encroachment which will be registered on title if Council approves this report. He has the ability to obtain commercial insurance naming the City as additional insured and has completed the requested application and survey of the property and further, a license agreement to reflect the conditions approved by Council and the appropriate parties can be prepared for signatures.

3) STAFF COMMENTS AND DISCUSSIONS

Planning Comments:

The section of the building that encroaches on the City-owned railway right-of-way was constructed after a minor variance was granted in 1987 (File A16/87). It appears that incorrect information was submitted with the minor variance application regarding the location of the rear lot line for 104 Fraser Street. The site plan that accompanied the application shows that there should be 2.4m (8ft) between the rear lot line at the north-eastern corner of the building. Evidently, this is incorrect and the north-east corner of the building now projects 2.26m (7.4ft) onto the railway right-of-way. Nevertheless, the minor variance was granted and the structure has been in place since the late 1980s. The Planning Division is supportive of this encroachment agreement as a way to recognize this zoning deficiency and provide a legal agreement for its continued existence.

Building Comments:

Building has received a Building Permit application for renovations to the encroaching structure. The application acknowledges that the existing building and stair landing encroaches over the northerly property boundary, though the extent of the encroachments is not clear.

The owner was advised that a survey, prepared by an Ontario Land Surveyor (OLS), showing the extent of the encroachments must be provided, and an Encroachment Agreement with the City of Port Colborne executed, prior to issuance of the permit.

Fire Comments:

The Fire Department has no adverse comments regarding this proposed encroachment.

Engineering Comments

The Engineering Division will support this application if the following is adhered to:

1. The land owner of 104 Fraser Street enters into a formalized encroachment agreement with the municipality;
2. No additions to the building that will create any other encroachments;
3. No extensions onto the existing encroachments;
4. If the encroachments are ever removed, they will not be allowed to be reconstructed to encroach on City property.

The By-law Enforcement Division is not opposed to the proposed encroachment

4) OPTIONS AND FINANCIAL CONSIDERATIONS

a) Do Nothing

This is not a viable option as the existing condition would remain, without agreements and liability insurance coverage.

b) Other Options

This section is not applicable.

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

This section is not applicable.

6) ATTACHMENTS

Appendix 1 – Aerial view of the area
Appendix 2 – Encroachment Application;

7) RECOMMENDATION

That Council approve the encroachment application and authorize entering into a License Agreement with the applicant and owner Yvon Mousseau for 104 Fraser Street.

8) SIGNATURES

Prepared on January 14, 2019 by:



Sherry Hanson, C.P.S.O.
Manager of By-law Services

Reviewed by:



Dan Aquilina, RPP, MCIP, CPT
Director of Planning and Development

Reviewed and respectfully
submitted by: Reviewed by:

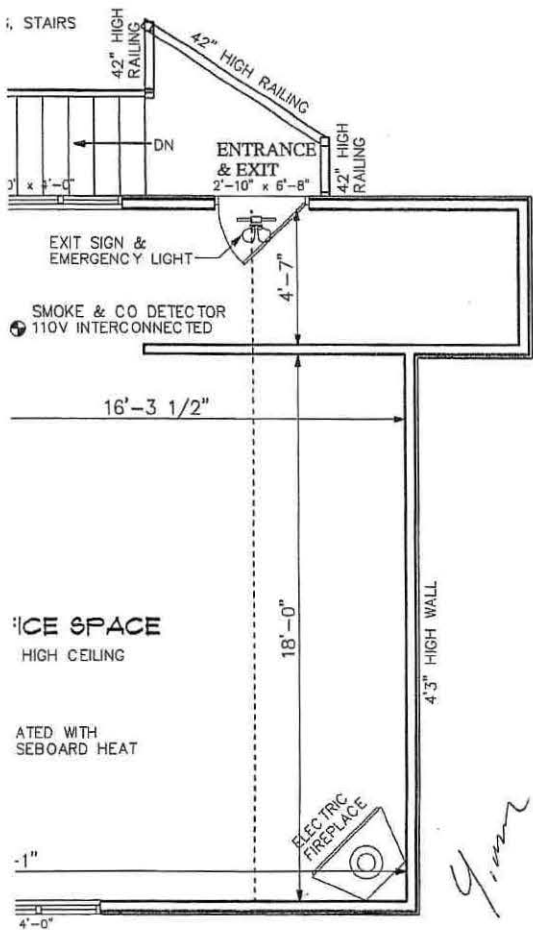


C. Scott Luey
Chief Administrative Officer

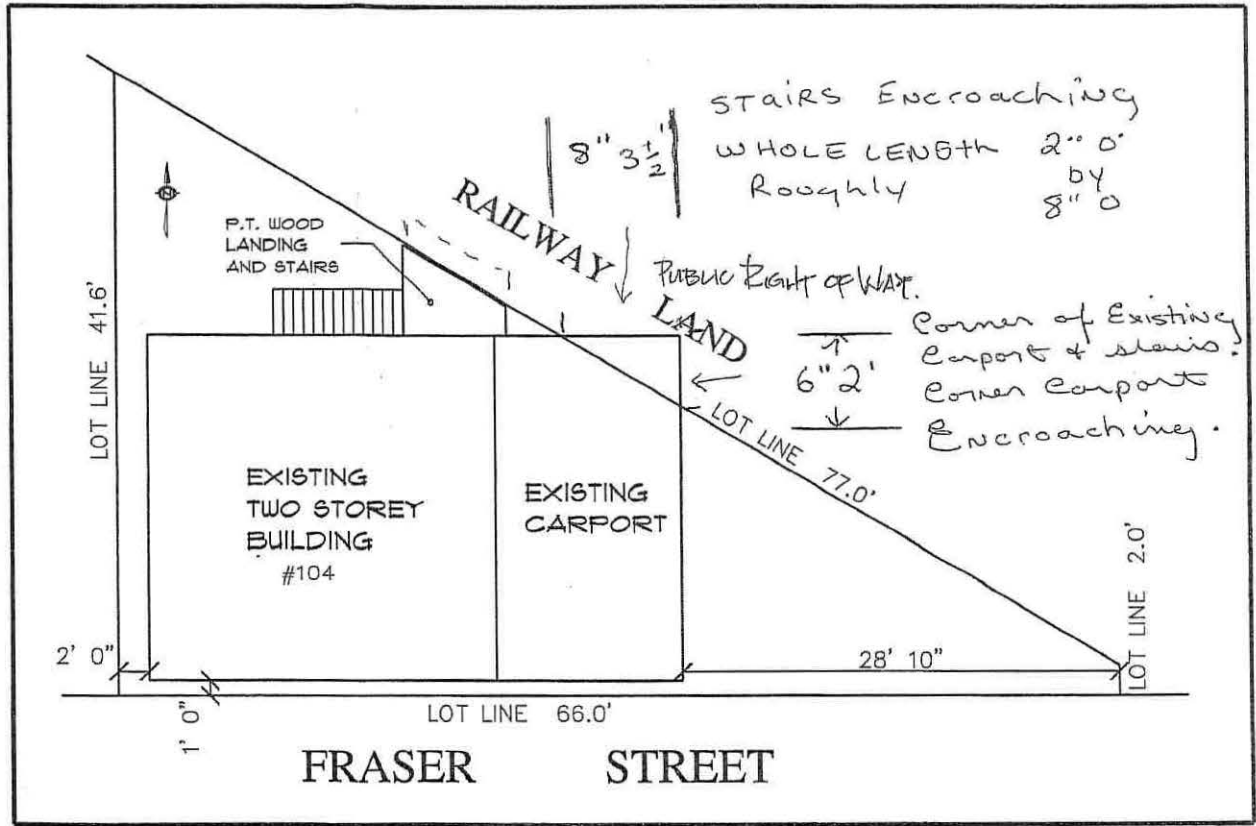


Chris Lee

Director of Engineering & Operations



Yimm





ENCROACHMENT APPLICATION



WHAT YOU NEED TO START

- Complete the below application
- \$300 Application fee or (\$150 if in the CIP area) \$60 Register Encroachment on Title
- Apply for CIP Funding if available
- Be able to obtain and provide \$2 or \$5 million dollars liability insurance, naming the City as additional insured with a 30 day cancellation certificate. (depends on the nature of the encroachment)
- Attached a sketch/ site plan of the proposed encroachment with accurate measurements
- Specify the dates and times required for the encroachment

1. APPLICATION

<input type="checkbox"/>	Applicant	
	Name	YUON MOUSSEAU
	Address	[REDACTED]
	Phone Number	[REDACTED]
	Email Address	
<input checked="" type="checkbox"/>	Owner	
	Name:	
	Address:	
	Phone Number:	
	Email Address:	

2. THE ENCROACHMENT

<input checked="" type="checkbox"/>	Location of Encroachment	104 Fraser st
	Address:	
	Roll Number	271102000901300
	PIN#	
	Legal Description	Plaw 843 PT, Lot 13
<input type="checkbox"/>	Type of Encroachment	
<input type="checkbox"/>	Awning	<input type="checkbox"/> Tables and Chairs - No Alcohol
<input type="checkbox"/>	Sign	<input type="checkbox"/> Tables and Chairs - Alcohol is being served
<input type="checkbox"/>	Bench	<input type="checkbox"/> Encroachment located on St. Lawrence Management Corporation Property
<input type="checkbox"/>	Ramp	<input checked="" type="checkbox"/> Other - Specify <i>Stairs & Carport Existing</i>

<input type="checkbox"/> Duration of Encroachment	
Seasonal - specify dates and times	
<input checked="" type="checkbox"/> Permanent - year round	STAIRS + Car port
Temporary - Specify dates	
Other:	

3. SITE PLAN

Site Plan Attached ~~SEE ATTACHED~~ SEE Attached

			YIM						

4. SIGNATURE

Date:	Jan 16 2019
Print Name:	YUON. Mousseau
Signature:	<i>Yvon Mousseau</i>

5. OFFICE USE ONLY

- Form Complete
- Owner of property
- Tenant of property
- Seaway Property
- Fee paid \$300
- Reviewed By: _____
- Site Plan complete
- Building Permit Required
- CIP Funding available
- Regional Property
- Fee Paid \$150
- Other: please specify
- \$2 Million Insurance
- \$5 Million Insurance
- Registered on Title Fee \$60
- New Application
- Renewal

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January 21, 2019

Council Session, January 17, 2019
Committee Session, January 9, 2019
CSD 6-2019, January 9, 2019

LOCAL AREA MUNICIPALITIES

SENT ELECTRONICALLY

Approval of Interim Levy Dates and Amounts
CSD 6-2019

Regional Council, at its meeting held on January 17, 2019, passed the following recommendation of its Corporate Services Committee:

That Report CSD 6-2019, dated January 9, 2019, respecting Approval of Interim Levy Dates and Amounts, **BE RECEIVED** and the following recommendations **BE APPROVED**:

1. That the interim amounts for the Regional levy **BE APPROVED** by Regional Council in the amounts shown in Appendix I to Report CSD 6-2019;
2. That the Regional Clerk ensures that the appropriate by-law **BE PREPARED** for presentation to Regional Council for consideration and approval; and
3. That Report CSD 6-2019 **BE CIRCULATED** to the Councils of the local area municipalities for information.

A copy of CSD 6-2019 is enclosed for your reference.

Yours truly,



Ann-Marie Norio
Regional Clerk
:MJT

CLK-C 2019-34

cc: Helen Chamberlain Director, Financial Management and Planning / Deputy Treasurer

Subject: Approval of Interim Levy Dates and Amounts

Report to: Corporate Services Committee

Report date: Wednesday, January 9, 2019

Recommendations

1. That the interim amounts for the Regional levy **BE APPROVED** by Regional Council in the amounts shown in **Appendix I** to Report CSD 6-2019;
2. That the Regional Clerk ensures that the appropriate by-law **BE PREPARED** for presentation to Regional Council for consideration and approval; and
3. That report CSD 6-2019 **BE CIRCULATED** to the Councils of the local area municipalities for information.

Key Facts

- The purpose of this report is to provide an interim levy equivalent to 50% of the prior year's approved estimates pursuant to Section 316 of the Municipal Act in order to continue core services prior to the adoption of budget estimates for the year.
- The authority to incur expenditures by Regional departments, boards and agencies is granted by Regional Council through the annual approved budget as prescribed by the Municipal Act.
- The Region's Budget Control Bylaw (2017-63, section 6.3 paragraph a.) provides that prior to Council's approval of the Operating Budget bylaw, a current year's expenditures may be incurred if a budget for a similar item existed in the previous year's operating budget and the expenditures is at the same service level as the prior year and does not exceed 50% if the amount appropriated in the previous year's operating budget.
- The Region's Budget Control Bylaw (2017-63, section 6.3 paragraph b.) provides that prior to Council's approval of the Capital Budget Bylaw, expenditures for new capital projects may be permitted if an individual capital project is deemed a priority by Council and specifically approved by Council in advance of the general capital budget bylaw (section 6.3. paragraph b).

Financial Considerations

The interim levy amounts to be requisitioned from the local area municipalities totals \$173,374,138 (General Levy) and \$17,301,170 (Waste Management) for a total of \$190,675,308 or 50% of the 2018 levied amounts. The interim levy will provide sufficient

cash flows for current year Region operations until approval of the 2019 operating budget and levy amounts.

Analysis

The authority to incur expenditures by Regional departments, boards and agencies is granted by Regional Council through the annual approved operating budget as prescribed by the Municipal Act. Prior to the an annual budget being adopted by Regional Council, bylaw 2017-63 as approved by Regional Council provides that regional departments, boards and agencies may incur expenses up to 50% of their prior year's operating budget in order to maintain business as usual for Regional services.

Further to this, Section 316 of the Municipal Act authorizes Council through a bylaw to provide an interim levy equivalent to 50% of the prior year's approved estimates (subject to certain adjustments) before the adoption of budget estimates for the year. It has been the Region's past practice to levy an interim levy in order to fund Regional services prior to the approval of the annual budget and final levy amounts.

Expenditures for new capital projects prior to Council's approval of the 2019 consolidated capital budget bylaw may be permitted if an individual capital project is deemed a priority by Council and specifically approved by Council in advance of the general capital budget bylaw (section 6.3. paragraph b).

Alternatives Reviewed

Alternative thresholds were not considered as the interim levy of 50% permitted by the Municipal Act will generally ensure cash inflows in the shorter term are able to accommodate the level of expenditures. The Municipal Act does not have a requirement to approve a spending limit in advance of the budget approval however the practice has been adopted by the Region through bylaw 2017-63.

Interim levy dates are consistent with the prior years. The local area municipalities were consulted and no alternative dates are considered.

Relationship to Council Strategic Priorities

Approval of the interim levy for 2019 will permit expenditures to be incurred in order to maintain business as usual for Regional services.

Other Pertinent Reports

N/A.

Prepared by:

Helen Chamberlain, CPA, CA
Director, Financial Management &
Planning/Deputy Treasurer

Recommended by:

Todd Harrison, CPA, CMA
Commissioner/Treasurer
Enterprise Resource Management
Services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Rob Fleming, Senior Tax & Revenue Analyst and reviewed by Margaret Murphy, Associate Director, Budget Planning & Strategy.

Appendices

Appendix I

Interim Levy Payments and Dates

Page 4

Appendix I - Interim Levy Payments and Dates

General Levy			
Municipality	March 13, 2019	May 15, 2019	Total Interim Levy
Fort Erie	5,481,277	5,481,277	10,962,554
Grimsby	6,273,994	6,273,994	12,547,988
Lincoln	5,043,903	5,043,903	10,087,806
Niagara Falls	18,214,623	18,214,623	36,429,245
Niagara-on-the-Lake	7,365,417	7,365,417	14,730,834
Pelham	3,603,433	3,603,433	7,206,867
Port Colborne	2,878,164	2,878,164	5,756,327
St. Catharines	23,371,245	23,371,245	46,742,490
Thorold	3,390,085	3,390,085	6,780,169
Wainfleet	1,300,920	1,300,920	2,601,841
Welland	7,128,946	7,128,946	14,257,891
West Lincoln	2,635,064	2,635,064	5,270,128
Total	86,687,069	86,687,069	173,374,138

Waste Management Special Levy			
Municipality	March 13, 2019	May 15, 2019	Total Interim Levy
Fort Erie	656,840	656,840	1,313,680
Grimsby	452,694	452,694	905,387
Lincoln	393,664	393,664	787,327
Niagara Falls	1,686,399	1,686,399	3,372,797
Niagara-on-the-Lake	369,902	369,902	739,804
Pelham	292,632	292,632	585,264
Port Colborne	437,090	437,090	874,180
St. Catharines	2,678,457	2,678,457	5,356,915
Thorold	357,948	357,948	715,897
Wainfleet	135,227	135,227	270,453
Welland	974,580	974,580	1,949,161
West Lincoln	215,154	215,154	430,307
Total	8,650,585	8,650,585	17,301,170

Total General & Waste Management Interim Levy			
Municipality	March 13, 2019	May 15, 2019	Total Interim Levy
Fort Erie	6,138,117	6,138,117	12,276,234
Grimsby	6,726,687	6,726,687	13,453,375
Lincoln	5,437,567	5,437,567	10,875,133
Niagara Falls	19,901,021	19,901,021	39,802,042
Niagara-on-the-Lake	7,735,319	7,735,319	15,470,638
Pelham	3,896,065	3,896,065	7,792,131
Port Colborne	3,315,254	3,315,254	6,630,507
St. Catharines	26,049,702	26,049,702	52,099,404
Thorold	3,748,033	3,748,033	7,496,066
Wainfleet	1,436,147	1,436,147	2,872,294
Welland	8,103,526	8,103,526	16,207,052
West Lincoln	2,850,218	2,850,218	5,700,435
Total	95,337,654	95,337,654	190,675,308

January 21, 2019

Council Session, January 17, 2019
Committee Session, January 9, 2019
CSD 3-2019, January 9, 2019

LOCAL AREA MUNICIPALITIES

SENT ELECTRONICALLY

Vacancy Program Revisions to Ministry of Finance
CSD 3-2019

Regional Council, at its meeting held on January 17, 2019, passed the following recommendation of its Corporate Services Committee:

That Report CSD 3-2019, dated January 9, 2019, respecting Vacancy Program Revisions to Ministry of Finance, **BE RECEIVED** and that the following recommendations **BE APPROVED**:

1. That the proposed amendments to the existing Commercial/Industrial Vacant Unit Rebate and Vacant/Excess Land Subclass property tax rate reductions programs **BE APPROVED** as follows:
 - a) Vacant Unit Tax Rebate
 - i. Commercial Properties: Phase out the current program in its entirety, over three years, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 20% in 2019, 10% in 2020, and 0% in 2021 and onwards.
 - ii. Industrial Properties: Phase out the current program in its entirety, over three years, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 20% in 2019, 10% in 2020, and 0% in 2021 and onwards.
 - b) Vacant/Excess Land Tax Rate Reduction
 - i. Commercial Properties: Phase out the current program in its entirety, over four years starting 2021, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 22.5% in 2021, 15% in 2022, 7.5% in 2023 and 0% in 2024 and onwards.

- ii. Industrial Properties: Phase out the current program in its entirety, over four years starting 2021, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 22.5% in 2021, 15% in 2022, 7.5% in 2023 and 0% in 2024 and onwards;
2. That the Province of Ontario **BE REQUESTED** to adopt regulations and make any other legislative amendments required to adjust Niagara Region's Vacant Unit and Vacant/Excess Land Tax Programs as per Recommendation 1;
3. That the Commissioner, Enterprise Resource Management Services/Treasurer **BE DIRECTED** to submit this report to the Ontario Minister of Finance, along with any other supporting documentation as required by the Ministry to enact the requested program changes; and
4. That this report **BE CIRCULATED** to the Councils of the area municipalities for information.

A copy of CSD 3-2019 is enclosed for your reference.

Yours truly,



Ann-Marie Norio
Regional Clerk
:MJT

CLK-C 2019-33

cc: Rob Fleming Senior Tax & Revenue Analyst

Subject: Vacancy Program Revisions to Ministry of Finance

Report to: Corporate Services Committee

Report date: Wednesday, January 9, 2019

Recommendations

1. That the proposed amendments to the existing Commercial/Industrial Vacant Unit Rebate and Vacant/Excess Land Subclass property tax rate reductions programs **BE APPROVED** as follows:
 - a. Vacant Unit Tax Rebate
 - i. Commercial Properties: Phase out the current program in its entirety, over three years, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 20% in 2019, 10% in 2020, and 0% in 2021 and onwards.
 - ii. Industrial Properties: Phase out the current program in its entirety, over three years, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 20% in 2019, 10% in 2020, and 0% in 2021 and onwards.
 - b. Vacant/Excess Land Tax Rate Reduction
 - i. Commercial Properties: Phase out the current program in its entirety, over four years starting 2021, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 22.5% in 2021, 15% in 2022, 7.5% in 2023 and 0% in 2024 and onwards.
 - ii. Industrial Properties: Phase out the current program in its entirety, over four years starting 2021, by reducing the eligible rebate percentage from the current rate of 30% in 2018, to 22.5% in 2021, 15% in 2022, 7.5% in 2023 and 0% in 2024 and onwards;
2. That the Province of Ontario **BE REQUESTED** to adopt regulations and make any other legislative amendments require to adjust Niagara Region's Vacant Unit and Vacant/Excess Land Tax Programs as per Recommendation 1.
3. That the Commissioner, Enterprise Resource Management Services/Treasurer **BE DIRECTED** to submit this report to the Ontario Minister of Finance, along with any other supporting documentation as required by the Ministry to enact the request program changes; and
4. That this report **BE CIRCULATED** to the Councils of the area municipalities for information.

Key Facts

- Commencing in 2017, the Province provided municipalities a greater range of options to modify or eliminate the Vacant Unit Property Tax Rebate and Commercial/Industrial Vacant/Excess Subclass property tax reduction programs.
- Currently, Niagara Region has adopted property tax rebate/reduction for the above noted programs of 30%.
- Report CSD 77-2017 Commercial and Industrial Sub Class Tax Rate Reduction and Rebates, dated November 29, 2019, Regional Council approved a public consultation process to be conducted in order to solicit opinions on program alterations. Both area municipal staff and business associations were consulted.
- Report CSD 41-2018 dated July 18, 2018 presented the result of the public engagement to Council and based on the comments provided by local stakeholders, Regional staff proposed amendments to the existing rebate and reduction programs as outlined in the recommendations section of this report.
- Council reviewed the proposed changes included in CSD 41-2018 and requested that additional public engagement occur in order to ensure communication of the proposed changes and input is achieved.
- Three additional public engagement sessions were held and no changes to the previously presented program revisions as per CSD 41-2018 are being recommended as a result of no new information being obtained from the business community coupled with an increased desired from the non-commercial/industrial property owners for program elimination.

Financial Considerations

Vacant Unit Rebates – The Region’s vacancy rebate program is an application based program that provides for a 30% rebate to both commercial and industrial property classes if vacancies are experienced in year. The rebate program policy is a decision of Regional Council that applies to all the Niagara municipalities.

Unlike the subclass reduction program described below, the Region and each municipality budget for the cost of providing these vacancy rebates. The Region’s 2018 budget expense for providing this program was approximately \$1 Million or 0.28% of the tax levy. The impact on the local area municipal levies would be of a similar dollar magnitude in aggregate. Elimination of this program could provide direct budget opportunities for both the Region and area municipality’s budgets or could be used to provide mitigation against future budget increases.

Subclass Rate Reduction –The Region’s vacant and excess land discount factor for commercial and industrial properties is 30% for 2018 for properties that are vacant or have excess land. The subclass rate reductions are one of the tax policy decisions the Regional Council must make each year that apply to all the Niagara municipalities.

The subclass reductions provided to commercial and industrial vacant/excess lands amounts to approximately \$1.6 million (Regional portion only). It is important to note, that any changes to this program would not provide direct budget relief to the tax levy. Any reduction of the subclass discount percentage would result in a tax shift away from all other classes (including the residential, farm, full commercial and industrial classes) onto the previously discounted commercial and industrial classes. Unlike the vacant unit rebates, discussed above, the property owners do not have to apply for the reduction. Eligibility for the subclasses is ultimately determined by MPAC and is reflected annually on the tax roll.

The impact to the average residential household of eliminating the vacant unit rebate plus the benefit of the tax shift from eliminating the subclass discounts is estimated at \$10.96 or 0.75% reduction for the average household (Region portion only). For commercial and industrial properties assessed at \$1 million, the benefit of eliminating the discounts and rebates is \$74 and \$112, respectively.

The savings of starting the phase-out in 2019 will result in a decrease in the Region's Vacant Unit Rebate budget by approximately \$300 thousand which has been repurposed to other Regional priorities in the 2019 operating budget. As a result of the program change, a similar impact can be expected for the area municipalities in aggregate.

Analysis

Additional Public Engagement

At the direction of Corporate Services Committee, staff undertook additional consultation with local area municipalities and business associations above what was originally conducted. The Niagara Industrial Association, Greater Niagara Chambers of Commerce and previous users of the program were further engaged in order to ensure communication of the changes and input was achieved.

Regional staff organized two additional engagement sessions open to both area municipal staff and business groups/residents. Notification was distributed to area municipal staff informing them of the upcoming meeting. In order to increase awareness of the engagement session with the business groups and residents, Regional staff coordinated press releases through both the Niagara Industrial Association and Greater Niagara Chamber of Commerce, undertook a social media campaign and provided further information on the Region's website.

In order to ensure a comprehensive public engagement, Regional staff invited area municipal finance staff to complete direct mail outs to former recipients of the vacant unit rebate informing them of the intended program revisions and directing them to the Region's online survey. The direct mail out did yield a few verbal enquiries, however,

staff believe that the increase in the number of surveys completed (in comparison to the May 2018 survey) can partially be attributed to the direct mail outs and the social media campaign.

Region staff were also contacted by the Niagara Industrial and Commercial Brokers association with comments on the proposed program revisions. As a result, an additional meeting was arranged between the members of the association and Region staff to further discuss the existing program, the proposed program revisions and the impact of such changes. This meeting was attended by representatives of many commercial and industrial property owners across Niagara.

Result of Additional Public Engagement

The results of the additional municipal engagement were consistent with the previous sessions held with municipal staff. There was an interest in eliminating the programs and allocating the funds currently utilized by these program elsewhere (i.e., economic development activities or to the tax levy).

The results of the additional public engagement session with the community were mixed. The representatives in attendance from one of Niagara Business Improvement Areas was in support of program alterations while those that identified as business owners were not in favour of the proposed changes. The discussion primarily focused on the vacant unit rebate instead of the vacant/excess land subclass reduction program. In general, comments received from those in attendance were in support of the vacant unit rebate program as it provides assistance to business owners during challenging periods and/or transition periods between tenants.

Comments received from the Realtors association were similar to those received during the additional public consultation from the community as well. Those in attendance noted that the Region should not enact program changes for the sole purpose of being consistent with other municipalities across Southern Ontario. Those in attendance stressed the importance of a “made in Niagara” solution. This meeting also resulted in 9 letters in support of the current program being submitted to the Region from business owners (included as **Appendix I**).

From the time that report CSD 41-2018 was presented to Council an additional 157 online surveys were completed by business owners and residents. The full summary of the results are included as **Appendix II** to this report. The survey was designed to separate those that are representatives or owners of commercial/industrial properties and those that are not. Approximately 38% of the survey respondents identified themselves as a representative or owner of a commercial or industrial property in Niagara while the remaining 62% did not. The responses from those that identified as representatives or owners of a business were for the most part, consistent with the verbal feedback received at all engagement sessions. Unlike the engagement sessions

though, significant input was received from those that did not identify as representatives or owners of a business property. The majority of this group did not feel that the existing vacancy programs creates a positive impact on the local community and as a result, both programs should be discontinued.

Recommendation Based on Public Engagement

As discussed in CSD 41-2018, staff presented rationale for eliminating the programs which included:

- Existing programs place strain on current municipal budgets;
- No limitation on the number of years a property can be considered vacant and eligible which can lead to lack of incentive to develop properties or fill vacancies;
- Assessment practices have led to “double-dipping” as properties can receive reduced assessed values related to vacancies (as a result of built in assessment obsolescence factors by MPAC) in addition to a vacancy tax rebate during the same period.

Based on discussions from all stakeholder engagements, staff are recommending that the below phase-out schedules for both programs be endorsed by Council. It should be noted that the recommended program revisions are a “made in Niagara” solution. Many Golden Horseshoe municipalities (as noted in **Appendix III**) have opted to eliminate the Vacant Unit program through a phase-out starting 2017 or eliminate the program immediately without a phase-out. As noted in Table 1, the “made in Niagara” solution is to phase-out the Vacant Unit rebate starting 2019 and a delayed 4 year phase-out for the vacant/excess land subclass discount starting 2021.

Table 1: Recommended Program Phase-out Schedule

Year	Vacant Unit Rebate %	Vacant/Excess Land Reduction %
2018	30%	30%
2019	20%	30%
2020	10%	30%
2021	0%	22.5%
2022	0%	15%
2023	0%	7.5%
2024 and onwards	0%	0%

As discussed in CSD 41-2018, the intent of the phase out starting 2019 for the vacant unit rebate program is to allow for business owners that would be effected by the program change to adjust their business plans (i.e. seek tenants, better utilize available building space, etc.). The intent of the four year phase-out starting 2021 for the vacant and excess land subclass reduction program is to provide time for commercial and industrial land owners to create productive land and to match MPAC’s assessment phase-in cycles allowing for a “fresh start” in 2024. It should also be noted that the

Ontario Business Improvement Area Association is in support of eliminating the vacant unit rebate for similar reasons as noted above (press release included as **Appendix IV**).

Provincial Requirements to Enact Requested Program Revisions

As outlined in **Appendix V**, the Province established requirements that must be completed prior to submitting program changes for their consideration. Over the course of the review period conducted by Regional staff, all requirements have been completed save and except the final requirement of Council to pass a resolution indicating approval of the changes. If Council passes a resolution in accordance with the report recommendations as presented, staff will request the Province to enact the program revisions as outlined in Table 1 noted above.

Alternatives Reviewed

Continue both the commercial/industrial vacant unit and vacant/excess land subclass tax reduction programs as a status quo. This alternative is **NOT RECOMMENDED** as it does not respond to the concerns heard during the public consultation process.

Eliminate both the vacant unit and vacant/excess land subclass rebate and reduction programs immediately without phase-out. This alternative is **NOT RECOMMENDED** as it would not provide sufficient time for local business owners to adjust their business plans accordingly.

Continue the vacant unit program but limit the number of years that a property can be eligible for rebate. This alternative is **NOT RECOMMENDED** as it does not represent the majority of the input received during the public engagement sessions. It is also believed that this approach would create confusion with the program and increase administrative burden of having these programs.

Relationship to Council Strategic Priorities

Options provided supports Council's priority of fostering an environment for economic prosperity.

Other Pertinent Reports

CSD 79-2016 Recommended Actions for Correspondence from the City of St. Catharines respecting Tax Policy Changes
CSD 77-2017 Commercial and Industrial Sub Class Tax Rate Reductions and Rebates
CWCD 142-2017 Response to enquires from March 22, 2017 Corporate services Committee meeting
CSD 18-2018 Property Tax Policy, Ratios and Rates
CSD 41-2018 Results of Stakeholder Engagement for Vacancy Rebate Program Revisions

Prepared by:

Rob Fleming, MBA
Senior Tax & Revenue Analyst
Enterprise Resource Management
Services

Recommended by:

Todd Harrison, CPA, CMA
Commissioner/Treasurer
Enterprise Resource Management
Services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Margaret Murphy, Associate Director, Budget Planning & Strategy and Ken Scholtens, Manager, Business Development & Expedited Services, and reviewed by Helen Chamberlain, Director, Financial Management & Planning /Deputy Treasurer.

Appendices

Appendix I	Letters Re Vacancy Program Revisions
Appendix II	Survey Outcomes
Appendix III	Map of Neighbouring Municipalities with Council Approved Program Changes
Appendix IV	News Release - Ontario Business Improvement Area Association
Appendix V	Letter from Ministry of Finance Re: Vacant Unit and Vacant/Excess Land Subclasses

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

I'm the owner of the property located at 142 Cushman Road, St. Catharines, consisting of 53,800 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,



Collini Ferretti Holdings Inc

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7


I'm the owner of the property located at 1620 Dominion Road, Fort Erie, consisting of 8533 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,



Larry Stewart

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

I'm the owner of the property located at 10 Dunlop St., St. Catharines, consisting of 4195 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

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Sincerely,



Larry Stewart

Rob Flemming
Senor Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

I'm the owner of the property located at 543 Allanburg Road, Thorold, consisting of 3150 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,



Larry Stewart

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

I'm the owner of the property located at 101 Hannover Drive, St. Catharines, consisting of 3824 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,



Larry Stewart

CAUSEWAY PROPERTIES INC.

Appendix I
January 9, 2019

242 Main Street East
Hamilton, Ontario, L8N 1H5

Phone: (905) 528-8956
Fax: (905) 528-2165

November 15th, 2018

**Rob Flemming
Senor Tax & Revenue Analyst
Financial Management and Planning**

**Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7**

Causeway Properties Inc. is the owner of the property located at 113-115 Cushman Road St. Catharines, Ontario, consisting of 185,642 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

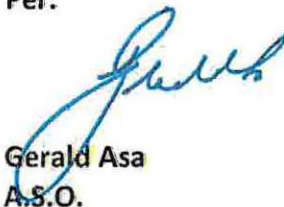
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Please remove this proposal from the Region and Municipalities.

Sincerely,

CAUSEWAY PROPERTIES INC.

Per:



Gerald Asa
A.S.O.

F.T.A. CONDOR HOLDINGS INC.

242 Main Street East
Hamilton, Ontario, L8N 1H5

Phone: (905) 528-8956
Fax: (905) 528-2165

November 15th, 2018

Rob Flemming
Senor Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

F.T.A. Condor Holdings Inc. is the owner of the property located at 380 Vansickle Road, St. Catharines, Ontario, consisting of 99,762 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,

F.T.A. CONDOR HOLDINGS INC.

Per:



Gerald Asa
A.S.O.

F.T.A. CONDOR HOLDINGS INC.

Appendix I
January 9, 2019

242 Main Street East
Hamilton, Ontario, L8N 1H5

Phone: (905) 528-8956
Fax: (905) 528-2165

November 15th, 2018

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

F.T.A. Condor Holdings Inc. is the owner of the property located at 360 York Road, Niagara-on-the-Lake, Ontario, consisting of 66,458 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

Sincerely,

F.T.A. CONDOR HOLDINGS INC.

Per:



Gerald Asa
A.S.O.

Rob Flemming
Senior Tax & Revenue Analyst
Financial Management and Planning

Enterprise Resource Management Services
Niagara Region
1815 Sir Isaac Brock Way
Thorold, ON L2V 4T7

I'm the owner of the property located at 150 Bunting Road, St. Catharines consisting of 42,000 sq. ft.

I'm opposed to any removal of the Vacancy Tax Credit.

Even though other regions have opted out of the Vacancy Tax Credit, I believe as with many of my colleagues that this should be a "Made in Niagara Solution". What may work in other Regions, I can assure you that this proposal will not work here. We are just coming into a healthy rental market with a forecast of a downturn come late 2019 through to 2022. Other Regions have experienced strong market conditions and have expanded significantly. Whereas Niagara is just starting to fill their industrial, commercial is holding its own and office is looking bleak. How could you even consider implementing a measure such as this when we have had such a dismal past.

Please remove this proposal from the Region and Municipalities.

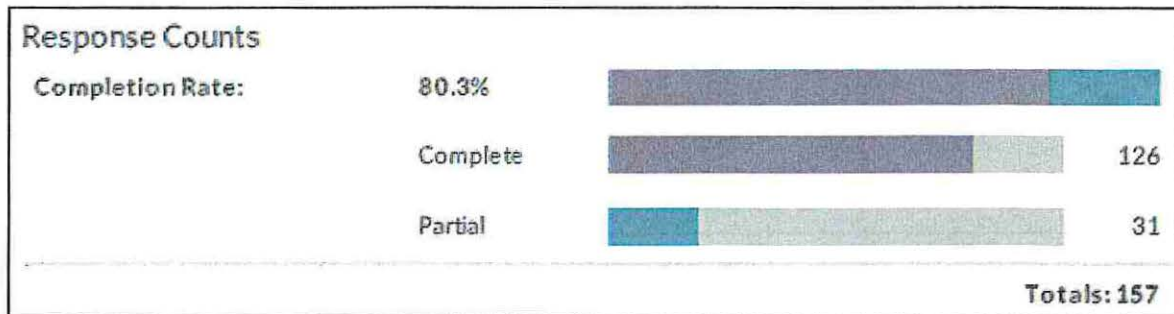
Sincerely,

A handwritten signature in blue ink that reads "Stanley Pierog". The signature is written in a cursive, flowing style.

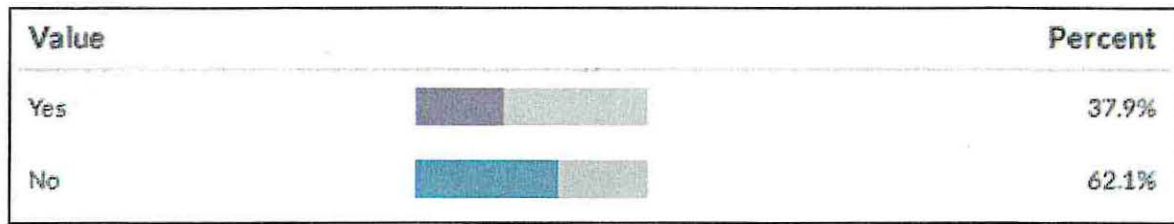
S & S PIEROG LIMITED

Survey Response Summary / Introductory Questions

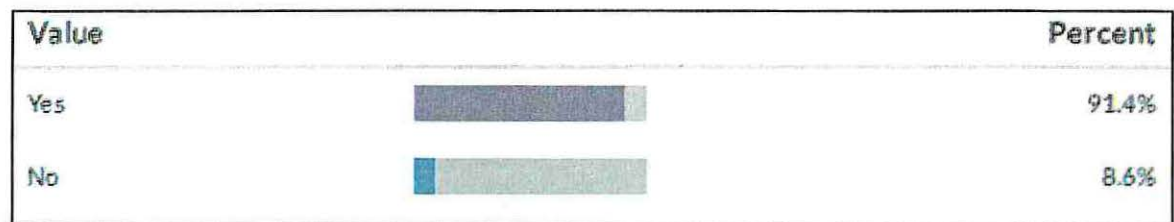
1. Summary/number of responses:



2. Do you own, or represent an owner, of a commercial / industrial property in Niagara?



3. Do you understand these two programs and the differences between them?



Responses from Niagara Commercial/Industrial Property Owners/Representatives

1. Did you know that for 2018 these programs cost commercial and industrial property owners approximately \$74 and \$112 in Regional property taxes, respectively? (Based on a \$1 million assessment)

Value	Percent
Yes	52.8%
No	47.2%

2. Indicate if you currently, or have previously, benefitted from either of these programs:

Value	Percent
Vacant Unit Rebate	80.6%
Vacant/ Excess Land Reduction	25.0%
Neither	13.9%

3. How important are the rebates and reductions in your business plan?

Value	Percent
Not important	5.6%
Somewhat important	19.4%
Important	22.2%
Very important	22.2%
Extremely important	30.6%

4. Would a multi-year phase out of these programs allow you to prepare for the elimination of these programs?

Value	Percent
Yes	55.6%
No	44.4%

5. Do you believe that either the rebate or reduction creates a positive impact on the local community?

Value	Percent
Yes	65.7%
No	34.3%

6. Should the rebate or reduction continue?

Value	Percent
Yes, continue both	69.4%
Yes, continue the Vacant Unit Rebate	22.2%
No, discontinue both	8.3%

7. Would you rather see these program expenditures allocated to other Economic Development incentives / programs or reduce the tax levy?

Value	Percent
Yes	25.7%
No	74.3%

8. Did you know that as a commercial / industrial property owner, a portion of your property taxes goes toward subsidizing these programs?

Value	Percent
Yes	72.2%
No	27.8%

Responses from Non-Commercial/Industrial Property Owners/Representatives

1. Did you know that the Region currently budgets \$1 million each year in Vacant Unit Rebates for commercial and industrial properties?

Value	Percent
Yes	20.2%
No	79.8%

2. Do you believe that either the rebate or reduction creates a positive impact on the local community?

Value	Percent
Yes	13.1%
No	86.9%

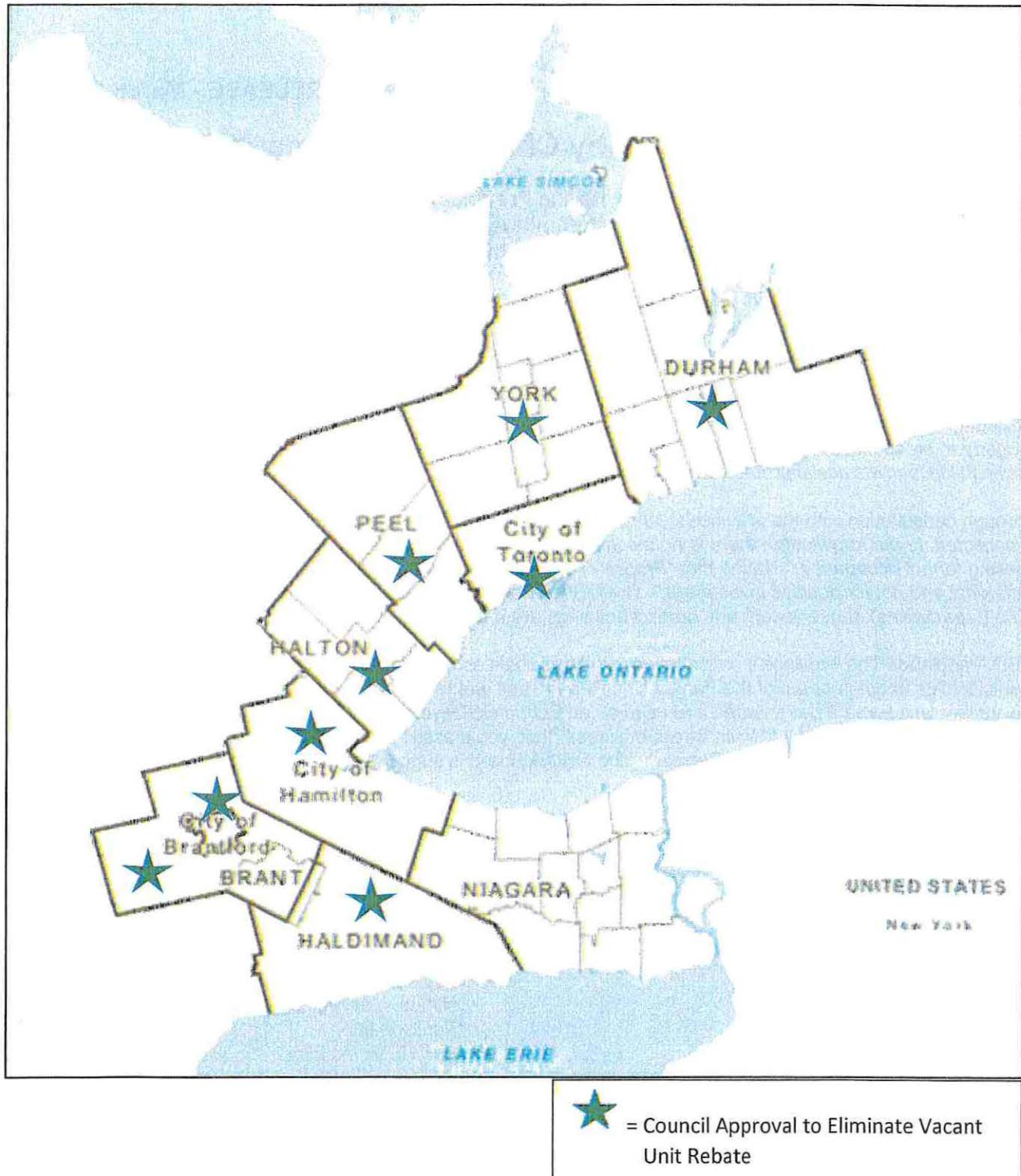
3. Should the rebate or reduction continue?

Value	Percent
Yes, continue both	7.1%
Yes, continue the Vacant Unit Rebate	2.4%
Yes, continue the Vacant / Excess Land Reduction	7.1%
No, discontinue both	83.3%

4. Would you rather see these program expenditures allocated to other Economic Development incentives / programs or reduce the tax levy?

Value	Percent
Yes	88.0%
No	12.0%

Appendix I - Map of Neighbouring Municipalities with Council Approved Program Changes





Return on Investment of BIAs

FOR IMMEDIATE RELEASE - March 22, 2017

Changing the Landscape by Changing the Vacant Unit Rebate

The Ontario BIA Association works with the Province, through the Planning, Environment, Resources and Land Deputies Committee (PERL) and the Ministry of Finance to help BIAs change the landscape through Municipal Act Changes.

Ontario’s BIAs have continued to raise the Vacant Unit Rebate ([Municipal Act 364](#)) as a deterrent from their beautification and revitalization efforts. Vacant and deteriorating buildings can and do result in a decrease in the marketable lease rates or the overall ‘lease-ability’ of a BIA area.

At the recent meeting of the PERL Deputy Ministers and the Board of OBIAA, the board cited contradicting strategies between BIAs and the Province, stated “*that BIAs build programs and invest funds to promote vacant property to prospective lessees and in order to achieve full occupancy, but*”, the board went on to state, “*the provincial incentives assist property owners with remaining vacant.*”

Through consultation with the province’s BIAs, the Board informed the Deputy Ministers, “*Once a property owner is accepted, to our knowledge, there is no mechanism in place to ensure that the property owner is actively seeking tenant occupancy.*” Noting that “*Property owners purchasing property for purely financial reasons (tax write offs) and not for positive investment.*” The OBIAA Board indicated that in the case of both large and small BIAs (Downtowns), those vacant and derelict buildings are a challenge.

OBIAA applauds The Province’s consultation with Municipalities to consider changing the wording to allow Municipalities to opt in or out of the Vacant Unit Rebate, and would like to suggest to BIAs and Municipalities that the Vacant Unit Rebate be renamed and used as an Economic Development Tool. The Board is suggesting a new business classification of “Main Street Business” that would assist BIAs and Property Owners around the province to apply for an “Attraction Rebate”. The OBIAA Board is suggesting the following timelines and guidelines:

<p>Attraction Rebate for Main Street Class: (non-office towers)</p> <ul style="list-style-type: none"> • Year One - 100% of the 30% or 35% • Year Two - 50 % of the 30% or 35% • Year Three - 25 % of the 30% or 35% • Year Four - 0% of the 30% or 35% 	<p>Attraction Guidelines for Main Street Class: (non-office towers)</p> <ul style="list-style-type: none"> • Property Standards as set by the Municipalities. Validation of state of the building(s) • Market Value Rental Value as set by the local marketplace • Education of local Economic Development Tools stimulus, as provided by the Municipalities (CIPs, Heritage etc.). • Pop Up vs Incubator – to allow a property owner to have either of these without losing the Vacant Unit Rebate.
---	--

The Ministry of Finance is now moving forward with providing municipalities’ broad flexibility for 2017 and in future years. This change was announced in November 2016 and is intended to allow municipalities to tailor the vacant rebate and reduction programs to reflect community needs and circumstances. Municipalities will be required to submit a response to a Ministry of Finance Checklist and a Council Resolution indicating how they will be implementing the changes to the Vacant Rebate and Reduction Programs.

OBIAA supports these changes and is encouraging BIAs and Municipalities to consider implementing the above noted “Attraction Rebate” as an Economic Development Tool that could make our Urban and Rural Communities stronger.



Return on Investment of **BIAs**

-- 30 --

About OBIAA

OBIAA is the network that represents unique and vibrant BIAs across Ontario. The Association, incorporated in 2001, supports and advocates on behalf of its members through the building and nurturing of strong relationships and partnerships. OBIAA is a leader in the development and sharing of information, tools, resources and best practices, and is the ONE voice on common issues. www.obiaa.com

For more information, please contact:

Kay Matthews, Executive Director

OBIAA

info@obiaa.com

VACANT UNIT REBATE AND VACANT/EXCESS LAND SUBCLASSES

January 2017

Since 1998, the Vacant Unit Rebate and Vacant/Excess Land Subclasses have provided tax rebates and reductions to property owners who have vacancies in commercial and industrial buildings or land.

- **Vacant Unit Rebates:** The Vacant Unit Rebate provides a tax rebate to property owners who have vacancies in commercial and industrial buildings. This application-based program is administered by municipalities. The current rebate is 30% of the property tax for vacant commercial space and 35% for vacant industrial space.
- **Vacant and Excess Land Property Tax Subclass:** Commercial and industrial properties or portions of these properties in the Vacant and Excess Land Property Tax Subclasses are taxed at a fixed percentage rate below the tax rate of the broad class. These properties are discounted at 30% to 35% of the full Commercial and/or Industrial rate.

Currently, upper- and single-tier municipalities may choose to apply the same percentage of relief (between 30% - 35%) to both the commercial and industrial property classes.

NEW MUNICIPAL FLEXIBILITY FOR 2017 AND FUTURE YEARS

The Province has reviewed the Vacant Unit Rebate and the Vacant/Excess Land Subclasses in consultation with municipal and business stakeholders.

In response to municipal and other stakeholders' requests, the Province is now moving forward with providing municipalities broad flexibility for 2017 and future years. This change, announced in November 2016, is intended to allow municipalities to tailor the vacant rebate and reduction programs to reflect community needs and circumstances, while considering the interests of local businesses.

In order to provide the most flexibility for municipalities, changes to the rebate and reduction programs will be implemented through regulation. Upper- and single-tier municipalities that have decided to change the programs can notify the Minister of their intent to utilize this flexibility and provide details of the proposed changes along with a council resolution.

To support implementation of changes to the vacant rebate and reduction programs, municipalities should review the attached checklist prior to submitting a request for changes to the Minister.

IMPLEMENTATION

Municipalities wishing to utilize the flexibility available to them must submit details of proposed changes to the Minister along with a council resolution by one of the following dates to ensure amendments are included in a regulation as soon as possible.

- March 1, 2017
- April 1, 2017
- July 1, 2017

Municipalities will be notified when the regulation implementing the requested changes has been enacted.

Note that in two-tiered municipalities, any program changes to be implemented will be an upper-tier municipal decision, consistent with the flexibility currently available to upper-tier municipalities, to determine the rebate and reduction percentage between 30% and 35%.

The Province has an interest in continuing to ensure tax competitiveness and consistency for taxpayers and as such, the Minister will consider proposed program changes within this context.

FURTHER INFORMATION

For general information about the vacant rebate and reduction programs, please contact the Ministry of Finance at info.propertytax@ontario.ca.

**VACANCY REBATE AND REDUCTION PROGRAM CHANGES
CHECKLIST
January 2017**

BUSINESS COMMUNITY ENGAGEMENT

- ✓ Have you engaged the local business community?
- ✓ Can you provide details on how and when you have engaged the local business community?
- ✓ Have you considered the potential impacts the proposed changes may have on local businesses?
- ✓ Have you communicated potential impacts of proposed changes to the business community?
- ✓ Has Council been made aware of the potential impacts on the business community?

PROGRAM DETAILS

- ✓ Have you outlined details of program changes in your submission?
- ✓ For municipalities in a two-tiered system, have you discussed proposed changes with lower-tier municipalities?
- ✓ Have you considered how you will implement or administer any potential changes to the vacancy programs?
- ✓ Have you considered these changes as part of a multi-year strategy?
- ✓ Has Council passed a resolution indicating approval of these changes?

FURTHER INFORMATION

If you have any questions about implementation of changes to the vacant rebate and reduction programs, please contact the Ministry of Finance at info.propertytax@ontario.ca.

4800 SOUTH SERVICE RD
BEAMSVILLE, ON L0R 1B1

905-563-8205

January 29, 2019

Hon. Victor Fedeli
Minister of Finance
Frost Building South 7th Floor,
7 Queen's Park Cres.
Toronto, ON M7A 1Y7

Sent Via Email: Minister.fin@ontario.ca

Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales

Honourable Minister Fedeli:

At its meeting held on January 28, 2019, Town of Lincoln Council approved the following motion:

WHEREAS Ontario's grape and wine industry is an important and unique part of Lincoln's economy; and

WHEREAS Lincoln has an emerging craft beer sector that continues to grow and expand; and

WHEREAS Lincoln has over 50 wineries, breweries and distilleries contributing to both our local and provincial economy, creating jobs and investment across Lincoln; and

WHEREAS the Government of Ontario has announced its plan to modernize alcohol sales by expanding the sale of beer and wine to corner stores, grocery stores and big-box stores, based on market demand, and has requested public input on its plan through an online survey until February 1, 2019; and

WHEREAS this decision represents a significant opportunity to strengthen both Lincoln's and Niagara's economy by growing Ontario's wine, craft beer and spirits industry through increased consumer access;

THEREFORE BE IT RESOLVED that the Town of Lincoln requests that the Provincial Government must include specific policies that support and expand the

growth of 100 per cent Ontario-grown-and-produced wines and Ontario-made craft beer and spirits in its retail channel regulations; and

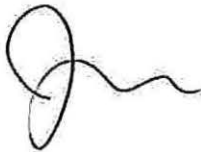
BE IT FURTHER RESOLVED that the Town of Lincoln submit this resolution to the Provincial Government and area MPPs as part of the public consultation on the Modernization of Alcohol Sales before February 1, 2019; and

BE IT FURTHER RESOLVED that this resolution be circulated to Niagara municipalities for consideration and support; and

BE IT FURTHER RESOLVED that Town staff be directed to report back to Council on a government relations strategy that ensures the importance of 100 per cent Niagara-grown-and-produced wines and Niagara-made craft beer and spirits is recognized at Queen's Park.

If you have any questions, please contact Legislative Services, Town Clerk at extension 225.

Regards,



Julie Kirkelos
Town Clerk
jkirkelos@lincoln.ca

cc: Niagara area municipalities and MPPs

January 25, 2019

City of St. Catharines
50 Church Street
P.O. Box 3012
St. Catharines, Ontario
L2R 7C2

Attention: Bonnie Nistico-Dunk, City Clerk

Dear Ms. Nistico-Dunk:

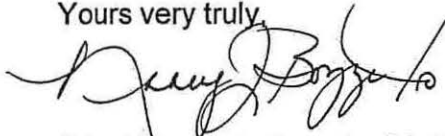
**City of St. Catharines - Support for Ontario Wine and Beer in Retail Stores
as Part of Modernizing Alcohol Sales**

At their regular meeting of January 21st, 2019, Council of the Town of Pelham received your correspondence and endorsed the following:

BE IT RESOLVED THAT Council receive correspondence from the City of St. Catharines dated, January 15, 2019 supporting Ontario wine and beer in retail stores as part of modernizing alcohol sales, for information.

On behalf of Council, thank you for your correspondence.

Yours very truly,



(Mrs.) Nancy J. Bozzato, *Dipl. M.M., AMCT*
Town Clerk

/hw

cc: Niagara Area Municipalities
Local MPPs

From the Clerk's Department



**Administrative
Services**

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City of Port Colborne
Regular Committee of the Whole Meeting 04-19
Minutes

Date: January 28, 2019

Time: 6:30 p.m.

Place: Council Chambers, Municipal Offices, 66 Charlotte Street, Port Colborne

Members Present: M. Bagu, Councillor
E. Beauregard, Councillor
R. Bodner, Councillor
G. Bruno, Councillor
F. Danch, Councillor
A. Desmarais, Councillor
D. Kalailieff, Councillor
W. Steele, Mayor (presiding officer)
H. Wells, Councillor

Staff Present: D. Aquilina, Director of Planning & Development
T. Cartwright, Fire Chief
A. Grigg, Director of Community and Economic Development
A. LaPointe, Manager of Legislative Services/City Clerk
C. Lee, Director of Engineering and Operations
S. Luey, Chief Administrative Officer
L. Nelson, EAA to Director of Corporate Services (minutes)
T. Rogers, Chief Building Official
P. Senese, Director of Corporate Services

Also in attendance were interested citizens, members of the news media and WeeStream.

1. Call to Order:

Mayor Steele called the meeting to order.
Mayor Steele requested a moment of silence for Former Councillor John Mayne.

2. National Anthem:

Those in attendance stood for O Canada.

3. Introduction of Addendum Items:

Nil.

4. Confirmation of Agenda:

Moved by Councillor R. Bodner
Seconded by Councillor H. Wells

That the agenda dated January 28, 2019 be confirmed, as circulated or as amended.

CARRIED.

5. Disclosures of Interest:

Nil.

6. Adoption of Minutes:

(a) Regular meeting of Committee of the Whole 01-19, held on January 14, 2019.

Moved by Councillor G. Bruno
Seconded by Councillor A. Desmarais

That the minutes of the regular meeting of Committee of the Whole 01-19, held on January 14, 2019, be approved as presented.

CARRIED.

7. Determination of Items Requiring Separate Discussion:

The following items were identified for separate discussion:

Items 1, 2, 5 and 14

8. Approval of Items Not Requiring Separate Discussion:

Moved by Councillor A. Desmarais
Seconded by Councillor H. Wells

That Items 1 to 16 on the agenda be approved, with the exception of items that have been deferred, deleted or listed for separate discussion, and the recommendation contained therein adopted.

Items:

- 3. Planning and Development Department, Planning Division, Report 2019-10, Subject: Bill 66 – Proposed Amendment to the Growth Plan**
-

Committee of the Whole Recommends:

That Council receive Planning and Development Department, Planning Division Report 2019-10 for information.

4. Planning and Development Department, By-law Division, Report 2019-9, Subject: Parking and Traffic – Elgin Street

Committee of the Whole Recommends:

That the amendment to By-law 89-2000 being a By-law regulating traffic and parking on City roads be approved as follows:

That Schedule 'E' Limited Parking Restrictions, to By-law 89-2000 as amended, be amended by deleting therefrom the following:

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>	<u>Column 5</u>
Highway	Side	From To	Times/ Days	Maximum
Elgin St.	South	Steele St. Fielden Ave.	Anytime	1 Hour

6. Corporate Services Department, Finance Division, Report 2019-6, Subject: Cancellation, Reduction or Refund of Realty Tax

Committee of the Whole Recommends:

That the applications pursuant to Section 357/358 of the *Municipal Act, 2001*, as amended, 2018-04 (566 Pleasant Beach Road) and 2018-05 (4443 Koabel Road) be approved to cancel or reduce taxes in the total amount of \$244.60.

7. National Eating Disorder Information Centre Re: Request for Proclamation of Eating Disorder Awareness Week (EDAW), February 1-7, 2019

Committee of the Whole Recommends:

That the week of February 1 - 7, 2019 be proclaimed as Eating Disorder Awareness Week in the City of Port Colborne in accordance with the request received from the National Eating Disorder Information Centre.

8. Cathy Boyko and Peter Van Caulart, Co-Chairs, 2019 ARC Terminus Committee Re: Request for Proclamation of Air Race Week, June 19-24, 2019

Committee of the Whole Recommends:

That the week of June 19 - 24, 2019 be proclaimed as "Air Race Week" in the City of Port Colborne in accordance with the request received from Cathy Boyko and Peter Van Caulart, Co-Chairs, 2019 ARC Terminus Committee.

9. Municipal Property Assessment Corporation Re: 2018 Year-End Assessment Report

Committee of the Whole Recommends:

That the correspondence received from the Municipal Property Assessment Corporation (MPAC) Re: 2018 Year-End Assessment Report, be received for information.

10. Memorandum from Vance Badawey, Member of Parliament, Niagara Centre Re: National Trade Corridors Fund – 3rd Call for Proposals

Committee of the Whole Recommends:

That the Memorandum from Vance Badawey, Member of Parliament, Niagara Centre Re: National Trade Corridors Fund – 3rd Call for Proposals, be received for information.

11. Municipalities in the Niagara Region Re: Responses regarding their decision on retail cannabis whether to "Opt-In" or "Opt-Out" to allow retail cannabis in their Municipality

Committee of the Whole Recommends:

That the resolutions received from the municipalities within Niagara Region regarding retail cannabis, be received for information.

12. City of St. Catharines Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales

Committee of the Whole Recommends:

That the resolution received from the City of St. Catharines Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales, be supported.

13. Town of Niagara-on-the-Lake Re: Support for Locally grown and produced wine and craft beer

Committee of the Whole Recommends:

That the resolution received from the Town of Niagara-on-the-Lake Re: Support for Locally grown and produced wine and craft beer, be received for information.

15. Township of Georgina, Township of Wilmot, Town of Orangeville Re: Bill 66 – “Restoring Ontario’s Competitiveness Act” – Oppose Schedule 10 of Bill 66 “Open for Business” Planning By-law

Committee of the Whole Recommends:

That the resolutions received from the Town of Georgina, Township of Wilmot and the Town of Orangeville Re: Bill 66 “Restoring Ontario’s Competitiveness Act” – Oppose Schedule 10 of Bill 66 “Open for Business” Planning By-law, be received for information.

16. City of Welland Re: Transit Agreement approval with the City of Port Colborne

Committee of the Whole Recommends:

That the resolution received from the City of Welland Re: Transit Agreement with the City of Port Colborne, be received for information.

CARRIED.

9. Presentations:

(a) Lynne Cunningham, Account Manager, Municipal Property Assessment Corporation (MPAC)

Lynne Cunningham, Account Manager, Municipal Property Assessment Corporation provided information on MPAC and answered questions by Members of Council regarding MPAC and Ontario’s Assessment System. Ms. Cunningham directed residents with inquiries regarding their property assessment to visit aboutmyproperty.ca. A copy of the presentation is attached.

10. Delegations:

(a) Michael Smith, President, Hometown Properties Inc., regarding a request to include 176 Elm Street within the Community Improvement Plan (CIP) Boundary

Michael Smith requested to extend the Downtown CIP boundaries to include 176 Elm Street. Mr. Smith noted that there is a shortfall in the downtown core to provide affordable housing for seniors and the former church is an opportunity to create affordable housing for seniors.

Moved by Councillor D. Kalailieff
Seconded by Councillor A. Desmarais

That the Director of Planning and Development be directed to evaluate the request for 176 Elm Street to be included within the Downtown CIP boundary; and

That staff review the Downtown CIP boundary as a whole; and

That staff report back to Council with recommendations.

CARRIED.

11. Mayor's Report:

Mayor Steele announced that the City has lost a great community supporter with the passing of former Ward One Councillor John Mayne. Mayor Steele noted that former Councillor Mayne was very passionate about Port Colborne with his many volunteer activities within the community, especially serving as a volunteer firefighter for 25 years, retiring as Captain in 2008. Mayor Steele noted that flags have been lowered in John's honour. Mayor Steele spoke regarding warming centres during the recent cold spell and the efforts made across all sectors to alleviate conditions that local residents are dealing with. Mayor Steele also reminded residents about Sportsfest, February 8-10.

12. Regional Councillor's Report:

Regional Councillor Butters provided Council with answers to questions raised by a resident regarding garbage bi-weekly collection. Councillor Butters advised that if any Councillor receives feedback from the public, good and bad comments, please forward to her attention. Councillor Butters spoke regarding the water tower being taken down and noted that it is unfortunate that the City name will not be displayed on water tower anymore. Councillor Butters suggested Council and staff think of other ways of creating signage near the harbor such as on the Grain Terminal.

13. Councillors' Items:

(a) South Crescent Street Lights (Bagu)

In response to a concern Councillor Bagu received with respect to South Crescent street lighting, the Director of Engineering and Operations advised that he will touch base with staff on January 29th, and report back on the issue.

(b) Warming Centre and Snowbuddies Volunteers (Desmarais)

In response to an inquiry Councillor Desmarais received from a local business running the warming centre, Councillor Desmarais suggested contacting the City volunteers to work at the warming centre as well as for the Snowbuddies

program which is currently in need of volunteers for the large population of seniors in the City. The Director of Community and Economic Development advised that she will speak to the volunteer coordinator.

(c) Parking Lot Lighting at Vale Centre (Beauregard)

Councillor Beauregard noted that he has heard parents mentioning the low lighting and dark parking lot at the Vale Centre. The Director of Engineering and Operations advised that facilities staff are looking into retrofitting current lighting at the Vale Health and Wellness Centre and replacing with LED lighting.

(d) Parking Lot Lighting at Vale Centre (Wells)

Councillor Wells thanked staff for the prompt replacement of mailboxes that had been knocked down by snow plowing.

Staff responses to Councillors' enquiries:

(a) Sound Deafening Measures Golden Puck Room (Grigg)

The Director of Community and Economic Development provided an update regarding successful installation of baffles in the Golden Puck room to deafen the sound.

(b) Pedestrian Crossover Update (Lee)

The Director of Engineering and Operations provided an update that there will be a presentation at the next meeting of Council regarding the pedestrian crossover on Clarence Street.

(c) Building a Disaster Resilient Niagara Conference (Cartwright)

The Fire Chief provided an overview of the Building a Disaster Resilient Niagara conference on February 18th that the CAO, some staff and some members of Council attended. All in attendance enjoyed the day and the information provided.

(d) Budget Meeting (Senese)

The Director of Corporate Services advised Council and staff that the next scheduled budget meeting is February 4th at 530 p.m.

14. Consideration of Items Requiring Separate Discussion:

- 1. Planning and Development Department, Building Division, Report 2019-8, Subject: Rates and Fees By-law – Building Division Fees**

Moved by Councillor H. Wells
Seconded by Councillor F. Danch

That the Council of the City of Port Colborne adopt the fees and charges in Schedule X of Appendix A to By-Law No. 6558/13/18 as provided in this report.

CARRIED.

2. Motion by Councillor Beauregard Re: Rezoning of Certain Lands within the East Waterfront Secondary Plan Area to Industrial/Employment Purposes

Moved by Councillor E. Beauregard
Seconded by Councillor A. Desmarais

That Planning and Development staff be directed to bring forward applications under the Planning Act to propose changes in land use for certain properties within the East Waterfront Secondary Plan Area that are federally and privately owned from Parks and Open Space to Industrial/Employment purposes.

CARRIED.

5. Corporate Services Department, Finance Division, Report 2019-11, Subject: Consolidated Fees and Charges By-law – 2019

Moved by Councillor G. Bruno
Seconded by Councillor R. Bodner

That the Consolidated Fees and Charges By-law attached to Corporate Services Department, Finance Division report 2019-11 be approved; and

That the Mayor and City Clerk be authorized to execute the appropriate By-law.

CARRIED.

14. City of St. Catharines Re: Plastic Straw and Plastic Stir Stick Ban in City Facilities

Moved by Councillor E. Beauregard
Seconded by Councillor F. Danch

That the resolution received from the City of St. Catharines Re: Plastic Straw and Plastic Stir Stick Ban in City Facilities, be received for information.

Moved in referral by Councillor E. Beauregard
Seconded by Councillor F. Danch

That the correspondence received from the City of St. Catharines be referred to the Director of Community and Economic Development and the Environmental Advisory Committee for recommendations for the City of Port Colborne.

CARRIED.

15. Notice of Motion:

Councillor Kalailieff provided notice of her intention to introduce a motion at the February 11, 2019 Committee of the Whole meeting with respect to waiving the fire inspection fees on Bed and Breakfasts.

16. Adjournment:

Moved by Councillor F. Danch
Seconded by Councillor E. Beauregard

That the Committee of the Whole meeting be adjourned at approximately 8:41 p.m.

CARRIED.

AL/ln



MAYOR'S REPORT – JANUARY 28, 2019

FORMER COUNCILLOR JOHN MAYNE

On Friday, we lost a great community supporter with the passing of former Ward One Councillor John Mayne.

John was very passionate about Port Colborne with his many volunteer activities within the community, especially serving as a volunteer firefighter for 25 years, retiring as Captain in 2008.

He represented the constituents of Ward One for 4 years and sat on the many committees including Accessibility, Committee of Adjustment, Economic Development, Heritage, Library, Operations Centre and Property Standards during his term.

Never afraid to speak up or ask a question, you always knew where you stood with John.

Our prayers go out to his wife Mickey and family. Our flags have been lowered in John's honour.

WARMING CENTRES

There is no question that the City of Port Colborne is a compassionate and caring community.

We witness this 365 days a year and in particular this time of year with the harshness of winter.

During this recent extreme cold spell there have been a number efforts made during this across all sectors – including community, organizational as well as municipal level to alleviate the difficult conditions that local residents who are living in rental units or homes without heat or hydro, or are couch surfing because they don't have a place of their own, or are on the brink of becoming homeless or are.

Late last week the City announced that all local residents seeking warmth and shelter are welcomed and encouraged to go to all city owned buildings during operating hours— including the Vale Centre and library as well as here at city hall.

Since becoming Mayor and being appointed to the police board, I am fully aware of the incredible work that goes on day in day out in this community by our frontline police and social service personnel working as an interdisciplinary team to reach out to Port Colborne residents who are at risk - many who face addiction and mental health issues and are in extremely difficult situations including living in inhabitable conditions.

This team has been working hard seven days a week to make sure people are helped and properly housed.

They are the eyes and ears of those most in need in our city.

I have also learned an incredible amount about the work of Port Cares and its Reach Out Centre to help those in need—including what Port Cares can do to keep residents from becoming homeless because they don't have heat or hydro as result of not having enough money to pay their utility bills.

I appreciate all the assets and resources that we have in Port Colborne to help those at risk and those at greatest risk during times like these.

However, collectively we have to get beyond the stop-gap measures and knee jerk reactions.

We need real, workable and impactful solutions to wrestle down the housing crisis – solutions that in one year, two years, five and ten years mean we don't have to rely on opening up buildings so our residents can have comfort for a few hours a day.

As Canadians – we want more – we want everyone to have a safe home.

We know full well that the availability of safe, affordable housing is increasingly shrinking – this is the case in Port Colborne along with nearly all municipalities in the region.

However, we need to work TOGETHER – TRULY TOGETHER, not just as a municipality but as a COMMUNITY, to move far past the stop gap measures that deal in the moment of what’s happening at this moment or today when the weather takes a bad turn to longer term strategies and solutions which will ultimately eliminate stop gap measures.

While we know full well that the answer to the situation ultimately rests in increasing the stock of safe affordable housing – both rental and owned in our city.

This won’t happen overnight nor can the city alone address the issue.

To this end, I am seeking the assistance of the Social Determinants of Health Committee, as well as our Planning and Economic Development Departments to work with me to deliver long-term effective strategies.

SPORTSFEST

A reminder to residents that the weekend of February 8-10 is SportsFest, a family-friendly **Festival of Sports** event, which attracts participants from across Niagara, with proceeds donated to various charities.

The Mayor's Cup Invitational Hockey Tournament, indoor Volleyball Tournament, FREE Family Skating & Swimming, Music Trivia, Sno-Pitch & Outdoor Ball Hockey are just some of the events that are offered to the community.

Providing a sense of community pride and greater awareness of each community group, SportsFest offers activities for all ages, promotes a healthy lifestyle, and an opportunity for organized fundraising within the City of Port Colborne.

SNOW PLOW OPERATIONS AND PARKING ON CITY STREETS

During a snow event, we remind the citizens of Port Colborne to refrain from parking on the street and NOT to park in a way that interferes with snow removal.

A snow-clearing event is when our plows are dispatched, and they move the snow from the travelled portion of the roadway to the edge or sides of the road allowance.

All vehicles that interfere with this process by causing the creation of windrows, parking on the road allowance and/or parking in removal areas for the snow to be displaced from the highway, will receive:

- a \$75 ticket.
- a purple tow tag
- have their vehicle towed

All of these actions may take place within the hour, depending on the severity of the snow.

Therefore, to avoid actions from our By-law Enforcement Division, please refrain from parking on the highway and allow our plow operators to clear the snow in a safe and timely fashion.

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**City of Port Colborne
Regular Meeting of Council 03-19
Monday, February 11, 2019
following Committee of the Whole Meeting
Council Chambers, 3rd Floor, 66 Charlotte Street**

Agenda

1. **Call to Order:** Mayor William C. Steele
2. **Introduction of Addendum Items:**
3. **Confirmation of Agenda:**
4. **Disclosures of Interest:**
5. **Adoption of Minutes:**
 - (a) Regular meeting of Council 02-19, held on January 28, 2019.
6. **Determination of Items Requiring Separate Discussion:**
7. **Approval of Items Not Requiring Separate Discussion:**
8. **Consideration of Items Requiring Separate Discussion:**
9. **Proclamations:**

Nil.
10. **Minutes of Boards, Commissions & Committees:**
 - (a) Minutes of the Port Colborne Public Library Board Meeting of December 11, 2018
11. **Consideration of By-laws:**
12. **Council in Closed Session:**
 - (i) Motion to go into Closed Session

That Council do now proceed into closed session in order to address the following matter(s):

 - (a) Concerning Seaway Lands Divestiture, pursuant to the *Municipal Act, 2001*, Subsection 239(2)(c) a proposed or pending acquisition or disposition of land by the municipality or local board.
 - (ii) Disclosures of Interest (closed session agenda):

(iii) Consideration of Closed Session Items:

(iv) Motion to Rise With Report:

13. Disclosures of Interest Arising From Closed Session:

14. Report/Motions Arising From Closed Session:

15. Adjournment:

Council Items:

Notes	Item	Description / Recommendation
<p>WCS MB EB RB GB FD AD DK HW</p>	<p>1.</p>	<p><u>Motion by Councillor Desmarais Re: Affordable Housing Strategy</u></p> <p>Whereas access to adequate housing is a fundamental human right (paragraph 25(1) of the United Nations Universal Declaration of Human Rights, and Ontario Human Rights Commission - Human Rights Perspective on Housing Supply, January 2019); and</p> <p>Whereas Port Colborne is fast approaching a housing crisis with alarming occupancy rates, soaring housing costs and stagnating incomes (Ontario Association of Food Banks, Quarterly Report, September 2018, Port Colborne Primary Rental Market Statistics, 2016, Key Housing Indicators for Port Colborne, July 5, 2017 and Where Will We Live – Ontario’s Rental Housing Crisis, May 2018); and</p> <p>Whereas the Senior Citizens Advisory Committee and the Social Determinants of Health Committee, both being committees of this council have each placed housing as a priority to their mandate; and Whereas designing and implementing a poverty reduction strategy has been included in the Port Colborne Strategic Plan (CAO Report No.:2015-47); and</p> <p>Whereas adequate and affordable housing has been directly linked to poverty reduction (Wellesley Institute, Poverty Is a Health Issue: It’s time to address housing and homelessness, Oct 10, 2013)</p> <p>Therefore be it resolved that The Corporation of the City of Port Colborne does acknowledge that housing is a human right and that municipal government has a role to play in the gradual realization of this right for all residents of Port Colborne; and</p> <p>That staff be directed to engage with stakeholders to create a coordinated municipal affordable housing strategy for the city of Port Colborne with the goal to establish a definition for the term “affordable housing” and to create affordable housing options across the housing continuum, with a report due back to this council to include a high-level view of timelines and targets on or before May 27, 2019.</p> <p>Note: Notice of Motion was given at the Meeting of January 14, 2019.</p>

WCS RB AD	MB GB DK	EB FD HW	2.	<p><u>Engineering and Operations Department, Engineering Division, Report 2019-15, Subject: Information Report on the Proposed Regional Niagara Waste Collection Services Contract</u></p> <p>That Council receive Engineering and Operations Department Report 2019-15 for information.</p>
WCS RB AD	MB GB DK	EB FD HW	3.	<p><u>Engineering and Operations Department, Engineering Division, Report 2019-12, Subject: Amendment to the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains Report</u></p> <p>That staff be directed to prepare a by-law appointing Paul Marsh P. Eng. of EWA Engineering Inc. to comply with Section 8, Chapter D. 17 of the Drainage Act R.S.O. 1990, as such a by-law will allow us to fulfill the requirement of Section 58(4), Chapter D. 17 of the Drainage Act R.S.O. 1990, as recommended by the Tribunal Coordinator; and</p> <p>That the Mayor and City Clerk be directed to execute the appropriate by-law.</p>
WCS RB AD	MB GB DK	EB FD HW	4.	<p><u>Planning and Development Department, By-law Enforcement Division, Report 2019-13, Subject: Encroachment request 104 Fraser Street</u></p> <p>That Council approve the encroachment application and authorize entering into a License Agreement with the applicant and owner Yvon Mousseau for 104 Fraser Street.</p>
Miscellaneous Correspondence				
WCS RB AD	MB GB DK	EB FD HW	5.	<p><u>Region of Niagara Re: Approval of Interim Levy Dates and Amounts (Report CSD 6-2019)</u></p> <p>That the correspondence received from the Region of Niagara Re: Approval of Interim Levy Dates and Amounts, be received for information.</p>
WCS RB AD	MB GB DK	EB FD HW	6.	<p><u>Region of Niagara Re: Vacancy Program Revisions to Ministry of Finance (Report CSD 3-2019)</u></p> <p>That the correspondence received from the Region of Niagara Re: Vacancy Program Revisions to Ministry of Finance, be received for information.</p>

Outside Resolutions – Requests for Endorsement				
WCS	MB	EB	7.	<p><u>Town of Lincoln, Town of Pelham Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales</u></p> <p>That the resolutions received from the Town of Lincoln and Town of Pelham Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales, be received for information.</p>
RB	GB	FD		
AD	DK	HW		
Responses to City of Port Colborne Resolutions				
Nil.				

**Consideration of By-laws
(Council Agenda Item 11)**

By-law No.	Title
6641/05/19	Being a By-law to Appoint Paul Marsh, P. Eng. of EWA Engineers Inc. for the Preparation of an Amended Engineers Report for the Zavitz Municipal Drain situated in the Town of Fort Erie and the City of Port Colborne and to Rescind By-law No. 5606/36/11
6642/06/19	Being a By-law to Establish a Committee of Adjustment and Repeal By-laws 3580/6/98, 3844/130/99 and 4479/10/04
6643/07/19	Being a By-law to Appoint Members of Council to the Committee of Adjustment
6644/08/19	Being a By-law to Authorize Entering into a Licence Agreement between The Corporation of the city of Port Colborne and Yvon Mousseau regarding 104 Fraser Street, Port Colborne
6645/09/19	Being a By-law to Adopt, Ratify and Confirm the Proceedings of the Council of The Corporation of the City of Port Colborne at its Regular Meeting of February 11, 2019

**City of Port Colborne
Regular Council Meeting 02-19
Minutes**

Date: January 28, 2019

Time: 8:41 p.m.

Place: Council Chambers, Municipal Offices, 66 Charlotte Street, Port Colborne

Members Present: M. Bagu, Councillor
E. Beauregard, Councillor
G. Bruno, Councillor
R. Bodner, Councillor
F. Danch, Councillor
A. Desmarais, Councillor
D. Kalailieff, Councillor
W. Steele, Mayor (presiding officer)
H. Wells, Councillor

Staff Present: D. Aquilina, Director of Planning & Development
T. Cartwright, Fire Chief
A. Grigg, Director of Community and Economic Development
A. LaPointe, Manager of Legislative Services/City Clerk
C. Lee, Director of Engineering and Operations
S. Luey, Chief Administrative Officer
L. Nelson, EAA to Director of Corporate Services (minutes)
T. Rogers, Chief Building Official
P. Senese, Director of Corporate Services

Also in attendance were interested citizens, members of the news media and WeeStream.

1. Call to Order:

Mayor Steele called the meeting to order.

2. Introduction of Addendum Items:

Nil.

3. Confirmation of Agenda:

No. 11 Moved by Councillor G. Bruno
Seconded by Councillor H. Wells

That the agenda dated January 28, 2019 be confirmed, as circulated or as amended.

CARRIED.

4. **Disclosures of Interest:**

Nil.

5. **Adoption of Minutes:**

No. 12 Moved by Councillor H. Wells
Seconded by Councillor E. Beauregard

That the minutes of the regular meeting of Council 01-19, held on January 14, 2019, be approved as presented.

CARRIED.

6. **Determination of Items Requiring Separate Discussion:**

Nil.

7. **Approval of Items Not Requiring Separate Discussion:**

No. 13 Moved by Councillor A. Desmarais
Seconded by Councillor D. Kalailieff

That Items 1 to 16 on the agenda be approved, with the exception of items that have been deferred, deleted or listed for separate discussion, and the recommendation contained therein adopted.

Item:

1. **Planning and Development Department, Building Division, Report 2019-8, Subject: Rates and Fees By-law – Building Division Fees**

Council resolved:

That the Council of the City of Port Colborne adopt the fees and charges in Schedule X of Appendix A to By-Law No. 6558/13/18 as provided in this report.

2. **Motion by Councillor Beauregard Re: Rezoning of Certain Lands within the East Waterfront Secondary Plan Area to Industrial/Employment Purposes**

Council resolved:

That Planning and Development staff be directed to bring forward applications under the Planning Act to propose changes in land use for certain properties within the East Waterfront Secondary Plan Area that are federally and privately owned from Parks and Open Space to Industrial/Employment purposes.

3. Planning and Development Department, Planning Division, Report 2019-10, Subject: Bill 66 – Proposed Amendment to the Growth Plan

Council resolved:

That Council receive Planning and Development Department, Planning Division Report 2019-10 for information.

4. Planning and Development Department, By-law Division, Report 2019-9, Subject: Parking and Traffic – Elgin Street

Council resolved:

That the amendment to By-law 89-2000 being a By-law regulating traffic and parking on City roads be approved as follows:

That Schedule 'E' Limited Parking Restrictions, to By-law 89-2000 as amended, be amended by deleting therefrom the following:

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>	<u>Column 5</u>
Highway	Side	From To	Times/ Days	Maximum
Elgin St.	South	Steele St. Fielden Ave.	Anytime	1 Hour

5. Corporate Services Department, Finance Division, Report 2019-11, Subject: Consolidated Fees and Charges By-law – 2019

Council resolved:

That the Consolidated Fees and Charges By-law attached to Corporate Services Department, Finance Division report 2019-11 be approved; and

That the Mayor and City Clerk be authorized to execute the appropriate By-law.

6. **Corporate Services Department, Finance Division, Report 2019-6,
Subject: Cancellation, Reduction or Refund of Realty Tax**

Council resolved:

That the applications pursuant to Section 357/358 of the *Municipal Act, 2001*, as amended, 2018-04 (566 Pleasant Beach Road) and 2018-05 (4443 Koabel Road) be approved to cancel or reduce taxes in the total amount of \$244.60.

7. **National Eating Disorder Information Centre Re: Request for
Proclamation of Eating Disorder Awareness Week (EDAW), February
1 – 7, 2019**

Council resolved:

That the week of February 1 - 7, 2019 be proclaimed as Eating Disorder Awareness Week in the City of Port Colborne in accordance with the request received from the National Eating Disorder Information Centre.

8. **Cathy Boyko and Peter Van Caulart, Co-Chairs, 2019 ARC Terminus
Committee Re: Request for Proclamation of Air Race Week, June 19-
24, 2019**

Council resolved:

That the week of June 19 - 24, 2019 be proclaimed as "Air Race Week" in the City of Port Colborne in accordance with the request received from Cathy Boyko and Peter Van Caulart, Co-Chairs, 2019 ARC Terminus Committee.

9. **Municipal Property Assessment Corporation Re: 2018 Year-End
Assessment Report**

Council resolved:

That the correspondence received from the Municipal Property Assessment Corporation (MPAC) Re: 2018 Year-End Assessment Report, be received for information.

10. **Memorandum from Vance Badawey, Member of Parliament, Niagara
Centre Re: National Trade Corridors Fund – 3rd Call for**

Proposals

Council resolved:

That the Memorandum from Vance Badawey, Member of Parliament, Niagara Centre Re: National Trade Corridors Fund – 3rd Call for Proposals, be received for information.

11. Municipalities in the Niagara Region Re: Responses regarding their decision on retail cannabis whether to “Opt-In” or “Opt-Out” to allow retail cannabis in their Municipality

Council resolved:

That the resolutions received from the municipalities within Niagara Region regarding retail cannabis, be received for information.

12. City of St. Catharines Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales

Council resolved:

That the resolution received from the City of St. Catharines Re: Support for Ontario Wine and Beer in Retail Stores as Part of Modernizing Alcohol Sales, be supported.

13. Town of Niagara-on-the-Lake Re: Support for Locally grown and produced wine and craft beer

Council resolved:

That the resolution received from the Town of Niagara-on-the-Lake Re: Support for Locally grown and produced wine and craft beer, be received for information.

14. City of St. Catharines Re: Plastic Straw and Plastic Stir Stick Ban in City Facilities

Council resolved:

That the correspondence received from the City of St. Catharines be referred to the Director of Community and Economic Development and the Environmental Advisory Committee for recommendations for the City of Port Colborne.

15. Township of Georgina, Township of Wilmot, Town of Orangeville Re: Bill 66 – “Restoring Ontario’s Competitiveness Act” – Oppose Schedule 10 of Bill 66 “Open for Business” Planning By-law

Council resolved:

That the resolutions received from the Town of Georgina, Township of Wilmot and the Town of Orangeville Re: Bill 66 “Restoring Ontario’s Competitiveness Act” – Oppose Schedule 10 of Bill 66 “Open for Business” Planning By-law, be received for information.

16. City of Welland Re: Transit Agreement approval with the City of Port Colborne

Council resolved:

That the resolution received from the City of Welland Re: Transit Agreement with the City of Port Colborne, be received for information.

CARRIED.

8. Consideration of Items Requiring Separate Discussion:

Nil.

9. Proclamations:

(a) Eating Disorder Awareness Week, February 1 – 7, 2019

No. 14 Moved by Councillor G. Bruno
Seconded by Councillor A. Desmarais

Whereas Eating Disorder Awareness Week will be from February 1 – 7, 2019; and

Whereas eating disorders have the highest mortality rate among all psychiatric illnesses and can develop in anyone, regardless of age, ethno-racial background, socioeconomic status, gender or ability; and

Whereas stigma, secrecy and stereotypes still surround eating disorders, causing many people who are suffering to refrain from seeking help; and

Whereas open supportive dialogue can help break the shame and silence that affect nearly 1 million Canadians living with diagnosable eating disorders and the millions of others who are struggling with food and weight preoccupation; and

Whereas Eating Disorder Awareness Week (EDAW) seeks to raise awareness of eating disorders, shed light on dangerous and pervasive myths, and promote prevention. It is also a time of year for Canadians to learn about available resources and appropriate services for themselves and/or loved ones; and

Whereas Eating Disorder Awareness Week aims to teach Canadians that eating disorders are not a choice, and that eating disorders are a serious and dangerous mental illness;

Now therefore, I, Mayor, William C. Steele, proclaim February 1st – 7th, 2019 as “Eating Disorder Awareness Week” in the City of Port Colborne.

CARRIED.

(b) Air Race Week, June 19 – 24, 2019

No. 15 Moved by Councillor G. Bruno
Seconded by Councillor A. Desmarais

Whereas the Air Race Classic (ARC) is the world’s pre-eminent longest running air race for women. Its mission is to emphasize the acknowledgement of female pilots through aviation based education and outreach programs; and

Whereas participant racers come from throughout the global community to enhance their experience by sharing skills and to provide opportunity and mentor support for those seeking aviation based careers; and

Whereas youth aviation careers or life choices are directly influenced by exposure to positive role models and flying experiences obtained at local general aviation airports; and

Whereas Port Colborne’s shared general aviation asset, the Niagara Central Dorothy Rungeling Airport (NCDRA) is named for such a role model and offers multiple ways for the public to experience aviation at a world class facility; and

Whereas the Air Race Classic has selected NCDRA to be the 2019 Terminus finish for the 43rd annual running of its 2,400 mile air race; and

Now therefore, Mayor, William C. Steele, proclaim June 19 – 24, 2019 as “Air Race Week” in the City of Port Colborne.

CARRIED.

10. Minutes of Boards, Commissions & Committees:

Nil.

11. Consideration of By-laws:

No. 16 Moved by Councillor G. Bruno
Seconded by Councillor A. Desmarais

That the following by-laws be enacted and passed:

- 6638/02/19 Being a By-law to Establish Fees and Charges for Various Services and to Repeal by-law 6658/13/18
- 6639/03/19 Being a By-law to Amend By-law No. 89-2000, Being a By-law Regulating Traffic and Parking on City Roads
- 6640/04/19 Being a By-law to Adopt, Ratify and Confirm the Proceedings of the Council of The Corporation of the City of Port Colborne at its Regular Meeting of January 28, 2019

CARRIED.

12. Adjournment:

No. 17 Moved by Councillor F. Danch
Seconded by Councillor A. Desmarais

That the Council meeting be adjourned at approximately 8:43 p.m.

CARRIED.

William C. Steele
Mayor

Amber LaPointe
City Clerk

AL/ln

The Corporation of the City of Port Colborne

By-law No. 6641/05/19

Being a by-law to appoint Paul Marsh P. Eng. of EWA Engineers Inc. for the preparation of an Amended Engineer's Report for the Zavitz Municipal Drain situated in the Town of Fort Erie and the City of Port Colborne and to rescind By-law No. 5606/36/11

Whereas, on the 11th day of April, 2011, Council adopted By-law 5606/36/11 to appoint Paul Smeltzer P. Eng. of AMEC for the preparation of a new engineer's report for the repair and improvement of the Zavitz Municipal Drain situated in the City of Port Colborne; and

Whereas, AMEC Earth and Environmental Limited is unable to provide the services required; and

Whereas, on the 11th day of February, 2019, that Council approved Department of Engineering & Operations, Engineering Division, Report No. 2019-12 Amendment to the Zavitz Municipal Drain Sherkston North Branch East & West Trail Branch Drains to prepare revisions to the original Zavitz Drain report for repairs and improvements.

Now therefore the Council of the Corporation of the City of Port Colborne enacts as follows:

1. That Paul Marsh, P. Eng. EWA Engineers Inc. be appointed as the Drainage Engineer for the preparation of an Amended Engineer's Report for the Zavitz Municipal Drain under Section 58(4) of the Drainage R.S.O. 1990, to undertake a revision of the current Engineer's Report, for the repair and improvement of the Zavitz Municipal Drain, situated in the City of Port Colborne.
2. That By-law 5606/36/11 be repealed.
3. That the Town of Fort Erie be so advised.

Enacted and passed this 11th day of February, 2019.

William C. Steele
Mayor

Amber LaPointe
City Clerk

The Corporation of the City Of Port Colborne

By-Law No. 6642/06/19

Being a by-law to establish a committee of adjustment and repeal by-laws 3580/6/98, 3844/130/99 and 4479/10/04

Whereas pursuant to Chapter P.13 of The Planning Act, RSO 1990, Section 44, if a municipality has passed a by-law under Section 34 or a predecessor of such section, the Council of the municipality may by by-law constitute and appoint a Committee of Adjustment for the municipality composed of such persons, not fewer than three, as the Council considers advisable.

Now therefore the Council of the Corporation of the City of Port Colborne enacts as follows:

1. That the Committee known as the "Committee of Adjustment" be hereby established.
2. That the Terms of Reference for the "Committee of Adjustment", attached hereto as Schedule "A" be and they are hereby authorized and approved as adopted.
3. That this By-law shall come into force and take effect on the date of passing.
4. That By-laws 3580/6/98, 3844/130/99 and 4479/10/04 are hereby repealed.

Enacted and passed this 11th day of February, 2019.

William C. Steele
Mayor

Amber LaPointe
City Clerk

SCHEDULE "A"

COMMITTEE OF ADJUSTMENT TERMS OF REFERENCE

1. The Committee of Adjustment is formed with regard to Section 44 of *The Planning Act*.
2. The Council of the Corporation of the City of Port Colborne assigns the Committee of Adjustment the authority to:
 - a. Grant minor variances pursuant to Subsection 45 (1) of *The Planning Act*;
 - b. Grant applications pursuant to Subsections 45 (2) and 45 (3) of *The Planning Act*;
 - c. Grant consents pursuant to Section 53 of *The Planning Act*, which is deemed to include the giving of approval to the foreclosures or of exercise of a power of sale in a mortgage or charge, pursuant to Subsection 50 (18) of *The Planning Act* and the issuing of certificates of validation pursuant to Section 57 of the Planning Act.
3. The Committee of Adjustment shall consist of five voting members made up of the following:
 - a. At least one member of the Council of the Corporation of the City of Port Colborne. Members of Council must be appointed to the Committee annually by by-law; and,
 - b. At least one member of the public. Members of public shall serve a term that ends with the term of Council that appoints them.
4. The Director of Planning and Development shall designate a member of staff to serve as a non-voting Secretary-Treasurer to the Committee of Adjustment.
5. Voting Members of the Committee of Adjustment shall be paid by the Corporation of the City of Port Colborne for each meeting they attend at a rate set in the annual Councillor appointment by-law.

The Corporation of the City Of Port Colborne

By-Law No. 6643/07/19

Being a By-Law to appoint members of council to the
committee of adjustment

Whereas pursuant to Subsection 44 (3) of *The Planning Act*, members of council that serve on a Committee of Adjustment must be appointed by by-law annually; and

Whereas at its meeting on January 14th 2019 Council resolved to appoint four members of Council to the Committee of Adjustment for a term ending November 30th 2022.

Now therefore the Council of the Corporation of the City of Port Colborne enacts as follows:

1. That Councillors Angie Desmarais, Eric Beauregard, Donna Kalailieff, and Gary Bruno be appointed as the Council representatives to the Committee of Adjustment for a period ending January 30, 2020.
2. That members of the Committee of Adjustment receive a payment of \$75.00 per meeting they attend with the chair of each meeting receiving an additional \$5.00.

Enacted and passed this 11th day of February, 2019.

William C. Steele
MAYOR

Amber LaPointe
CLERK

The Corporation of the City of Port Colborne

By-law No. 6644/08/19

Being a By-law to authorize entering into a Licence Agreement between The Corporation of the City of Port Colborne and Yvon Mousseau regarding 104 Fraser Street, Port Colborne

Whereas at its meeting of February 11th, 2019 the Council of The Corporation of the City of Port Colborne approved the recommendation of Planning and Development Department, By-law Enforcement Division, Report 2019-13, Subject: Encroachment request 104 Fraser Street; and

Whereas Council is desirous of entering into a licence agreement with Yvon Mousseau (owner) regarding 104 Fraser Street, Port Colborne.

Now therefore the Council of The Corporation of the City of Port Colborne enacts as follows:

1. That The Corporation of the City of Port Colborne enter into a licence agreement with Yvon Mousseau (owner) regarding 104 Fraser Street, Port Colborne for an existing carport, deck and stairs located on or overhanging the City's active rail line.
2. That the Mayor and Clerk be and they are hereby authorized and directed to sign said Agreement and the Clerk is hereby authorized to affix the Corporate Seal thereto.

Enacted a passed this 11th day of February, 2019.

William C. Steele
Mayor

Amber LaPointe
City Clerk

The Corporation of the City of Port Colborne

By-Law no. 6645/09/19

Being a by-law to adopt, ratify and confirm
the proceedings of the Council of The
Corporation of the City of Port Colborne at
its Regular Meeting of February 11, 2019

Whereas Section 5(1) of the *Municipal Act, 2001*, provides that the powers of a municipality shall be exercised by its council; and

Whereas Section 5(3) of the *Municipal Act, 2001*, provides that a municipal power, including a municipality's capacity rights, powers and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise; and

Whereas it is deemed expedient that the proceedings of the Council of The Corporation of the City of Port Colborne be confirmed and adopted by by-law;

Now therefore the Council of The Corporation of the City of Port Colborne enacts as follows:

1. Every action of the Council of The Corporation of the City of Port Colborne taken at its Regular Meeting of February 11, 2019 upon which a vote was taken and passed whether a resolution, recommendations, adoption by reference, or other means, is hereby enacted as a by-law of the City to take effect upon the passing hereof; and further
2. That the Mayor and Clerk are authorized to execute any documents required on behalf of the City and affix the corporate seal of the City and the Mayor and Clerk, and such other persons as the action directs, are authorized and directed to take the necessary steps to implement the action.

Enacted and passed this 11th day of February, 2019.

William C. Steele
Mayor

Amber LaPointe
City Clerk



Port Colborne Public Library Board

City of Port Colborne
RECEIVED

FEB 04 2019

CORPORATE SERVICES
DEPARTMENT

MINUTES of the 10th Regular Board Meeting of 2018

Held Tuesday, December 11, 2018, 6:00 p.m.

Port Colborne Public Library, Auditorium

310 King St., Port Colborne, ON

Present: Michael Cooper (Chair), Valerie Catton (Vice Chair), Harmony Cooper, Cheryl MacMillan,
Staff: Susan Therrien (Director of Library Services/Board Secretary)
Regrets: Scott Luey (CEO), Peter Senese (Treasurer), Jeanette Frenette, Bryan Ingram, Ann Kennerly

1. **Call to Order:**

Michael Cooper, Chair, called the meeting to order.

2. **Invocation:**

The invocation was read.

3. **Chairperson's Remarks:**

Mr. Cooper welcomed the Board.

4. **Approval of the Agenda:**

Moved by H. Cooper
Seconded by C. MacMillan

18:071 That the agenda be adopted as circulated.
CARRIED.

5. **Declaration of Conflict of Interest:**

Nil.

6. **Delegations:**

Nil.



7. Approval of the Minutes of the Previous Meeting of Tuesday, November 13, 2018:

Moved by H. Cooper
Seconded by C. MacMillan

18:072 That the minutes of the November 13, 2018 meeting be adopted.
CARRIED.

8. Business Arising from the Minutes:

Nil.

9. Agenda Items:

i. Legacy Document

Moved by C. MacMillan
Seconded by H. Cooper

18:073 That the Port Colborne Public Library Board Legacy Document be accepted as presented.
CARRIED.

ii. Strategic Plan Implementation

The Director reported on work accomplished to date regarding implementing the goals of the Strategic Plan.

iii. Capital Projects: Progress Report

a. Cultural Block Security

No updates to report.

b. Risk Assessment Security Upgrades

No updates to report.



c. Shelving, Furniture, and Flooring

An Open House was held at the library on December 1, 2018, with 343 people visiting the library to view the new shelving and furniture.

d. Accessible Public Washroom: Updates

No updates to report.

e. King Street Entrance Accessibility

No updates to report.

iv. **Governance and Policy Review**

B. Ingram, H. Cooper and S. Therrien were not able to meet and will reschedule the policy working session.

v. **Committee Reports:**

Accessibility Committee (B. Ingram, V. Catton):

Nil.

Cultural Block Sub-Committee (M. Cooper, V. Catton):

Nil.

10. **Administrative Business:**

i. **Correspondence:**

Nil.

ii. **Public Relations Report:**

Librarian R. Tkachuk submitted a report on Pop-Up Library outreach activities and PD Day activities.



Moved by H. Cooper
Seconded by C. MacMillan

18:074 That the Public Relation's report be received for information purposes.
CARRIED

Chief Executive Officer's Report:

Nil.

iii. Treasurer's Report:

Nil.

iv. Director's Report:

a. Mayor Maloney's Staff Appreciation Reception, November 30, 2018

Attended by the Director and Assistant Librarian C. Cooke. The Director presented a card of appreciation to Mayor Maloney on behalf of the Board and staff.

b. Mayor Steele's Meeting with Library and Museum Staff, December 5, 2018

The Mayor visited the library for a meet-and-greet with library and museum staff. He also received a tour of the library to view the recent renovations.

c. Council Orientation, Open House and Tour

- i. The Director attended an orientation for the new Council on December 10, 2018, and made a formal presentation to Council on behalf of the Board.
- ii. The Director and Librarian R. Tkachuk will attend an Open House at City Hall on December 12, 2018, to showcase the library and answer questions for the Mayor and councillors.
- iii. Mayor Steele and Council will visit the library on December 15, 2018, as part of a City-wide tour of facilities.



d. Youth Job Connection Placement

The Library hosted a young job-seeker for a one-week (2 hours/day) placement as part of the Youth Job Connection program.

e. **Report on Meetings and Workshops**

i. Staff Development Day, November 19, 2018

During the Library closure on Monday, November 19, 2018, library staff participated in a staff development day held at the L.R. Wilson Heritage Research Archives. Human Resources Coordinator, T. Morden and Health & Safety Coordinator, I. Reeves presented the mental health and wellness educational program "The Working Mind." In the afternoon, staff participated in a "Mindfulness Workshop" led by Heidi Dotchin.

ii. Dewey Divas and Dudes, Niagara Falls Public Library, November 20, 2018

Librarian R. Tkachuk, Assistant Librarian J. Sider and Assistant Librarian S. Hol attended a *Dewey Divas and Dudes* session hosted by the Niagara Falls Public Library. Four Canadian-based publishers presented noteworthy fiction and non-fiction titles from the current season.

Moved by H. Cooper

Seconded by C. MacMillan

18:075 That the Director's report be received for information purposes.

CARRIED

Circulation Report

Nil.

11. Board Members' Items:

Nil.

12. Notices of Motion:

Nil.



13. Date of the Next Meeting:

Tuesday, January 8, 2019, 6:00 p.m.
Port Colborne Public Library, Auditorium
310 King St., Port Colborne, ON

14. Adjournment:

Moved by H. Cooper
Seconded by V. Catton

18:076 That the meeting be adjourned.
CARRIED.

January 22, 2018